Humboldt County
Solid Waste Local Task Force-

Cities of:
Arcata
Blue Lake
Eureka
Ferndale
Fortuna
Rio Dell
Trinidad

County of Humboldt

Humboldt Waste Management Authority

The Humboldt County Local Task Force serves in an advisory capacity to individual agencies and the HWMA towards the implementation of the integrated management of solid wastes and recyclables.

The Local Task Force is also responsible for assisting in the coordination, review and implementation the county and cities 5-Year CIWMP Report.

Agenda- *Amended 10/27/21*

Monday, November 1, 2021 (10:30 am-12:00 pm)

Virtual Meeting Link
https://us02web.zoom.us/j/85620932419
Meeting ID: 856 2093 2419
Call In: 1-669-900-6833
***Copies Available**: Copies of the agenda materials are available electronically upon request by emailing dwood@ci.eureka.ca.gov*

1. **Call to Order/Roll Call**

2. **Teleconference Meetings (report attached)**
Recommendation: Authorize Remote Teleconference Meetings Of The Solid Waste Local Task Force Pursuant To Brown Act Provisions Due To A State Of Emergency and Imminent Risk of In-Person Meetings as Humboldt County Remains an Area of High COVID-19 Transmission.

3. **July 6, 2021 Minutes (attached)** – *Review & Approve*

4. **August 30, 2021 Minutes (attached)-** *Review & Approve*

5. **Jurisdiction Representative Reports-** *Receive updates and take action as appropriate.*

6. **Ongoing Discussion Items**

   1. **Recycling**

      a. **CA Redemption Value Buy Back Centers-** *Receive update from Jill Duffy, Executive Director of HWMA; Take action as appropriate.*

      b. **Curbside Recycling-** *Receive update from Linda Wise, General Manager of Recology. Take action as appropriate.*

      c. **Contamination Ad Hoc-** *Receive update from Ad Hoc members*

2. **"Mandatory Organic Recycling" (AB1826) and "Short Lived Climate Pollutants" (SB1383) -** *Group discussion*; *Take action as appropriate.*

    a. **SB1383 Ad Hoc-** *Receive update from Ad Hoc members*

7. **SB1383 Consultant RFP**- *Recommendation: 1.) Receive summary and recommendation of consultant selection from the SB 1383 Ad Hoc members; and 2) Recommend that the HWMA Board of Directors award the SB 1383 Compliance & Organics Regional Compliance Services service agreement to the recommended firm and 3) request a Letter of Commitment and Understanding from each participating jurisdiction pledging funding to include a fixed amount and/or portion based on size or population.*

8. **Humboldt Waste Management Authority Waste Characterization Study – Final Report- September 2021 (attached)-** *Informational only, no action necessary*

9. **Integrated Waste Management Plan (attached)-** *Review and approve*

10. Non-Local Task Force Organization Reports

This is a standing agenda item for non-member organizations to provide reports to the SWLTF on their respective waste management topics.

1. HWMA
2. Recology
3. Zero Waste Humboldt
4. LEA

11. Proposed Future Tasks/Actions

The LTF will identify tasks or action items to be addressed at a specified LTF meeting.

12. Oral and Written Communications

a. This time is provided for people to address the Task Force or to submit written communications concerning matters not on this agenda. Task Force Members may respond to statements, but any request that requires action will be referred to appropriate agency staff for review. Reasonable time limits may be imposed on both the total amount of time allocated for this item, and on the time permitted to each individual speaker. Such time allotment or portion thereof shall not be transferred to other speakers.

13. Adjournment

Cities of:
Arcata
Blue Lake
Eureka
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Humboldt County - Solid Waste Local Task Force

REPORT

SUBJECT: Item 2) Teleconference Meetings

RECOMMENDED ACTION: Voice vote.

Authorize Remote Teleconference Meetings of The Solid Waste Local Task Force Pursuant to Brown Act Provisions Due to A State of Emergency and Imminent Risk of In-Person Meetings as Humboldt County Remains an Area of High COVID-19 Transmission.

On September 16 Governor Newsom signed AB 361 into law. The bill revises the Ralph M. Brown Act by continuing the Governor's Executive Order N-29-20's teleconference rule waivers under certain conditions through January 1, 2024.

AB 361 allows the Solid Waste Local Taskforce, its subcommittees to meet virtually provided that:

1. A state-proclaimed state of emergency exists, and
2. State or local public health officials impose or recommend social distancing measures.

The Task Force may also find that, as a result of the proclaimed emergency, meeting in-person presents an imminent threat to the health or safety of attendees. Below are the findings:

- Proclamation of Imminent Risk of In-Person Meetings. The SWLTF hereby proclaims that as Humboldt County remains an area of high transmission of COVID-19 as determined by the Centers for Disease Control and Prevention, that meeting in-person presents imminent risks to the health or safety of attendees.
- Ratification of Governor's Proclamation of a State of Emergency. The SWLTF hereby ratifies the Governor of the State of California's Proclamation of State of Emergency, effective as of its issuance date of March 4, 2020.
- Remote Teleconference Meetings. The members of the Solid Waste Local Task Force, including but not limited to the members and its subcommittees, are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this reccomendation including conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

- Effective Date. This motion shall take effect immediately upon its adoption and shall be effective for 30 days or until this motion is extended by a majority vote of the SWLTF
- Extension by Motion. The SWLTF may extend the application of this by motion and majority vote by up to 30 days at a time, provided that it makes all necessary findings consistent with and pursuant to the requirements of Section 54953(e)(3).

In conclusion, meeting in-person during the current state of emergency would present imminent risks to the health or safety of attendees. This recommendation would permit meetings under the provisions of AB 361 for a period of 30 days. After 30 days, the Task Force would need to renew its recommendation, consistent with the requirements of AB 361, if it desires to continue meeting under the modified Brown Act requirements or allow the authorization to lapse.

Staff recommends the SWLTF approve the recommendation which provides necessary findings that, as a result of the continuing COVID-19 pandemic state of emergency, that meeting in person would present imminent risks to the health and safety of participants.

Humboldt County Local Task Force

Meeting Minutes

Wednesday, July 6, 2021 at 2:00 PM

Cities of:
Arcata
Blue Lake
Eureka
Ferndale
Fortuna
Rio Dell
Trinidad

County of Humboldt

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Virtual Meeting – Zoom Link:
https://us02webzoom.us/j/87552047149
Meeting ID: 875 5204 7149
Call in: 1-669-900-6833

1. Call to Order/Roll Call

Arcata	Emily Benvie
Blue Lake	Amanda Mager (late arrival)
Eureka	Donna Wood (Chair), Robin Praszker
Ferndale	Jay Parrish (late arrival)
Fortuna	Kevin Carter, Merritt Perry
Humboldt Co.	Tom Mattson
Trinidad	Not Present
Rio Dell	Kyle Knopp
HWMA	Jill Duffy

Members of the Public
Linda Wise – Recology
Marshalle Graham – CalRecycle
Spencer Fine – CalRecycle
Jess Barger – Zero Waste Humboldt
Megan Mott – CA Dept. of Food & Agriculture
Carolyn Hawkins – LEA

2. Approval of December 16, 2020 Minutes

Motion to approve minutes as submitted by Kyle Knopp (Rio Dell), Second by Tom Mattson (Humboldt County).
No public comment.
Motion passed.
Ayes: Arcata, Eureka, Fortuna, Rio Dell, Humboldt County
Noes: None
Absent: Blue Lake, Ferndale, Trinidad
Abstain: None

3. Jurisdiction Representative Reports

Arcata – Staff are working on reconciling unpaid garbage bills like Eureka and have also been active on the SB 1383 Ad Hoc. The food rescue grant is wrapping up the scope of work for food rescue capacity assessment.

Eureka – Staff have been working on reconciling unpaid garbage fees and have been active on both SB 1383 and Contamination ad hoc committees.

Fortuna – Nothing to report.

Humboldt County – A position for solid waste program coordinator will be re-flown as previous applicants did not have solid waste background. Staff will be looking to get more advertising in hopes of attracting more qualified applicants.

Rio Dell – Staff had a good call with Spencer Fine with CalRecycle. City Hall has been outfitted with organic recycling and compost bins. There isn't a large stream of waste, mostly coffee grounds but those are being composted.

Blue Lake, Ferndale, Trinidad – Not present

4. Ongoing Discussion Items

1. Recycling

a. CA Redemption Value Buy Back Centers

Jill Duffy, HWMA, provided an update. At the June meeting, the HWMA board received a request from Hambro, CRV recyclers in Del Norte County, are interested in identifying a site in Humboldt and have done a preliminary site in Arcata. If they proceed, they've asked that HWMA not get back in the CRV game so the volume is worth it. This question is going to the HWMA board this week. HWMA is having difficulty securing trucks, trailers, haulers, drivers to haul e-waste. There is a shortage across the country and it is being felt locally.

b. Curbside Recycling

Linda Wise, Recology, provided an update. Recology started route contamination surveys and went back to cans that were having problems. It was paused for a short time while staff were off work or not familiar with the route. They want to have consistency with the drivers. Last month, the residual in recycling processing center went down a little bit.

c. Contamination Ad Hoc

Robin Praszker (Eureka) provided an update. The SB 1383 ad hoc has been moving a little faster for a few different reasons. There is not a lot to report at this time. The contamination ad hoc has met

twice, had some good brain storms and hope to have more to report next time.

2. **"Mandatory Organic Recycling (AB1826) and "Short Lived Climate Pollutants" (SB1383)**

    a. **SB1383 Ad Hoc –** Donna Wood (Eureka, Chair) shared that since the ad hoc has a recommendation for the LTF on the agenda this will serve as the update.

5. SB1383 Consultant RFP

Donna Wood (Eureka, Chair) – Recommendation from SB 1383 Ad Hoc Committee to work together to release an RFP to hire a consultant to provide regional and technical assistance with SB 1383. It is recommended that this is done through HWMA and that they assist with figuring out the funding situation. The ad hoc is confident that this will demonstrate to the state that we are actively striving to make headway on this mandate.

HWMA – The recommendation is coming from the ad hoc to the LTF and there appears to be a broad level of support. There is an agenda item going to the HWMA board at their Thursday meeting. Jill had to be a little presumptive that it would be supported by the committee in order to provide a staff report for the board. A draft report was sent around the LTF for review.

Eureka – The ad hoc considered a smaller recommendation to handle a smaller portion of the process. We are going in the same direction as a lot of other jurisdictions in the state. There are a lot of consultants have direct experience with this topic.

HWMA – Will the ad hoc be charged with developing the RFP? Do the LTF members want to see it before it goes to HWMA board? It's preferred that the LTF as a whole to give its blessing to the RFP and process.

Eureka – The LTF may need to make a plan to meet on this topic prior to its regular meeting.

HWMA – It's preferred that the LTF as a whole give its blessing to the RFP and process.

County – The ad hoc can work out the details of the RFP and then send it to the LTF for a short period of time for review and comments. The LTF needs to trust the ad hoc to put the RFP together and review the responses to stay within the timeframe needed.

HWMA – The LTF is still a Brown Act committee and it could be problematic asking for approval that way.

Humboldt County – To clarify, it would be recommended that the ad hoc approve and release the RFP.

Eureka – When does the RFP need to be done? What is the time line?

Public comment opened at 2:23pm and closed at 2:27pm.
Carolyn Hawkins (LEA) addressed the committee.

HWMA – Currently, there is no funding and the ad hoc is being used to generate the RFP and review proposals. HWMA will take a look at what funding is available in its budget. It's possible that the County may have funds as they are obligated to take the lead. There would be some cost sharing with Fortuna since they are not a HWMA member. There was hope that a request of $225 million from the Governor's proposed budget specifically to help counties working on this would provide funding; however, it was rejected, so no there is no state funding. Until there are proposals, we won't know how much money is needed.

Eureka – Would the recommendation need to be modified to reflect working with the ad hoc as opposed to the LTF?

HWMA – The current recommendation is okay from HWMA's standpoint. The ad hoc would need to be clear that the LTF has given them the authority.

Recommendation: Approve HWMA to work with the LTF to release an RFP and develop the funding plan to hire a consultant to provide technical assistance with SB 1383 compliance.

Amended Recommendation: Request HWMA to work with the LTF to release an RFP and develop the funding plan to hire a consultant to provide technical assistance with SB 1383 compliance.

Motion to approve by Tom Mattson (Humboldt County). Seconded by Kyle Knopp (Rio Dell)
Motion passed.
Ayes: Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, Humboldt County
Noes: None
Absent: Trinidad
Abstain: None

6. Integrated Waste Management Plan

Carolyn Hawkins – LEA; HWMA is by agreement with the County of Humboldt, charged with producing the draft and giving it to the County. As it stands now, the LEA

has control of managing that contract. It's part of a larger contract that the County has with HWMA. HWMA submits it to CalRecycle, not Recology as reflected in error in the minutes.

HWMA – When this came up, it was in response to a question from Maggie Gainer. The five-year report had shrunk considerably and want to make sure that all jurisdictions have an idea on what the report looks like. When the report is complete, it will come back to LTF at September meeting for review before submission to CalRecycle.

County – There are two sections that are missing check boxes regarding whether programs are meeting their goals.

7. Non-Local Task Force Organization Reports

This is a standing agenda item for non-member organizations to provide reports to the SWLTF on their respective waste management topics.

1. **HWMA** –No report was provided.

2. **Recology** –Linda Wise provided a report. Beginning 1/2022, the first 20 days of audits will be starting.

3. **Zero Waste Humboldt** –Jess Barger shared that Maggie Gainer submitted written comments ahead of the meeting.

4. **LEA** – Carolyn Hawkins provided a report. Waste generation in surface area of Recology Eel River should be examined. It has exceeded the limits a number of times. A notice was sent to Recology and the City of Fortuna. The next step is a full permit tier if receiving over 100 tons per day. Recology staff responded with a number of steps that are being taken internally to try to prevent overage. There is more waste being reported in that facility than in previous years.

5. **CalRecycle –** Marshalle Graham provided a report. It is a regular update that is shared at LTF meetings. The 2016 and 2019 jurisdiction review have been completed and a notice sent out with the findings. Please reach out with any questions. The focus is on 1383 readiness. CalRecycle will coordinate with jurisdictions for site visits. The annual report is out and ready to go. Spencer can provide assistance on the annual report if needed. Updates for the 1383 webpage continue. There are new capacity planning tools and would include guidance on tier 1 and tier 2 edible food generators as well as a model franchise agreement, model resolution and model food recovery agreement. There will also be an update on haulers and will have information for waivers

and exemptions. There are still funds available in greenhouse gas reduction and market development loan programs. The next public meeting will be on July 20th.

HWMA – Can you send a link to the elected officials page? Can you send a list of consultants that have been working on SB 1383 action plans to make sure that we have broad circulation of our RFP?

CalRecycle – Spencer Fine shared the following link via chat: https://www.calrecycle.ca.gov/organics/slcp/electedofficials and Marshalle shared that there isn't a list and will have to connect with colleagues.

8. **Proposed Future Tasks/Actions**
   The LTF will identify tasks or action items to be addressed at a specified LTF meeting.

   Recology – Linda Wise contacted Ashland and Santa Rosa and both are interested in coming.

   HWMA – Jill Duffy asked to add presentation for recycling contamination strategies.

   Eureka – Will there be any type of motion needed for the RFP?

   HWMA – It depends on how quickly everyone is able to complete the work. A discussion will be needed to decide on a 30, 45, 60-day circulation. If the LTF meeting is set-up for the 3rd week of October, LTF won't need to schedule a special meeting.

9. **Oral and Written Communications –**Public comment opened and closed at 2:47pm.

10. **Adjournment** at 2:47pm. Next meeting to be determined by chair.

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County of Humboldt

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The Local Task Force is also responsible for assisting in the coordination, review and implementation the county and cities 5-Year CIWMP Report.

Humboldt County
Solid Waste Local Task Force
Special Meeting – Minutes

Agenda- *Special Meeting*
Monday, August 30, 2021 (10am-10:30am)

Virtual Meeting Link
https://us02web.zoom.us/j/87848736099
Meeting ID: 878 4873 6099
Call In: 1-669-900-6833
***Copies Available**: Copies of the agenda materials are available electronically upon request by emailing dwood@ci.eureka.ca.gov.*

1. Call to Order/Roll Call at 10:06 am.

Arcata	Emily Benvie
Blue Lake	Mandy Mager
Eureka	Donna Wood (Chair), Robin Praszker
Ferndale	Jay Parrish
Fortuna	Merritt Perry, Kevin Carter
Humboldt Co.	Tom Mattson, Sean Quincy
Trinidad	Not Present
Rio Dell	Kyle Knopp
HWMA	Jill Duffy
	Eric Keller-Heckman

Members of the Public
Linda Wise – Recology
Hana Na – LEA Humboldt
Marshalle Graham – Cal Recycle
Spencer Fine – Cal Recycle

2. Humboldt County SB1383 & Organics Regional Compliance RFP (attached) – *Review & Approve*

Jill Duffy (HWMA) provided a recap of the RFP.

Motion to approve by Tom Mattson (Humboldt County),
Second by Emily Benvie (Arcata).
No public comment.
Motion passed.
Ayes: Arcata, Blue Lake, Eureka, Ferndale, Fortuna, Rio Dell, Humboldt County
Noes: None

Absent: Trinidad
Abstain: None

3. Oral and Written Communications

a. This time is provided for people to address the Task Force or to submit written communications concerning matters not on this agenda. Task Force Members may respond to statements, but any request that requires action will be referred to appropriate agency staff for review. Reasonable time limits may be imposed on both the total amount of time allocated for this item, and on the time permitted to each individual speaker. Such time allotment or portion thereof shall not be transferred to other speakers.

Public comment opened and closed at 10:12 am.

4. Adjournment at 10:13 am.

HUMBOLDT WASTE
MANAGEMENT AUTHORITY

Memorandum

DATE: October 22, 2021

TO: Humboldt County Local Task Force

FROM: Jill K Duffy, HWMA Executive Director

SUBJECT: **Receive the "Humboldt Waste Management Authority Waste Characterization Study – Final Report. September 2021".**

HWMA secured the services of Cascadia Consulting Group, Inc. (Cascadia) on October 10, 2019 to perform a solid Waste Audit Characterization study for materials generated by HWMA member agencies. Two sampling periods were initially proposed to characterize materials in the winter and summer months of 2020. The summer sampling event was postponed due to the State's Shelter-In-Place in response to the coronavirus pandemic to June 2021.

Cascadia Consulting Group, Inc. prepared the attached report and presented a summary of the information at the HWMA's Board October 14, 2021 meeting. This item is informational only and no action is necessary.

ATTACHMENT:
"Humboldt Waste Management Authority Waste Characterization Study – Final Report". September 2021.

Refer to the HWMA Waste Characterization Study Final Report

Separate Electronic Attachment
Hard Copies to Be Distributed

HUMBOLDT WASTE MANAGEMENT AUTHORITY WASTE CHARACTERIZATION STUDY

FINAL REPORT

OCTOBER 2021

CASCADIA CONSULTING GROUP

Cascadia Consulting Group, Inc.
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www.cascadiaconsulting.com

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Project Overview

INTRODUCTION

To obtain data on the composition of disposed garbage, the Humboldt Waste Management Authority (HWMA) hired Cascadia Consulting Group (Cascadia) to characterize the disposed waste streams from five Humboldt County cities and the unincorporated areas of the county (collectively, the Members). The findings from this study are intended to provide information about the quantities and types of currently disposed materials. They will help inform solid waste planning efforts by identifying recycling and other diversion opportunities and measuring successes against the baseline data collected in 2010[1].

The study's overall objectives are to provide:

- Current composition and quantity data
- A comparison to the 2010 composition data
- Additional detail on disposed food waste and other organics to help plan for the goals set in AB 1826 (Organics Diversion) and SB 1383 (Short-Lived Climate Pollutants)

This study occurred over two study seasons (winter and summer). The first season occurred February 4-12, 2020. Due to COVID-19, the second season (originally planned for June 2020) was postponed to June 14-22, 2021. This report includes the results from both seasons and is organized into the following sections: Project Overview, Data Analysis, and Results. This document also includes the study design, a detailed material list, example field forms, and detailed results in appendices.

SUMMARY OF METHODOLOGY

Sampling Universe

The first step in planning a waste characterization study is to identify and carefully define the waste streams and sectors, or the "universe" of waste, to be studied. The sampling universe for this study includes a single waste stream generated by five distinct sectors from the six Members of HWMA.

Streams

A stream is determined by the generation, collection, or composition characteristics that make it a unique portion of the total waste stream. This study analyzes one stream only.

- **Garbage**: Materials placed in containers that are normally hauled to a landfill with minimal or no processing.

Sectors

A sector describes the source, or generator, of the disposed waste stream.

[1] Humboldt County Waste Characterization Report (March 2012)

- **Residential**: Waste from single-family homes or small complexes collected on a designated residential route. This may include small amounts of waste from very small commercial generators (businesses with cart service instead of dumpster service).
- **Commercia**l: Waste from non-residential properties including businesses, industries (e.g., factories, farms), and/or institutions (e.g., correctional facilities, hospitals, churches) collected on a designated commercial route. This may include multifamily residential waste.
- **Combined**: Waste from residential and commercial properties that is collected and disposed as a single load. In this study, combined waste loads were generated by Willow Creek (Unincorporated County) and Blue Lake. For the purposes of this study, the combined waste stream is treated as an independent sector.
- **Self-haul**: Waste from generators that transport their own materials from a residence or business to a transfer station rather than using commercial hauling services.
- **Construction and Demolition (C&D)**: Waste produced during the construction, renovation, and/or demolition of buildings or structures and received at a transfer station. This includes self-haul materials as well as materials hauled by certified or franchised waste haulers. Sampling of this sector occurred exclusively during the second season (during the summer when construction activity is greater).

HWMA Members

- City of Arcata
- City of Blue Lake
- City of Eureka
- City of Ferndale
- City of Rio Dell
- Unincorporated Humboldt County

Sample Allocation and Schedule

Cascadia collected a total of 186 residential, commercial, and self-haul garbage samples and 16 C&D samples from HWMA Members over two seasons of field work. The number of samples allocated to each Member was linked to its relative population.

During season one of field work, Cascadia achieved the total target number of samples planned, but the sample allocation varied slightly from the original plan. Due to limited traffic of self-haul vehicles from Rio Dell and Ferndale at the Hawthorne Street Transfer Station, the field crew increased samples from self-haul loads originating from Unincorporated County than initially planned to reach total sample number targets. Cascadia modified the sampling plan for season two to correct for any imbalances in the overall sampling plan and, at completion of the second season of field work, met all sample targets. Table 1 summarizes the total number of samples planned and the actual number of samples collected for each Member and sector.

Table 1. Sample Targets and Actuals

	Commercial		Residential		Combined		Self-haul		Total	
	Allocated	Actual	Allocated	Actual	Allocated	Actual	Allocated	Actual	Allocated	Actual
Arcata	25	25	10	10	0	0	12	12	47	47
Blue Lake	0	0	0	0	9	9	6	6	15	15
Eureka	25	25	10	10	0	0	12	12	47	47
Ferndale	6	6	3	3	0	0	6	6	15	15
Rio Dell	6	6	3	3	0	0	6	6	15	15
Unincorporated County	21	21	8	8	6	6	12	12	47	47
Total	**83**	**83**	**34**	**34**	**15**	**15**	**54**	**54**	**186**	**186**

Collect and Sort Samples

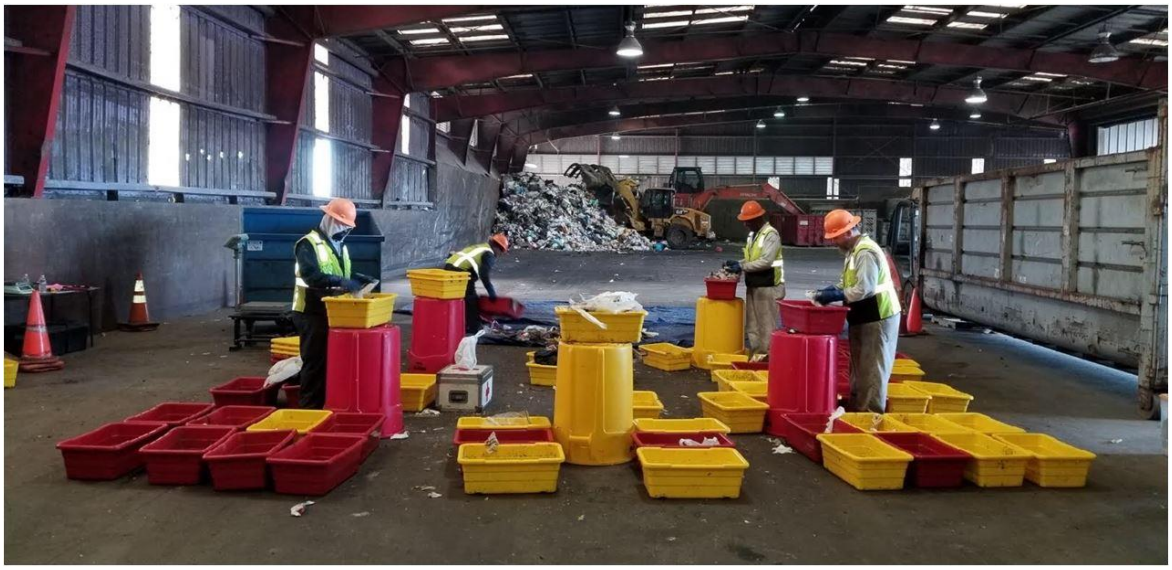
Commercial and Residential Loads

There are four haulers that serve the Members. As requested by HWMA to minimize impacts on daily operations at participating transfer stations, Cascadia pre-selected loads to sample and worked with all haulers to redirect selected vehicles that normally tip at the Redway, Humboldt Sanitation, and Eel River (ERTS) transfer stations to tip at Hawthorne Street Transfer Station (HSTS) for sampling. When a pre-selected truck arrived at HSTS, the Vehicle Surveyor directed the vehicle to the tipping area for sample collection.

The field crew randomly extracted a 200–250-pound sample from each load and hand sorted it according to the following protocol:

- **Step 1: Review methodology and sorting categories with the crew.** Before the sorting began, the field crew reviewed the safety protocols, procedures, forms, and material definitions in detail.
- **Step 2: Photograph the sample.** The field crew photographed the sample using a digital camera. The *Sample Placard* which identifies the sample was positioned to be visible in each photo.
- **Step 3: Sort the sample.** Once the sample was placed on the sorting table, the field crew sorted material by hand into the prescribed material categories in plastic baskets. Individual members of the field crew typically specialized in groups of materials, such as papers or plastics. The Crew Lead monitored the accuracy of sorting, re-sorting any materials that were improperly classified. The complete list of material types and definitions are included in Appendix B. Material List.
- **Step 3: Weigh the sample.** The field crew verified the purity of each material as it was weighed using a pre-tared scale and recorded the data on the *Material Weight Tally Sheet*.
- **Step 4: Review Data.** At the conclusion of each field work day, the field crew conducted a quality control review of the data recorded.

Figure 1. Hand Sorting Process



Self-haul and C&D Loads

During each season, Cascadia's field crew characterized self-haul loads onsite during the first two days of field work at Humboldt Sanitation and ERTS. At HSTS, the field crew characterized self-haul samples evenly across all days of the study weeks. The field crew used a systematic sampling approach to ensure accurate representation of self-haul loads. During the second season of field work, the field crew collected all C&D loads that arrived to HWMA during the study period. When an eligible self-haul or C&D vehicle arrived at the scale house and was selected for characterization, the Vehicle Surveyor directed the vehicle to the tipping area.

Self-haul and C&D samples were usually visually characterized. Since these loads are typically highly stratified and heterogeneous, the visual characterization method considers the entire load to produce more representative findings than hand sorting a 200–250-pound sample. The visual characterization method follows the eight steps described below:

Figure 2. Self-haul Sample

- **Step 1: Collect information about the load.** At the sampling area, the field crew recorded key information, including the net weight and jurisdiction of origin for each self-hauled load.
- **Step 2: Measure load volume.** The field crew used a tape measure to obtain the length, width, and height of the load while it was still in the vehicle and recorded it on the data sheet.
- **Step 3: Photograph the sample.** Using a digital camera, the field crew took a photograph after each sample was tipped. They positioned the sample placard so it was visible in each photograph.

- **Step 4: Note which material classes are present.** The field crew walked entirely around the load and indicated on the *Visual Characterization Form* which major material classes were present in the load.
- **Step 5: Estimate composition by volume for each major material class.** Beginning with the largest major material class present by volume, the field crew estimated the volumetric percentage of the material class and recorded it on the form.
- **Step 6: Estimate composition by volume for each specific material component.** The field crew considered each major material class separately and estimated the percentage of each major class that was made up of each specific material component.
- **Step 7: Check and reconcile percentage data.** The crew ensured that the percentage estimates for the major material classes added up to 100 percent. Also, they ensured that the percentage estimates for the specific material components within each major class totaled 100 percent.
- **Step 8: Convert volume estimates to weight estimates.** This step was done at Cascadia's offices after field work was complete. Cascadia entered data from the *Visual Characterization Forms* into a customized database and used density conversion factors to develop estimates of the weight of each material component in each load.

If self-haul samples contained a significant amount of mixed household trash, the sort crew hand-sorted the material according to the protocol described above in the Commercial and Residential Loads section. Appendix A. Study Design includes a detailed description of the study methodology.

Data Analysis

Estimating the Composition

Waste composition estimates were calculated using a method that gives equal weighting or "importance" to each sample within a given stratum (a stratum for this study is typically defined as waste in a particular sector from a particular member). Confidence intervals (error ranges) were calculated based on assumptions of normality in the composition estimates. Appendix A. Study Design includes a detailed description of the calculations.

Tonnage Data

To complete the analysis, HWMA provided annual tonnage estimates for its member agencies. As requested by HWMA, Cascadia used the annual tonnages reported for calendar year 2019 to account for tonnages prior to the impacts of the Covid-19 pandemic. Table 2 presents the annual tonnages for each member and sector.

Table 2. Annual Tonnages

Member	Sector	Tons
Arcata	Commercial	4982.4
Arcata	Residential	3199.6
Arcata	Self-haul	1955.8
Blue Lake City	Combined	580.5
Blue Lake City	Self-haul	137.6
Eureka	Commercial	11046.3
Eureka	Residential	6825.6
Eureka	Self-haul	14421.6
Ferndale	Commercial	365.4
Ferndale	Residential	355.9
Ferndale	Self-haul	578.3
Rio Dell	Commercial	501.1
Rio Dell	Residential	484.6
Rio Dell	Self-haul	847.4
Unincorporated County	Combined	767.8
Unincorporated County	Commercial	12304.4
Unincorporated County	Residential	11736.0
Unincorporated County	Self-haul	19637.7
HWMA Member Total ***(included in report)***		**90,728**

Results

This section describes the composition and recoverability of HWMA's overall disposed waste stream and of the disposed waste stream from each Member. The findings present results from data collected during both seasons of field work. Appendix D. Detailed Results includes composition and quantity data for each of the individual Members and sectors.

INTERPRETING THE RESULTS

The findings of this study present characterization results (by weight) as follows:

1. A bar chart presents the material composition by Recoverability Group.
2. A bar chart presents an overview of material composition by **Material Class**.
3. A table lists the ten most prevalent *material types*.
4. A detailed table lists the full composition and quantity results for each stream by *material type*.

The Results section of this report presents the two bar charts and the top ten tables. The detailed compositions are included in Appendix D. Detailed Results. The definitions of *material types* and their **Material Class** designations are included in Appendix B. Material List.

Percent Composition and Error

Cascadia conducted statistical analyses on the data from the material characterization process to provide two pieces of information for each material type:

- The estimated percent composition of waste by weight.
- The error range for the composition estimates at the 90 percent confidence level.

Material Designations

For clarity, broad material classes such as **Plastic** and **Paper** are bolded and capitalized while material types such as *paper bags* and *carpet* are italicized.

The example in Table 3 below illustrates how the results can be interpreted. The best estimate of the amount of *food – not donatable* present in the overall waste stream is 10.4 percent. The 3.6 percent figure reflects the degree of precision of the estimate. When calculations are performed at the 90 percent confidence level, we are 90 percent certain that the true mean for *food –not donatable* is between 10.4 percent plus 3.6 percent and 10.4 percent minus 3.6 percent. In other words, we are 90 percent certain that the true mean lies between 6.8 percent and 14.0 percent.

Table 3. Example Percent Composition and Error Range

Material	Est. %	+ / -
food – not donatable	10.4%	3.6%

Rounding

When interpreting the results presented in the tables and figures in this report, it is important to consider the effect of rounding. To keep the waste composition tables and figures readable, estimated tonnages are

rounded to the nearest ton, and estimated percentages are rounded to the nearest tenth of a percent. Due to rounding, the tonnages or percentages presented in the report, when added together, may not exactly match the subtotals and totals shown. Percentages less than 0.05 percent are shown as 0.0 percent even though there may be weights associated with the material.

Recoverability Groups

To identify additional diversion opportunities, material types were classified according to their recoverability, using five Recoverability Groups[2]:

- **Recoverable Paper:** Paper materials for which recycling technologies, programs, and markets are well developed, readily available, and currently used.
- **Other Recoverables**: Other, non-paper materials (plastic, metal, and glass) for which recycling technologies, programs, and markets are well developed, readily available, and currently used.
- **Compostable/Potentially Compostable:** Organic materials typically accepted for use in commercial compost or digestion systems.
- **Potentially Recoverable:** Materials for which recycling technologies, programs, and markets exist, but are either not well developed or not currently used. Examples include *used oil filters*, and *carpet*.
- **Problem Materials:** Materials that are not readily recyclable or face other market-related barriers. The HWMA has diversion programs in place to handle many of the problem materials. An example problem material is *plastic trash bags*.

Figure 3 shows how material types are categorized into each Recoverability Group.

[2] These groups were developed by HWMA to ensure they matched current programs.

Figure 3. Material Types by Recoverability Group

Recoverable Paper	Potentially Recoverable	Problem Materials
Uncoated Corrugated Cardboard	Paper Cups - Not Compostable	Remainder/Composite Paper
Paper Bags	Plastic Grocery and Other Merchandise Bags	Single-Use Expanded Polystyrene Food Service Items
Other Recyclable Paper	Non-Bag Commercial and Industrial Packaging Film	#3-#7 Other Containers
	Used Oil Filters*	Plastic Trash Bags
Other Recoverables	Manures	Film Products
PETE Water Bottles	Textiles - Organic	Other Film
Other PETE Containers	Textiles - Synthetic	Other Non-Recyclable Rigid Plastic
HDPE Containers	Carpet**	Remainder/Composite Plastic
Rigid Plastic Drip Lines	Concrete	Flat Glass
Other Recyclable Rigid Plastic	Asphalt Paving	Remainder/Composite Glass
Clear Glass Bottles and Containers	Asphalt Composition Shingles	Remainder/Composite Metal
Green Glass Bottles and Containers	Clean Dimensional Lumber*	Animal Carcasses
Brown Glass Bottles and Containers	Clean Engineered Wood	Remainder/Composite Organic
Other Colored Glass Bottles and Containers	Clean Pallets and Crates*	Roofing Tar Paper/Felt
Tin/Steel Cans	Other Wood Waste*	Roofing Mastic
Major Appliances	Clean Gypsum Board	Built-Up Roofing
Other Ferrous	E-waste**	Other Asphalt Roofing Material
Aluminum Cans	Mattresses**	Painted/Demolition Gypsum Board
Other Non-Ferrous	Vehicle and Truck Tires*	Rock, Soil and Fines
Mixed Recoverable Metal		Remainder/Composite Inerts and Other Household Hazardous Waste*
Compostable/Potentially Compostable		Ash
Waxed Corrugated Cardboard		Treated Medical Waste
Paper Cups - Compostable		Bulky Items
Compostable Paper		Other Tires
Compostable Plastics		Remainder/Composite Special Waste
Food - Potentially Donatable		Mixed Residue
Food - Not Donatable		
Leaves and Grass		
Prunings and Trimmings		
Branches and Stumps		

** Potentially recoverable and problem materials are typically difficult to recover or recycle. HWMA has programs to recover clean wood, sharps, and other materials marked with an asterisk.*

*** Collected and diverted for recycling/recovery thru the Carpet Recycling, Mattress Recycling and Recovery, and e-waste collection programs*

OVERALL DISPOSED WASTE

The overall waste composition is the weighted average of all 186 samples disposed by all Members. Problem Materials that are not recoverable account for only one-third of the overall garbage stream, meaning that two-thirds of the material in the garbage stream is at least potentially recoverable. Compostable/Potentially Compostable materials make up one-quarter of the overall garbage stream. **Other Organic** is the most prevalent material class at 28 percent. *Food – not donatable* is the most common material type (14.8%), followed by *other recyclable paper* (6.7%) and *compostable paper* (5.4%).

Figure 4. Overall Composition by Recoverability Group

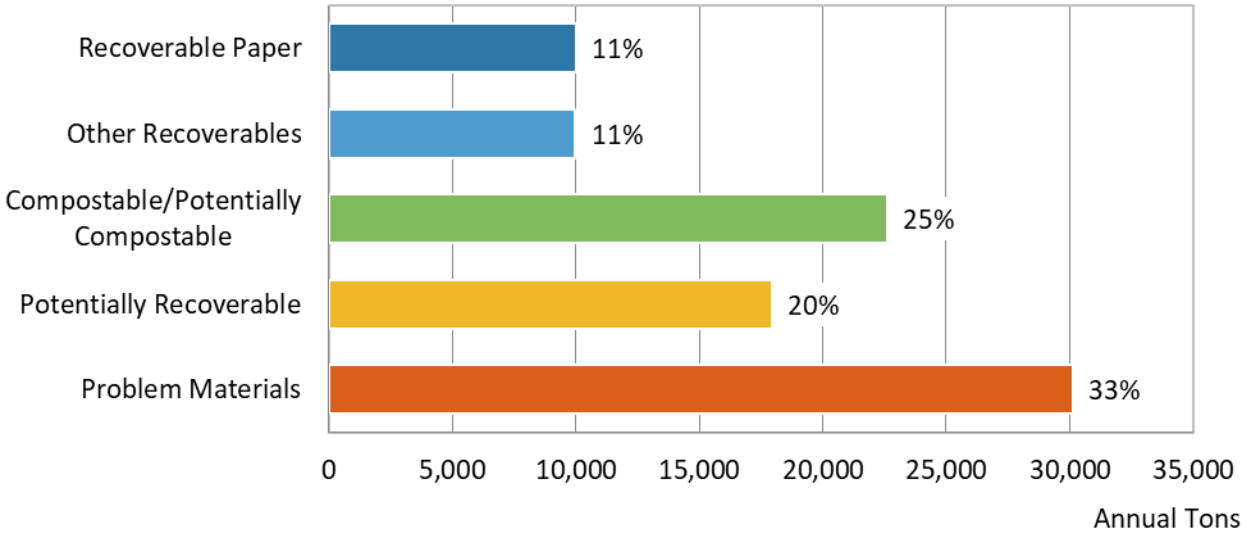


Figure 5. Overall Composition by Material Class

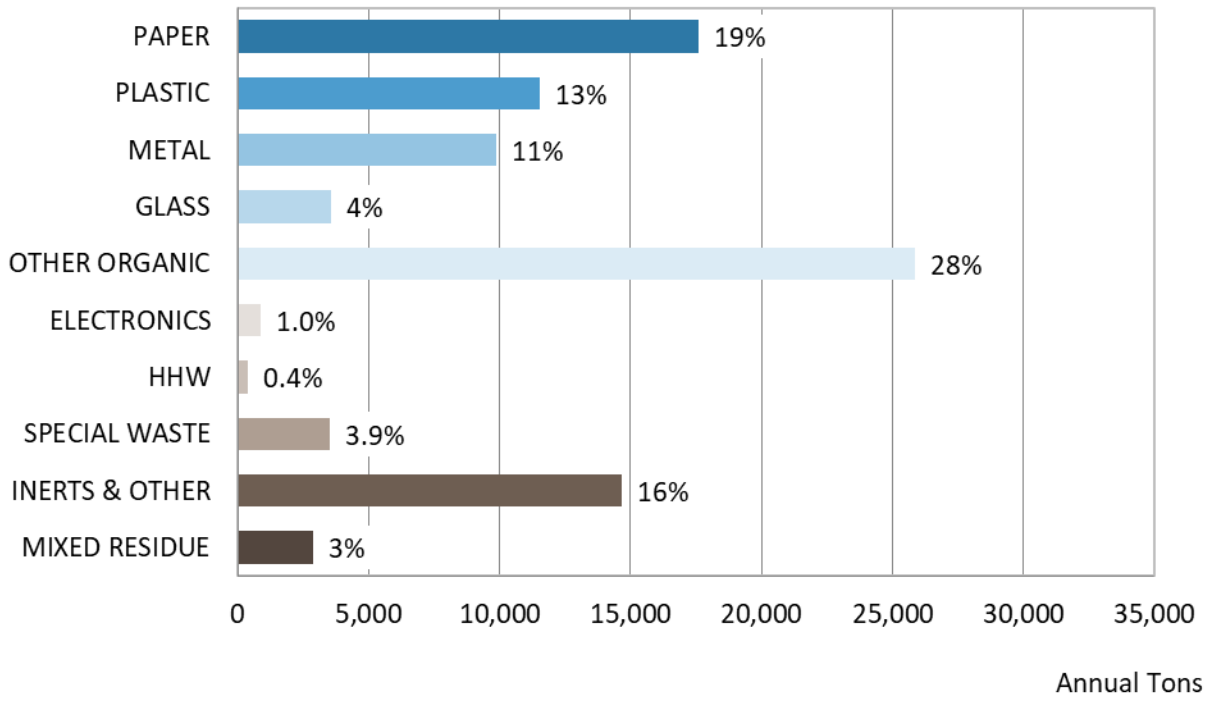


Table 4. Ten Most Prevalent Materials, Overall

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	14.8%	13,433
Other Recyclable Paper	6.7%	6,114
Compostable Paper	5.4%	4,936
R/C Metal	5.2%	4,755
R/C Organic	4.5%	4,126
Clean Dimensional Lumbar	3.8%	3,467
Uncoated Corrugated Cardboard	3.6%	3,244
Other Film	3.3%	3,025
Other Wood Waste	3.3%	3,012
Textiles - Organic	3.2%	2,938
Total for Top Materials	**54.1%**	**49,050**

RESULTS BY SECTOR

Residential

The overall residential waste composition is the weighted average of 34 samples. Unrecoverable Problem Materials make up approximately one-third (35%) of the residential garbage stream, meaning that 65 percent of the material in the garbage stream is recoverable or potentially recoverable. Compostable/Potentially Compostable materials make up 38 percent of the stream (Figure 6). **Other Organic** is the most prevalent material class at 44 percent (Figure 7). *Food – not donatable* is the most common material type (22.4%), followed by *remainder/composite organic* (10.9%) and *compostable paper* (9.2%). The ten most prevalent materials in the residential garbage stream make up nearly three-quarters (74.8%) of the material overall (Table 5).

Figure 6. Overall Composition by Recoverability Group, Residential

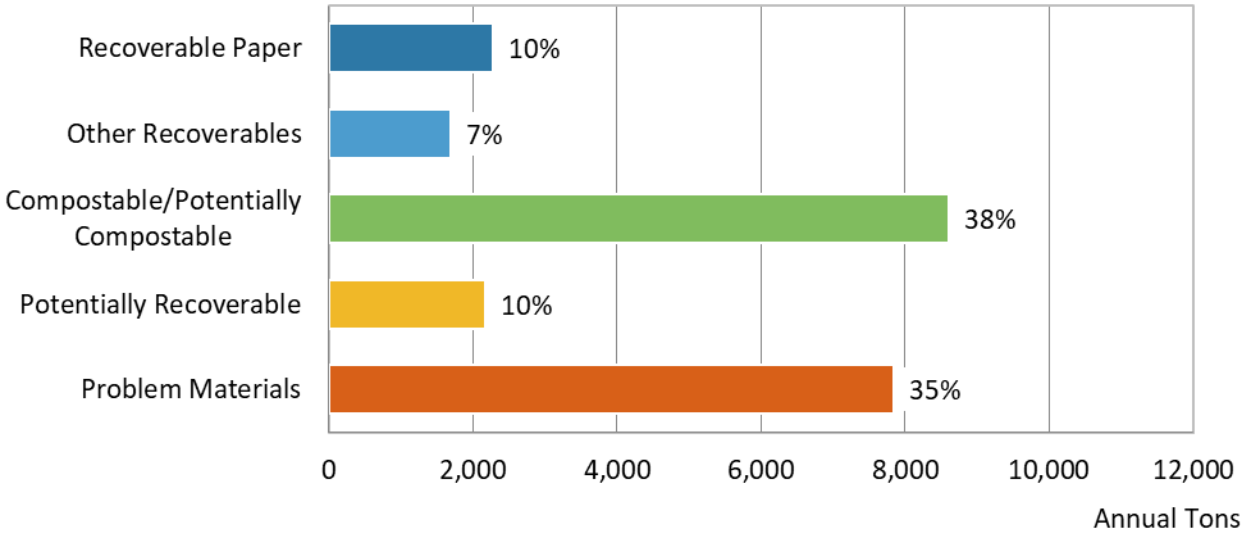


Figure 7. Overall Composition by Material Class, Residential

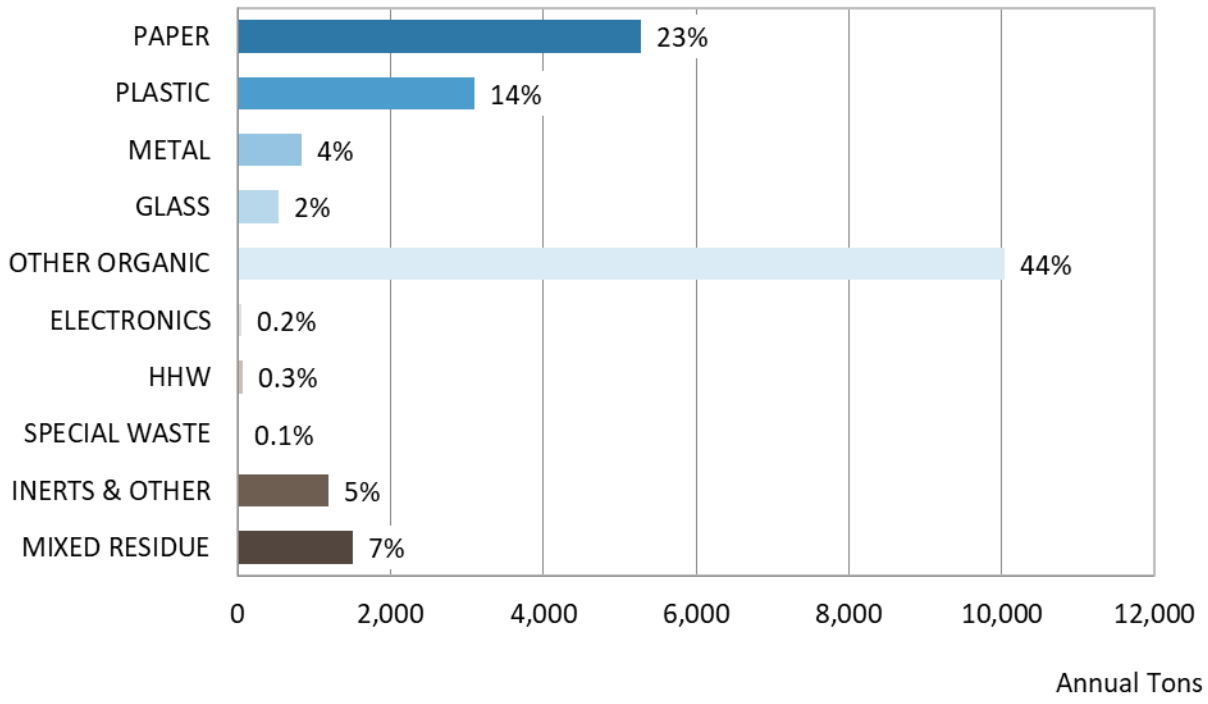


Table 5. Ten Most Prevalent Materials, Residential

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	22.4%	5,060
R/C Organic	10.9%	2,453
Compostable Paper	9.2%	2,085
Other Recyclable Paper	7.5%	1,697
Mixed Residue	6.7%	1,505
Other Film	5.0%	1,132
Textiles - Organic	4.5%	1,016
R/C Paper	3.7%	838
Textiles - Synthetic, Mixed, & Unknown	2.7%	609
Prunings Trimmings	2.3%	511
Total for Top Materials	**74.8%**	**16,905**

Commercial

The overall commercial waste composition is the weighted average of 83 samples. Problem Materials make up 29 percent of the commercial garbage stream, meaning that 71 percent of the material in the garbage stream is at least potentially recoverable. Compostable/Potentially Compostable materials make up one-third of the stream (Figure 8). **Other Organic** is the most prevalent material class at 32 percent followed by **Paper** (24%) (Figure 9). *Food – not donatable* is the most common material type (19.7%), followed by *compostable paper* (7.8%) and *other recyclable paper* (6.2%). The ten most prevalent materials in the commercial garbage stream make up over half (60.3%) of the material overall (Table 6).

Figure 8. Overall Material Composition by Recoverability Group, Commercial

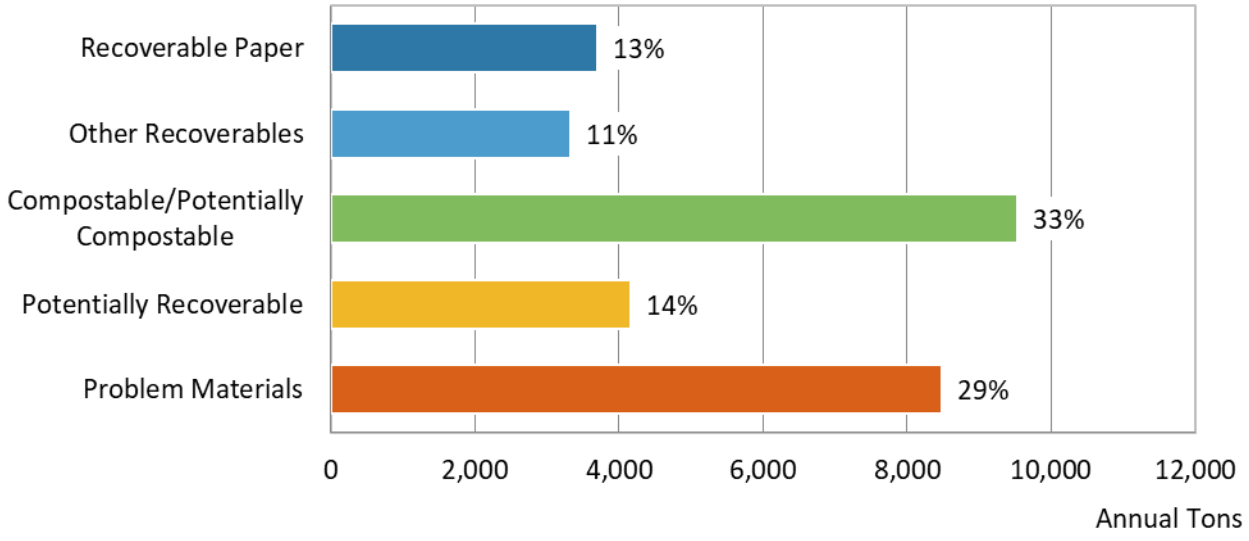


Figure 9. Overall Material Composition by Material Class, Commercial

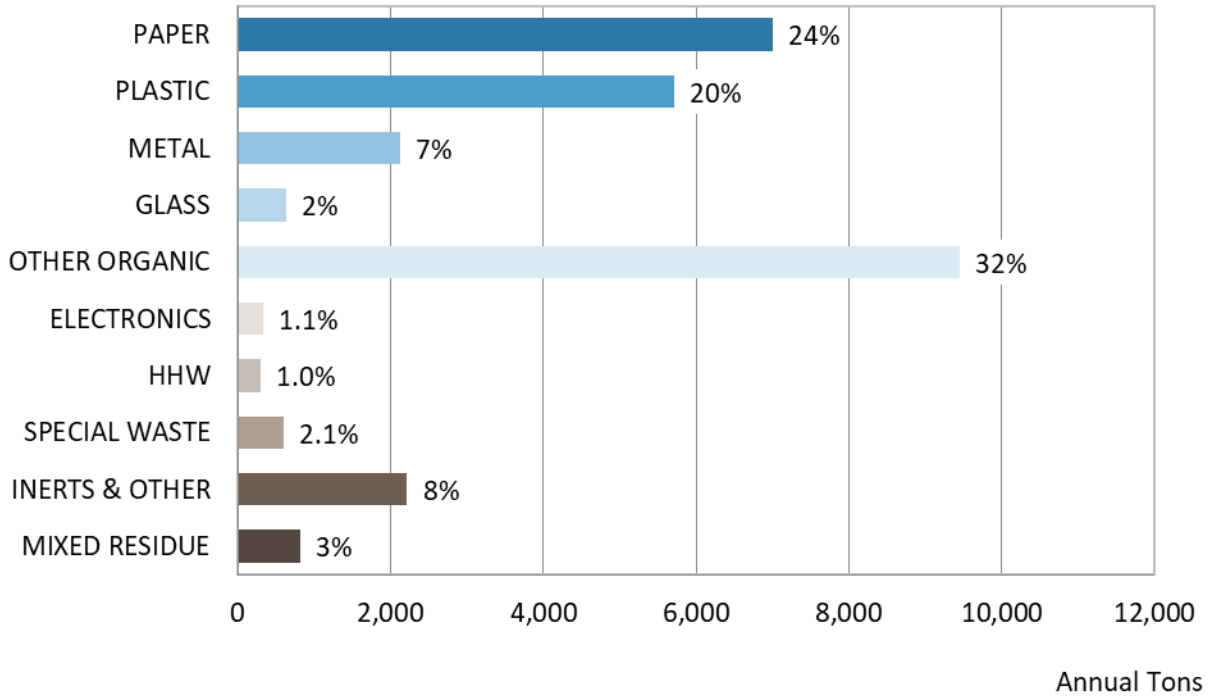


Table 6. Ten Most Prevalent Materials, Commercial

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	19.7%	5,757
Compostable Paper	7.8%	2,281
Other Recyclable Paper	6.2%	1,813
Uncoated Corrugated Cardboard	5.7%	1,672
Other Film	5.0%	1,453
R/C Organic	4.5%	1,316
Other Ferrous	3.0%	882
Plastic Trash Bags	2.8%	823
Mixed Residue	2.8%	821
Non-Bag Industrial Packaging Film	2.7%	793
Total for Top Materials	**60.3%**	**17,610**

Combined

The overall combined (mixed residential and commercial) waste composition is the weighted average of 15 samples collected from Blue Lake and Willow Creek (Unincorporated County). Problem Materials make up 34 percent of the combined garbage stream and Compostable/Potentially Compostable materials make up 29 percent of the stream (Figure 10). **Other Organic** is the most prevalent material class at 33 percent followed by **Paper** (24%) (Figure 11). *Food – not donatable* is the most common material type (18.1%), followed by *remainder/composite organic* (8.5%) and *other recyclable paper* (7.0%). The ten most prevalent materials in the combined garbage stream make up two-thirds (66.5%) of the material overall (Table 7).

Figure 10. Overall Composition by Recoverability Group, Combined

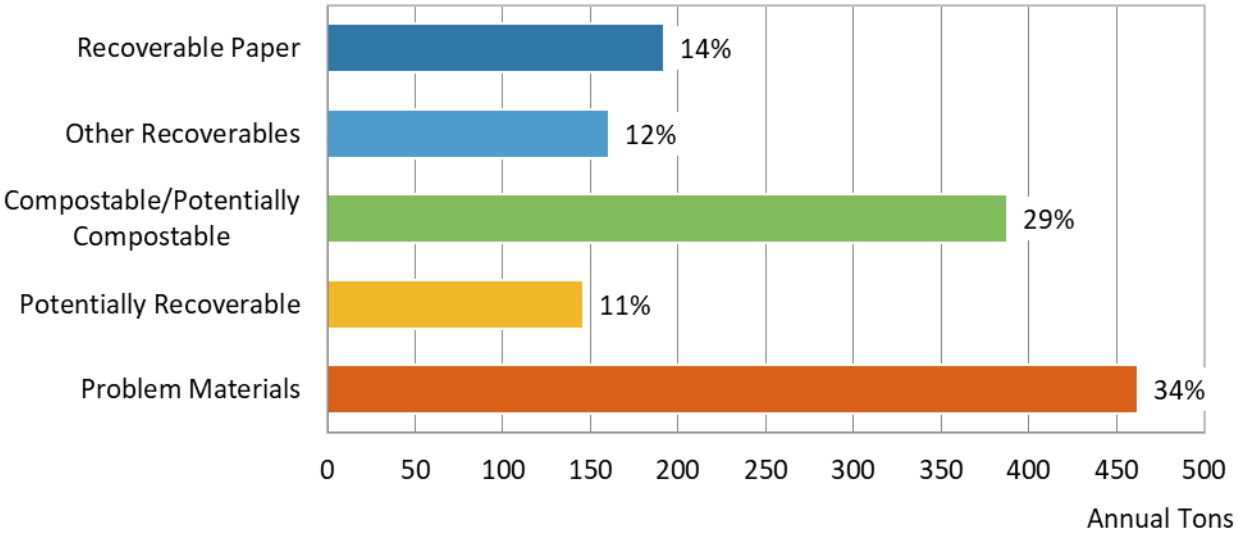


Figure 11. Overall Composition by Material Class, Combined

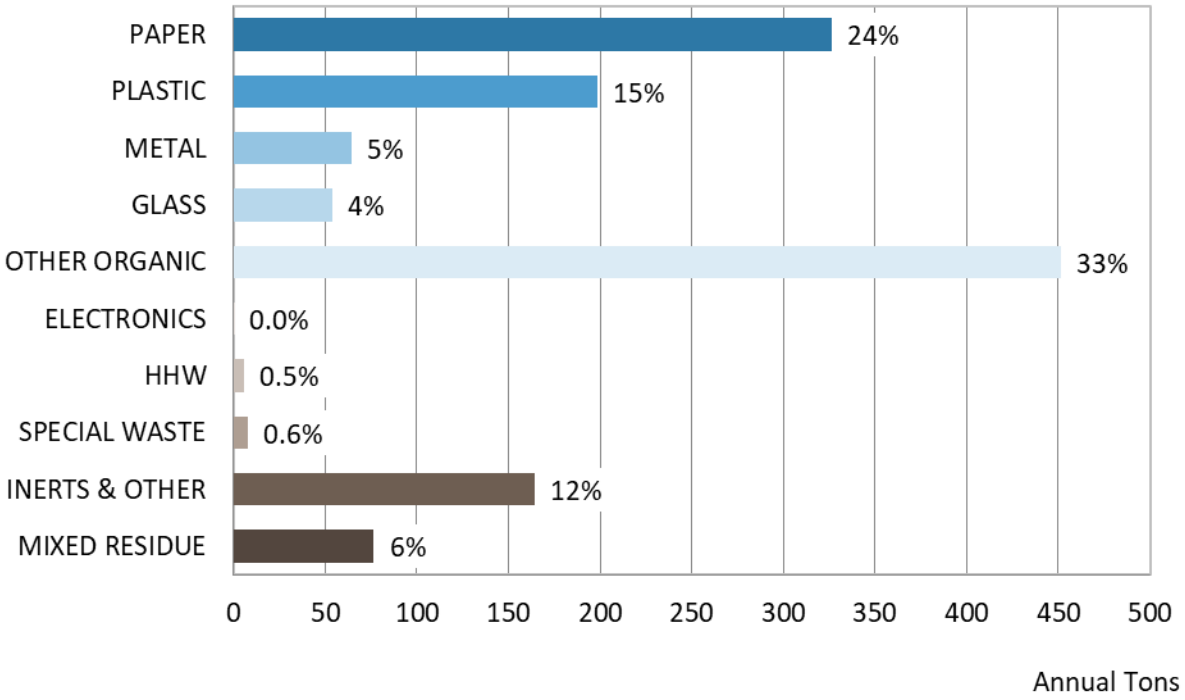


Table 7. Ten Most Prevalent Material Types, Combined

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	18.1%	244
R/C Organic	8.5%	115
Other Recyclable Paper	7.0%	94
Compostable Paper	6.7%	91
Uncoated Corrugated Cardboard	6.1%	82
Mixed Residue	5.7%	77
Other Film	4.6%	62
Textiles - Synthetic, Mixed, & Unknown	3.6%	48
Rock, Soil, & Fines	3.3%	45
Textiles - Organic	2.9%	40
Total for Top Materials	**66.5%**	**897**

Self-haul

The overall waste composition from self-haul sources is the weighted average of 54 samples. Problem Materials make up 35 percent of the self-haul stream, Potentially Recoverable materials make up 31 percent, and the remaining recoverable and compostable material types make up 34 percent of the garbage stream (Figure 12). **Inerts and Other** is the most prevalent material class (30%) (Figure 13). *Remainder/composite metal* is the most common material type (11.5%), followed by *clean dimensional lumber* (8.7%) and *other recyclable paper* (6.7%). The ten most prevalent materials in the self-haul garbage stream make up over half (60.7%) of the material overall (Table 8).

Figure 12. Overall Composition by Recoverability Group, Self-haul

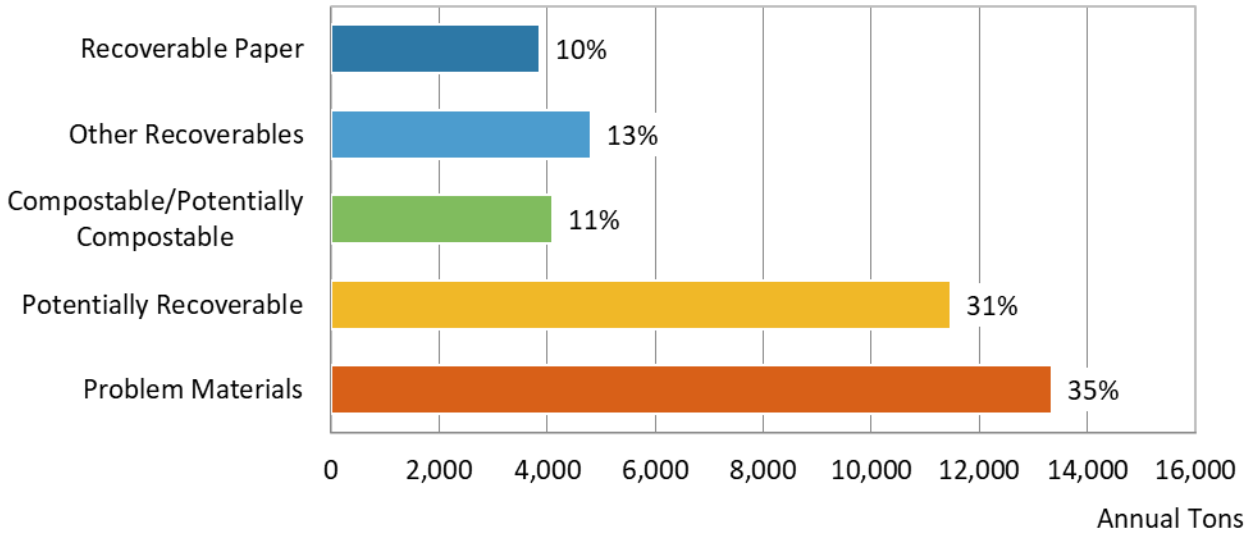


Figure 13. Overall Composition by Material Class, Self-haul

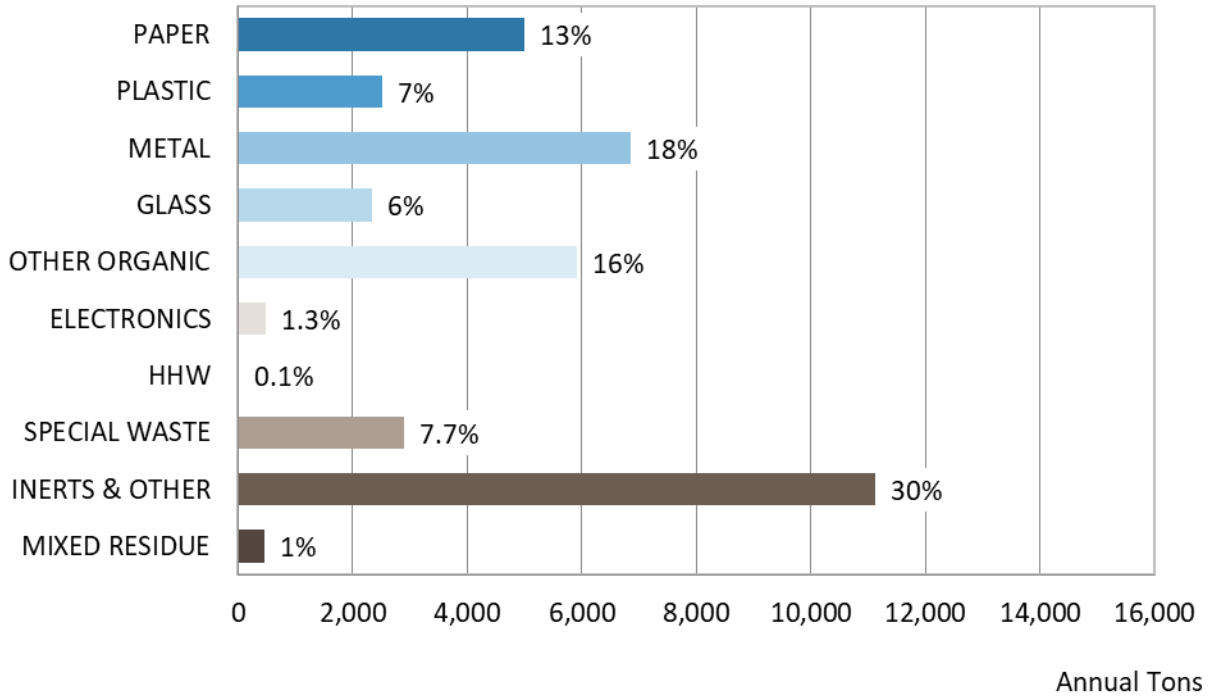


Table 8. Ten Most Prevalent Material Types, Self-haul

Material	Estimated Percent	Estimated Tons
R/C Metal	11.5%	4,313
Clean Dimensional Lumbar	8.7%	3,259
Other Recyclable Paper	6.7%	2,509
Food - Not Donatable	6.3%	2,372
Other Wood Waste	6.0%	2,267
Bulky Items	5.7%	2,158
R/C Inerts & Other	4.8%	1,801
Other Ferrous	4.4%	1,642
Clear Glass Bottles Containers	3.5%	1,319
Rock, Soil, & Fines	3.1%	1,183
Total for Top Materials	**60.7%**	**22,825**

C&D

The overall waste composition from C&D sources is the average composition of 16 samples. Problem Materials make up only 23 percent of the C&D stream (the lowest percentage of all streams). Potentially Recoverable materials account for nearly three-quarters (73%) of the stream (Figure 14). **Inerts and Other** make up 90% of the material in the C&D stream (Figure 15), and *asphalt composition shingles*, by far the most prevalent material type, account for nearly half of the material overall (48.7%) (Table 9).

Figure 14. Overall Composition by Recoverability Group, C&D

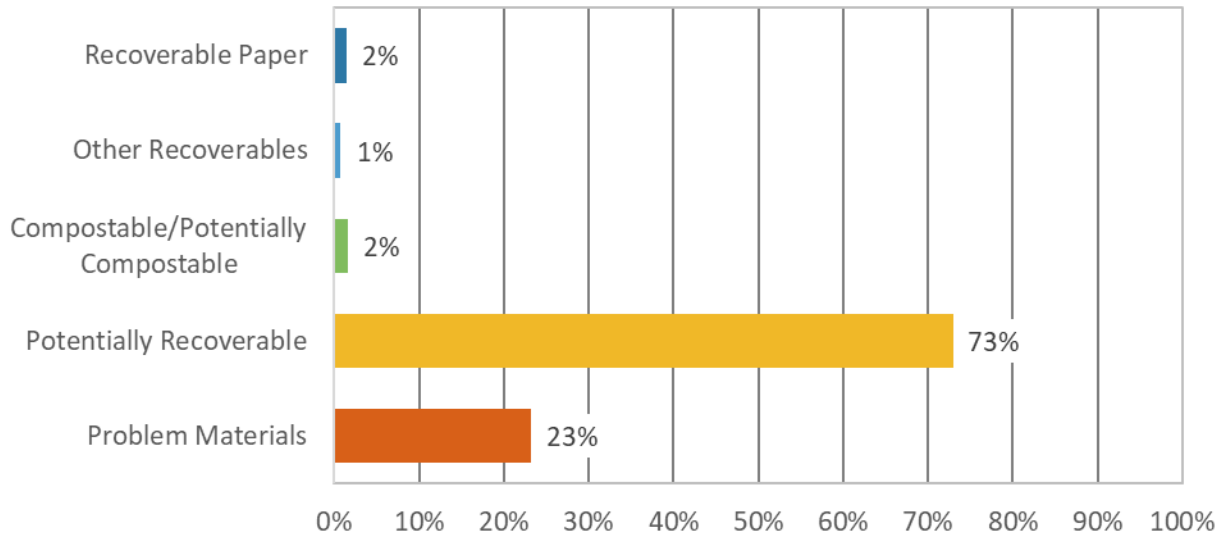


Figure 15. Overall Composition by Material Class, C&D

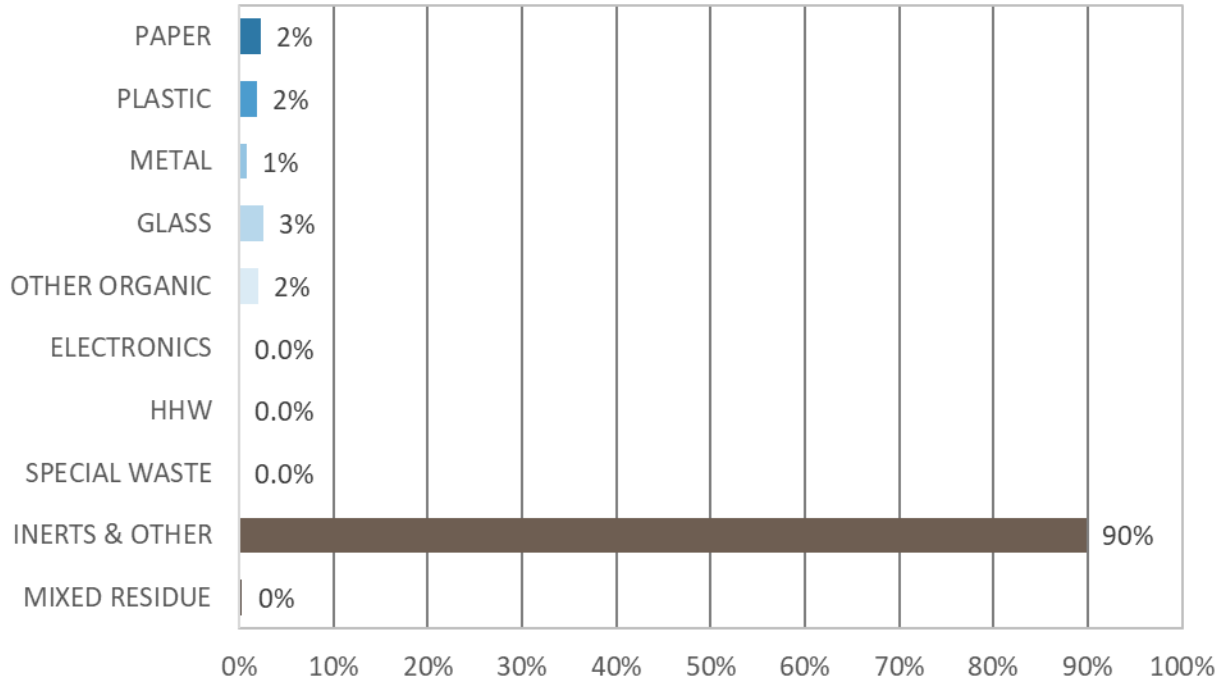


Table 9. Ten Most Prevalent Material Types, C&D

Material	Estimated Percent
Asphalt Composition Shingles	48.7%
Other Wood Waste	9.5%
R/C Inerts & Other	7.6%
Clean Pallets Crates	4.8%
Roofing Tar Paper/Felt	4.5%
Clean Engineered Wood	4.2%
Rock, Soil, & Fines	3.1%
Clean Dimensional Lumbar	3.0%
R/C Glass	2.6%
Painted/Demolition Gypsum Board	2.2%
Total for Top Materials	**90.3%**

RESULTS BY MEMBER

City of Arcata

The overall waste composition of the city of Arcata is the weighted average of 47 samples. Recoverable Paper, Other Recoverables, and Compostable/Potentially Compostable materials make up nearly half (49%) of Arcata's garbage stream. Unrecoverable Problem Materials make up one-third (33%) (Figure 16). **Other Organic** and **Inerts and Other** are the most prevalent material classes at 21 percent each (Figure 17). *Food – not donatable* is the most common material type (16.4%), followed by *other recyclable paper* (8.0%) and *compostable paper* (7.2%) (Table 10).

Figure 16. Overall Composition by Recoverability Group, Arcata

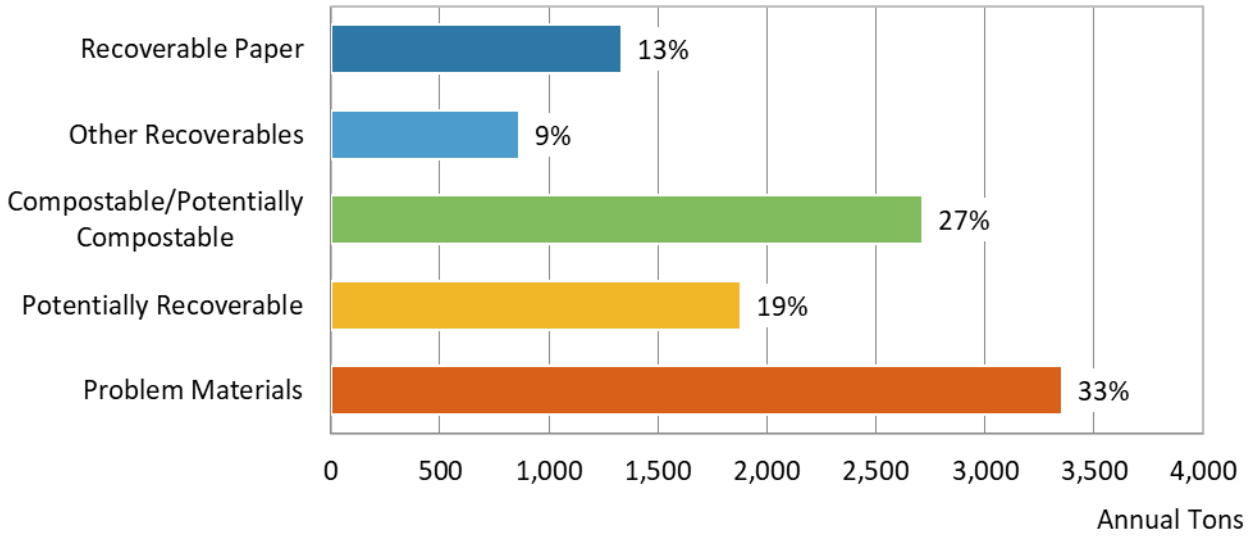


Figure 17. Overall Composition by Material Class, Arcata

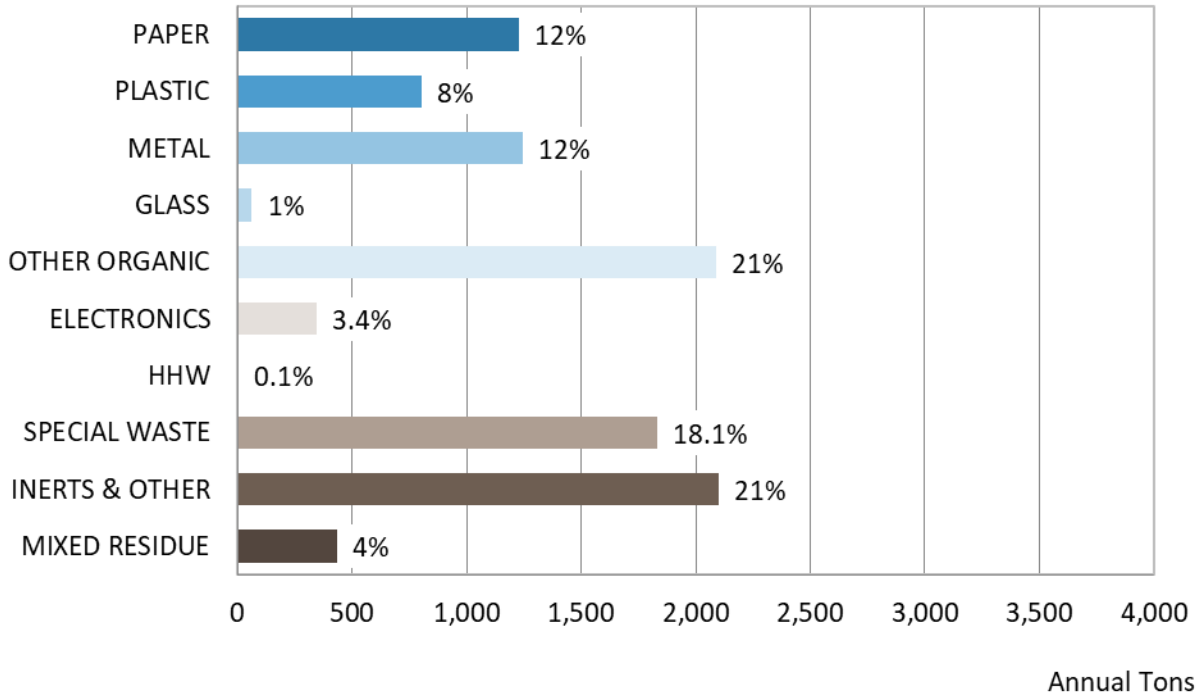


Table 10. Ten Most Prevalent Material Types, Arcata Overall

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	16.4%	1,669
Other Recyclable Paper	8.0%	808
Compostable Paper	7.2%	728
R/C Organic	6.5%	663
Mixed Residue	6.0%	607
Other Wood Waste	4.9%	499
Other Film	4.7%	478
Uncoated Corrugated Cardboard	4.1%	419
Textiles - Organic	3.8%	381
Textiles - Synthetic, Mixed, & Unknown	3.5%	352
Total for Top Materials	**65.1%**	**6,603**

City of Blue Lake

The overall waste composition of the city of Blue Lake is the weighted average of 15 samples. Recoverable Paper, Other Recoverables, and Compostable/Potentially Compostable materials make up over half (55%) of Blue Lake's garbage stream. Unrecoverable Problem Materials make up approximately one-third (32%) (Figure 18). **Other Organic** (32%) and **Paper** (22%) are the most prevalent material classes (Figure 19). *Food – not donatable* is the most common material type (17.3%), followed by *compostable paper* (8%) and *remainder/composite organic* (7.8%) (Table 11).

Figure 18. Overall Composition by Recoverability Group, Blue Lake

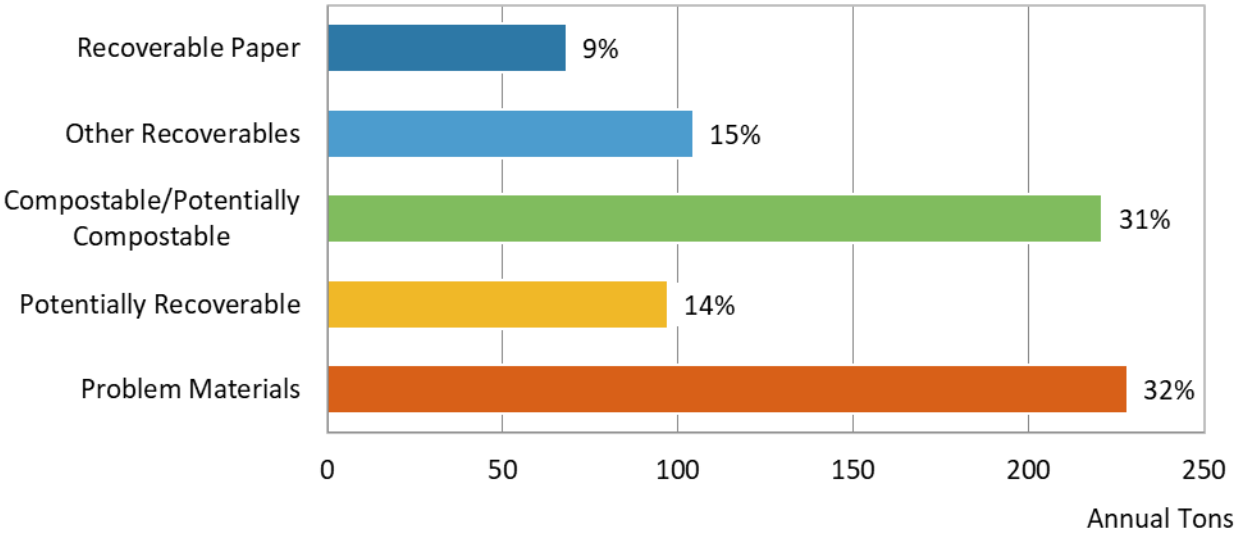


Figure 19. Overall Composition by Material Class, Blue Lake

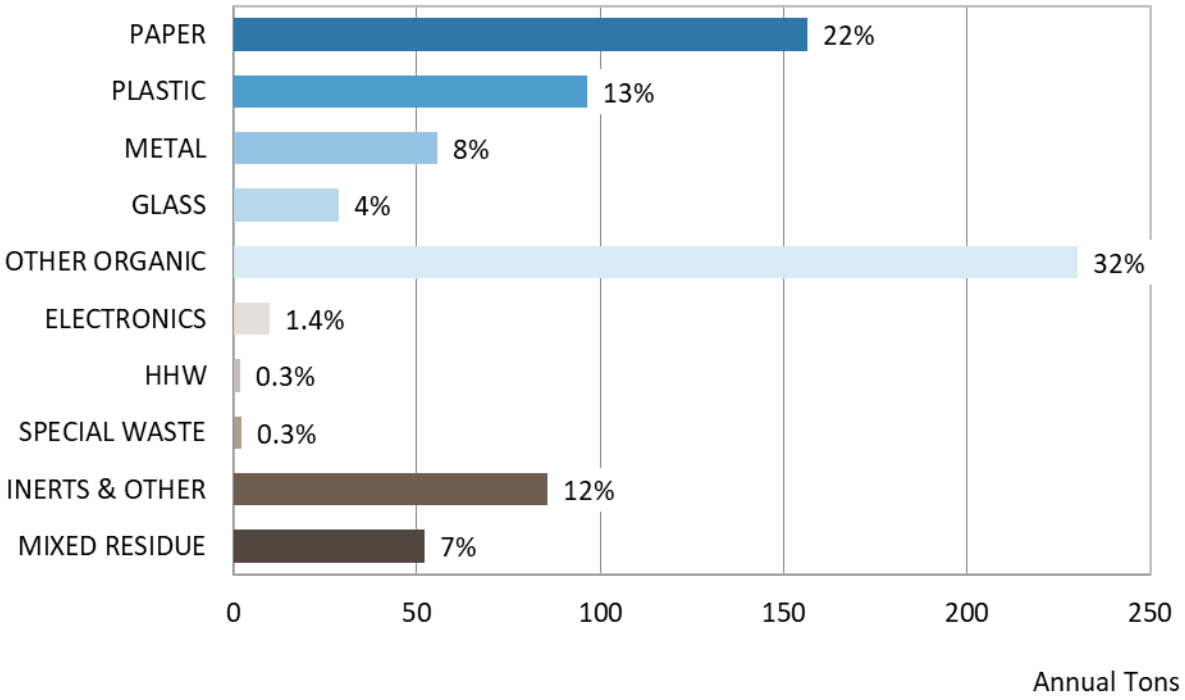


Table 11. Ten Most Prevalent Material Types, Blue Lake Overall

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	17.3%	125
Compostable Paper	8.0%	58
R/C Organic	7.8%	56
Mixed Residue	7.2%	52
Other Recyclable Paper	5.8%	42
Other Film	4.0%	28
Other Wood Waste	3.9%	28
R/C Paper	3.3%	24
Other Ferrous	2.8%	20
Uncoated Corrugated Cardboard	2.6%	19
Total for Top Materials	**62.9%**	**452**

City of Eureka

The overall waste composition of the city of Eureka is the weighted average of 47 samples. Recoverable Paper, Other Recoverables, and Compostable/Potentially Compostable materials make up 39 percent of Eureka's garbage stream. Unrecoverable Problem Materials make up approximately one-third (31%) (Figure 20). **Other Organic** (26%) and **Inerts and Other** (24%) are the most prevalent material classes (Figure 21). *Food – not donatable* is the most common material type (13.1%), followed by *clean dimensional lumber* (9.4%) and *other recyclable paper* (5.2%) (Table 12).

Figure 20. Overall Composition by Recoverability Group, Eureka

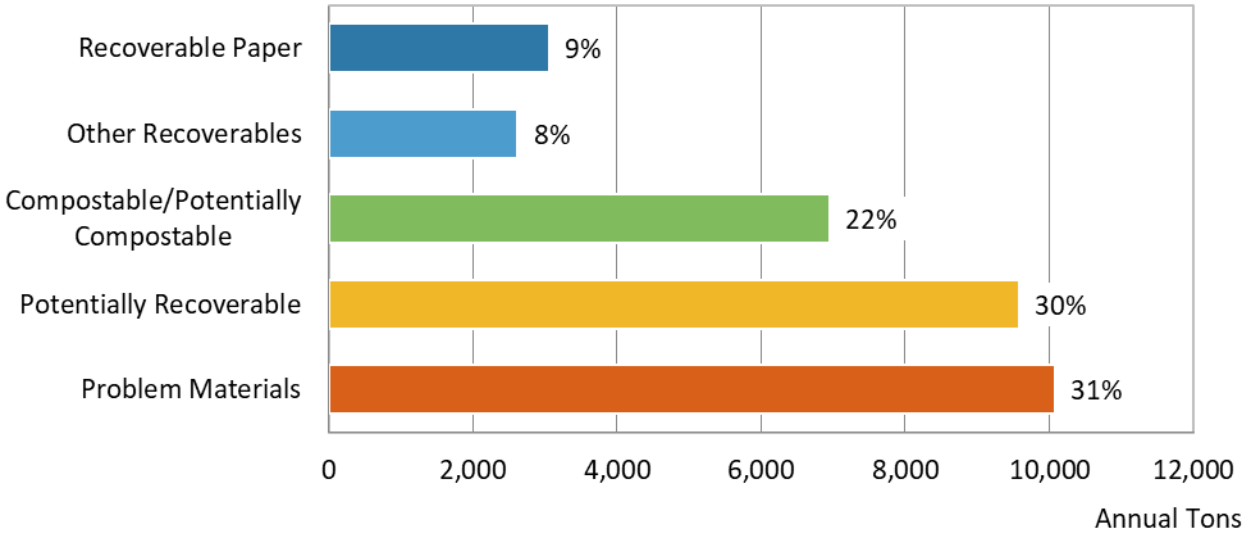


Figure 21. Overall Composition by Material Class, Eureka

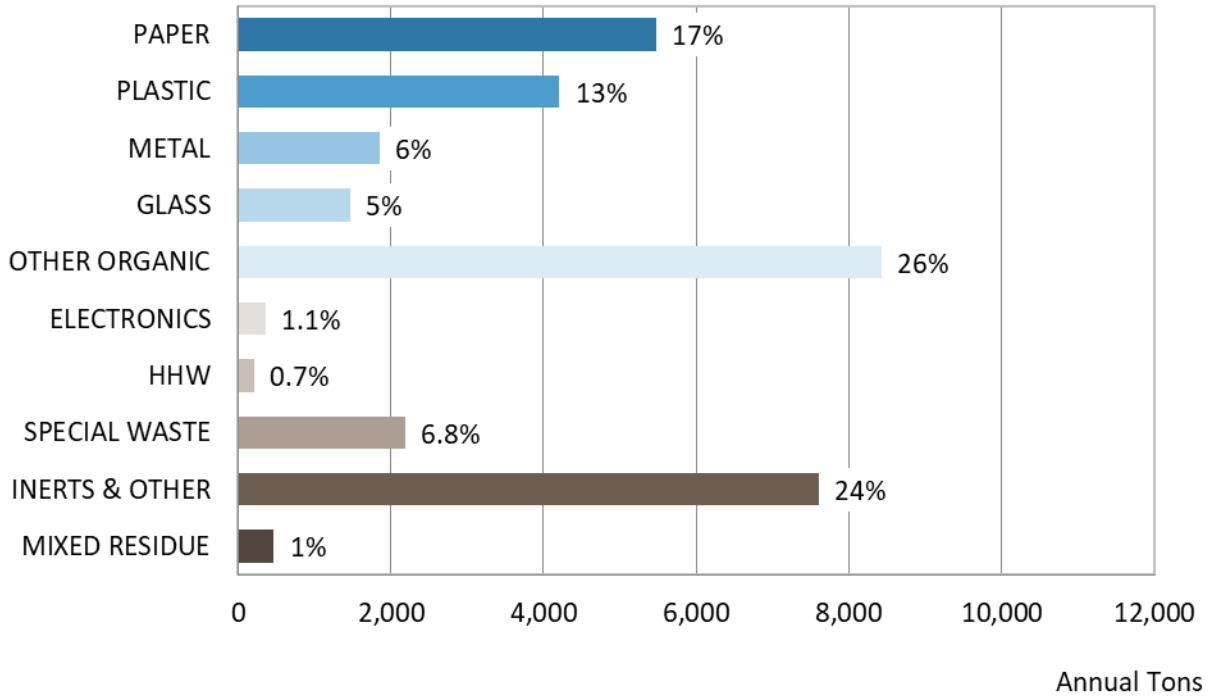


Table 12. Ten Most Prevalent Materials, Eureka Overall

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	13.1%	4,225
Clean Dimensional Lumbar	9.4%	3,047
Other Recyclable Paper	5.2%	1,684
Compostable Paper	4.9%	1,570
Bulky Items	4.4%	1,430
Other Wood Waste	4.1%	1,321
Other Film	3.8%	1,232
Uncoated Corrugated Cardboard	3.7%	1,189
R/C Organic	3.6%	1,155
Rock, Soil, & Fines	3.4%	1,089
Total for Top Materials	**55.6%**	**17,942**

City of Ferndale

The overall waste composition of the city of Ferndale is the weighted average of 15 samples. Compostable/Potentially Compostable materials make up 38 percent of Ferndale's garbage stream. Unrecoverable Problem Materials make up approximately one-third (31%) (Figure 22). **Other Organic** (41%) is by far the most prevalent material class (Figure 23). *Food – not donatable* is the most common material type (29.7%), followed by *mixed residue* (8.9%). The ten most prevalent materials together account for nearly three-quarters (72.5%) of Ferndale's garbage (Table 13).

Figure 22. Overall Material Composition by Recoverability Group, Ferndale

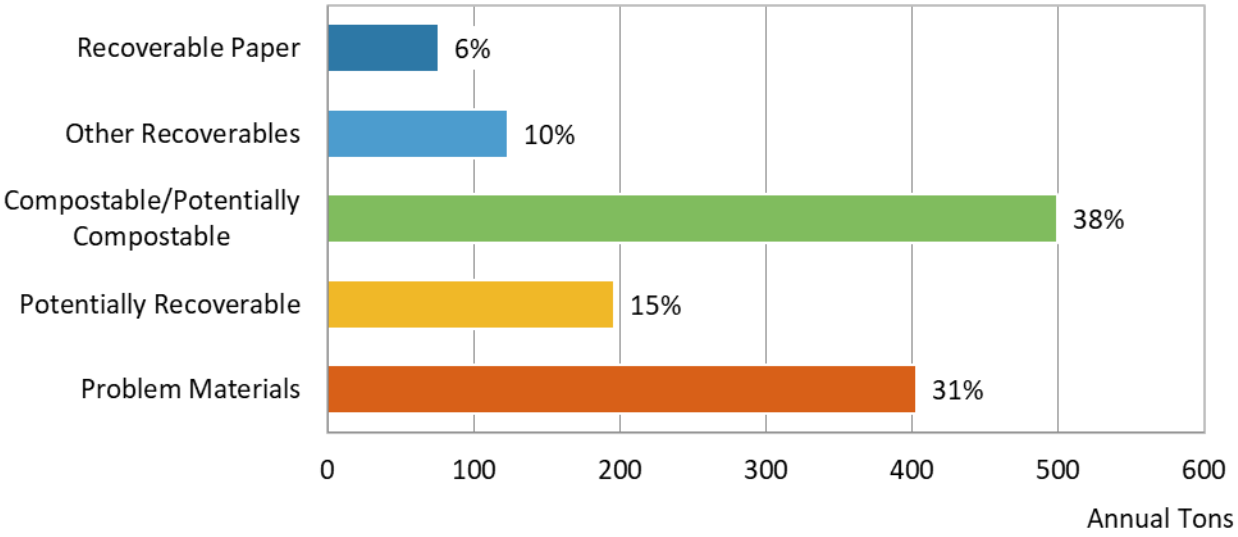


Figure 23. Overall Material Composition by Material Class, Ferndale

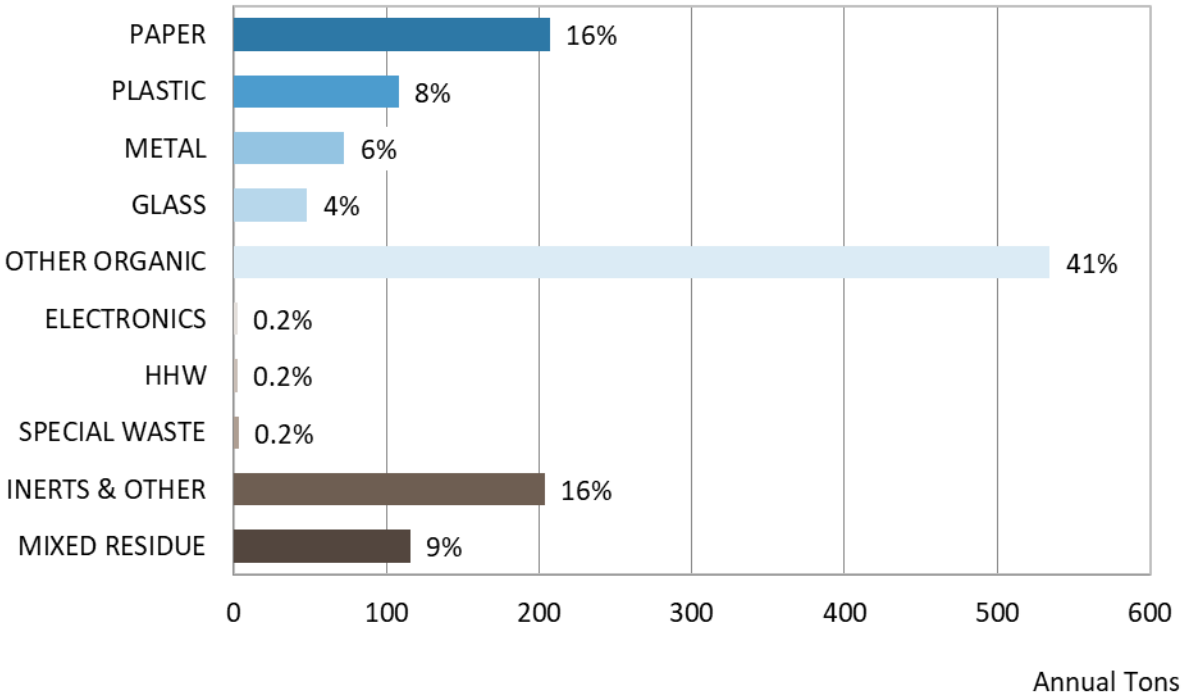


Table 13. Ten Most Prevalent Materials, Ferndale Overall

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	29.7%	386
Mixed Residue	8.9%	116
R/C Organic	5.6%	73
R/C Paper	5.0%	65
Compostable Paper	4.8%	63
Other Recyclable Paper	4.6%	60
Clean Engineered Wood	4.5%	58
Clean Dimensional Lumbar	3.3%	43
Clear Glass Bottles Containers	3.1%	40
Food - Potentially Donatable	3.0%	39
Total for Top Materials	**72.5%**	**942**

City of Rio Dell

The overall waste composition of the city of Rio Dell is the weighted average of 15 samples. Recoverable Paper, Other Recoverables and Compostable/Potentially Compostable materials make up 43 percent of Rio Dell's garbage stream. Unrecoverable Problem Materials make up 40 percent (Figure 24). **Other Organic** (24%)**, Mixed Residue** (20%), and **Paper** (19%) are the most prevalent material classes (Figure 25). *Mixed residue* is the most common material type (19.7%), followed by *food – not donatable* (13.2%) (Table 14).

Figure 24. Overall Material Composition by Recoverability Group, Rio Dell

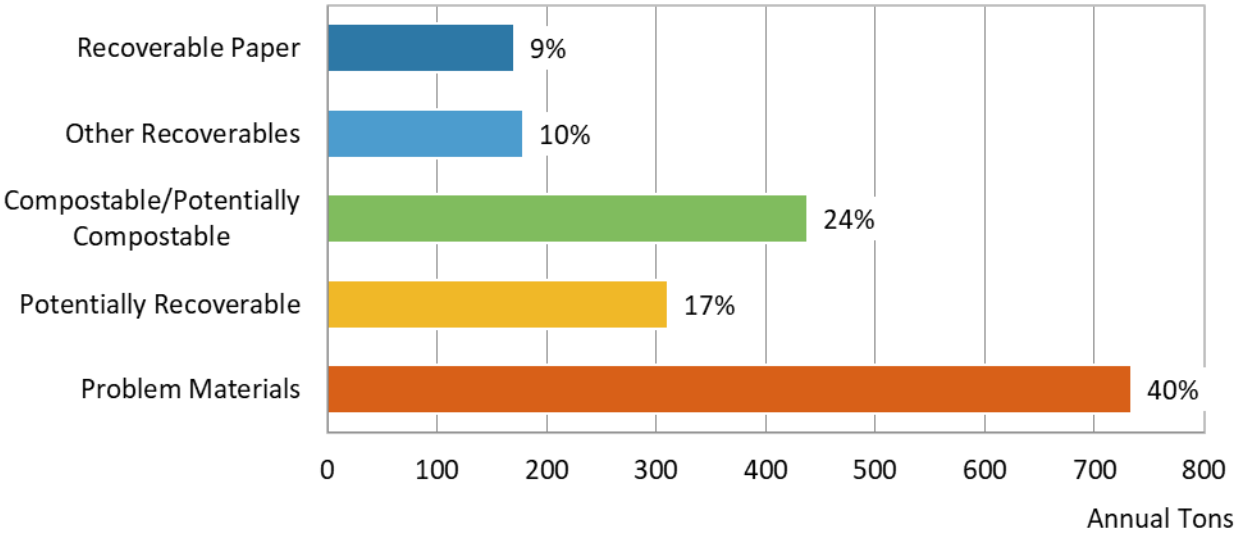


Figure 25. Overall Composition by Material Class, Rio Dell

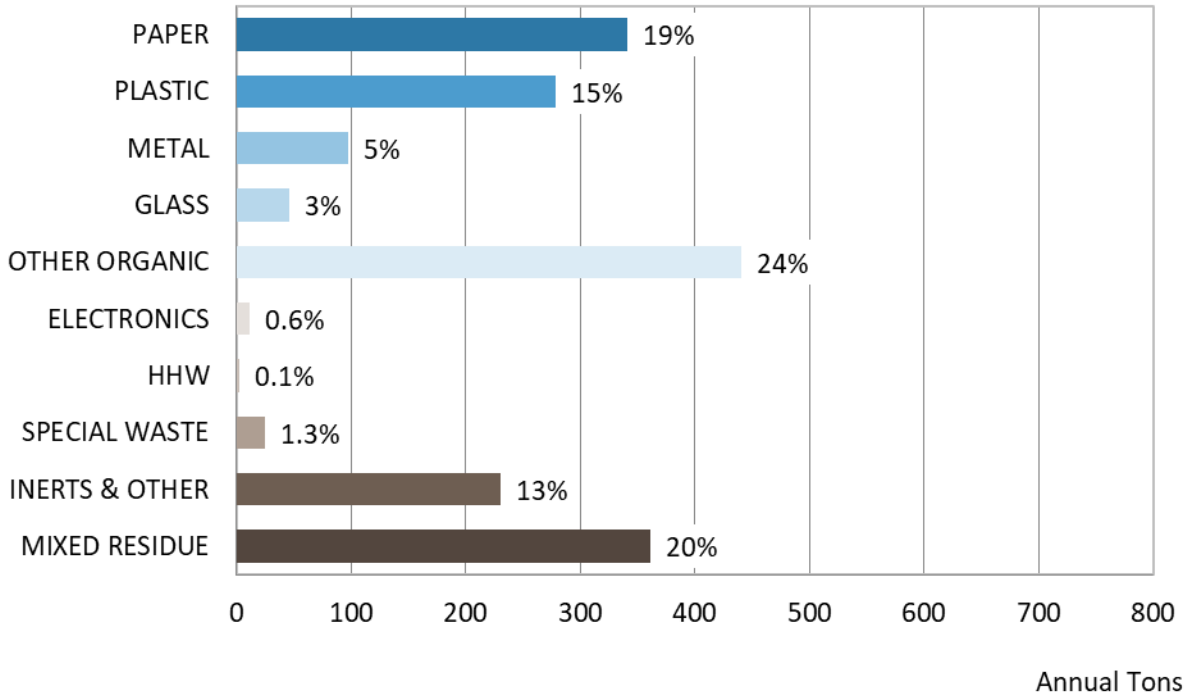


Table 14. Ten Most Prevalent Materials, Rio Dell

Material	Estimated Percent	Estimated Tons
Mixed Residue	19.7%	361
Food - Not Donatable	13.2%	241
Textiles - Synthetic, Mixed, & Unknown	6.6%	121
Other Recyclable Paper	6.3%	115
Compostable Paper	5.6%	103
Textiles - Organic	3.8%	69
R/C Paper	3.4%	62
Other Film	2.7%	49
Uncoated Corrugated Cardboard	2.5%	46
Tin/Steel Cans	2.4%	44
Total for Top Materials	**66.1%**	**1,212**

Unincorporated County

The overall waste composition of unincorporated Humboldt County is the weighted average of 47 samples. Recoverable Paper, Other Recoverables, and Compostable/Potentially Compostable materials make up over half (53%) of the Unincorporated County's garbage stream. Unrecoverable Problem Materials make up approximately one-third (35%) (Figure 26). **Other Organic** (30%) and **Paper** (20%) are the most prevalent material classes (Figure 27). *Food – not donatable* is the most common material type (15.3%), followed by *remainder/composite metal* (9.3%) and *other recyclable paper* (7.7%) (Table 15).

Figure 26. Overall Material Composition by Recoverability Group, Unincorporated County

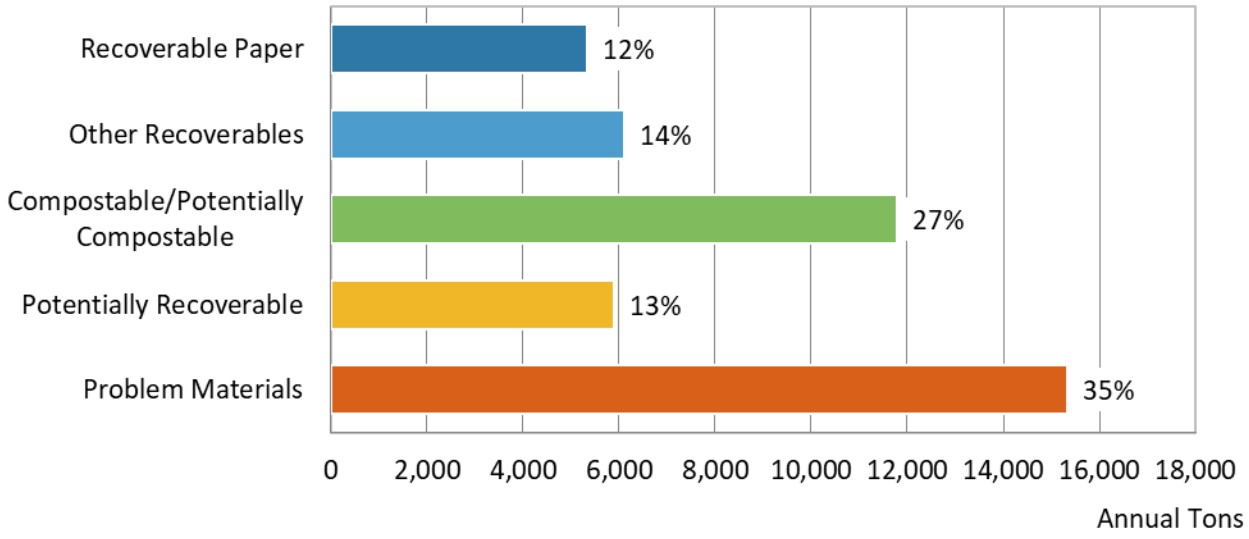


Figure 27. Overall Material Composition by Material Class, Unincorporated County

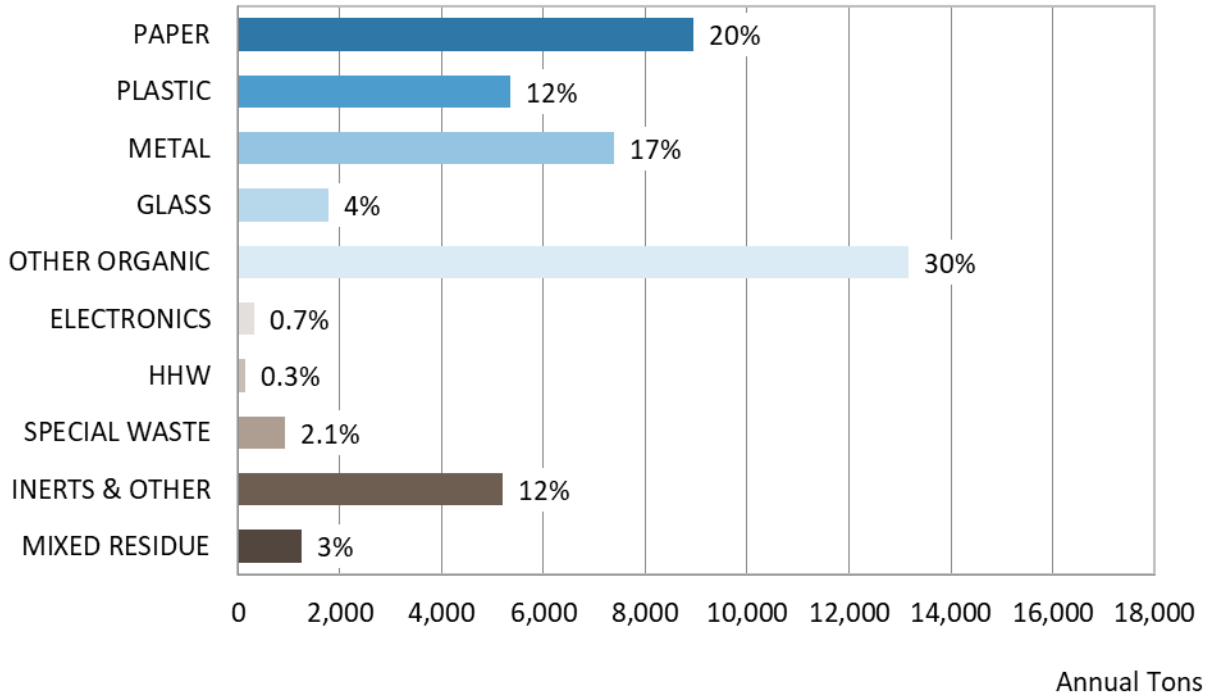


Table 15. Ten Most Prevalent Materials, Unincorporated County

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	15.3%	6,783
R/C Metal	9.3%	4,119
Other Recyclable Paper	7.7%	3,407
Compostable Paper	5.4%	2,420
Other Ferrous	5.1%	2,251
R/C Organic	4.8%	2,122
R/C Inerts & Other	4.5%	1,995
Uncoated Corrugated Cardboard	3.4%	1,521
Clear Glass Bottles Containers	3.4%	1,519
Textiles - Organic	3.3%	1,487
Total for Top Materials	**62.2%**	**27,623**

SEASONAL COMPARISON

The first season of field work occurred in winter 2020, prior to State-mandated restrictions due to the COVID-19 pandemic. Season two of field work was postponed until summer 2021, after the restrictions were lifted. This section provides a comparison of the overall composition of the garbage stream prior to the COVID-19 pandemic in 2020 and the year following the onset of the pandemic in 2021. The comparison of garbage composition between seasons by sectors, including detailed composition tables, can be found in Appendix E. Seasonal Comparison by Sector.

As presented in Figure 28, the overall recoverability of materials is comparable between seasons. The most significant change was a decrease of three percentage points in Compostable/Potentially Compostable material, and a three percent increase in Potentially Recoverable material. All seasonal difference fall well within the error range around the mean for each recoverability group, indicating that the changes between seasons are likely due to sampling and not "real" differences in the composition.

Figure 28. Overall Material Composition by Recoverability Group, Season One vs Season Two

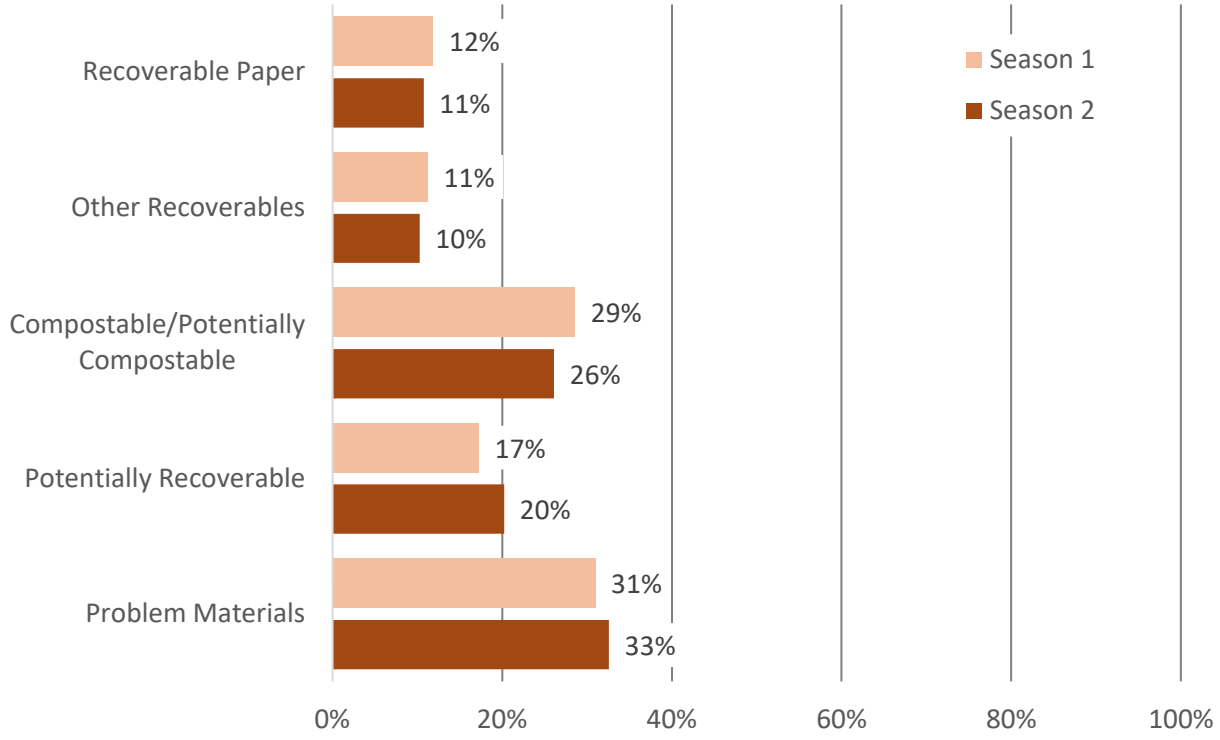
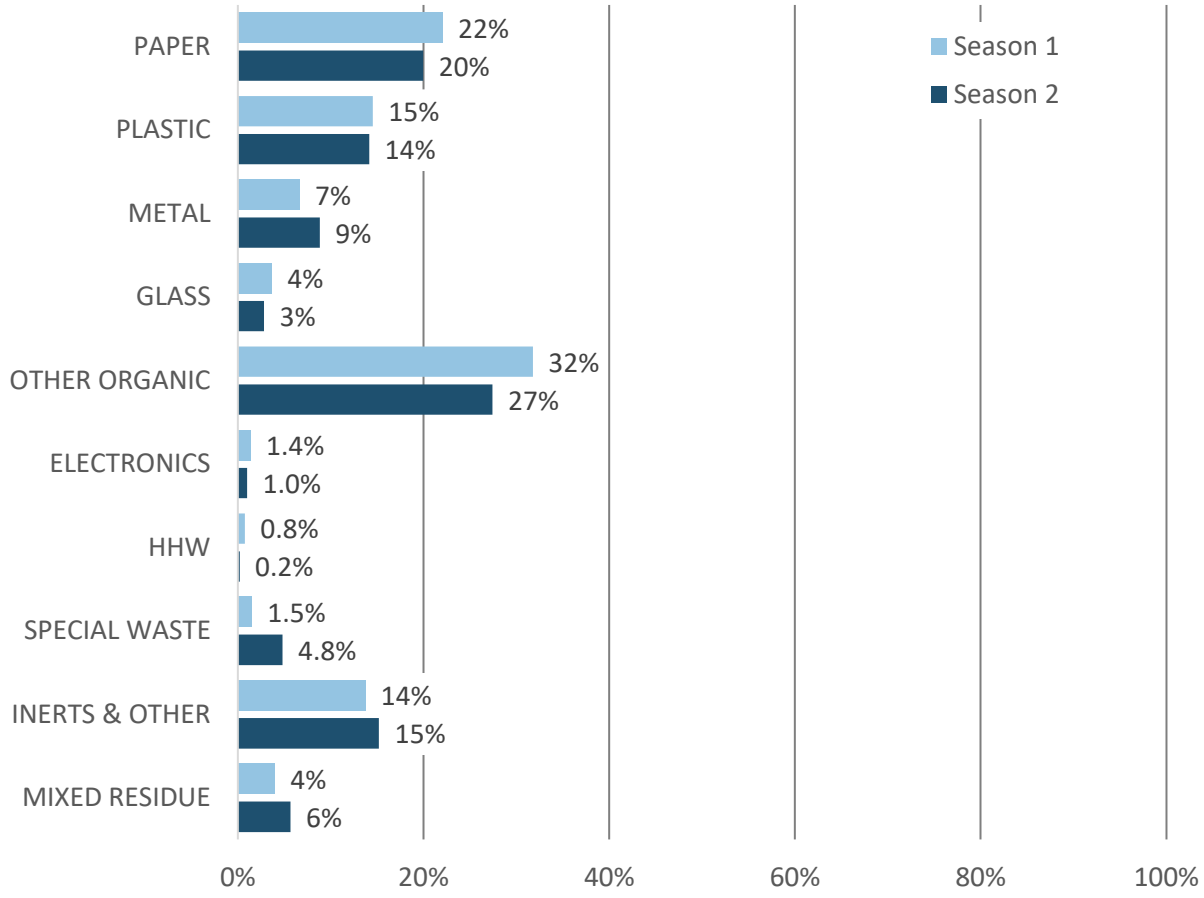


Figure 29 shows the composition by material class. **Other Organic** material decreased from 32 percent to 27 percent in the second season, and Special Waste increased from 1.5 percent to 4.8 percent. All seasonal difference fall well within the error range around the mean for each material class, indicating that the changes between seasons are likely due to sampling and not "real" differences in the composition.

Figure 29. Overall, Material Class, Season One vs. Season Two



WASTE COMPOSITION CHANGES AND TRENDS OVER TIME

Comparing waste composition data collected during previous studies with the current study allows for a useful examination of trends and changes in the disposed waste stream over time. This section presents findings from statistical comparisons between the 2010 disposed waste composition data and the 2020-2021 study. The analysis examines statistical differences, using t-tests, to determine if changes in the composition of members of the HWMA's disposed waste stream are statistically significant.

The year-to-year comparisons were made by examining the changes in the composition percentages for selected material groupings. The material groupings included:

- Paper
- Plastic
- Glass
- Metal
- Other Organic
- Inerts and Other

- Electronics
- Household Hazardous Waste
- Special Waste
- Mixed Residue

Statistical tests were used to analyze differences in the overall composition percentages between years for the following sector substreams:

- Residential
- Commercial
- Self-haul
- Construction and Demolition

Statistical tests were also used to analyze differences in the overall composition percentages between years for the following jurisdictions:

- Arcata
- Eureka
- Blue Lake
- Rio Dell
- Ferndale
- Unincorporated County

The differences in material groupings between studies can be divided into two main categories – statistically significant or not significant.

- Statistically significant—These findings can be considered true differences because the probability of observing these results if there had been no actual year-to-year change is low. The difference was statistically significant if the p-value is less than or equal to 0.01.

Because the waste composition results are expressed as percentages, rather than absolute tonnages, significant changes for one material may affect the percentages for other materials. For example, increases over time in materials recycled may alter the percentages for other materials remaining in the disposed waste stream.

Overall, Other Organics decreased by about 11 percentage points. The decrease in Other Organics was most significant across the residential and commercial sectors. Inerts and Other increased overall by 6.5 percentage points and showed a statistically significant increase in the Residential sector. Mixed Residue increased by 3.4 percent overall.

Comparisons identified as “statistically significant” in the tested sectors are summarized in the tables below. Note that the t-test could not determine statistically significant changes in the C&D sector due to the small sample size of that sector. The comparisons for each jurisdiction can be found in Appendix F. Waste Composition Changes and Trends by Jurisdiction.

Table 16. Waste Composition Changes and Trends, 2010 vs. 2020, Overall

Material Class	Composition† 2010	Composition† 2020	Change	Change in Composition	t-Statistic	p-Value	Strength of Results
Paper	22.2%	21.0%	-5.4% ▼	-1.2% ▼	0.91	0.364	not significant
Plastic	14.6%	14.3%	-1.9% ▼	-0.3% ▼	0.27	0.790	not significant
Glass	2.9%	3.2%	12.1% ▲	0.4% ▲	0.57	0.567	not significant
Metal	7.1%	7.7%	8.8% ▲	0.6% ▲	0.37	0.710	not significant
Other Organic	40.9%	29.6%	-27.7% ▼	-11.3% ▼	5.73	0.000 *	stat. significant
Inerts and Other	8.0%	14.5%	81.7% ▲	6.5% ▲	2.64	0.009 *	stat. significant
Electronics	0.7%	1.2%	76.5% ▲	0.5% ▲	1.30	0.196	not significant
Household Hazardous Waste	0.4%	0.5%	32.9% ▲	0.1% ▲	0.52	0.605	not significant
Special Waste	2.0%	3.2%	61.2% ▲	1.2% ▲	0.92	0.358	not significant
Mixed Residue	1.4%	4.8%	249.3% ▲	3.4% ▲	4.69	0.000 *	stat. significant
Number of Samples	**187**	**186**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Table 17. Waste Composition Changes and Trends, 2010 vs. 2020, Residential

Material Class	Composition† 2010	Composition† 2020	Change	Change in Composition	t-Statistic	p-Value	Strength of Results
Paper	24.7%	21.9%	-11.4% ▼	-2.8% ▼	1.61	0.112	not significant
Plastic	11.8%	13.8%	16.3% ▲	1.9% ▲	2.55	0.013	not significant
Glass	2.7%	2.0%	-27.0% ▼	-0.7% ▼	1.88	0.064	not significant
Metal	3.4%	3.6%	6.2% ▲	0.2% ▲	0.40	0.689	not significant
Other Organic	53.3%	43.9%	-17.6% ▼	-9.4% ▼	3.94	0.000 *	stat. significant
Inerts and Other	1.5%	6.4%	310.6% ▲	4.8% ▲	4.72	0.000 *	stat. significant
Electronics	0.1%	0.3%	410.3% ▲	0.2% ▲	1.34	0.185	not significant
Household Hazardous Waste	0.2%	0.3%	12.6% ▲	0.0% ▲	0.21	0.834	not significant
Special Waste	0.1%	0.1%	-35.9% ▼	0.0% ▼	0.45	0.656	not significant
Mixed Residue	2.1%	7.9%	279.1% ▲	5.8% ▲	4.86	0.000 *	stat. significant
Number of Samples	**39**	**34**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Table 18. Waste Composition Changes and Trends, 2010 vs. 2020, Commercial

Material Class	Composition† 2010	Composition† 2020	Change	Change in Composition	t-Statistic	p-Value	Strength of Results
Paper	23.0%	24.6%	6.9% ▲	1.6% ▲	0.98	0.328	not significant
Plastic	16.9%	19.0%	12.5% ▲	2.1% ▲	1.32	0.187	not significant
Glass	2.7%	2.4%	-10.6% ▼	-0.3% ▼	0.62	0.534	not significant
Metal	6.0%	7.2%	20.4% ▲	1.2% ▲	0.86	0.392	not significant
Other Organic	41.0%	32.3%	-21.3% ▼	-8.7% ▼	3.83	0.000 *	stat. significant
Inerts and Other	7.3%	7.9%	7.2% ▲	0.5% ▲	0.38	0.708	not significant
Electronics	1.0%	1.1%	11.0% ▲	0.1% ▲	0.17	0.867	not significant
Household Hazardous Waste	0.3%	0.8%	190.0% ▲	0.5% ▲	1.17	0.243	not significant
Special Waste	1.4%	2.0%	47.6% ▲	0.6% ▲	0.76	0.449	not significant
Mixed Residue	0.5%	2.8%	468.3% ▲	2.3% ▲	5.49	0.000 *	stat. significant
Number of Samples	**94**	**83**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Table 19. Waste Composition Changes and Trends, 2010 vs. 2020, Self-haul

Material Class	Composition† 2010	Composition† 2020	Change	Change in Composition	t-Statistic	p-Value	Strength of Results
Paper	17.7%	13.9%	-21.8% ▼	-3.9% ▼	1.24	0.217	not significant
Plastic	12.0%	7.2%	-40.0% ▼	-4.8% ▼	2.96	0.004 *	stat. significant
Glass	3.6%	5.2%	45.2% ▲	1.6% ▲	0.82	0.415	not significant
Metal	13.4%	12.1%	-9.5% ▼	-1.3% ▼	0.24	0.812	not significant
Other Organic	28.5%	15.1%	-47.2% ▼	-13.5% ▼	2.85	0.005 *	stat. significant
Inerts and Other	15.6%	30.8%	97.7% ▲	15.2% ▲	2.20	0.030	not significant
Electronics	0.6%	2.3%	262.5% ▲	1.6% ▲	1.90	0.060	not significant
Household Hazardous Waste	0.7%	0.1%	-83.8% ▼	-0.5% ▼	2.28	0.025	not significant
Special Waste	5.2%	7.7%	48.4% ▲	2.5% ▲	0.56	0.573	not significant
Mixed Residue	2.7%	5.7%	107.8% ▲	2.9% ▲	1.22	0.225	not significant
Number of Samples	**54**	**54**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Table 20. Waste Composition Changes and Trends, 2010 vs 2020, C&D

Material Class	Composition† 2010	Composition† 2020	Change	Change in Composition	t-Statistic	p-Value	Strength of Results
Paper	1.6%	2.3%	43.3% ▲	0.7% ▲	0.65	0.515	not significant
Plastic	0.8%	2.0%	148.6% ▲	1.2% ▲	2.48	0.015	not significant
Glass	2.9%	2.6%	-8.2% ▼	-0.2% ▼	0.11	0.916	not significant
Metal	3.4%	0.8%	-77.0% ▼	-2.6% ▼	1.11	0.271	not significant
Other Organic	10.3%	2.0%	-80.0% ▼	-8.2% ▼	1.65	0.101	not significant
Inerts and Other	78.7%	89.9%	14.2% ▲	11.2% ▲	1.50	0.137	not significant
Electronics	0.0%	0.0%	-100.0% ▼	0.0% ▼	0.42	0.677	not significant
Household Hazardous Waste	0.1%	0.0%	-100.0% ▼	-0.1% ▼	0.57	0.569	not significant
Special Waste	0.8%	0.0%	-100.0% ▼	-0.8% ▼	0.76	0.448	not significant
Mixed Residue	1.5%	0.3%	-76.4% ▼	-1.1% ▼	0.71	0.481	not significant
Number of Samples	**88**	**16**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Appendix A. Study Design

INTRODUCTION AND OVERVIEW

To obtain data about the composition of disposed solid waste, the Humboldt Waste Management Authority (HWMA) hired Cascadia Consulting Group (Cascadia) to characterize the disposed waste streams from five Humboldt County cities and the unincorporated areas of the county (collectively, the Members). The findings from this study are intended to provide information about the quantities and types of currently disposed materials. They will inform solid waste planning by identifying recycling and other diversion opportunities and measuring successes against the baseline established in 2010. The study's overall objectives are to:

- Current composition and quantity data.
- A comparison to the 2010 composition data.
- Additional detail on disposed food waste and other organics to help plan for the goals set in AB 1826 (Organics Diversion) and SB 1383 (Short-Lived Climate Pollutants).

This study design includes protocols for a representative and unbiased approach to selecting routes and customers for sampling. This document also describes the sampling and data analysis methodologies. The study design is organized into the following sections:

- Introduction and Overview
- Sampling Universe
- Number and Allocation of Samples
- Sampling Calendar
- Site Logistics and Hauler/Facility Coordination
- Selecting and Collecting Samples
- Sample Sorting and Data Recording
- Data Analysis

SAMPLING UNIVERSE

The first step in planning a waste characterization study is to identify and carefully define the waste streams: the "universe" of waste to be studied. Each stream is determined by the generation, collection, or composition characteristics that make it a unique portion of the total waste stream. The sampling universe for this study includes a single waste stream generated by four distinct sectors from the six Members of the HWMA.

Streams

- Garbage: Materials placed in containers that are normally hauled to a landfill with minimal or no processing.

Sectors

- Residential: Waste from single-family homes or small complexes collected on a designated residential route. This may include small amounts of waste from very small commercial generators (businesses with cart service instead of dumpster service).
- Commercial: Waste from non-residential properties including businesses, industries (e.g., factories, farms), and/or institutions (e.g., correctional facilities, hospitals, churches) collected on a designated commercial route. This may include multifamily residential waste.
- Self-haul: Waste from generators that transport their own materials from a residence or business to a transfer station rather than using commercial hauling services.
- Construction and Demolition: Waste produced during the construction, renovation, and/or demolition of buildings or structures that is received at a transfer station. This includes self-haul materials as well as materials hauled by certified or franchised waste haulers.

HWMA Members and Participating Jurisdictions

- City of Arcata
- City of Blue Lake
- City of Eureka
- City of Ferndale
- City of Rio Dell
- Unincorporated Humboldt County[3]

NUMBER AND ALLOCATION OF SAMPLES

Cascadia will collect 186 samples of residential, commercial, and self-haul garbage from HWMA Members, allocated approximately equally between the two seasons and among the six Members. The number of samples allocated to each Member is proportionate to their relative populations. Residential and commercial samples will be hand-sorted and self-haul samples will be visually characterized[4].

In addition, Cascadia will visually characterize as many construction and demolition (C&D) samples received at HWMA's Hawthorne Street Transfer Station (HSTS) as possible during the second season of field work. There is no sampling quota for this stream because the number of loads available for characterization is unknown and is expected to be lower than in the previous study.

The number of samples allocated to each Member and sector is summarized in Table 21.

[3] *Willow Creek and the surrounding area serviced by Tom's Trash will be sampled and reported separately because of its unique collection system. It will also be included in the unincorporated county overall composition.*

[4] *For the targeted C&D and self-haul waste streams, visual characterization of entire loads produces more accurate findings than hand-sorting 200–250 lb. samples. The advantages of this approach are detailed in the Selecting and Collecting Samples section below.*

Table 21. Target Samples per Season, HWMA Members

Jurisdiction	Sector	Sample Goals		
		Winter	Summer	Total
Arcata	Commercial	13	12	25
Arcata	Residential	5	5	10
Arcata	Self-haul	6	6	12
Blue Lake City	Res/Com	5	4	9
Blue Lake City	Self-haul	3	3	6
Eureka	Commercial	13	12	25
Eureka	Residential	5	5	10
Eureka	Self-haul	6	6	12
Ferndale	Commercial	3	3	6
Ferndale	Residential	2	1	3
Ferndale	Self-haul	3	3	6
Rio Dell	Commercial	3	3	6
Rio Dell	Residential	2	1	3
Rio Dell	Self-haul	3	3	6
Unincorporated County	Commercial	13	12	25
Unincorporated County	Residential	5	5	10
Unincorporated County	Self-haul	6	6	12
All HWMA Jurisdictions	C&D	0	10-40	10-40
Total		**96**	**100-130**	**196-226**

SAMPLING CALENDAR

The field work will be based on regular collection and operating schedules and is arranged to ensure an even distribution of samples across days of the week. The two study seasons, in February and June 2020, will each consist of seven field work days in a two-week period. Table 22 shows the planned dates for both study seasons.

Table 22. Study Season Schedule

Study Season	Dates
Winter	February 4-8, 11-12
Summer	June 8-12, 15-16

All commercial, residential, and self-haul samples will be evenly distributed across days of the week during each study period. Willow Creek is dedicated as an independent stream because residential and commercial routes in the Willow Creek area are collected and mixed together. They are hauled by Tom's Trash and deposited in a roll-off container serviced by Humboldt Sanitation. We will request that the roll-off container be serviced and delivered to HSTS for sampling according to the sampling schedule. Similarly, commercial and

residential routes originating from Blue Lake will be characterized as a single steam because they are comingled during regular collection.

Table 23 and Table 24 below summarize the planned daily sample counts per season for HWMA members. The actual daily sample counts may vary slightly.

The field crew lead will be stationed at Eel River Recology Transfer Station (ERTS) in Fortuna, and Humboldt Sanitation in McKinleyville for the first two days of each study period to visually characterize self-haul samples. This will ensure that the self-haul samples reflect the composition of waste generated throughout the Authority.

Table 23. Planned Daily Sample Counts for HWMA Members - Winter Season

		Sector	Mon	Tue	Wed	Thu	Fri	Mon	Tue	Total Samples
Hawthorne St. Transfer Station (HSTS)	Arcata	Res	1	1	1	1	1			5
		Com	2	1	1	4	2	2	1	13
		Self-haul		1	1	1	1	1	1	6
	Blue Lake	Res/Com	1	2				1	1	5
		Self-haul	1		1	1				3
	Eureka	Res		1	1		1		2	5
		Com	2	2	2	1	2	2	2	13
		Self-haul	1	1	1	1	1	1		6
	Ferndale	Res	1		1					2
		Com		2					1	3
		Self-haul	1					1	1	3
	Rio Dell	Res				2				2
		Com	1		1		1			3
		Self-haul					1	1	1	3
	Unincorporated County	Res	1			1		2		4
		Com	1		2	1	3	2	2	11
		Willow Creek		3						3
		Self-haul	1		1	1	1	1	1	6
Total:			14	14	13	14	14	14	13	96

Table 24. Planned Daily Sample Counts for HWMA Members - Summer Season

		Sector	Mon	Tue	Wed	Thu	Fri	Mon	Tue	Total Samples
Hawthorne St. Transfer Station (HSTS)	Arcata	Res			1		1	2	1	5
		Com	2	2	1	2	2	2	1	12
		Self-haul	1	1	1	1	1	1		6
	Blue Lake	Res/Com	1	1				1	1	4
		Self-haul				1	1		1	3
	Eureka	Res	2			1		2		5
		Com	1	2	2	2	2	1	2	12
		Self-haul	1		1	1	1	1	1	6
	Ferndale	Res						1		1
		Com		1					2	3
		Self-haul	1				1		1	3
	Rio Dell	Res				1				1
		Com			1		1	1		3
		Self-haul	1	1	1					3
	Unincorporated County	Res	1	1	1	1				4
		Com	2	1	3	1	1		2	10
		Willow Creek		3						3
		Self-haul		1	1	1	1	1	1	6
Total:			13	14	13	12	12	13	13	90

All C&D samples will be characterized during the summer study season as they arrive at HSTS.

SITE LOGISTICS AND HAULER/FACILITY COORDINATION

Cascadia will coordinate with all involved parties, including the haulers, sites selected for sample capture, and HWMA staff, to ensure smooth execution of the study. Already, during the planning phase, Cascadia scheduled a kickoff meeting with representatives from HWMA, the hauler, and the facilities to receive input from all involved parties on the study protocol and to ensure project goals will be met.

Cascadia staff also performed site visits of HSTS, Humboldt Sanitation transfer station in McKinleyville, and ERTS in Fortuna to understand daily operations and the layout of the facilities. Discussions with the facility managers included the collection process of samples from incoming vehicles, protocol for sorting and/or visually characterizing samples, disposal of sample material, and health and safety.

Lastly, Cascadia coordinated with Recology and received route data to determine schedules of incoming loads and determine which routes would be selected for sampling. Cascadia will establish lines of communication between the haulers, facility staff, and the field crew lead during field work to ensure that all samples are captured and to notify the field crew of incoming loads.

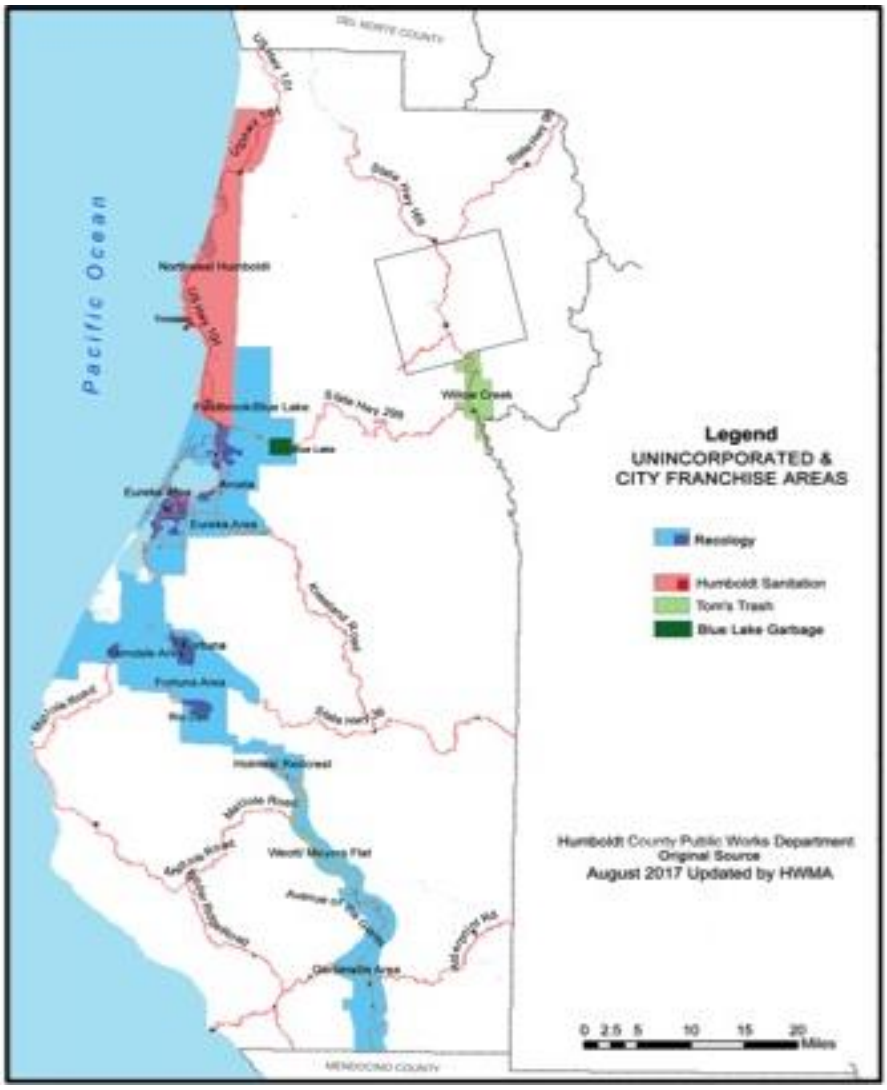
SELECTING AND COLLECTING SAMPLES

Route Selection

Commercial and Residential

There are four haulers that serve the Members. Per the request by HWMA to minimize impacts on daily operations at participating transfer stations, we will work with all haulers to redirect vehicles to HSTS for sampling the pre-selected loads that normally tip at the Redway, Humboldt Sanitation, and Eel River transfer stations. Figure 30 below shows the service areas for each hauler.

Figure 30. Map of HWMA Service Areas by Hauler



Cascadia obtained the schedule for commercially-hauled commercial and residential routes from each of the haulers. When the number of routes exceeded the number of samples needed, we randomly selected routes from each weekday using the =*rand()* function in Microsoft Excel. Through random selection, we ensured that the selected routes provide a representative mix of neighborhoods throughout the Authority.

Cascadia will provide brightly colored *Sample Placards* to the haulers prior to the study week to be distributed to the drivers of the pre-selected routes. Each placard, placed in the windshield of a vehicle, alerts the vehicle surveyor and scale house staff stationed at HSTS that the vehicle has been designated for participation in the study. When a selected truck arrives at HSTS, the surveyor will direct the vehicle to the tipping area.

Self-haul

Cascadia's field crew will characterize self-haul loads on-site during the first two days of each study season at Humboldt Sanitation and ERTS. At HSTS, the field crew will characterize self-haul samples evenly across all days of the study weeks. To select self-haul loads to characterize, Cascadia will calculate a vehicle selection

frequency for each facility. The frequency will be determined by dividing the total expected number of self-haul loads arriving at the facility on that day by the number of samples needed on that day. The resulting number determines, for example, whether every third vehicle, every sixth vehicle, or every twentieth vehicle is selected. This strategy is referred to as "systematic sampling." For each day of field work, the Cascadia surveyor will have a day-specific *Vehicle Selection Form* listing the information needed for selecting loads.

When an eligible vehicle arrives at the scale house and is selected for characterization, the surveyor will place a brightly colored *Sample Placard* on the windshield of the vehicle and direct the vehicle to the tipping area.

C&D

Cascadia will characterize as many C&D samples as possible that are collected throughout the Authority and received at HSTS during the second season of field work. C&D loads are planned be collected in the summer season, as it is expected that very few C&D loads will arrive at HSTF during the winter season. However, if a C&D load does arrive to the facility during the first season of field work, the vehicle surveyor will notify facility staff and the field crew may characterize the load.

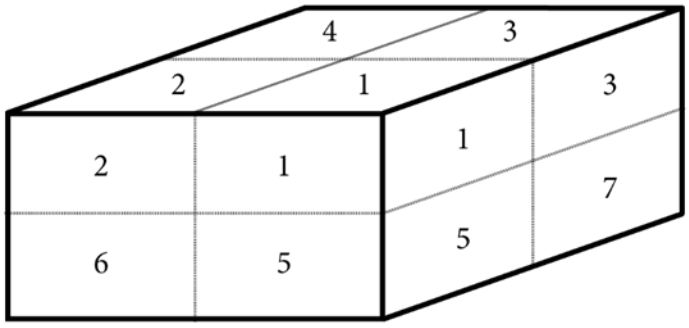
Sample Collection

The sampling approach is dependent on the type of load. The protocol for each sector is described in this section.

Commercial and Residential

Once directed to the tipping floor, selected commercial and residential loads will be tipped in an elongated pile. From each load, the field crew will select a sample using an imaginary 8-cell grid (as shown in Figure 31) superimposed over the tipped material. The crew will provide HWMA's loader operator (Operator) with the randomly-selected cell from which to capture the sample. When the number of commercial or residential loads from a specific Member is less than the number of target samples in a study period (e.g., residential loads from one of the less populous Members), multiple samples may be extracted from a single load.

Figure 31. 8-Cell Grid for Sampling



The target weight of each sample will be 200-250 pounds. Samples will be collected before facility staff divert any materials from the load. The Operator will scoop the specified amount of material from the selected cell and transport the sample(s) from the tip floor to the storing location. Once finished dumping the load and handing off the *Sample Placard(s)*, drivers will make their way back to the scale house to weigh out.

Self-haul and C&D

For selected self-haul and C&D loads, the entire load is considered a sample and will be characterized in place after they are dumped.

SAMPLE SORTING AND DATA RECORDING

Residential and Commercial Loads

Once collected, residential and commercial samples will be hand-sorted according to the following protocol:

- **Step 1: Review methodology and sorting categories with the crew.** To provide consistent sorting quality, Cascadia will use highly trained crew members throughout the project. Before the sorting begins, all crew members will review the safety protocols, procedures, forms, and material definitions in detail.
- **Step 2: Photograph the sample.** A member of the field crew will take photographs of the sample using a digital camera. The *Sample Placard* identifying the sample will be positioned to be visible in each photo.
- **Step 3: Sort the sample.** Once the sample is placed on the sorting table, the field crew will sort material by hand into the prescribed material categories in plastic baskets. Individual members of the field crew typically specialize in groups of materials, such as papers or plastics. The crew lead will monitor the accuracy of sorting, re-sorting materials that are improperly classified. The complete list of material types and definitions are included in Appendix B. Material List.
- **Step 3: Weigh the sample.** The crew lead will verify the purity of each material as it is weighed using a pre-tared scale and will record the data on the *Material Weight Tally Sheet*.
- **Step 4: Review Data.** At the conclusion of each field work day, the crew lead will conduct a quality control review of the data recorded.

Self-haul and C&D Loads

C&D and self-haul samples will be visually characterized. For these types of samples, visual characterizations of entire loads produce more accurate findings than hand-sorting 200–250 lb. samples. This approach is preferable to hand-sorting C&D and self-haul samples for the following reasons:

- These loads are often “chunky;” in other words, they often consist of large pieces or large amounts of one material concentrated in one area of the load. Hand sorting of 200-pound samples does not capture this variability of composition within individual loads. Visual characterization of the entire load accounts for all the materials that are present in significant amounts.
- The composition variability from one load to another in these waste streams is very high. Therefore, in order to obtain high-quality data, it is necessary to characterize relatively more samples. Our cost-effective visual characterization method allows us to characterize far more loads than could be done through hand sorting.

The visual characterization method follows the eight steps described below:

- **Step 1: Collect information about the load.** At the sampling area, our field crew member will record key information, including the net weight and jurisdiction of origin for each self-hauled load.

- **Step 2: Measure load volume.** The crew member will use a tape measure to obtain the length, width, and height of the load while it is still in the vehicle and record it on the data sheet.
- **Step 3: Photograph the sample.** Using a digital camera, the crew member will take a photograph after each sample is tipped. The sample placard that identifies each sample will be positioned so it is visible in each photograph.
- **Step 4: Note which material classes are present.** The crew member will walk entirely around the load and indicate on the *Visual Characterization Form* which major material classes are present in the load.
- **Step 5: Estimate composition by volume for each major material class.** Beginning with the largest major material class present by volume, the crew member will estimate the volumetric percentage of the material class and record it on the form. An example of a major material class is Paper. This process will be repeated for the next largest material class, and so forth, until the volume percentage of every material class has been estimated. The crew member will then calculate the sum of material percentages for this step, ensuring that the total is 100 percent.
- **Step 6: Estimate composition by volume for each specific material component.** The crew member will consider each major material class separately and estimate the percentage of each major class that is made up of each specific material component. For example, *newspaper* is a specific material component within the major material class of Paper materials. While considering only the Paper materials class, the crew member will estimate the volume percentage of Paper materials that is composed of newspaper. The crew member will then do the same for every other specific material component within the Paper material class (such as uncoated corrugated cardboard or office paper). The total of percentages for all of the material components must equal 100 percent. This process is repeated for the other major classes, with all the material components in each material class totaling 100 percent.
- **Step 7: Check and reconcile percentage data.** The crew member will then ensure that the percentage estimates for the major material classes add up to 100 percent. Also, the percentage estimates for the specific material components within each major class must total 100 percent.
- **Step 8: Convert volume estimates to weight estimates.** This step will be done at Cascadia's offices after field work is completed each season. Data from the *Visual Characterization Forms* will be entered into a customized database and accepted density conversion factors will be used to develop estimates of the weight of each material component in each load.

If self-haul samples contain a significant amount of mixed household trash, they will be hand-sorted accorded to the protocol described above in the Residential and Commercial Loads section.

DATA ANALYSIS

The Cascadia team will analyze the data collected using rigorous QA/QC protocols and the standard statistical procedures used for previous studies, including the 2010 study.

Estimating the Composition

Waste composition estimates will be calculated using a method that gives equal weighting or "importance" to each sample within a given stratum. Confidence intervals (error ranges) will be calculated based on assumptions of normality in the composition estimates.

In the descriptions of calculation methods, the following variables are used frequently:

- i denotes an individual sample;

- j denotes the material type;
- c_j is the weight of the material type j in a sample;
- w is the weight of an entire sample;
- r_j is the composition estimate for material j (r stands for *ratio*);
- a denotes a region of the state (a stands for *area*);
- s denotes a particular sector or subsector of the waste stream; and
- n denotes the number of samples in the particular group that is being analyzed at that step.

The following method will be used to estimate the composition of waste belonging to the residential, commercial, self-haul, and C&D sectors.

For a given stratum (that is, for the samples belonging to the same waste sector within the same region), the composition estimate denoted by r_j represents the ratio of the component's weight to the total weight of all the samples in the stratum. This estimate will be derived by summing each component's weight across all of the selected samples belonging to a given stratum and dividing by the sum of the total weight of waste for all of the samples in that stratum, as shown in the following equation:

$$r_j = \frac{\sum_i c_{ij}}{\sum_i w_i}$$

where:

- c = weight of particular component;
- w = sum of all component weights;
- for i = 1 to n, where n = number of selected samples; and
- for j = 1 to m, where m = number of components.

For example, the following simplified scenario involves three samples. For the purposes of this example, only the weights of the component *carpet* are shown.

	Sample 1	Sample 2	Sample 3
Weight (*c*) of Carpet	5	3	4
Total Sample Weight (*w*)	80	70	90

$$r_{Carpet} = \sum \frac{5+3+4}{80+70+90} = 0.05$$

To find the composition estimate for the component *carpet*, the weights for that material are added for all selected samples and divided by the total sample weights of those samples. The resulting composition is 0.05, or 5 percent. In other words, 5 percent of the sampled material by weight is *carpet*. This finding is then projected onto the stratum being examined in this step of the analysis.

The confidence interval for this estimate will be derived in two steps. First, the variance around the estimate will be calculated, accounting for the fact that the ratio included two random variables (the component and total sample weights). The variance of the ratio estimator equation follows:

$$\mathrm{Var}(r_j) \approx \left(\frac{1}{n}\right)\left(\frac{1}{\overline{w}^2}\right)\left(\frac{\sum_i \left(c_{ij} - r_j w_i\right)^2}{n-1}\right)$$

where:

$$\overline{w} = \frac{\sum_i w_i}{n}$$

(For more information regarding Equation 2, refer to *Sampling Techniques, 3rd Edition* by William G. Cochran [John Wiley & Sons, Inc., 1977].)

Second, precision levels at the 90 percent confidence level will be calculated for a component's mean as follows:

$$r_j \pm \left(z\sqrt{\mathrm{Var}(r_j)}\right)$$

Where *z* = the value of the *z*-statistic (1.645) corresponding to a 90 percent confidence level.

Composition results for strata will be combined, using a weighted averaging method, to estimate the composition of larger portions of the waste stream. The relative tonnages associated with each stratum will serve as the weighting factors. The calculation will be performed as follows:

$$O_j = \left(p_1 * r_{j1}\right) + \left(p_2 * r_{j2}\right) + \left(p_3 * r_{j3}\right) + \ldots$$

where:

- *p* = the proportion of tonnage contributed by the noted waste stratum (the weighting factor);
- *r* = ratio of component weight to total waste weight in the noted waste stratum (the composition percent for the given material component); and
- for *j* = 1 to *m*, where *m* = number of material components.

For example, the above equation is illustrated here using three waste strata.

	Stratum 1	Stratum 2	Stratum 3
Ratio (r) of Carpet	5%	10%	10%
Tonnage	25,000	100,000	50,000
Proportion of Tonnage (*p*)	14.3%	57.1%	28.6%

To estimate the portion of larger portions of the waste stream, the composition results for the three strata are combined as follows.

$$O_{Carpet} = (0.143 * 0.05) + (0.571 * 0.10) + (0.286 * 0.10) = 0.093 = 9.3\%$$

Therefore, 9.3 percent of this examined portion of the waste stream is *carpet*.

The variance of the weighted average will be calculated as follows:

$$\mathrm{Var}(O_j) = \left(p_1^2\ \mathrm{Var}(r_{j1})\right) + \left(p_2^2\ \mathrm{Var}(r_{j2})\right) + \left(p_3^2\ \mathrm{Var}(r_{j3})\right) + \ldots$$

Method for Obtaining Tonnage Data

To collect tonnages of sampled loads, the vehicle surveyor will provide each selected vehicle with a ticket upon entry to the facility that has a unique number to identify the load. The vehicle surveyor will request that the vehicle driver return the ticket upon exiting the facility. The surveyor will collect both the ticket and the net wet of the vehicle from the driver as they exit.

To complete the analysis, we will rely on HWMA to provide annual tonnage estimates for its member agencies and complete Table 25.

Table 25. Annual Tonnages Needed for Analysis

	Sector	Annual Tons
Arcata	Res	
	Com	
	Self-haul	
Blue Lake	Res/Com	
	Self-haul	
Eureka	Res	
	Com	
	Self-haul	
Ferndale	Res	
	Com	
	Self-haul	
Rio Dell	Res	
	Com	
	Self-haul	
Unincorporated County	Res	
	Com	
	Willow Creek	
	Self-haul	
Total		

Appendix B. Material List

Paper

- **Uncoated Corrugated Cardboard** usually has three layers. The center wavy layer is sandwiched between the two outer layers. It does not have any wax coating on the inside or outside. Examples include entire cardboard containers, such as shipping and moving boxes, computer packaging cartons, and sheets and pieces of boxes and cartons. This type does not include chipboard boxes such as cereal and tissue boxes.
- **Waxed Corrugated Cardboard** includes cardboard, linerboard, containerboard, cartons, and other boxes with a wax coating. Examples include commercial produce boxes**.**
- **Paper Bags** means bags and sheets made from kraft paper. The paper may be brown (unbleached) or white (bleached). Examples include paper grocery bags, fast food bags, department store bags, and heavyweight sheets of kraft packing paper.
- **Other Recyclable Paper** means items make of paper that do not fit into any of the other paper types, but that are generally recyclable or not generally composted. Paper may be combined with minor amounts of other materials such as was or glues. Examples include newspapers and glossy inserts found in newspapers, folding cartons, election guides, plan news packing paper, stapled college class schedules, tax instruction booklets, general office-type papers such as copy paper, computer envelopes, index cards, lined or colored notebook paper, and carbonless forms, and items make of chipboard, ground wood paper, and deep-toned or fluorescent dyed paper, unused paper plates and cups, school construction paper, self-adhesive notes, hardcover and paperback books, phone books and directories, bagged shredded paper, greeting cards, envelopes with or without clear windows, glossy magazines, catalogs, brochures, and pamphlets. Does not include envelopes lined with plastic or bubble wrap.
- **Paper Cups – Compostable** means single-use paper cups that clearly do not have a coating or multiple layers.
- **Paper Cups – Not compostable** means single-use paper cups that clearly have a coating (usually shiny) or multiple layers.
- **Compostable Paper** includes all paper soiled with food. Examples include paper plates, pizza boxes, french-fry containers, sandwich boxes, napkins, and paper towels.
- **Remainder/Composite Paper** means paper that typically is non-recyclable, paper that does not fit into any of the other paper types, or paper that is combined with large amounts of other materials such as wax, plastic, glues, or foil. Examples include packages laminated with Mylar, boxes with large plastic windows (common for children's toys), packages with foam or plastic cushions integrated into the package, paper-coated polystyrene containers, aseptic packages, plastic-coated paper milk cartons, waxed paper, tissue, non-food-soiled paper towels, blueprints, sepia, onion skin, fast food wrappers, carbon paper, self-adhesive notes, hard cover books, and photographs.

Plastic

- **PETE Water Bottles** means clear or colored PETE (polyethylene terephthalate) bottles for non-carbonated water that are one liter or less in size. When marked for identification, they bear the number 1 in the center of the triangular recycling symbol and may also bear the letters PETE or PET. The color is usually transparent green or clear. A PETE water bottle usually has ribs and a narrow neck as well as a small dot left from the manufacturing process, not a seam. It does not turn white when bent. Examples include single-serve plain water bottles, flavored water bottles, and vitamin, mineral, or otherwise enhanced water bottles.
- **Other PETE Containers** means PETE (polyethylene terephthalate) containers other than water bottles less than one liter in size. This includes boxes, clamshells, jars, bottles, and cartons. When marked for identification, they bear the number 1 in the center of the triangular recycling symbol and may also bear the letters PETE or PET. A PETE container usually has a small dot left from the manufacturing process, not a seam. It does not turn white when bent. Examples include soft drink and liquor bottles, water bottles larger than one liter in size, cooking oil bottles, pastry jars, food jars, aspirin bottles, frozen food or other trays, and hardware, small electronics and battery packaging.
- **HDPE Containers** means natural and colored HDPE (high-density polyethylene) containers. This plastic is usually either cloudy white, allowing light to pass through it (natural), or a solid color, preventing light from passing through it (colored). When marked for identification, it bears the number 2 in the triangular recycling symbol and may also bear the letters HDPE. Examples include milk jugs, water jugs, detergent bottles, some hair-care bottles, HDPE sealed containers (must be cut, pried, or torn to be opened), empty motor oil, empty antifreeze, and other empty vehicle and equipment fluid containers.
- **Single-Use Expanded Polystyrene Food Service Items** means cups, plates, bowls, trays, coverings, and hinged or lidded containers (clamshells), Polystyrene foam coolers which are not wholly encapsulated or encased within a more durable material, and other food or drink packaging marked with a number 6 that are intended for single-use food and drink storage, transport, and service. Items are typically used at restaurants, convenience stores, or other food service establishments, including fast-food restaurants. Additionally, includes packaging for food left over from partially consumed meals. This type also includes foam egg cartons.
- **#3-#7 Other Containers** means plastic containers other than PETE bottles and containers, HDPE bottles and containers, and single-use EPS food service items. These include boxes, clamshells, jars, bottles, and cartons. Items may be made of PVC (polyvinyl chloride), LDPE (low-density polyethylene), PP (polypropylene), PS (polystyrene), or mixed resins. When marked for identification, these items may bear the number 3, 4, 5, or 6 in the triangular recycling symbol and may also bear the letters PS, PP, PVC, etc. Examples include bakery packaging, hardware and fastener packaging, food containers such as bottles for salad dressings and vegetable oils, flexible and brittle yogurt cups, syrup bottles, margarine tubs, microwave food trays, and clamshell-shaped fast food containers. This type also includes some shampoo containers, vitamin bottles, and clamshell-like muffin containers.
- **Compostable Plastics** means clear or colored corn, potato, or other vegetable-based plastics meant to break down into useable compost. May be labeled with 7 in the triangular recycling symbol or bear the letters PLA. Examples include compostable bottles, compostable to-go food packaging, compostable bags, and compostable single-use utensils.

- **Plastic Trash Bags** means plastic bags sold for use as trash bags, for both residential and commercial use. Examples include garbage, kitchen, compactor, can-liner, composting, yard, lawn, leaf, and recycling bags. This type does not include other plastic bags, like shopping bags, that might have been used to contain trash.
- **Plastic Grocery and Other Merchandise Bags** means plastic shopping bags used to contain merchandise to transport items from the place of purchase, distributed by the store with the purchase. This type includes dry cleaning bags intended for one-time use but does not include produce bags.
- **Non-Bag Commercial and Industrial Packaging Film** means film plastic used for large-scale packaging or transport packaging. Examples include shrink-wrap, mattress bags, furniture wrap, and film bubble wrap.
- **Film Products** means plastic film used for purposes other than packaging. Examples include agricultural film (films used in various farming and growing applications, such as silage greenhouse films, mulch films, and wrap for hay bales), plastic sheeting used as drop cloths, and building wrap.
- **Other Film** means all plastic film that does not fit into any other type. Examples include other types of plastic bags such as sandwich bags, zipper-recloseable bags, newspaper bags, produce bags, frozen vegetable bags, bread bags, food wrappers such as candy bar wrappers, deli bags, other point-of purchase plastic film packaging, mailing pouches, bank bags, X-ray film, and metalized film (wine containers and balloons).
- **Rigid Plastic Drip Lines** means agricultural-use drip irrigation pipes and tubes.
- **Other Recyclable Rigid Plastic** includes other recyclable durable plastic items not described elsewhere. These include rigid plastics made to last for more than one use that are not contaminated or combined with other materials and which do not shatter when folded or bent. These items may bear the numbers 1 through 7 in the triangular recycling symbol. Examples include some plastic toys, plastic patio furniture, and plastic cans, buckets, and bins larger than one gallon.
- **Other Non-Recyclable Rigid Plastic** means rigid plastics that are often made to last for more than one use that are brittle and shatter or break when bent. These items may bear the numbers 1 through 7 in the triangular recycling symbol. Examples include CDs and housewares such as dishes and cutlery. This type also includes pipes, plumbing fittings, and electronics packaging for computers, televisions, and stereos. This does not include rigid plastic agricultural drip lines.
- **Remainder/Composite Plastic** means plastic that cannot be included in any other plastic type. This type includes items made mostly of plastic but combined with other materials. Examples include auto parts made of plastic attached to metal, plastic drinking straws, foam packing blocks, packing peanuts, and new Formica, vinyl, or linoleum.

Glass

- **Clear Glass Bottles and Containers** means clear glass containers with or without a California Redemption Value (CRV) label. Examples include whole or broken clear soda and beer bottles, fruit juice bottles, peanut butter jars, and mayonnaise jars.

- **Green Glass Bottles and Containers** means green-colored glass containers with or without a CRV label. Examples include whole or broken green soda and beer bottles, and whole or broken green wine bottles.
- **Brown Glass Bottles and Containers** means brown-colored glass containers with or without a CRV label. Examples include whole or broken brown soda, beer, and wine bottles.
- **Other Colored Glass Bottles and Containers** means colored glass containers and bottles other than green or brown with or without a CRV label. Examples include whole or broken blue or other colored bottles and containers.
- **Flat Glass** means clear or tinted glass that is flat. Examples include glass window panes, doors and table tops, flat automotive window glass (side windows), safety glass, and architectural glass. This type does not include windshields, laminated glass, or any curved glass.
- **Remainder/Composite Glass** means glass that cannot be put in any other type. It includes items made mostly of glass but combined with other materials. Examples include Pyrex, Corningware, crystal and other glass tableware, mirrors, incandescent light bulbs, auto windshields, laminated glass, or any curved glass.

Metal

- **Tin/Steel Cans** means rigid containers made mainly of steel. These items will stick to a magnet and may be tin-coated. This type is used to store food, beverages, paint, and a variety of other household and consumer products. Examples include canned food and beverage containers, empty metal paint cans, empty spray paint and other aerosol containers, and bimetal containers with steel sides and aluminum ends.
- **Major Appliances** means discarded major appliances of any color. These items are often enamel-coated. Examples include washing machines, clothes dryers, hot water heaters, stoves, and refrigerators. This type does not include electronics, such as televisions and stereos.
- **Used Oil Filters** means metal oil filters used in motor vehicles and other engines, which contain a residue of used oil.
- **Other Ferrous** means any item made 100% from any iron or steel material that is magnetic or any stainless steel item. This type does not include tin/steel cans. Examples include structural steel beams, ferrous metal clothes hangers, metal pipes, machinery, car parts, stainless steel cookware, security bars, and scrap ferrous items.
- **Aluminum Cans** means any food or beverage container made mainly of aluminum. Examples include aluminum soda or beer cans, and some pet food cans. This type does not include bimetal containers with steel sides and aluminum ends.
- **Other Non-Ferrous** means any metal item, other than aluminum cans, made 100% from material that is not stainless steel and that is not magnetic. These items may be made of aluminum, copper, brass, bronze, lead, zinc, or other metals. Examples include aluminum window frames, aluminum siding, copper wire, shell casings, brass pipe, and aluminum foil.
- **Mixed Recoverable Metal** means composite, multi-metal products or products with nonmetal contaminants. The metal content must be more than 50% by weight of the material. Examples

include mixed ferrous and non-ferrous cooking pots and pans, engines and electric motors, cooking pots with plastic or silicone handles, doorknobs, and metal patio furniture with plastic or wicker straps.

- **Remainder/Composite Metal** means items made primarily from metals but composed of less than 50% metal by weight metal that cannot be put in any other type. This type includes metallic items combined with significant amounts of nonmetals. Examples include umbrellas, insulated wire, and other finished products that contain a mixture of metals and other materials.

Other Organic

- **Food – Potentially Donatable** means foods in their unopened original packaging as well as unpackaged fruits and vegetables that have not been partially consumed. Foods may be cooked or raw. Examples include mixed fruit salad, whole apple, sliced fruits, sliced vegetables, entire head of lettuce, milk, cheese – whole or sliced, eggs, yogurt, soy and nut yogurts, soy and nut cheeses, soy/nut/rice/coconut milks (whether shelf stable or not) tofu, whole rotisserie chicken in original unopened package, raw steak in original unopened package, raw fish in original unopened package, sliced deli meat in original unopened package, prepared meats in original unopened package such as chicken nuggets, jerky, canned meat and fish, a whole egg sandwich in original unopened package, whole tray of lasagna, whole tray of chow mein, whole frozen pizza in original unopened package, whole baked goods such as whole loaves of breads, whole pastries, whole bag of tortillas in original unopened package, unopened perishable beverages such as fresh fruit or vegetable juice, canned and bottled foods, rice, pasta, beans, lentils, nuts, nut butters, flour, sugar, spices, oils, condiments, foods contained in aseptic or retort packages, and non-perishable beverages such as sodas.
- **Food – Not Donatable** means any food that is not in a whole state (i.e., partially consumed), or the product's packaging has been opened, or the product was not contained in any packaging at all (except unpackaged, whole fruits and vegetables), or items typically not consumed by people in the United States. Examples of include: a partially consumed rotisserie chicken, deli meat in opened package, unpackaged raw meats, a hamburger, meat and fish trimmings, half eaten burrito, partially consumed lasagna, fruit and vegetable peels, skins, trimmings, and ends (e.g., potato skins, banana peel, cucumber end), bones, pits, shells, coffee grounds, and any indistinguishable food.
- **Leaves and Grass** means plant material, except woody material, from any public or private landscapes. Examples include leaves, grass clippings, plants, and seaweed. This type does not include woody material or material from agricultural sources.
- **Prunings and Trimmings** means woody plant material up to 4 inches in diameter from any public or private landscape. Examples include prunings, shrubs, and small branches with branch diameters that do not exceed 4 inches. This type does not include stumps, tree trunks, branches exceeding 4 inches in diameter, or material from agricultural sources.
- **Branches and Stumps** means woody plant material, branches, and stumps that exceed 4 inches in diameter, from any public or private landscape.
- **Manures** means manure and soiled bedding materials from domestic, farm, or ranch animals. Examples include manure and soiled bedding from animal production operations, race tracks, riding stables, animal hospitals, and other sources.

- **Textiles - Organic** means cloth, clothing, sheets and towels, other textile items, and rope made of 100 percent cotton, leather, wool or other naturally occurring fibers. Composites of several different naturally occurring fibers (such as a wool jacket with a cotton liner) can be included in this material, as can organic textiles with buttons and zippers.
- **Carpet** means flooring applications consisting of various natural or synthetic fibers bonded to some type of backing material. This type does not include carpet padding.
- **Animal Carcasses** means carcasses of small animals and pieces of larger animals, unless the waste is the result of food storage or preparation.
- **Remainder/Composite Organic** means organic material that cannot be put in any other type. This type includes items made mostly of organic materials but combined with other material types. Examples include cork, hemp rope, garden hoses, rubber items, hair, carpet padding, cigarette butts, diapers, feminine hygiene products, small wood products (such as Popsicle sticks and toothpicks), sawdust, agricultural crop residues, and animal feces not mixed with kitty litter.

Inerts and Other

- **Concrete** means a hard material made from sand, aggregate, gravel, cement mix, and water. Examples include pieces of building foundations, concrete paving, and concrete/cinder blocks.
- **Asphalt Paving** means a black or brown, tar-like material mixed with aggregate used as a paving material.
- **Asphalt Composition Shingles** means composite shingles composed of fiberglass or organic felts saturated with asphalt and covered with inert aggregates. Does not include built-up roofing. Commonly known as three-tab roofing.
- **Roofing Tar Paper/Felt** means a heavy paper impregnated with tar, or a fiberglass or polyester fleece impregnated with tar, used as part of a roof for waterproofing.
- **Roofing Mastic** means a paste-like material used as an adhesive or seal in roofing applications.
- **Built-Up Roofing** means other roofing material made with layers of felt, asphalt, aggregates, and attached roofing tar and tar paper normally used on flat/low pitched roofs usually on commercial buildings.
- **Other Asphalt Roofing Material** means any other roofing material containing asphalt that cannot be put into any of the other roofing material types.
- **Clean Dimensional Lumber** means unpainted new or demolition dimensional lumber. Includes materials such as 2x4s, 2x6s, 2x12s, and other residual materials from framing and related construction activities. May contain nails or other trace contaminants.
- **Clean Engineered Wood** means unpainted new or demolition scrap from sheeted goods such as plywood, particleboard, wafer board, oriented strand board, and other residual materials used for sheathing and related construction uses. May contain nails or other trace contaminants.
- **Clean Pallets and Crates** means unpainted wood pallets, crates, and packaging made of lumber/engineered wood.

- **Other Wood Waste** means wood waste that cannot be put into any other material type. This type may include untreated/unpainted scrap from production of prefabricated wood products such as wood furniture or cabinets, untreated or unpainted wood roofing and siding, painted or stained wood, and treated wood.
- **Clean Gypsum Board** means unpainted gypsum wallboard or interior wall covering made of a sheet of gypsum sandwiched between paper layers. Examples include used or unused, broken or whole sheets. Gypsum board may also be called sheetrock, drywall, plasterboard, gypboard, gyproc, or wallboard.
- **Painted/Demolition Gypsum Board** means painted gypsum wallboard or interior wall covering made of a sheet of gypsum sandwiched between paper layers. Examples include used or unused, broken or whole sheets. Gypsum board may also be called sheetrock, drywall, plasterboard, gypboard, gyproc, or wallboard.
- **Rock, Soil and Fines** means rock pieces of any size, soil, dirt, and other matter. Examples include rock, stones, sand, clay, soil, and other fines. This type also includes non-hazardous contaminated soil.
- **Textiles – Synthetic, Mixed, Unknown** means cloth, clothing, sheets and towels, other textile items, shoes, clothing accessories (purses), and rope made of unknown fibers, synthetic fibers or made from a mixture of synthetic and natural materials. Also includes leather items like belts and baseball gloves.
- **Remainder/Composite Inerts and Other** means inerts and other material that cannot be put in any other type. This type may include items from different types combined, which would be very hard to separate. Examples include brick, ceramics, tiles, toilets, sinks, and fiberglass insulation. This type may also include demolition debris that is a mixture of items such as plate glass, wood, tiles, gypsum board, and aluminum scrap.

Electronics

- **E-Waste** means most items with an external or internal power source and extensive circuitry. Examples include mobile phones, GPS, calculators, printers, computers (without a video display device incorporated), vacuum cleaners, sewing machines, microwaves, irons, toasters, electric knives, shavers, hair care, toys, some musical equipment, slot machines, large printing machines, large exercise equipment, cathode ray tube containing devices (CRT devices), cathode ray tubes (CRTs), computer monitors containing CRTs, laptop computers with liquid crystal display (LCD), LCD containing desktop monitors, televisions containing CRTs, televisions containing LCD screens, plasma televisions, portable DVD players with LCD screens, tablet computers (like the iPad and Kindle Fire), and solar panels.

Household Hazardous Waste

- **Household Hazardous Waste** means household items that are caustic, toxic, explosive, or otherwise harmful that may cause problems if handled in via traditional waste collection, landfilling, or incineration. Examples include paint, batteries, automotive fluids, propane cylinders, pharmaceuticals (prescription and OTC), sharps, pesticides, mercury containing items, and fluorescent lamps.

Special Waste

- **Ash** means a residue from the combustion of any solid or liquid material. Examples include ash from fireplaces, incinerators, biomass facilities, waste-to-energy facilities, and barbecues. This type also includes ash and burned debris from structure fires.
- **Treated Medical Waste** means medical waste that has been processed in order to change its physical, chemical, or biological character or composition, or to remove or reduce its harmful properties or characteristics, as defined in Section 25123.5 of the Health and Safety Code.
- **Mattresses** means common household sleeping mattresses.
- **Bulky Items** means large hard to handle items that are not defined elsewhere in the material types list, including furniture, and other large items. Examples include all sizes and types of furniture, box springs, and base components.
- **Vehicle and Truck Tires** means pneumatic tires or solid tires manufactured for use on any type of motor vehicle such as trucks, automobiles, motorcycles, and heavy equipment.
- **Other Tires** means tires not used on motor vehicles such as bicycle tires and lawn mower tires.
- **Remainder/Composite Special Waste** means special waste that cannot be put in any other type. Examples include asbestos-containing materials such as certain types of pipe insulation and floor tiles, auto fluff, auto bodies, trucks, trailers, truck cabs, untreated medical waste, and artificial fireplace logs.

Mixed Residue

- **Mixed Residue** means material that cannot be put in any other type. This type includes mixed residue that cannot be further sorted. Examples include clumping kitty litter, cosmetics, and residual material from a materials recovery facility or other sorting process that cannot be put in any other material type, including remainder/composite types.

Appendix C. Field Forms

Figure 32. Vehicle Selection Sheet

2020 Waste Characterization Study

Facility Vehicle Selection Form

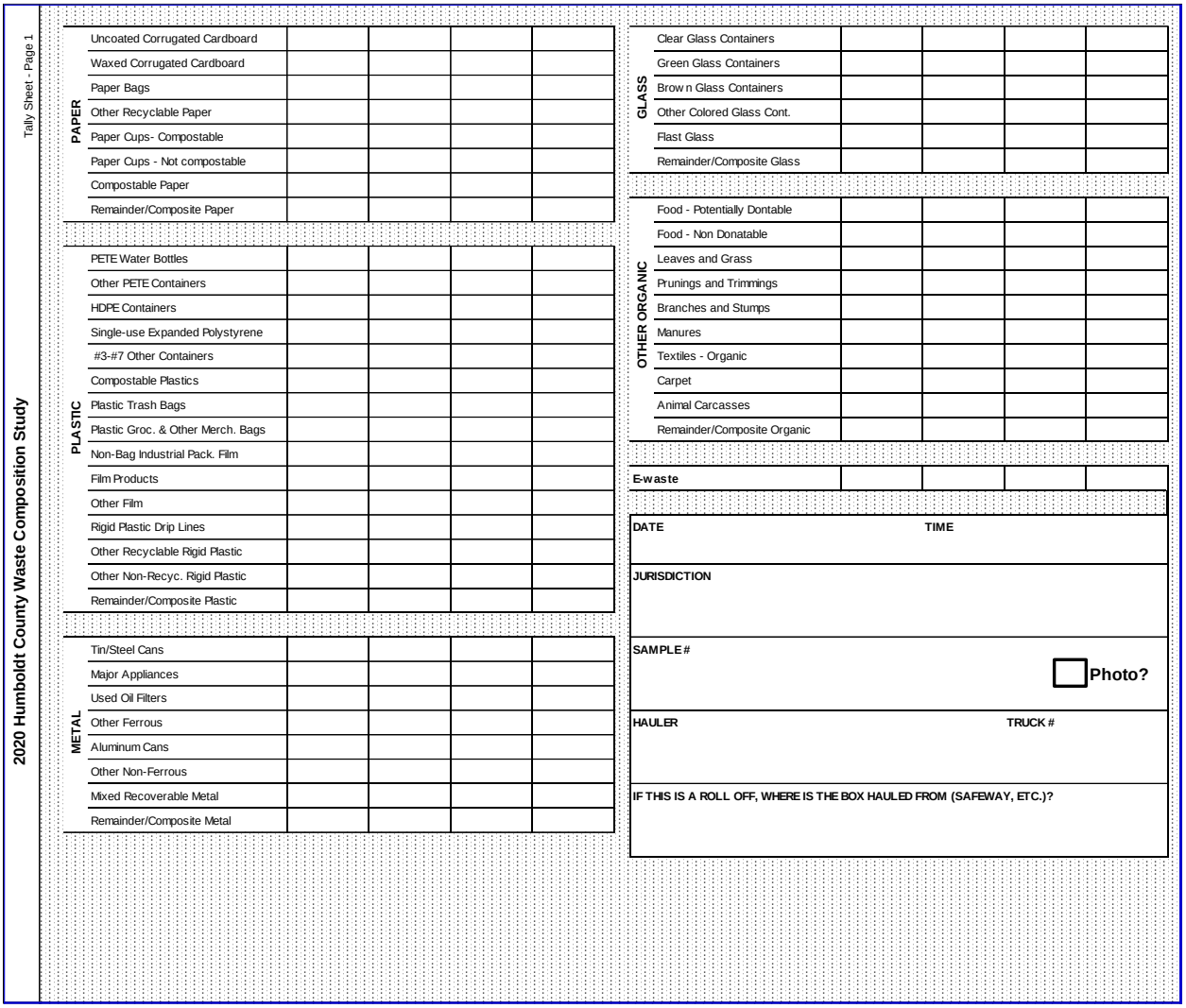
Date: Monday February 3, 2020 **Total Samples 14**

Facili Hawthorne St. Transfer Station

When the driver of the following loads arrive at your facility please direct them to tipping area set aside for selected study vehicles.

Truck #	Hauler	City/Origin	Res, Com, SH	ID	# of Samples	Comments/Notes
	Recology	Arcata	Com	01	1	This load should be tagged with pink placard.
	Recology	Arcata	Com	09	1	This load should be tagged with pink placard.
	Recology	Arcata	Res	01	1	This load should be tagged with pink placard.
	Blue Lake	Blue Lake Town	Res/Com	04	1	This load is mixed res/com. Should be tagged with pink placard.
		Blue Lake Town	SH	19	1	Get first SH from Blue Lake. If no Blue Lake SH get a SH from the County. (1) 2 3 4 5 6 7 8 9 10
	Recology	Eureka	Com	19, 20	2	This load should be tagged with pink placard.
		Eureka	SH	07	1	Get first SH from Eureka. (1) 2 3 4 5 6 7 8 9 10
	Recology	Ferndale	Res	11	1	This load should be tagged with pink placard.
		Ferndale	SH	13	1	Get first SH from Ferndale. (1) 2 3 4 5 6 7 8 9 10
	Recology	Rio Dell	Com	30	1	This load should be tagged with pink placard.
	Recology	Unicorporated County	Com	37	1	This load should be tagged with pink placard.
	Recology	Unicorporated County	Res	17	1	This load should be tagged with pink placard.
	Recology	Unicorporated County	SH	22	1	Get first SH from Unicorporated County. (1) 2 3 4 5 6 7 8 9 10

Figure 33. Hand Sort Tally Sheet, Front



2020 Humboldt County Waste Composition Study — Tally Sheet - Page 1

PAPER	Uncoated Corrugated Cardboard				
	Waxed Corrugated Cardboard				
	Paper Bags				
	Other Recyclable Paper				
	Paper Cups- Compostable				
	Paper Cups - Not compostable				
	Compostable Paper				
	Remainder/Composite Paper				
PLASTIC	PETE Water Bottles				
	Other PETE Containers				
	HDPE Containers				
	Single-use Expanded Polystyrene				
	#3-#7 Other Containers				
	Compostable Plastics				
	Plastic Trash Bags				
	Plastic Groc. & Other Merch. Bags				
	Non-Bag Industrial Pack. Film				
	Film Products				
	Other Film				
	Rigid Plastic Drip Lines				
	Other Recyclable Rigid Plastic				
	Other Non-Recyc. Rigid Plastic				
	Remainder/Composite Plastic				
METAL	Tin/Steel Cans				
	Major Appliances				
	Used Oil Filters				
	Other Ferrous				
	Aluminum Cans				
	Other Non-Ferrous				
	Mixed Recoverable Metal				
	Remainder/Composite Metal				

GLASS	Clear Glass Containers				
	Green Glass Containers				
	Brow n Glass Containers				
	Other Colored Glass Cont.				
	Flast Glass				
	Remainder/Composite Glass				
OTHER ORGANIC	Food - Potentially Dontable				
	Food - Non Donatable				
	Leaves and Grass				
	Prunings and Trimmings				
	Branches and Stumps				
	Manures				
	Textiles - Organic				
	Carpet				
	Animal Carcasses				
	Remainder/Composite Organic				
E-waste					

DATE TIME

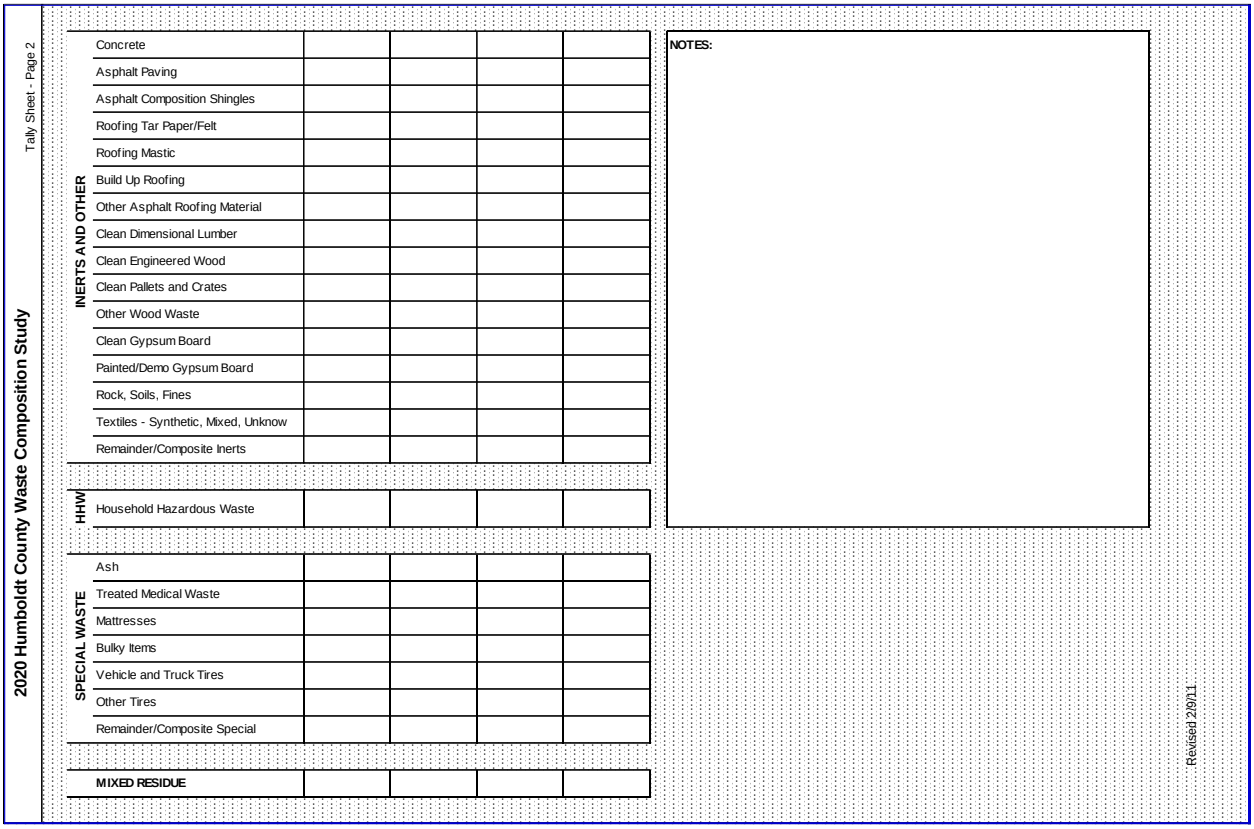
JURISDICTION

SAMPLE # ☐ Photo?

HAULER TRUCK #

IF THIS IS A ROLL OFF, WHERE IS THE BOX HAULED FROM (SAFEWAY, ETC.)?

Figure 34. Hand Sort Tally Sheet, Back



2020 Humboldt County Waste Composition Study

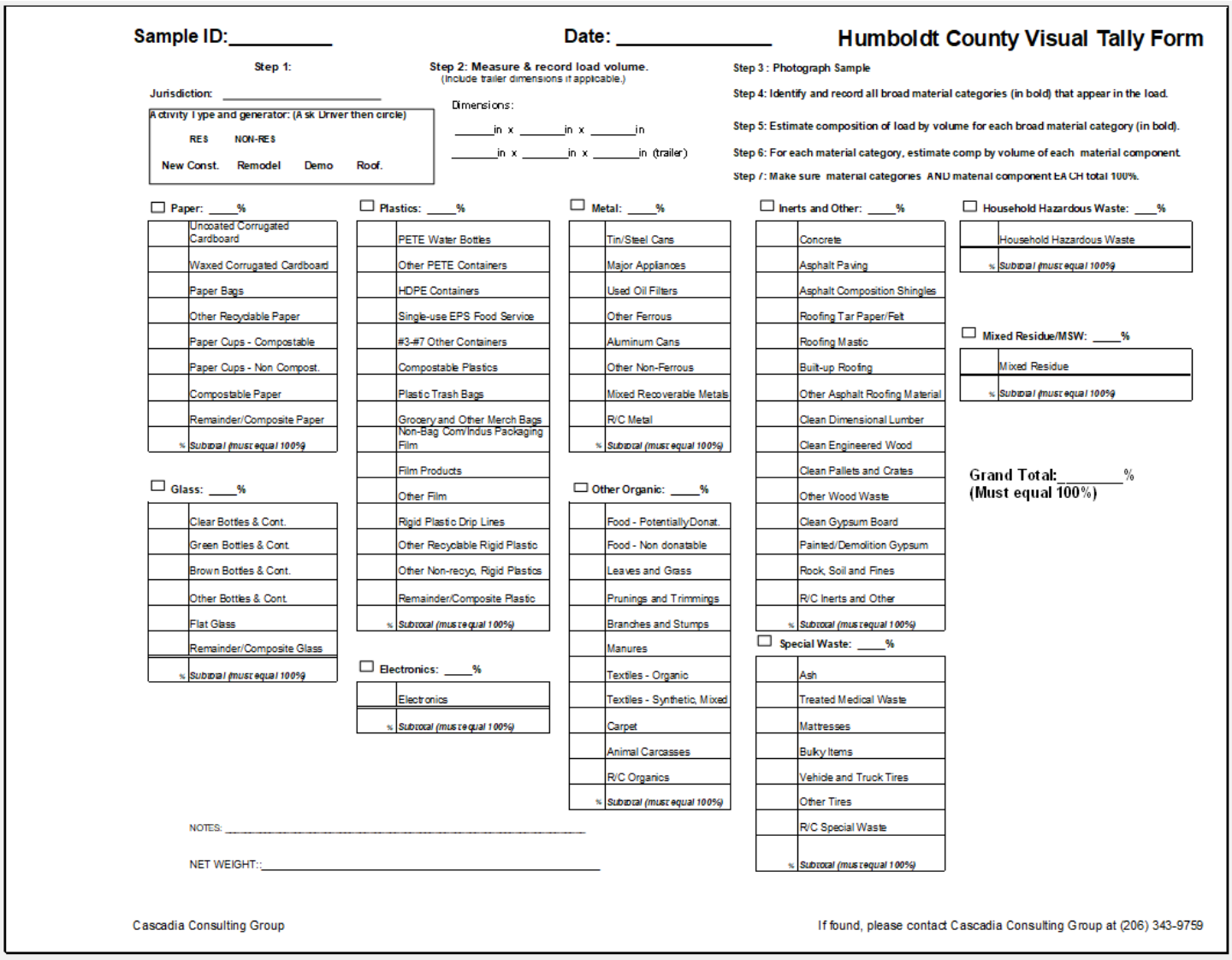
Tally Sheet - Page 2

INERTS AND OTHER	Concrete				
	Asphalt Paving				
	Asphalt Composition Shingles				
	Roofing Tar Paper/Felt				
	Roofing Mastic				
	Build Up Roofing				
	Other Asphalt Roofing Material				
	Clean Dimensional Lumber				
	Clean Engineered Wood				
	Clean Pallets and Crates				
	Other Wood Waste				
	Clean Gypsum Board				
	Painted/Demo Gypsum Board				
	Rock, Soils, Fines				
	Textiles - Synthetic, Mixed, Unknow				
	Remainder/Composite Inerts				
HHW	Household Hazardous Waste				
SPECIAL WASTE	Ash				
	Treated Medical Waste				
	Mattresses				
	Bulky Items				
	Vehicle and Truck Tires				
	Other Tires				
	Remainder/Composite Special				
MIXED RESIDUE					

NOTES:

Revised 2/9/11

Figure 35. Visual Tally Form



Sample ID:_____ **Date:** _____ **Humboldt County Visual Tally Form**

Step 1:

Jurisdiction: _____

Activity Type and generator: (Ask Driver then circle)

RES NON-RES

New Const. Remodel Demo Roof.

Step 2: Measure & record load volume.
(Include trailer dimensions if applicable.)

Dimensions:

_____in x _____in x _____in

_____in x _____in x _____in (trailer)

Step 3 : Photograph Sample

Step 4: Identify and record all broad material categories (in bold) that appear in the load.

Step 5: Estimate composition of load by volume for each broad material category (in bold).

Step 6: For each material category, estimate comp by volume of each material component.

Step 7: Make sure material categories AND material component EACH total 100%.

☐ **Paper: ____%**

	Uncoated Corrugated Cardboard
	Waxed Corrugated Cardboard
	Paper Bags
	Other Recyclable Paper
	Paper Cups - Compostable
	Paper Cups - Non Compost.
	Compostable Paper
	Remainder/Composite Paper
%	*Subtotal (must equal 100%)*

☐ **Glass: ____%**

	Clear Bottles & Cont.
	Green Bottles & Cont.
	Brown Bottles & Cont.
	Other Bottles & Cont.
	Flat Glass
	Remainder/Composite Glass
%	*Subtotal (must equal 100%)*

☐ **Plastics: ____%**

	PETE Water Bottles
	Other PETE Containers
	HDPE Containers
	Single-use EPS Food Service
	#3-#7 Other Containers
	Compostable Plastics
	Plastic Trash Bags
	Grocery and Other Merch Bags
	Non-Bag Com/Indus Packaging Film
	Film Products
	Other Film
	Rigid Plastic Drip Lines
	Other Recyclable Rigid Plastic
	Other Non-recyc. Rigid Plastics
	Remainder/Composite Plastic
%	*Subtotal (must equal 100%)*

☐ **Electronics: ____%**

	Electronics
%	*Subtotal (must equal 100%)*

☐ **Metal: ____%**

	Tin/Steel Cans
	Major Appliances
	Used Oil Filters
	Other Ferrous
	Aluminum Cans
	Other Non-Ferrous
	Mixed Recoverable Metals
	R/C Metal
%	*Subtotal (must equal 100%)*

☐ **Other Organic: ____%**

	Food - Potentially Donat.
	Food - Non donatable
	Leaves and Grass
	Prunings and Trimmings
	Branches and Stumps
	Manures
	Textiles - Organic
	Textiles - Synthetic, Mixed
	Carpet
	Animal Carcasses
	R/C Organics
%	*Subtotal (must equal 100%)*

☐ **Inerts and Other: ____%**

	Concrete
	Asphalt Paving
	Asphalt Composition Shingles
	Roofing Tar Paper/Felt
	Roofing Mastic
	Built-up Roofing
	Other Asphalt Roofing Material
	Clean Dimensional Lumber
	Clean Engineered Wood
	Clean Pallets and Crates
	Other Wood Waste
	Clean Gypsum Board
	Painted/Demolition Gypsum
	Rock, Soil and Fines
	R/C Inerts and Other
%	*Subtotal (must equal 100%)*

☐ **Special Waste: ____%**

	Ash
	Treated Medical Waste
	Mattresses
	Bulky Items
	Vehicle and Truck Tires
	Other Tires
	R/C Special Waste
%	*Subtotal (must equal 100%)*

☐ **Household Hazardous Waste: ____%**

	Household Hazardous Waste
%	*Subtotal (must equal 100%)*

☐ **Mixed Residue/MSW: ____%**

	Mixed Residue
%	*Subtotal (must equal 100%)*

Grand Total:_____%
(Must equal 100%)

NOTES: _____

NET WEIGHT:: _____

Cascadia Consulting Group

If found, please contact Cascadia Consulting Group at (206) 343-9759

Figure 36. Sample Placard

Facility: Hawthorne St Hauler: Recology	Jurisdiction: **Arcata**		**Cell: 10** **Route: 515**
	Sector: **Commercial**		Sample ID: **Com-01**
	Monday, **2/3/2020**		# of Samples: **1**

Appendix D. Detailed Results

Table 26. Detailed Material Composition, Overall

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**19.1%**	**1.6%**	**17,376**	**OTHER ORGANIC**	**28.2%**	**2.6%**	**25,579**
Uncoated Corrugated Cardboard	3.2%	0.6%	2,935	Food - Potentially Donatable	1.9%	0.5%	1,762
Waxed Corrugated Cardboard	0.0%	0.0%	31	Food - Not Donatable	15.5%	2.3%	14,043
Paper Bags	0.7%	0.1%	663	Leaves Grass	1.0%	0.4%	868
Other Recyclable Paper	6.3%	1.0%	5,745	Prunings Trimmings	1.2%	0.4%	1,056
Paper Cups - Compostable	0.1%	0.1%	88	Branches Stumps	0.0%	0.0%	29
Paper Cups - Not Compostable	0.3%	0.0%	248	Manures	0.0%	0.0%	8
Compostable Paper	5.4%	0.4%	4,921	Textiles - Organic	3.1%	0.7%	2,794
R/C Paper	3.0%	0.4%	2,746	Carpet	1.0%	1.1%	886
PLASTIC	**12.8%**	**0.9%**	**11,621**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.4%	0.1%	351	R/C Organic	4.6%	0.7%	4,134
Other PETE Containers	0.6%	0.1%	586	**INERTS & OTHER**	**17.0%**	**4.2%**	**15,433**
HDPE Containers	0.6%	0.1%	539	Concrete	0.0%	0.0%	12
Polystyrene Food Service Items	0.1%	0.0%	127	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.1%	0.2%	1,036	Asphalt Composition Shingles	0.2%	0.2%	165
Compostable Plastics	0.0%	0.0%	22	Roofing Tar Paper/Felt	0.1%	0.1%	117
Plastic Trash Bags	1.8%	0.2%	1,678	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.3%	0.0%	285	Built-up Roofing	0.0%	0.0%	3
Non-Bag Industrial Packaging Film	1.0%	0.3%	913	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.5%	0.3%	424	Clean Dimensional Lumbar	3.6%	3.4%	3,262
Other Film	3.3%	0.3%	3,033	Clean Engineered Wood	1.5%	0.9%	1,316
Rigid Plastic Drip Lines	0.0%	0.0%	32	Clean Pallets Crates	0.1%	0.1%	95
Other Recyclable Rigid Plastic	0.8%	0.2%	709	Other Wood Waste	4.1%	1.8%	3,721
Other Non-Recyclable Rigid Plastic	0.8%	0.2%	683	Clean Gypsum Board	0.5%	0.7%	481
R/C Plastic	1.3%	0.3%	1,202	Painted/Demolition Gypsum Board	0.1%	0.1%	136
GLASS	**8.4%**	**3.1%**	**7,589**	Rock, Soil, & Fines	1.6%	1.2%	1,440
Clear Glass Bottles Containers	1.9%	0.6%	1,688	Textiles - Synthetic, Mixed, & Unknown	3.1%	0.7%	2,808
Green Glass Bottles Containers	0.3%	0.2%	266	R/C Inerts & Other	2.1%	1.2%	1,877
Brown Glass Bottles Containers	0.5%	0.2%	451	**ELECTRONICS**	**1.4%**	**0.6%**	**1,235**
Other Colored Glass Containers	0.1%	0.0%	57	E-Waste	1.4%	0.6%	1,235
Flat Glass	0.7%	1.0%	597	**HHW**	**0.4%**	**0.3%**	**342**
R/C Glass	0.1%	0.1%	122	Household Hazardous Waste	0.4%	0.3%	342
METAL	**3.5%**	**1.2%**	**3,180**	**SPECIAL WASTE**	**3.8%**	**2.4%**	**3,479**
Tin/Steel Cans	0.8%	0.2%	704	Ash	0.1%	0.1%	64
Major Appliances	0.6%	0.5%	507	Treated Medical Waste	0.0%	0.0%	6
Used Oil Filters	0.0%	0.0%	7	Mattresses	1.1%	1.0%	971
Other Ferrous	2.4%	1.2%	2,178	Bulky Items	2.4%	1.8%	2,186
Aluminum Cans	0.5%	0.1%	460	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.6%	0.2%	507	Other Tires	0.0%	0.0%	14
Mixed Recoverable Metal	0.7%	0.4%	593	R/C Special Waste	0.3%	0.1%	238
R/C Metal	2.9%	2.8%	2,633	**MIXED RESIDUE**	**5.4%**	**1.3%**	**4,903**
				Mixed Residue	5.4%	1.2%	4,903
Recoverable Paper	10.3%	1.4%	9,343	**Potentially Recoverable**	21.2%	4.5%	19,207
Other Recoverables	10.6%	1.7%	9,628	**Problem Materials**	32.8%	4.0%	29,740
Compostable/Potentially Compostable	25.1%	2.5%	22,820				
Sample Count			**185**	**Total Tons**			**90,738**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 27. Detailed Material Composition, Residential

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**23.4%**	**2.3%**	**5,282**	**OTHER ORGANIC**	**44.4%**	**3.5%**	**10,036**
Uncoated Corrugated Cardboard	1.7%	0.7%	377	Food - Potentially Donatable	2.2%	0.6%	499
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	22.4%	2.3%	5,060
Paper Bags	0.9%	0.2%	208	Leaves Grass	1.9%	1.2%	434
Other Recyclable Paper	7.5%	1.3%	1,697	Prunings Trimmings	2.3%	1.1%	511
Paper Cups - Compostable	0.1%	0.0%	12	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.3%	0.1%	65	Manures	0.0%	0.0%	0
Compostable Paper	9.2%	1.0%	2,085	Textiles - Organic	4.5%	1.1%	1,016
R/C Paper	3.7%	0.7%	838	Carpet	0.3%	0.3%	63
PLASTIC	**13.7%**	**1.5%**	**3,099**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.4%	0.1%	81	R/C Organic	10.9%	2.5%	2,453
Other PETE Containers	1.0%	0.3%	220	**INERTS & OTHER**	**5.2%**	**1.4%**	**1,180**
HDPE Containers	0.5%	0.1%	106	Concrete	0.0%	0.0%	1
Polystyrene Food Service Items	0.3%	0.1%	63	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.2%	0.2%	278	Asphalt Composition Shingles	0.2%	0.3%	43
Compostable Plastics	0.0%	0.0%	10	Roofing Tar Paper/Felt	0.0%	0.0%	2
Plastic Trash Bags	2.2%	0.4%	497	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.5%	0.1%	121	Built-up Roofing	0.0%	0.0%	3
Non-Bag Industrial Packaging Film	0.1%	0.1%	27	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.2%	0.4%	55	Clean Dimensional Lumbar	0.1%	0.1%	25
Other Film	5.0%	0.7%	1,132	Clean Engineered Wood	0.0%	0.0%	5
Rigid Plastic Drip Lines	0.0%	0.0%	4	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.4%	0.2%	100	Other Wood Waste	0.6%	0.4%	134
Other Non-Recyclable Rigid Plastic	0.4%	0.2%	99	Clean Gypsum Board	0.0%	0.0%	1
R/C Plastic	1.3%	0.6%	305	Painted/Demolition Gypsum Board	0.1%	0.0%	13
GLASS	**2.3%**	**0.3%**	**528**	Rock, Soil, & Fines	0.0%	0.0%	4
Clear Glass Bottles Containers	1.6%	0.3%	353	Textiles - Synthetic, Mixed, & Unknown	2.7%	1.0%	609
Green Glass Bottles Containers	0.2%	0.1%	38	R/C Inerts & Other	1.5%	0.9%	340
Brown Glass Bottles Containers	0.4%	0.1%	91	**ELECTRONICS**	**0.2%**	**0.3%**	**53**
Other Colored Glass Containers	0.1%	0.1%	26	E-Waste	0.2%	0.3%	53
Flat Glass	0.0%	0.0%	0	**HHW**	**0.3%**	**0.2%**	**67**
R/C Glass	0.1%	0.1%	20	Household Hazardous Waste	0.3%	0.2%	67
METAL	**3.7%**	**0.6%**	**839**	**SPECIAL WASTE**	**0.1%**	**0.1%**	**15**
Tin/Steel Cans	1.0%	0.2%	218	Ash	0.0%	0.0%	8
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	6	Mattresses	0.0%	0.0%	0
Other Ferrous	0.6%	0.4%	145	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.3%	0.1%	70	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.7%	0.2%	151	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.4%	0.2%	89	R/C Special Waste	0.0%	0.0%	6
R/C Metal	0.7%	0.4%	160	**MIXED RESIDUE**	**6.7%**	**1.3%**	**1,505**
				Mixed Residue	6.7%	1.3%	1,505
Recoverable Paper	10.1%	1.8%	2,283	**Potentially Recoverable**	9.6%	2.0%	2,169
Other Recoverables	7.5%	0.7%	1,692	**Problem Materials**	34.7%	2.3%	7,849
Compostable/Potentially Compostable	38.1%	2.7%	8,610				
Sample Count			**34**	**Total Tons**			**22,603**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 28. Detailed Material Composition, Commercial

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**24.0%**	**2.0%**	**6,999**	**OTHER ORGANIC**	**32.4%**	**2.8%**	**9,446**
Uncoated Corrugated Cardboard	5.7%	1.2%	1,672	Food - Potentially Donatable	1.9%	0.6%	569
Waxed Corrugated Cardboard	0.0%	0.0%	8	Food - Not Donatable	19.7%	2.6%	5,757
Paper Bags	0.8%	0.1%	222	Leaves Grass	1.6%	1.1%	469
Other Recyclable Paper	6.2%	0.8%	1,813	Prunings Trimmings	1.2%	0.6%	354
Paper Cups - Compostable	0.2%	0.1%	61	Branches Stumps	0.1%	0.1%	23
Paper Cups - Not Compostable	0.6%	0.1%	164	Manures	0.0%	0.0%	3
Compostable Paper	7.8%	1.1%	2,281	Textiles - Organic	2.6%	0.8%	746
R/C Paper	2.7%	0.4%	778	Carpet	0.7%	0.4%	208
PLASTIC	**19.6%**	**1.8%**	**5,721**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.6%	0.1%	177	R/C Organic	4.5%	1.1%	1,316
Other PETE Containers	0.8%	0.1%	235	**INERTS & OTHER**	**7.6%**	**1.7%**	**2,219**
HDPE Containers	0.9%	0.2%	256	Concrete	0.1%	0.1%	18
Polystyrene Food Service Items	0.2%	0.0%	45	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.7%	0.5%	497	Asphalt Composition Shingles	0.0%	0.0%	6
Compostable Plastics	0.0%	0.0%	10	Roofing Tar Paper/Felt	0.0%	0.0%	7
Plastic Trash Bags	2.8%	0.4%	823	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.4%	0.1%	106	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	2.7%	1.1%	793	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.9%	0.7%	261	Clean Dimensional Lumbar	0.6%	0.4%	182
Other Film	5.0%	0.7%	1,453	Clean Engineered Wood	0.9%	1.0%	276
Rigid Plastic Drip Lines	0.1%	0.1%	15	Clean Pallets Crates	0.3%	0.3%	95
Other Recyclable Rigid Plastic	0.8%	0.3%	234	Other Wood Waste	2.0%	1.0%	580
Other Non-Recyclable Rigid Plastic	1.1%	0.5%	315	Clean Gypsum Board	0.0%	0.0%	2
R/C Plastic	1.7%	0.6%	501	Painted/Demolition Gypsum Board	0.1%	0.1%	29
GLASS	**2.2%**	**0.5%**	**638**	Rock, Soil, & Fines	0.7%	0.7%	212
Clear Glass Bottles Containers	1.2%	0.3%	347	Textiles - Synthetic, Mixed, & Unknown	2.0%	0.5%	584
Green Glass Bottles Containers	0.2%	0.1%	63	R/C Inerts & Other	0.8%	0.4%	228
Brown Glass Bottles Containers	0.4%	0.1%	131	**ELECTRONICS**	**1.1%**	**1.0%**	**335**
Other Colored Glass Containers	0.1%	0.0%	17	E-Waste	1.1%	1.0%	335
Flat Glass	0.1%	0.1%	22	**HHW**	**1.0%**	**1.0%**	**293**
R/C Glass	0.2%	0.2%	60	Household Hazardous Waste	1.0%	1.0%	293
METAL	**7.3%**	**2.3%**	**2,125**	**SPECIAL WASTE**	**2.1%**	**1.2%**	**602**
Tin/Steel Cans	0.9%	0.3%	249	Ash	0.2%	0.3%	57
Major Appliances	0.8%	1.0%	248	Treated Medical Waste	0.0%	0.0%	1
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.2%	0.2%	61
Other Ferrous	3.0%	1.8%	882	Bulky Items	1.0%	1.0%	283
Aluminum Cans	0.4%	0.1%	126	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.5%	0.1%	138	Other Tires	0.0%	0.1%	14
Mixed Recoverable Metal	0.7%	0.4%	206	R/C Special Waste	0.6%	0.3%	186
R/C Metal	0.9%	0.3%	277	**MIXED RESIDUE**	**2.8%**	**0.7%**	**821**
				Mixed Residue	2.8%	0.7%	821
Recoverable Paper	12.7%	1.3%	3,707	**Potentially Recoverable**	14.2%	2.2%	4,161
Other Recoverables	11.4%	2.2%	3,321	**Problem Materials**	29.0%	2.2%	8,478
Compostable/Potentially Compostable	32.6%	3.0%	9,531				
Sample Count			**83**	**Total Tons**			**29,198**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 29. Detailed Material Composition, Combined Sector

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**24.2%**	**4.2%**	**326**	**OTHER ORGANIC**	**33.5%**	**3.9%**	**451**
Uncoated Corrugated Cardboard	6.1%	3.5%	82	Food - Potentially Donatable	2.2%	0.9%	30
Waxed Corrugated Cardboard	0.4%	0.5%	6	Food - Not Donatable	18.1%	3.1%	244
Paper Bags	1.2%	0.3%	17	Leaves Grass	0.7%	0.6%	9
Other Recyclable Paper	7.0%	1.7%	94	Prunings Trimmings	0.6%	0.3%	8
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.4%	0.1%	5	Manures	0.1%	0.1%	1
Compostable Paper	6.7%	1.6%	91	Textiles - Organic	2.9%	1.3%	40
R/C Paper	2.4%	0.5%	32	Carpet	0.4%	0.5%	5
PLASTIC	**14.7%**	**1.7%**	**199**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.8%	0.2%	10	R/C Organic	8.5%	2.3%	115
Other PETE Containers	1.2%	0.5%	16	**INERTS & OTHER**	**12.2%**	**5.4%**	**165**
HDPE Containers	0.8%	0.5%	11	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.3%	0.1%	4	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.8%	0.2%	11	Asphalt Composition Shingles	0.0%	0.1%	1
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	2.4%	0.3%	33	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.4%	0.1%	5	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.4%	0.2%	6	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.2%	0.1%	2	Clean Dimensional Lumbar	0.1%	0.1%	2
Other Film	4.6%	0.6%	62	Clean Engineered Wood	0.2%	0.2%	3
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.8%	0.5%	10	Other Wood Waste	2.3%	2.5%	31
Other Non-Recyclable Rigid Plastic	0.5%	0.2%	6	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.6%	0.8%	21	Painted/Demolition Gypsum Board	0.5%	0.7%	6
GLASS	**4.0%**	**1.1%**	**54**	Rock, Soil, & Fines	3.3%	3.1%	45
Clear Glass Bottles Containers	2.4%	0.8%	33	Textiles - Synthetic, Mixed, & Unknown	3.6%	2.4%	48
Green Glass Bottles Containers	0.3%	0.2%	5	R/C Inerts & Other	2.1%	2.9%	28
Brown Glass Bottles Containers	1.1%	0.4%	15	**ELECTRONICS**	**0.0%**	**0.0%**	**0**
Other Colored Glass Containers	0.1%	0.1%	1	E-Waste	0.0%	0.0%	0
Flat Glass	0.0%	0.0%	0	**HHW**	**0.5%**	**0.4%**	**6**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.5%	0.4%	6
METAL	**4.8%**	**1.6%**	**64**	**SPECIAL WASTE**	**0.6%**	**0.7%**	**8**
Tin/Steel Cans	0.9%	0.2%	12	Ash	0.1%	0.1%	1
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	1.2%	1.2%	16	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.8%	0.3%	10	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.4%	0.2%	5	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	1.1%	0.9%	15	R/C Special Waste	0.5%	0.7%	7
R/C Metal	0.4%	0.4%	5	**MIXED RESIDUE**	**5.7%**	**2.1%**	**77**
				Mixed Residue	5.7%	2.1%	77
Recoverable Paper	14.3%	3.5%	192	**Potentially Recoverable**	10.8%	5.3%	146
Other Recoverables	11.9%	2.6%	161	**Problem Materials**	34.3%	5.0%	463
Compostable/Potentially Compostable	28.7%	3.9%	387				
Sample Count			**15**	**Total Tons**			**1,349**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 30. Detailed Material Composition, Self-haul

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**13.3%**	**6.6%**	**4,992**	**OTHER ORGANIC**	**15.7%**	**8.5%**	**5,911**
Uncoated Corrugated Cardboard	3.0%	1.6%	1,113	Food - Potentially Donatable	2.2%	1.6%	818
Waxed Corrugated Cardboard	0.0%	0.0%	1	Food - Not Donatable	6.3%	3.3%	2,372
Paper Bags	0.6%	0.4%	233	Leaves Grass	0.5%	0.6%	171
Other Recyclable Paper	6.7%	4.6%	2,509	Prunings Trimmings	0.6%	0.6%	244
Paper Cups - Compostable	0.0%	0.0%	3	Branches Stumps	0.0%	0.0%	2
Paper Cups - Not Compostable	0.1%	0.1%	23	Manures	0.0%	0.0%	0
Compostable Paper	1.3%	0.8%	480	Textiles - Organic	3.0%	3.2%	1,136
R/C Paper	1.7%	0.9%	630	Carpet	2.5%	3.6%	927
PLASTIC	**6.7%**	**1.9%**	**2,523**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.4%	0.3%	141	R/C Organic	0.6%	0.6%	241
Other PETE Containers	0.4%	0.2%	132	**INERTS & OTHER**	**29.6%**	**13.1%**	**11,117**
HDPE Containers	0.4%	0.2%	155	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.0%	0.0%	9	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.4%	0.2%	147	Asphalt Composition Shingles	0.1%	0.1%	35
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.1%	0.1%	21
Plastic Trash Bags	0.7%	0.4%	247	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.1%	0.1%	51	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.3%	0.3%	119	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.3%	0.3%	102	Clean Dimensional Lumbar	8.7%	9.7%	3,259
Other Film	1.0%	0.6%	379	Clean Engineered Wood	2.4%	2.4%	907
Rigid Plastic Drip Lines	0.1%	0.1%	21	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.8%	0.6%	300	Other Wood Waste	6.0%	4.0%	2,267
Other Non-Recyclable Rigid Plastic	0.7%	0.3%	265	Clean Gypsum Board	1.6%	2.5%	589
R/C Plastic	1.2%	0.5%	454	Painted/Demolition Gypsum Board	0.3%	0.3%	99
GLASS	**6.2%**	**4.2%**	**2,341**	Rock, Soil, & Fines	3.1%	3.4%	1,183
Clear Glass Bottles Containers	3.5%	2.5%	1,319	Textiles - Synthetic, Mixed, & Unknown	2.5%	1.1%	956
Green Glass Bottles Containers	0.3%	0.3%	95	R/C Inerts & Other	4.8%	5.3%	1,801
Brown Glass Bottles Containers	0.3%	0.4%	116	**ELECTRONICS**	**1.3%**	**1.1%**	**476**
Other Colored Glass Containers	0.0%	0.0%	0	E-Waste	1.3%	1.1%	476
Flat Glass	2.1%	3.4%	784	**HHW**	**0.1%**	**0.1%**	**21**
R/C Glass	0.1%	0.1%	26	Household Hazardous Waste	0.1%	0.0%	21
METAL	**18.2%**	**12.3%**	**6,856**	**SPECIAL WASTE**	**7.7%**	**6.5%**	**2,891**
Tin/Steel Cans	0.5%	0.3%	198	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	8	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	2	Mattresses	1.9%	2.1%	731
Other Ferrous	4.4%	5.2%	1,642	Bulky Items	5.7%	4.7%	2,158
Aluminum Cans	0.5%	0.3%	176	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.6%	0.6%	211	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.8%	1.1%	305	R/C Special Waste	0.0%	0.0%	2
R/C Metal	11.5%	12.2%	4,313	**MIXED RESIDUE**	**1.2%**	**0.4%**	**460**
				Mixed Residue	1.2%	0.3%	460
Recoverable Paper	10.3%	5.7%	3,855	**Potentially Recoverable**	30.5%	12.2%	11,478
Other Recoverables	12.8%	6.4%	4,821	**Problem Materials**	35.5%	16.8%	13,343
Compostable/Potentially Compostable	10.9%	6.9%	4,092				
Sample Count			**54**	**Total Tons**			**37,588**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 31. Detailed Material Composition, Arcata, Overall

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**12.1%**	**2.1%**	**1,231**	**OTHER ORGANIC**	**20.6%**	**3.6%**	**2,087**
Uncoated Corrugated Cardboard	4.1%	1.1%	419	Food - Potentially Donatable	0.9%	0.3%	88
Waxed Corrugated Cardboard	0.1%	0.1%	7	Food - Not Donatable	16.4%	2.4%	1,669
Paper Bags	1.0%	0.1%	105	Leaves Grass	0.3%	0.4%	31
Other Recyclable Paper	8.0%	1.8%	808	Prunings Trimmings	1.6%	1.2%	159
Paper Cups - Compostable	0.3%	0.3%	26	Branches Stumps	0.0%	0.1%	5
Paper Cups - Not Compostable	0.3%	0.1%	33	Manures	0.0%	0.1%	3
Compostable Paper	7.2%	0.8%	728	Textiles - Organic	3.8%	1.0%	381
R/C Paper	3.2%	0.7%	328	Carpet	0.3%	0.4%	35
PLASTIC	**7.9%**	**1.7%**	**803**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.3%	0.1%	29	R/C Organic	6.5%	2.1%	663
Other PETE Containers	0.7%	0.2%	72	**INERTS & OTHER**	**20.7%**	**2.9%**	**2,100**
HDPE Containers	0.7%	0.3%	71	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.1%	0.0%	14	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.6%	0.4%	165	Asphalt Composition Shingles	0.4%	0.7%	44
Compostable Plastics	0.0%	0.0%	4	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	2.5%	0.3%	255	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.3%	0.1%	30	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.8%	0.7%	85	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.0%	0.0%	3	Clean Dimensional Lumbar	0.9%	0.9%	94
Other Film	4.7%	0.8%	478	Clean Engineered Wood	0.1%	0.1%	9
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.8%	0.3%	82	Other Wood Waste	4.9%	2.8%	499
Other Non-Recyclable Rigid Plastic	0.5%	0.2%	53	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.3%	0.5%	133	Painted/Demolition Gypsum Board	0.2%	0.3%	21
GLASS	**0.6%**	**0.8%**	**64**	Rock, Soil, & Fines	1.7%	1.8%	168
Clear Glass Bottles Containers	1.0%	0.3%	97	Textiles - Synthetic, Mixed, & Unknown	3.5%	1.1%	352
Green Glass Bottles Containers	0.2%	0.1%	22	R/C Inerts & Other	1.1%	0.6%	113
Brown Glass Bottles Containers	0.6%	0.2%	59	**ELECTRONICS**	**3.4%**	**1.1%**	**343**
Other Colored Glass Containers	0.1%	0.1%	6	E-Waste	1.7%	1.2%	172
Flat Glass	0.0%	0.0%	0	**HHW**	**0.1%**	**0.2%**	**7**
R/C Glass	0.1%	0.1%	14	Household Hazardous Waste	0.3%	0.2%	28
METAL	**12.3%**	**2.2%**	**1,244**	**SPECIAL WASTE**	**18.1%**	**2.4%**	**1,834**
Tin/Steel Cans	0.6%	0.1%	56	Ash	0.0%	0.0%	1
Major Appliances	1.2%	1.9%	119	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	1.4%	1.6%	140
Other Ferrous	1.3%	0.5%	128	Bulky Items	2.1%	2.7%	212
Aluminum Cans	0.3%	0.1%	34	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.5%	0.1%	54	Other Tires	0.0%	0.0%	3
Mixed Recoverable Metal	0.4%	0.2%	36	R/C Special Waste	0.2%	0.2%	16
R/C Metal	0.8%	0.4%	80	**MIXED RESIDUE**	**4.3%**	**1.5%**	**434**
				Mixed Residue	6.0%	1.3%	607
Recoverable Paper	13.1%	2.0%	1,332	**Potentially Recoverable**	18.5%	4.3%	1,879
Other Recoverables	8.5%	2.2%	866	**Problem Materials**	33.1%	4.0%	3,354
Compostable/Potentially Compostable	26.8%	3.1%	2,717				
Sample Count			**47**	**Total Tons**			**10,147**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 37. Composition by Recoverability Group, Arcata, Commercial

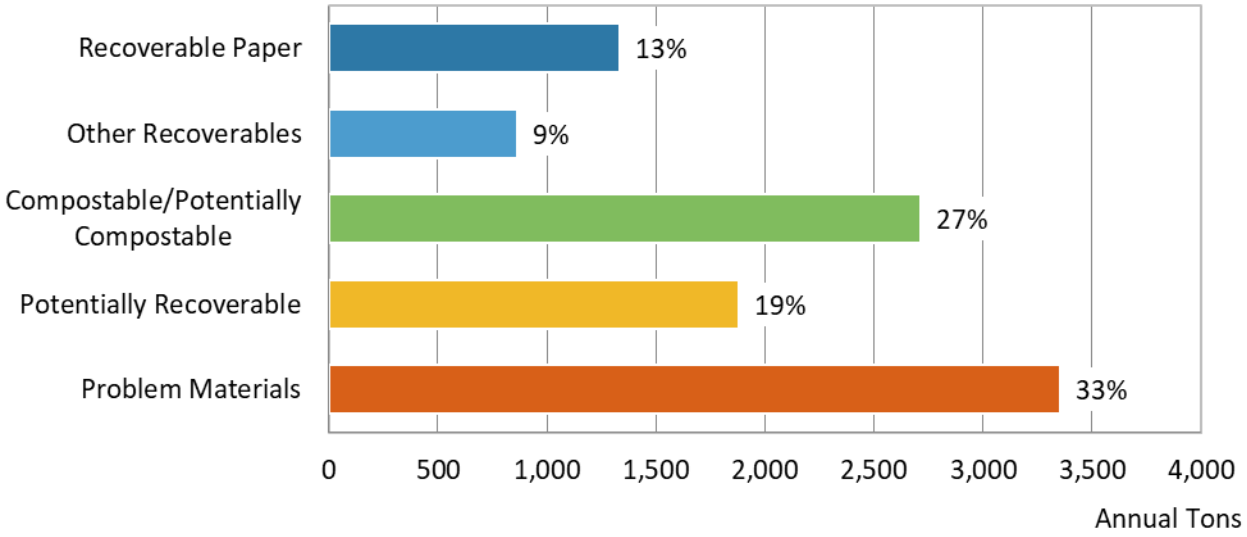


Figure 38. Composition by Material Class, Arcata, Commercial

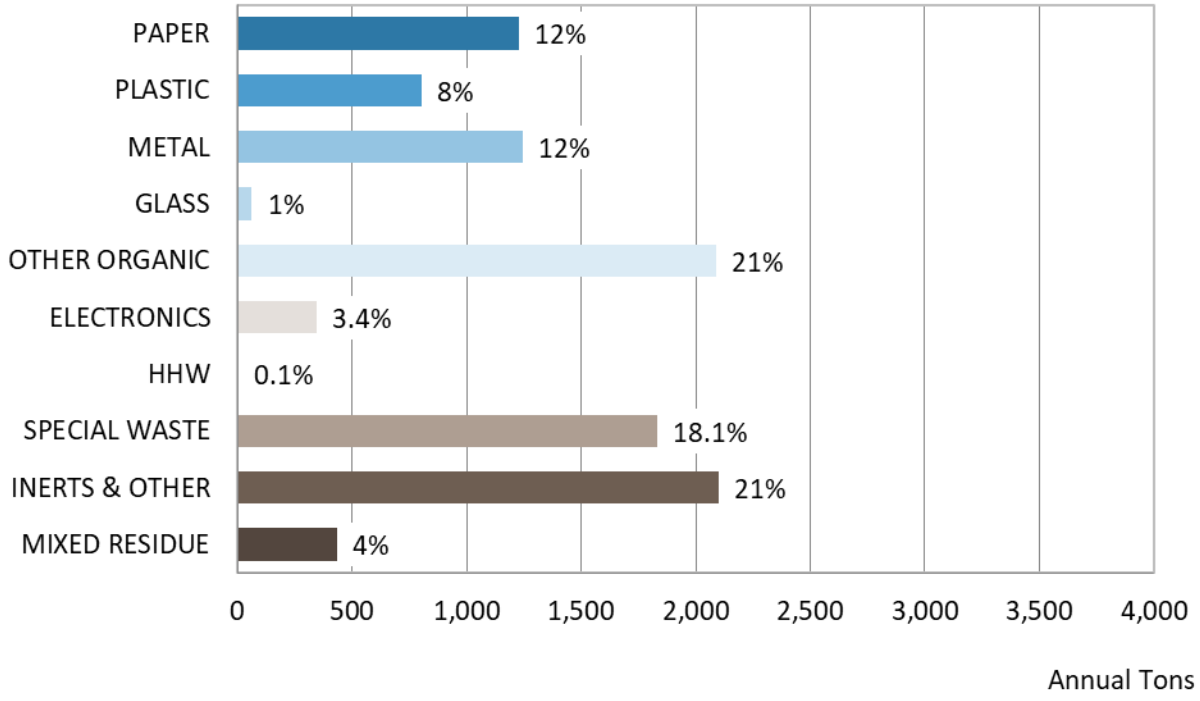


Table 32. Ten Most Prevalent Materials, Arcata, Commercial

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	16.4%	1,669
Other Recyclable Paper	8.0%	808
Compostable Paper	7.2%	728
R/C Organic	6.5%	663
Mixed Residue	6.0%	607
Other Wood Waste	4.9%	499
Other Film	4.7%	478
Uncoated Corrugated Cardboard	4.1%	419
Textiles - Organic	3.8%	381
Textiles - Synthetic, Mixed, & Unknown	3.5%	352
Total for Top Materials	**65.1%**	**6,603**

Table 33. Detailed Material Composition, Arcata, Commercial

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**28.2%**	**3.2%**	**1,406**	**OTHER ORGANIC**	**31.1%**	**3.8%**	**1,548**
Uncoated Corrugated Cardboard	6.6%	2.2%	330	Food - Potentially Donatable	1.1%	0.4%	53
Waxed Corrugated Cardboard	0.1%	0.1%	7	Food - Not Donatable	21.9%	4.1%	1,091
Paper Bags	1.2%	0.2%	58	Leaves Grass	0.1%	0.1%	3
Other Recyclable Paper	8.0%	1.9%	399	Prunings Trimmings	0.7%	1.0%	34
Paper Cups - Compostable	0.4%	0.6%	22	Branches Stumps	0.1%	0.2%	5
Paper Cups - Not Compostable	0.5%	0.2%	23	Manures	0.1%	0.1%	3
Compostable Paper	9.0%	1.5%	448	Textiles - Organic	3.2%	1.5%	161
R/C Paper	2.4%	0.7%	119	Carpet	0.6%	0.8%	28
PLASTIC	**16.1%**	**2.6%**	**803**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.3%	0.1%	17	R/C Organic	3.4%	1.1%	171
Other PETE Containers	0.7%	0.2%	36	**INERTS & OTHER**	**8.9%**	**3.2%**	**443**
HDPE Containers	0.9%	0.5%	45	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.1%	0.0%	6	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.7%	0.3%	82	Asphalt Composition Shingles	0.0%	0.1%	2
Compostable Plastics	0.0%	0.0%	2	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	3.1%	0.6%	154	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.3%	0.1%	14	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	1.1%	1.1%	55	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.0%	0.0%	1	Clean Dimensional Lumbar	0.3%	0.3%	14
Other Film	5.2%	1.3%	259	Clean Engineered Wood	0.0%	0.0%	0
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.6%	0.2%	31	Other Wood Waste	3.5%	2.3%	176
Other Non-Recyclable Rigid Plastic	0.4%	0.2%	22	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.6%	0.8%	79	Painted/Demolition Gypsum Board	0.4%	0.6%	19
GLASS	**2.2%**	**0.6%**	**108**	Rock, Soil, & Fines	1.3%	2.1%	65
Clear Glass Bottles Containers	1.2%	0.3%	59	Textiles - Synthetic, Mixed, & Unknown	2.7%	0.9%	135
Green Glass Bottles Containers	0.3%	0.2%	13	R/C Inerts & Other	0.6%	0.4%	31
Brown Glass Bottles Containers	0.6%	0.2%	32	**ELECTRONICS**	**1.6%**	**1.7%**	**81**
Other Colored Glass Containers	0.1%	0.1%	3	E-Waste	1.6%	1.7%	81
Flat Glass	0.0%	0.0%	0	**HHW**	**0.3%**	**0.3%**	**14**
R/C Glass	0.0%	0.0%	1	Household Hazardous Waste	0.3%	0.3%	14
METAL	**6.8%**	**4.5%**	**340**	**SPECIAL WASTE**	**1.3%**	**1.5%**	**63**
Tin/Steel Cans	0.8%	0.3%	39	Ash	0.0%	0.0%	0
Major Appliances	2.4%	3.8%	119	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.5%	0.7%	23
Other Ferrous	1.9%	1.0%	93	Bulky Items	0.4%	0.7%	22
Aluminum Cans	0.4%	0.2%	22	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.6%	0.2%	32	Other Tires	0.1%	0.1%	3
Mixed Recoverable Metal	0.2%	0.2%	12	R/C Special Waste	0.3%	0.4%	15
R/C Metal	0.5%	0.3%	23	**MIXED RESIDUE**	**3.5%**	**1.3%**	**177**
				Mixed Residue	3.5%	1.3%	177
Recoverable Paper	15.8%	2.8%	787	**Potentially Recoverable**	14.4%	3.5%	716
Other Recoverables	11.1%	4.2%	553	**Problem Materials**	25.3%	3.4%	1,262
Compostable/Potentially Compostable	33.4%	4.9%	1,664				
Sample Count			**25**	**Total Tons**			**4,982**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 39. Composition by Recoverability Group, Arcata, Residential

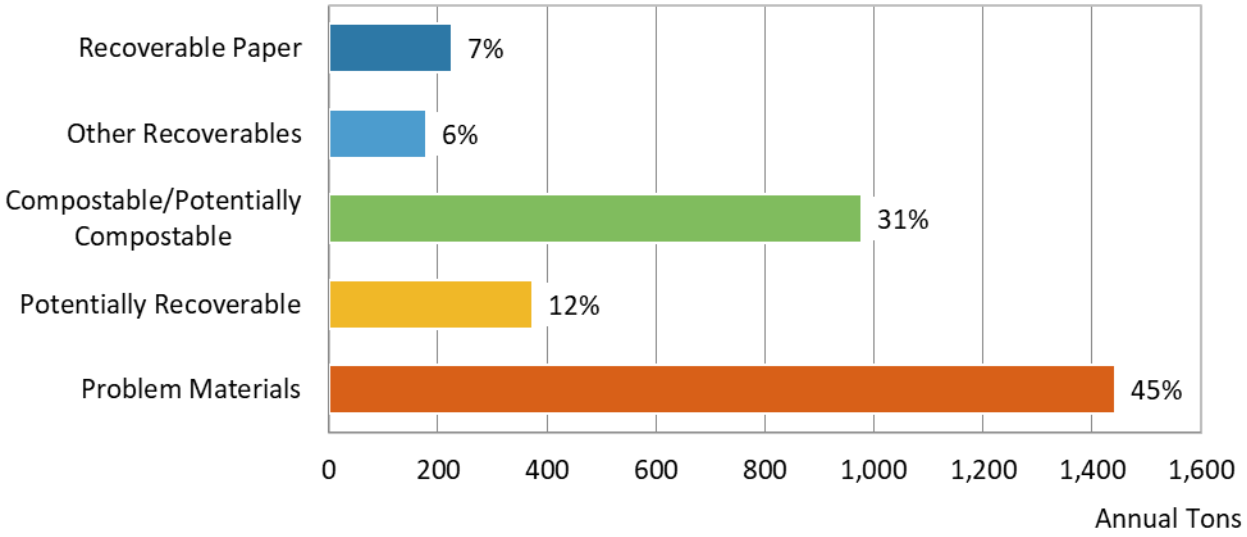


Figure 40. Composition by Material Class, Arcata, Residential

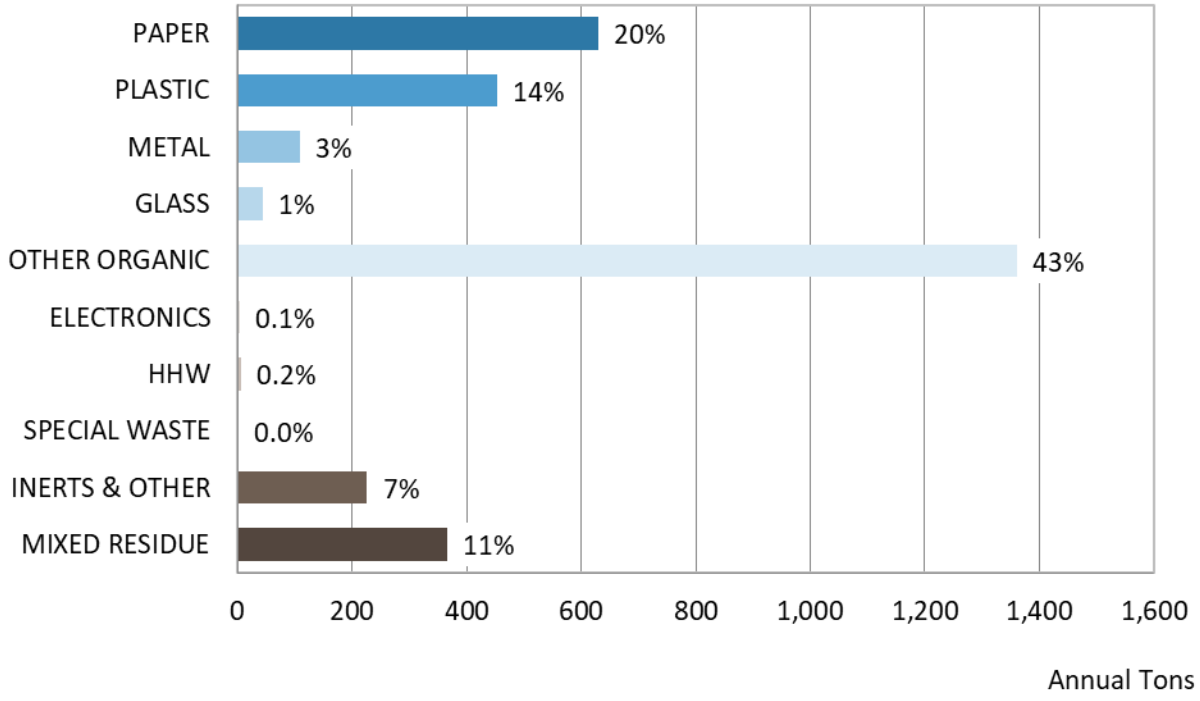


Table 34. Ten Most Prevalent Materials, Arcata, Residential

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	17.5%	560
R/C Organic	14.9%	478
Mixed Residue	11.4%	366
Compostable Paper	8.0%	257
Other Film	5.5%	178
Other Recyclable Paper	5.3%	171
Textiles - Organic	5.0%	160
R/C Paper	4.3%	136
Prunings Trimmings	3.7%	120
Textiles - Synthetic, Mixed, & Unknown	3.1%	99
Total for Top Materials	**78.9%**	**2,526**

Table 35. Detailed Material Composition, Arcata, Residential

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**19.7%**	**1.8%**	**629**	**OTHER ORGANIC**	**42.5%**	**6.6%**	**1,360**
Uncoated Corrugated Cardboard	0.7%	0.2%	23	Food - Potentially Donatable	1.0%	0.5%	34
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	17.5%	4.1%	560
Paper Bags	1.0%	0.2%	31	Leaves Grass	0.1%	0.1%	3
Other Recyclable Paper	5.3%	1.7%	171	Prunings Trimmings	3.7%	3.6%	120
Paper Cups - Compostable	0.1%	0.0%	3	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.2%	0.1%	8	Manures	0.0%	0.0%	0
Compostable Paper	8.0%	1.1%	257	Textiles - Organic	5.0%	1.6%	160
R/C Paper	4.3%	1.2%	136	Carpet	0.2%	0.2%	5
PLASTIC	**14.2%**	**1.8%**	**454**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.3%	0.1%	9	R/C Organic	14.9%	6.3%	478
Other PETE Containers	1.0%	0.4%	32	**INERTS & OTHER**	**7.1%**	**3.8%**	**226**
HDPE Containers	0.5%	0.2%	17	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.2%	0.1%	8	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.6%	0.3%	50	Asphalt Composition Shingles	1.3%	2.1%	43
Compostable Plastics	0.1%	0.0%	2	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	2.5%	0.4%	78	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.5%	0.1%	15	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.1%	0.1%	3	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.0%	0.0%	0	Clean Dimensional Lumbar	0.3%	0.3%	9
Other Film	5.5%	0.9%	178	Clean Engineered Wood	0.1%	0.1%	2
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.5%	0.3%	17	Other Wood Waste	0.8%	0.7%	27
Other Non-Recyclable Rigid Plastic	0.5%	0.3%	15	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.0%	0.4%	31	Painted/Demolition Gypsum Board	0.1%	0.1%	2
GLASS	**1.4%**	**0.5%**	**44**	Rock, Soil, & Fines	0.1%	0.1%	2
Clear Glass Bottles Containers	0.7%	0.2%	22	Textiles - Synthetic, Mixed, & Unknown	3.1%	2.2%	99
Green Glass Bottles Containers	0.0%	0.0%	2	R/C Inerts & Other	1.3%	1.3%	43
Brown Glass Bottles Containers	0.6%	0.3%	18	**ELECTRONICS**	**0.1%**	**0.2%**	**4**
Other Colored Glass Containers	0.1%	0.1%	3	E-Waste	0.1%	0.2%	4
Flat Glass	0.0%	0.0%	0	**HHW**	**0.2%**	**0.1%**	**7**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.2%	0.1%	7
METAL	**3.4%**	**1.5%**	**109**	**SPECIAL WASTE**	**0.0%**	**0.1%**	**1**
Tin/Steel Cans	0.5%	0.2%	15	Ash	0.0%	0.1%	1
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	0.5%	0.4%	17	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.2%	0.0%	7	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.5%	0.2%	15	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.2%	0.1%	6	R/C Special Waste	0.0%	0.0%	0
R/C Metal	1.5%	1.2%	49	**MIXED RESIDUE**	**11.4%**	**3.4%**	**366**
				Mixed Residue	11.4%	3.4%	366
Recoverable Paper	7.0%	1.6%	225	**Potentially Recoverable**	11.7%	3.5%	374
Other Recoverables	5.6%	0.9%	178	**Problem Materials**	45.1%	6.0%	1,444
Compostable/Potentially Compostable	30.6%	6.2%	979				
Sample Count			**10**	**Total Tons**			**3,200**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 41. Composition by Recoverability Group, Arcata, Self-haul

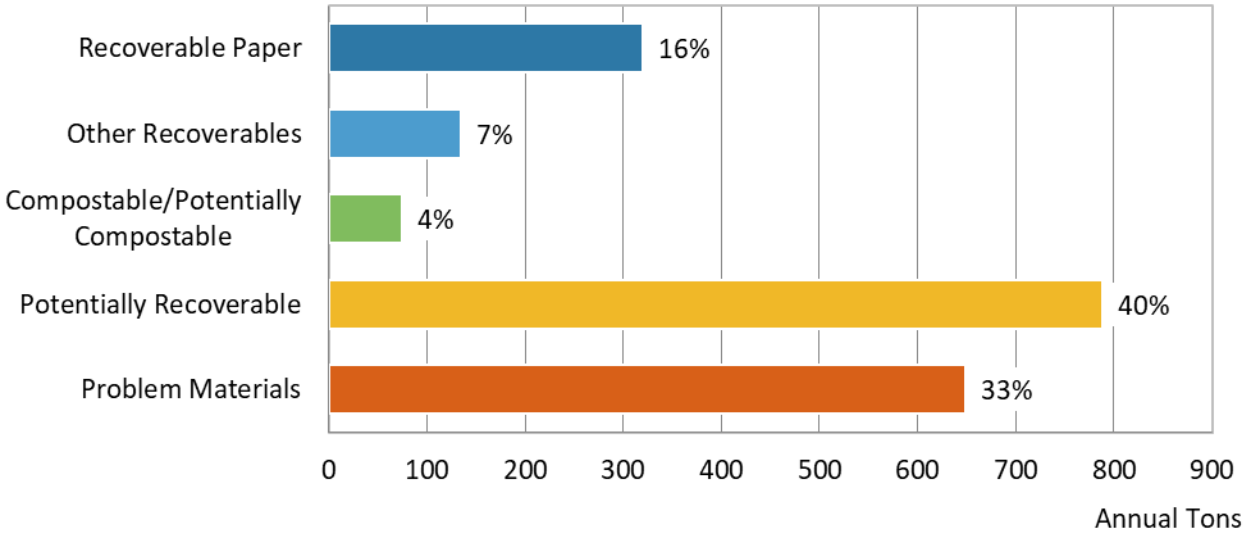


Figure 42. Composition by Material Class, Arcata, Self-haul

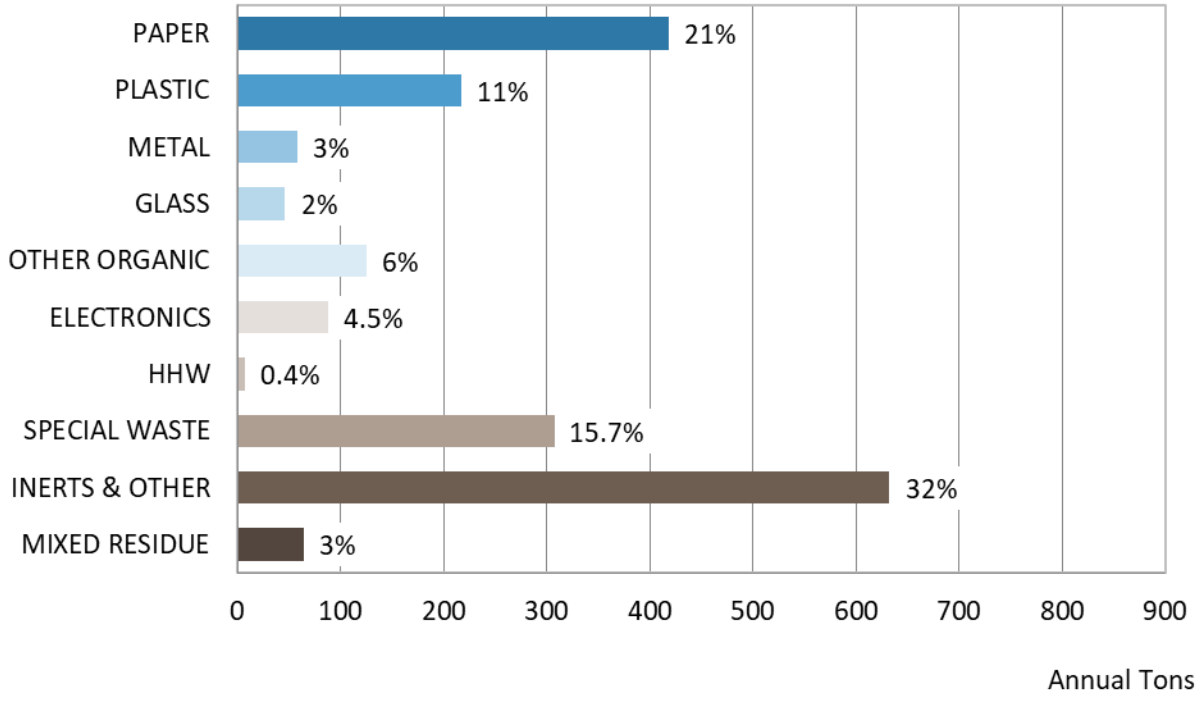


Table 36. Ten Most Prevalent Materials, Arcata, Self-haul

Material	Estimated Percent	Estimated Tons
Other Wood Waste	15.1%	296
Other Recyclable Paper	12.1%	239
Bulky Items	9.7%	190
Textiles - Synthetic, Mixed, & Unknown	6.0%	118
Mattresses	6.0%	117
Rock, Soil, & Fines	5.1%	101
E-Waste	4.5%	88
R/C Paper	3.7%	73
Clean Dimensional Lumbar	3.6%	72
Uncoated Corrugated Cardboard	3.3%	66
Total for Top Materials	**69.1%**	**1,358**

Table 37. Detailed Material Composition, Arcata, Self-haul

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**21.3%**	**7.6%**	**419**	**OTHER ORGANIC**	**6.4%**	**4.3%**	**125**
Uncoated Corrugated Cardboard	3.3%	1.8%	66	Food - Potentially Donatable	0.0%	0.1%	1
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	0.9%	0.8%	18
Paper Bags	0.8%	0.5%	15	Leaves Grass	1.3%	2.0%	25
Other Recyclable Paper	12.1%	7.2%	239	Prunings Trimmings	0.3%	0.4%	6
Paper Cups - Compostable	0.1%	0.1%	1	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.1%	0.1%	2	Manures	0.0%	0.0%	0
Compostable Paper	1.2%	0.9%	23	Textiles - Organic	3.0%	1.8%	59
R/C Paper	3.7%	2.7%	73	Carpet	0.1%	0.2%	2
PLASTIC	**11.1%**	**5.9%**	**217**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.2%	0.2%	4	R/C Organic	0.7%	0.6%	14
Other PETE Containers	0.2%	0.2%	5	**INERTS & OTHER**	**32.2%**	**11.1%**	**633**
HDPE Containers	0.4%	0.4%	9	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.0%	0.0%	0	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.7%	1.7%	33	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	1.1%	0.4%	22	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.0%	0.0%	1	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	1.4%	2.0%	27	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.1%	0.2%	2	Clean Dimensional Lumbar	3.6%	4.8%	72
Other Film	2.1%	1.8%	42	Clean Engineered Wood	0.4%	0.6%	7
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	1.8%	1.3%	35	Other Wood Waste	15.1%	13.2%	296
Other Non-Recyclable Rigid Plastic	0.8%	1.0%	16	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.2%	0.9%	23	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**2.4%**	**2.0%**	**46**	Rock, Soil, & Fines	5.1%	7.5%	101
Clear Glass Bottles Containers	0.9%	1.1%	17	Textiles - Synthetic, Mixed, & Unknown	6.0%	3.9%	118
Green Glass Bottles Containers	0.4%	0.4%	7	R/C Inerts & Other	2.0%	2.2%	40
Brown Glass Bottles Containers	0.5%	0.6%	9	**ELECTRONICS**	**4.5%**	**4.3%**	**88**
Other Colored Glass Containers	0.0%	0.0%	0	E-Waste	4.5%	4.3%	88
Flat Glass	0.0%	0.0%	0	**HHW**	**0.4%**	**0.4%**	**7**
R/C Glass	0.7%	0.7%	13	Household Hazardous Waste	0.4%	0.4%	7
METAL	**3.0%**	**1.3%**	**58**	**SPECIAL WASTE**	**15.7%**	**13.6%**	**308**
Tin/Steel Cans	0.1%	0.1%	2	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	6.0%	8.1%	117
Other Ferrous	0.9%	0.6%	18	Bulky Items	9.7%	13.6%	190
Aluminum Cans	0.3%	0.3%	5	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.3%	0.4%	6	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.9%	0.8%	18	R/C Special Waste	0.0%	0.0%	0
R/C Metal	0.4%	0.2%	9	**MIXED RESIDUE**	**3.3%**	**2.5%**	**64**
				Mixed Residue	3.3%	2.5%	64
Recoverable Paper	16.3%	7.5%	320	**Potentially Recoverable**	40.1%	19.2%	788
Other Recoverables	6.8%	3.2%	135	**Problem Materials**	33.0%	16.1%	648
Compostable/Potentially Compostable	3.8%	2.9%	74				
Sample Count			**12**	**Total Tons**			**1,965**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 38. Detailed Material Composition, Blue Lake, Overall

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**21.8%**	**3.8%**	**156**	**OTHER ORGANIC**	**32.0%**	**2.3%**	**230**
Uncoated Corrugated Cardboard	2.6%	1.4%	19	Food - Potentially Donatable	2.5%	1.4%	18
Waxed Corrugated Cardboard	0.6%	0.9%	5	Food - Not Donatable	17.3%	3.6%	125
Paper Bags	1.1%	0.4%	8	Leaves Grass	1.3%	1.1%	9
Other Recyclable Paper	5.8%	1.3%	42	Prunings Trimmings	0.9%	0.4%	6
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.2%	0.1%	2	Manures	0.2%	0.3%	1
Compostable Paper	8.0%	2.1%	58	Textiles - Organic	2.0%	1.0%	15
R/C Paper	3.3%	1.1%	24	Carpet	0.0%	0.0%	0
PLASTIC	**13.4%**	**1.9%**	**96**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.7%	0.3%	5	R/C Organic	7.8%	3.9%	56
Other PETE Containers	1.0%	0.4%	7	**INERTS & OTHER**	**11.9%**	**5.1%**	**86**
HDPE Containers	0.5%	0.1%	3	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.2%	0.1%	2	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.9%	0.2%	6	Asphalt Composition Shingles	0.1%	0.1%	1
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	1.8%	0.4%	13	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.4%	0.2%	3	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.4%	0.3%	3	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.4%	0.3%	3	Clean Dimensional Lumbar	1.5%	1.2%	11
Other Film	4.0%	0.8%	28	Clean Engineered Wood	1.0%	0.8%	7
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	1.0%	0.7%	7	Other Wood Waste	3.9%	3.7%	28
Other Non-Recyclable Rigid Plastic	0.5%	0.3%	3	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.7%	1.0%	12	Painted/Demolition Gypsum Board	0.9%	1.4%	6
GLASS	**4.0%**	**2.1%**	**29**	Rock, Soil, & Fines	1.6%	2.5%	12
Clear Glass Bottles Containers	2.4%	1.0%	17	Textiles - Synthetic, Mixed, & Unknown	2.5%	2.0%	18
Green Glass Bottles Containers	0.5%	0.7%	4	R/C Inerts & Other	0.5%	0.4%	3
Brown Glass Bottles Containers	0.9%	0.7%	6	**ELECTRONICS**	**1.4%**	**1.1%**	**10**
Other Colored Glass Containers	0.1%	0.2%	1	E-Waste	1.4%	1.1%	10
Flat Glass	0.0%	0.1%	0	**HHW**	**0.3%**	**0.2%**	**2**
R/C Glass	0.1%	0.1%	0	Household Hazardous Waste	0.3%	0.2%	2
METAL	**7.7%**	**2.9%**	**56**	**SPECIAL WASTE**	**0.3%**	**0.3%**	**2**
Tin/Steel Cans	0.6%	0.2%	5	Ash	0.1%	0.2%	1
Major Appliances	1.2%	1.9%	8	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	2.8%	2.3%	20	Bulky Items	0.0%	0.0%	0
Aluminum Cans	1.0%	0.5%	7	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.6%	0.4%	4	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	1.2%	0.8%	9	R/C Special Waste	0.2%	0.2%	1
R/C Metal	0.3%	0.3%	2	**MIXED RESIDUE**	**7.2%**	**3.4%**	**52**
				Mixed Residue	7.2%	3.4%	52
Recoverable Paper	9.5%	2.1%	68	**Potentially Recoverable**	13.5%	4.8%	97
Other Recoverables	14.5%	3.1%	104	**Problem Materials**	31.7%	4.1%	228
Compostable/Potentially Compostable	30.8%	4.3%	221				
Sample Count			**15**	**Total Tons**			**719**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 43. Composition by Recoverability Group, Blue Lake, Combined

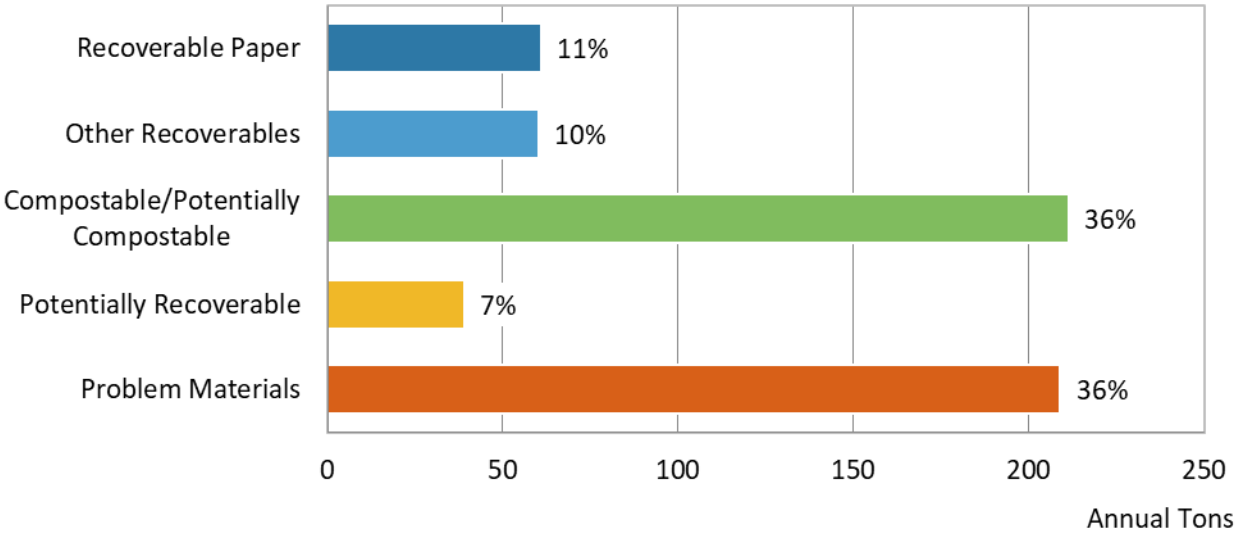


Figure 44. Composition by Material Class, Blue Lake, Combined

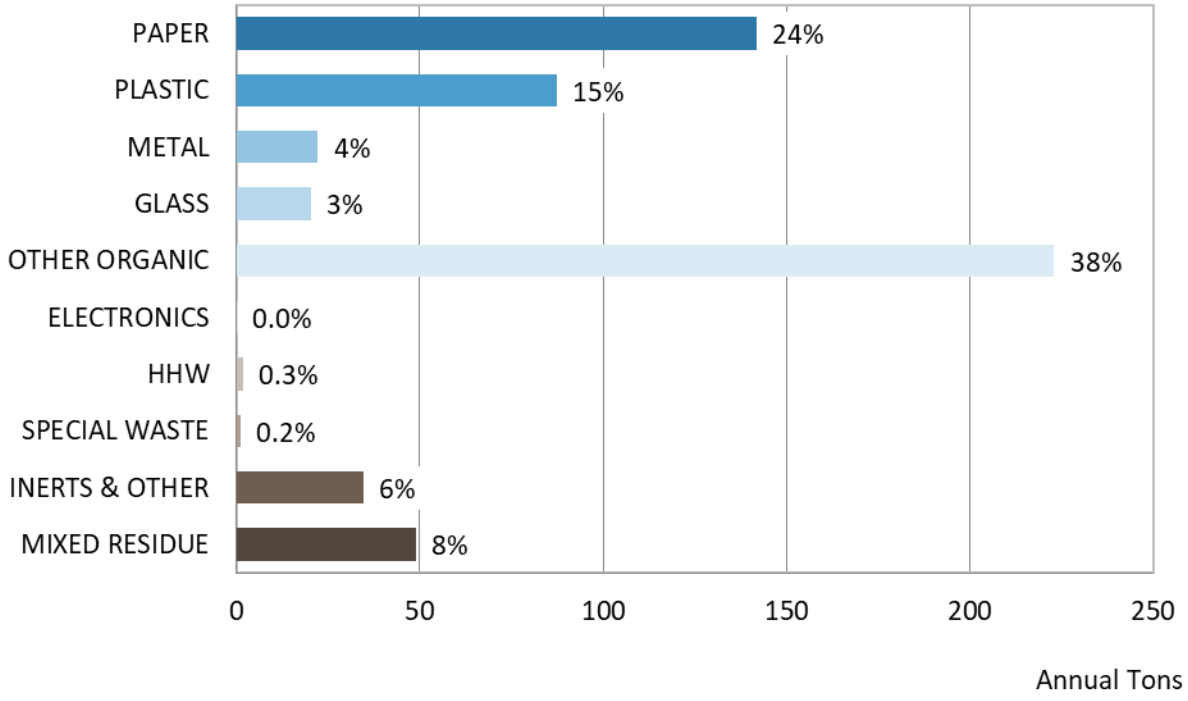


Table 39. Ten Most Prevalent Materials, Blue Lake, Combined

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	21.0%	122
R/C Organic	9.7%	56
Compostable Paper	9.5%	55
Mixed Residue	8.4%	49
Other Recyclable Paper	6.4%	37
Other Film	4.9%	28
R/C Paper	3.3%	19
Uncoated Corrugated Cardboard	3.1%	18
Clear Glass Bottles Containers	2.5%	15
Textiles - Organic	2.5%	15
Total for Top Materials	**71.3%**	**414**

Table 40. Detailed Material Composition, Blue Lake, Combined

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**24.4%**	**3.8%**	**142**	**OTHER ORGANIC**	**38.4%**	**2.3%**	**223**
Uncoated Corrugated Cardboard	3.1%	1.7%	18	Food - Potentially Donatable	2.4%	1.3%	14
Waxed Corrugated Cardboard	0.8%	1.1%	4	Food - Not Donatable	21.0%	4.4%	122
Paper Bags	1.1%	0.3%	6	Leaves Grass	1.5%	1.4%	9
Other Recyclable Paper	6.4%	1.2%	37	Prunings Trimmings	1.1%	0.6%	6
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.3%	0.2%	2	Manures	0.2%	0.3%	1
Compostable Paper	9.5%	2.6%	55	Textiles - Organic	2.5%	1.2%	15
R/C Paper	3.3%	0.9%	19	Carpet	0.0%	0.0%	0
PLASTIC	**15.0%**	**2.2%**	**87**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.8%	0.3%	5	R/C Organic	9.7%	4.8%	56
Other PETE Containers	1.2%	0.5%	7	**INERTS & OTHER**	**5.9%**	**3.4%**	**35**
HDPE Containers	0.5%	0.2%	3	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.3%	0.1%	2	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.9%	0.2%	5	Asphalt Composition Shingles	0.1%	0.2%	1
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	2.0%	0.5%	12	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.5%	0.2%	3	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.5%	0.3%	3	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.4%	0.3%	2	Clean Dimensional Lumbar	0.1%	0.1%	1
Other Film	4.9%	0.9%	28	Clean Engineered Wood	0.2%	0.2%	1
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.8%	0.6%	5	Other Wood Waste	0.8%	0.5%	5
Other Non-Recyclable Rigid Plastic	0.5%	0.4%	3	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.8%	1.1%	11	Painted/Demolition Gypsum Board	1.1%	1.7%	6
GLASS	**3.5%**	**1.3%**	**20**	Rock, Soil, & Fines	2.0%	3.1%	12
Clear Glass Bottles Containers	2.5%	1.1%	15	Textiles - Synthetic, Mixed, & Unknown	1.6%	1.3%	9
Green Glass Bottles Containers	0.1%	0.2%	1	R/C Inerts & Other	0.1%	0.1%	0
Brown Glass Bottles Containers	0.6%	0.2%	3	**ELECTRONICS**	**0.0%**	**0.0%**	**0**
Other Colored Glass Containers	0.2%	0.2%	1	E-Waste	0.0%	0.0%	0
Flat Glass	0.1%	0.1%	0	**HHW**	**0.3%**	**0.3%**	**2**
R/C Glass	0.1%	0.1%	0	Household Hazardous Waste	0.3%	0.3%	2
METAL	**3.8%**	**1.4%**	**22**	**SPECIAL WASTE**	**0.2%**	**0.3%**	**1**
Tin/Steel Cans	0.8%	0.3%	5	Ash	0.2%	0.2%	1
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	0.5%	0.5%	3	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.6%	0.2%	4	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.4%	0.2%	2	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	1.4%	0.9%	8	R/C Special Waste	0.0%	0.1%	0
R/C Metal	0.1%	0.1%	1	**MIXED RESIDUE**	**8.4%**	**4.1%**	**49**
				Mixed Residue	8.4%	4.1%	49
Recoverable Paper	10.5%	2.1%	61	**Potentially Recoverable**	6.7%	2.1%	39
Other Recoverables	10.4%	2.6%	60	**Problem Materials**	36.0%	4.6%	209
Compostable/Potentially Compostable	36.4%	5.0%	211				
Sample Count			**9**	**Total Tons**			**581**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 45. Composition by Recoverability Group, Blue Lake, Self-haul

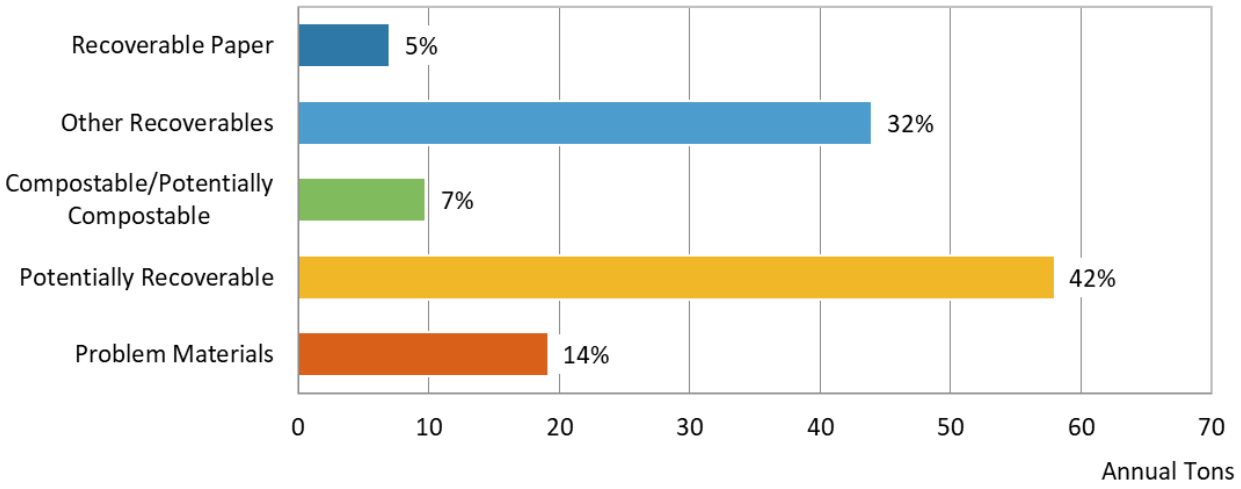


Figure 46. Composition by Material Class, Blue Lake, Self-haul

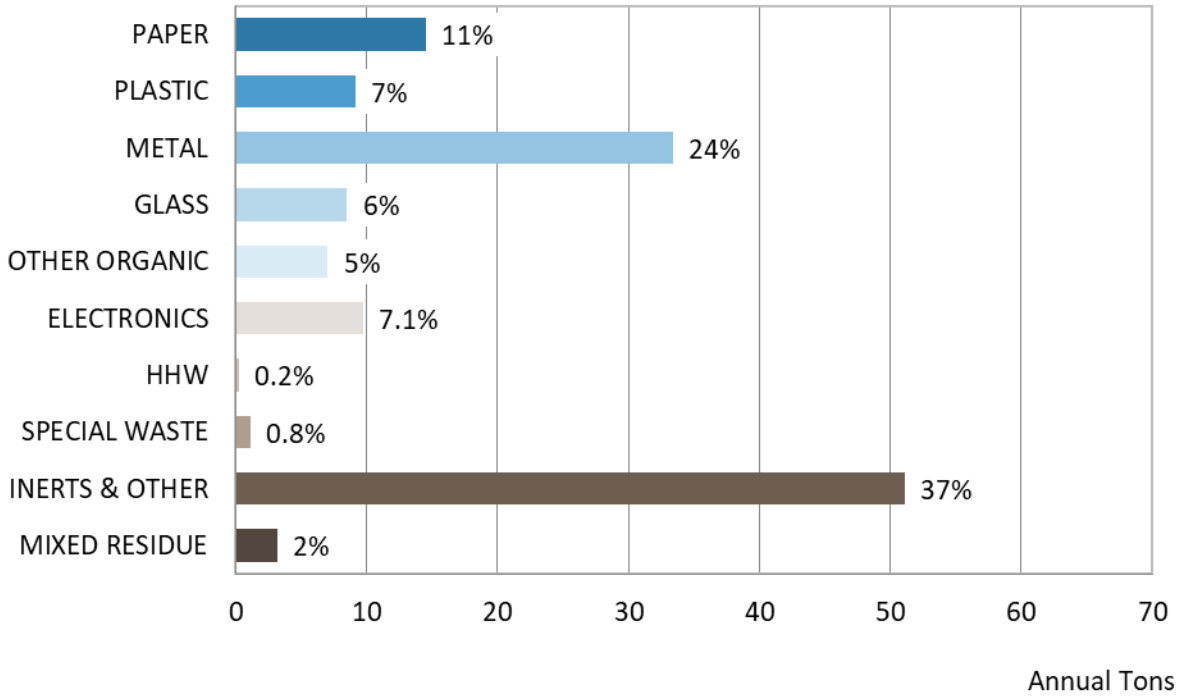


Table 41. Ten Most Prevalent Materials, Blue Lake, Self-haul

Material	Estimated Percent	Estimated Tons
Other Wood Waste	16.9%	23
Other Ferrous	12.6%	17
Clean Dimensional Lumbar	7.4%	10
E-Waste	7.1%	10
Textiles - Synthetic, Mixed, & Unknown	6.2%	9
Major Appliances	6.0%	8
Clean Engineered Wood	4.4%	6
R/C Paper	3.5%	5
Other Recyclable Paper	3.4%	5
Food - Potentially Donatable	3.1%	4
Total for Top Materials	**70.7%**	**98**

Table 42. Detailed Material Composition, Blue Lake, Self-haul

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**10.5%**	**11.4%**	**15**	**OTHER ORGANIC**	**5.1%**	**7.3%**	**7**
Uncoated Corrugated Cardboard	0.7%	0.8%	1	Food - Potentially Donatable	3.1%	5.1%	4
Waxed Corrugated Cardboard	0.2%	0.3%	0	Food - Not Donatable	1.7%	2.2%	2
Paper Bags	1.0%	1.6%	1	Leaves Grass	0.3%	0.5%	0
Other Recyclable Paper	3.4%	4.7%	5	Prunings Trimmings	0.0%	0.0%	0
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.0%	0.0%	0	Manures	0.0%	0.0%	0
Compostable Paper	1.8%	2.4%	2	Textiles - Organic	0.0%	0.0%	0
R/C Paper	3.5%	4.3%	5	Carpet	0.0%	0.0%	0
PLASTIC	**6.6%**	**3.6%**	**9**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.1%	0.2%	0	R/C Organic	0.0%	0.0%	0
Other PETE Containers	0.1%	0.2%	0	**INERTS & OTHER**	**37.1%**	**22.6%**	**51**
HDPE Containers	0.3%	0.3%	0	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.0%	0.0%	0	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.7%	0.8%	1	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	1.1%	0.9%	1	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.0%	0.0%	0	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.0%	0.0%	0	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.8%	0.5%	1	Clean Dimensional Lumbar	7.4%	6.3%	10
Other Film	0.1%	0.1%	0	Clean Engineered Wood	4.4%	4.0%	6
Rigid Plastic Drip Lines	0.1%	0.1%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	1.9%	2.1%	3	Other Wood Waste	16.9%	19.2%	23
Other Non-Recyclable Rigid Plastic	0.3%	0.4%	0	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.0%	1.5%	1	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**6.2%**	**9.8%**	**9**	Rock, Soil, & Fines	0.0%	0.0%	0
Clear Glass Bottles Containers	1.9%	3.0%	3	Textiles - Synthetic, Mixed, & Unknown	6.2%	9.2%	9
Green Glass Bottles Containers	2.2%	3.4%	3	R/C Inerts & Other	2.1%	2.0%	3
Brown Glass Bottles Containers	2.2%	3.4%	3	**ELECTRONICS**	**7.1%**	**5.6%**	**10**
Other Colored Glass Containers	0.0%	0.0%	0	E-Waste	7.1%	5.6%	10
Flat Glass	0.0%	0.0%	0	**HHW**	**0.2%**	**0.3%**	**0**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.2%	0.3%	0
METAL	**24.2%**	**13.9%**	**33**	**SPECIAL WASTE**	**0.8%**	**1.3%**	**1**
Tin/Steel Cans	0.0%	0.0%	0	Ash	0.0%	0.0%	0
Major Appliances	6.0%	9.6%	8	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	12.6%	12.0%	17	Bulky Items	0.0%	0.0%	0
Aluminum Cans	2.6%	2.7%	4	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	1.2%	2.1%	2	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.7%	0.5%	1	R/C Special Waste	0.8%	1.3%	1
R/C Metal	1.0%	1.5%	1	**MIXED RESIDUE**	**2.3%**	**3.6%**	**3**
				Mixed Residue	2.3%	3.4%	3
Recoverable Paper	5.1%	6.4%	7	**Potentially Recoverable**	42.0%	23.6%	58
Other Recoverables	31.9%	11.8%	44	**Problem Materials**	13.9%	9.6%	19
Compostable/Potentially Compostable	7.1%	7.6%	10				
Sample Count			**6**	**Total Tons**			**138**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 43. Detailed Material Composition, Eureka, Overall

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**16.9%**	**3.1%**	**5,471**	**OTHER ORGANIC**	**26.1%**	**5.0%**	**8,433**
Uncoated Corrugated Cardboard	3.7%	1.7%	1,189	Food - Potentially Donatable	1.6%	0.5%	517
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	13.1%	2.0%	4,225
Paper Bags	0.6%	0.1%	181	Leaves Grass	0.9%	0.8%	284
Other Recyclable Paper	5.2%	1.4%	1,684	Prunings Trimmings	1.0%	0.5%	315
Paper Cups - Compostable	0.1%	0.0%	18	Branches Stumps	0.1%	0.1%	19
Paper Cups - Not Compostable	0.3%	0.1%	112	Manures	0.0%	0.0%	0
Compostable Paper	4.9%	0.9%	1,570	Textiles - Organic	3.0%	1.0%	961
R/C Paper	2.2%	0.4%	718	Carpet	3.0%	4.2%	957
PLASTIC	**13.0%**	**1.7%**	**4,211**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.3%	0.2%	112	R/C Organic	3.6%	0.8%	1,155
Other PETE Containers	0.5%	0.1%	171	**INERTS & OTHER**	**23.6%**	**12.9%**	**7,612**
HDPE Containers	0.6%	0.2%	184	Concrete	0.0%	0.0%	1
Polystyrene Food Service Items	0.1%	0.0%	43	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.0%	0.2%	337	Asphalt Composition Shingles	0.1%	0.1%	33
Compostable Plastics	0.0%	0.0%	9	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	1.7%	0.2%	544	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.3%	0.1%	104	Built-up Roofing	0.0%	0.0%	3
Non-Bag Industrial Packaging Film	0.9%	0.6%	285	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.2%	0.3%	70	Clean Dimensional Lumbar	9.4%	11.3%	3,047
Other Film	3.8%	0.8%	1,232	Clean Engineered Wood	1.2%	1.1%	404
Rigid Plastic Drip Lines	0.1%	0.1%	35	Clean Pallets Crates	0.1%	0.1%	32
Other Recyclable Rigid Plastic	0.7%	0.4%	239	Other Wood Waste	4.1%	2.5%	1,321
Other Non-Recyclable Rigid Plastic	0.7%	0.4%	227	Clean Gypsum Board	1.8%	2.9%	574
R/C Plastic	1.9%	0.7%	618	Painted/Demolition Gypsum Board	0.4%	0.4%	113
GLASS	**4.6%**	**4.0%**	**1,470**	Rock, Soil, & Fines	3.4%	4.0%	1,089
Clear Glass Bottles Containers	1.1%	0.8%	362	Textiles - Synthetic, Mixed, & Unknown	2.4%	1.0%	777
Green Glass Bottles Containers	0.3%	0.3%	101	R/C Inerts & Other	0.7%	0.4%	220
Brown Glass Bottles Containers	0.5%	0.5%	149	**ELECTRONICS**	**1.1%**	**1.2%**	**359**
Other Colored Glass Containers	0.0%	0.0%	15	E-Waste	1.1%	1.2%	359
Flat Glass	2.4%	3.9%	784	**HHW**	**0.7%**	**0.9%**	**218**
R/C Glass	0.2%	0.2%	58	Household Hazardous Waste	0.7%	0.9%	218
METAL	**5.7%**	**2.2%**	**1,854**	**SPECIAL WASTE**	**6.8%**	**7.2%**	**2,196**
Tin/Steel Cans	0.8%	0.3%	254	Ash	0.2%	0.3%	60
Major Appliances	0.4%	0.6%	129	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	8	Mattresses	1.9%	2.4%	614
Other Ferrous	0.9%	0.4%	280	Bulky Items	4.4%	4.8%	1,430
Aluminum Cans	0.3%	0.2%	104	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.4%	0.2%	125	Other Tires	0.0%	0.1%	11
Mixed Recoverable Metal	1.1%	1.3%	360	R/C Special Waste	0.3%	0.2%	81
R/C Metal	1.8%	1.6%	594	**MIXED RESIDUE**	**1.5%**	**0.4%**	**469**
				Mixed Residue	1.5%	0.4%	469
Recoverable Paper	9.5%	2.9%	3,053	**Potentially Recoverable**	29.7%	11.2%	9,586
Other Recoverables	8.1%	3.2%	2,621	**Problem Materials**	31.2%	8.1%	10,076
Compostable/Potentially Compostable	21.5%	2.2%	6,957				
Sample Count			**47**	**Total Tons**			**32,294**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 47. Composition by Recoverability Group, Eureka, Commercial

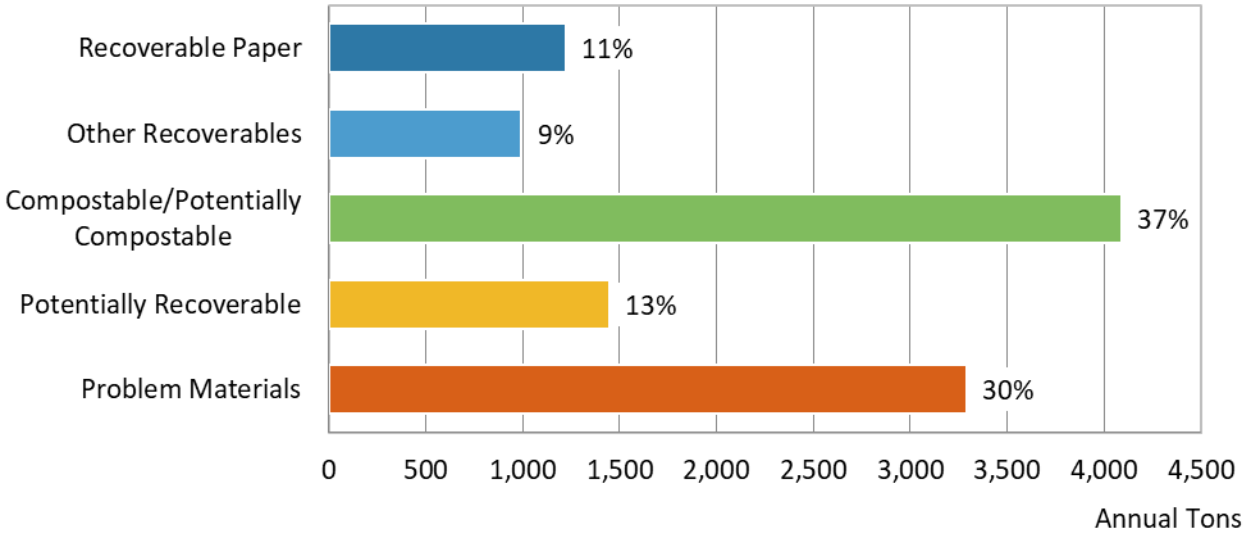


Figure 48. Composition by Material Class, Eureka, Commercial

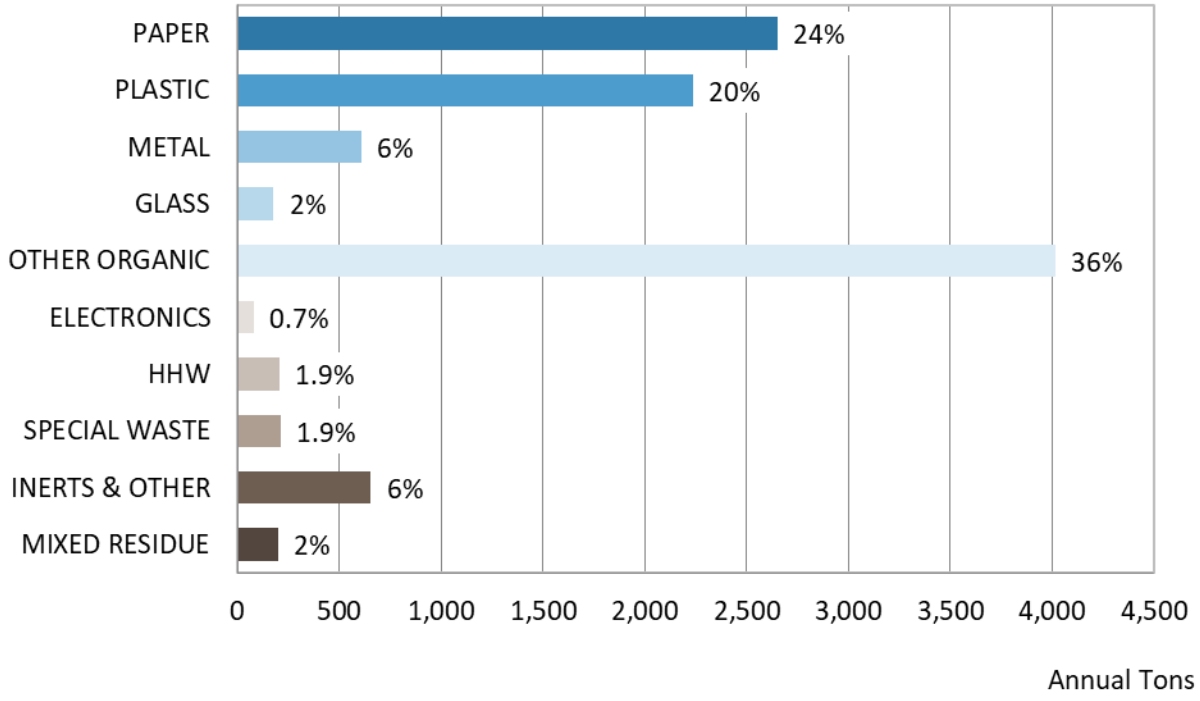


Table 44. Ten Most Prevalent Materials, Eureka, Commercial

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	23.5%	2,601
Compostable Paper	8.9%	987
Other Film	6.8%	748
Other Recyclable Paper	5.8%	645
Uncoated Corrugated Cardboard	4.5%	501
R/C Organic	3.8%	422
Textiles - Organic	3.7%	413
R/C Paper	3.2%	349
Plastic Trash Bags	3.0%	333
Food - Potentially Donatable	2.7%	296
Total for Top Materials	**66.0%**	**7,295**

Table 45. Detailed Material Composition, Eureka, Commercial

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**24.0%**	**3.5%**	**2,650**	**OTHER ORGANIC**	**36.3%**	**5.2%**	**4,014**
Uncoated Corrugated Cardboard	4.5%	1.1%	501	Food - Potentially Donatable	2.7%	1.3%	296
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	23.5%	5.3%	2,601
Paper Bags	0.7%	0.2%	78	Leaves Grass	0.0%	0.0%	4
Other Recyclable Paper	5.8%	1.2%	645	Prunings Trimmings	1.5%	1.2%	167
Paper Cups - Compostable	0.1%	0.1%	12	Branches Stumps	0.2%	0.2%	19
Paper Cups - Not Compostable	0.7%	0.2%	79	Manures	0.0%	0.0%	0
Compostable Paper	8.9%	2.4%	987	Textiles - Organic	3.7%	1.9%	413
R/C Paper	3.2%	0.8%	349	Carpet	0.8%	0.6%	92
PLASTIC	**20.2%**	**2.4%**	**2,237**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.5%	0.1%	51	R/C Organic	3.8%	1.4%	422
Other PETE Containers	0.8%	0.2%	89	**INERTS & OTHER**	**5.9%**	**2.4%**	**656**
HDPE Containers	1.1%	0.4%	119	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.2%	0.0%	19	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.6%	0.4%	180	Asphalt Composition Shingles	0.0%	0.0%	2
Compostable Plastics	0.1%	0.0%	6	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	3.0%	0.4%	333	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.4%	0.1%	39	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	1.7%	1.3%	182	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.1%	0.1%	6	Clean Dimensional Lumbar	1.1%	1.1%	124
Other Film	6.8%	1.7%	748	Clean Engineered Wood	0.7%	0.8%	80
Rigid Plastic Drip Lines	0.1%	0.1%	13	Clean Pallets Crates	0.3%	0.4%	32
Other Recyclable Rigid Plastic	0.9%	0.5%	103	Other Wood Waste	1.3%	1.1%	141
Other Non-Recyclable Rigid Plastic	1.2%	0.8%	138	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.9%	1.2%	209	Painted/Demolition Gypsum Board	0.1%	0.1%	6
GLASS	**1.6%**	**0.8%**	**178**	Rock, Soil, & Fines	0.1%	0.1%	6
Clear Glass Bottles Containers	0.6%	0.2%	71	Textiles - Synthetic, Mixed, & Unknown	1.6%	0.7%	179
Green Glass Bottles Containers	0.2%	0.1%	21	R/C Inerts & Other	0.8%	0.5%	86
Brown Glass Bottles Containers	0.3%	0.1%	31	**ELECTRONICS**	**0.7%**	**0.7%**	**82**
Other Colored Glass Containers	0.1%	0.0%	6	E-Waste	0.7%	0.7%	82
Flat Glass	0.0%	0.0%	0	**HHW**	**1.9%**	**2.5%**	**208**
R/C Glass	0.4%	0.5%	49	Household Hazardous Waste	1.9%	2.5%	208
METAL	**5.5%**	**2.2%**	**608**	**SPECIAL WASTE**	**1.9%**	**1.4%**	**214**
Tin/Steel Cans	0.9%	0.5%	104	Ash	0.5%	0.8%	53
Major Appliances	1.2%	1.9%	129	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	1.2%	0.7%	129	Bulky Items	0.7%	0.7%	74
Aluminum Cans	0.3%	0.1%	36	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.5%	0.1%	52	Other Tires	0.1%	0.2%	11
Mixed Recoverable Metal	0.4%	0.3%	40	R/C Special Waste	0.7%	0.6%	75
R/C Metal	1.1%	0.5%	118	**MIXED RESIDUE**	**1.8%**	**0.7%**	**200**
				Mixed Residue	1.8%	0.7%	200
Recoverable Paper	11.1%	1.7%	1,224	**Potentially Recoverable**	13.1%	3.2%	1,445
Other Recoverables	9.0%	2.1%	995	**Problem Materials**	29.8%	4.0%	3,291
Compostable/Potentially Compostable	37.0%	5.2%	4,091				
Sample Count			**25**	**Total Tons**			**11,046**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 49. Composition by Recoverability Group, Eureka, Residential

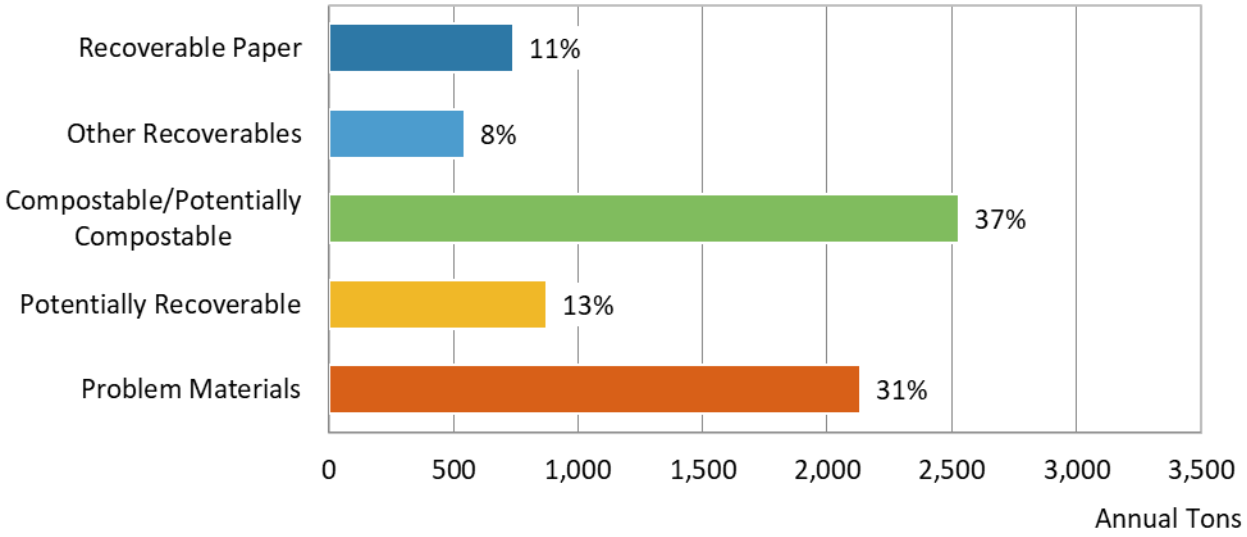


Figure 50. Composition by Material Class, Eureka, Residential

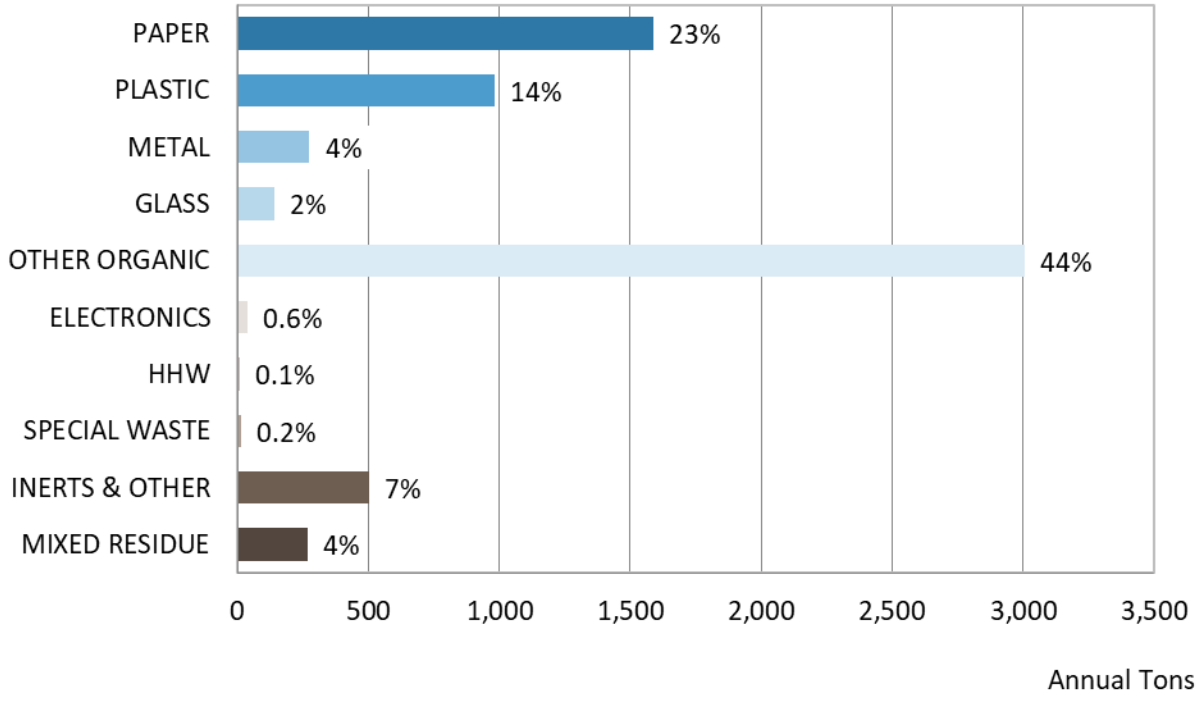


Table 46. Ten Most Prevalent Materials, Eureka, Residential

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	22.0%	1,504
R/C Organic	10.6%	721
Compostable Paper	8.3%	568
Other Recyclable Paper	8.2%	558
Other Film	4.7%	322
Textiles - Organic	4.7%	318
Textiles - Synthetic, Mixed, & Unknown	4.4%	304
Mixed Residue	3.9%	267
R/C Paper	3.6%	248
Food - Potentially Donatable	2.7%	186
Total for Top Materials	**73.2%**	**4,997**

Table 47. Detailed Material Composition, Eureka, Residential

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**23.3%**	**4.3%**	**1,590**	**OTHER ORGANIC**	**44.1%**	**4.6%**	**3,007**
Uncoated Corrugated Cardboard	1.5%	1.6%	102	Food - Potentially Donatable	2.7%	1.2%	186
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	22.0%	2.9%	1,504
Paper Bags	1.2%	0.3%	79	Leaves Grass	2.0%	2.0%	139
Other Recyclable Paper	8.2%	2.7%	558	Prunings Trimmings	1.8%	1.2%	126
Paper Cups - Compostable	0.1%	0.1%	5	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.4%	0.2%	28	Manures	0.0%	0.0%	0
Compostable Paper	8.3%	1.4%	568	Textiles - Organic	4.7%	2.1%	318
R/C Paper	3.6%	0.7%	248	Carpet	0.2%	0.3%	13
PLASTIC	**14.4%**	**2.1%**	**983**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.4%	0.2%	29	R/C Organic	10.6%	2.9%	721
Other PETE Containers	1.0%	0.3%	69	**INERTS & OTHER**	**7.4%**	**3.5%**	**503**
HDPE Containers	0.4%	0.2%	26	Concrete	0.0%	0.0%	1
Polystyrene Food Service Items	0.3%	0.1%	21	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.4%	0.3%	95	Asphalt Composition Shingles	0.0%	0.0%	1
Compostable Plastics	0.0%	0.0%	3	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	2.4%	0.8%	166	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.8%	0.2%	52	Built-up Roofing	0.0%	0.1%	3
Non-Bag Industrial Packaging Film	0.3%	0.4%	19	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.0%	0.0%	0	Clean Dimensional Lumbar	0.2%	0.1%	12
Other Film	4.7%	0.8%	322	Clean Engineered Wood	0.0%	0.1%	3
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.7%	0.5%	50	Other Wood Waste	1.1%	1.4%	78
Other Non-Recyclable Rigid Plastic	0.4%	0.2%	26	Clean Gypsum Board	0.0%	0.0%	1
R/C Plastic	1.5%	1.6%	103	Painted/Demolition Gypsum Board	0.1%	0.1%	8
GLASS	**2.0%**	**0.6%**	**139**	Rock, Soil, & Fines	0.0%	0.0%	0
Clear Glass Bottles Containers	1.2%	0.3%	83	Textiles - Synthetic, Mixed, & Unknown	4.4%	3.0%	304
Green Glass Bottles Containers	0.2%	0.1%	12	R/C Inerts & Other	1.4%	1.3%	93
Brown Glass Bottles Containers	0.4%	0.2%	26	**ELECTRONICS**	**0.6%**	**0.9%**	**40**
Other Colored Glass Containers	0.1%	0.2%	9	E-Waste	0.6%	0.9%	40
Flat Glass	0.0%	0.0%	0	**HHW**	**0.1%**	**0.1%**	**10**
R/C Glass	0.1%	0.2%	9	Household Hazardous Waste	0.1%	0.1%	10
METAL	**4.0%**	**1.0%**	**275**	**SPECIAL WASTE**	**0.2%**	**0.2%**	**13**
Tin/Steel Cans	1.0%	0.2%	68	Ash	0.1%	0.2%	7
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.1%	0.1%	6	Mattresses	0.0%	0.0%	0
Other Ferrous	1.1%	0.8%	78	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.4%	0.2%	26	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.5%	0.2%	34	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.5%	0.4%	36	R/C Special Waste	0.1%	0.1%	6
R/C Metal	0.4%	0.4%	27	**MIXED RESIDUE**	**3.9%**	**1.4%**	**267**
				Mixed Residue	3.9%	1.4%	267
Recoverable Paper	10.8%	4.1%	740	**Potentially Recoverable**	12.8%	5.4%	875
Other Recoverables	8.0%	1.2%	546	**Problem Materials**	31.3%	4.6%	2,133
Compostable/Potentially Compostable	37.1%	4.7%	2,532				
Sample Count			**10**	**Total Tons**			**6,826**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 51. Composition by Recoverability Group, Eureka, Self-haul

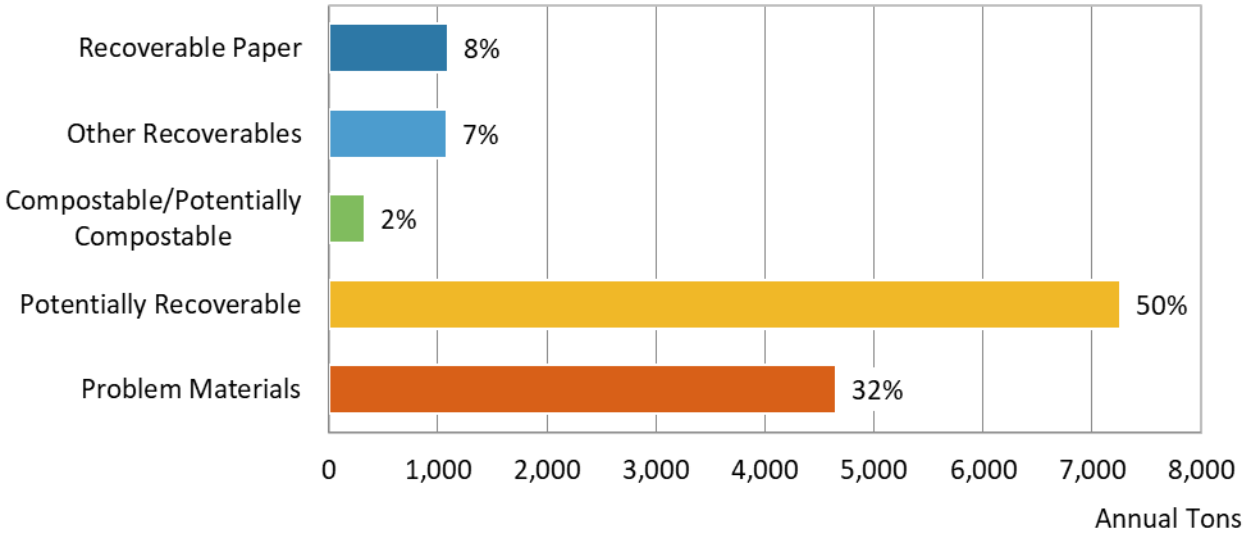


Figure 52. Composition by Material Class, Eureka, Self-haul

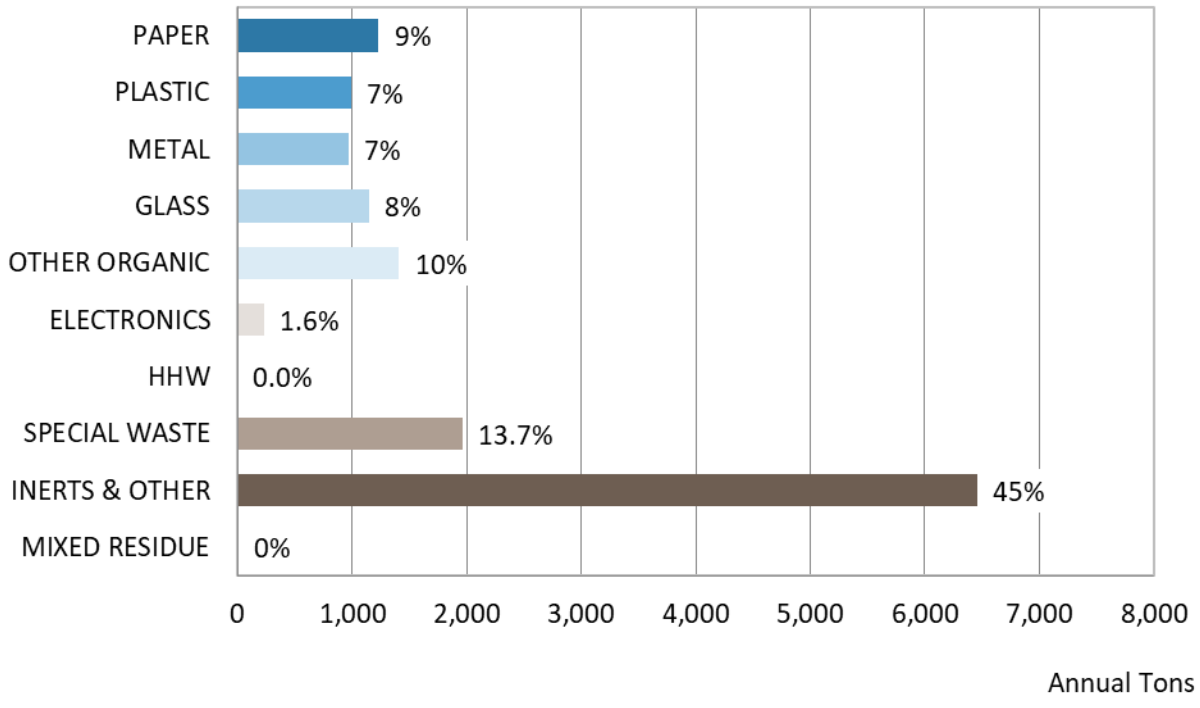


Table 48. Ten Most Prevalent Materials, Eureka, Self-haul

Material	Estimated Percent	Estimated Tons
Clean Dimensional Lumbar	20.2%	2,911
Bulky Items	9.4%	1,356
Other Wood Waste	7.6%	1,102
Rock, Soil, & Fines	7.5%	1,083
Carpet	5.9%	851
Flat Glass	5.4%	784
Mattresses	4.3%	614
Uncoated Corrugated Cardboard	4.1%	586
Clean Gypsum Board	4.0%	573
Other Recyclable Paper	3.3%	480
Total for Top Materials	**71.7%**	**10,340**

Table 49. Detailed Material Composition, Eureka, Self-haul

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**8.5%**	**6.2%**	**1,231**	**OTHER ORGANIC**	**9.8%**	**10.3%**	**1,412**
Uncoated Corrugated Cardboard	4.1%	3.6%	586	Food - Potentially Donatable	0.2%	0.3%	36
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	0.8%	1.1%	120
Paper Bags	0.2%	0.2%	24	Leaves Grass	1.0%	1.6%	141
Other Recyclable Paper	3.3%	2.8%	480	Prunings Trimmings	0.2%	0.2%	22
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.0%	0.0%	5	Manures	0.0%	0.0%	0
Compostable Paper	0.1%	0.1%	14	Textiles - Organic	1.6%	1.3%	230
R/C Paper	0.8%	0.6%	121	Carpet	5.9%	9.4%	851
PLASTIC	**6.9%**	**3.1%**	**991**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.2%	0.4%	32	R/C Organic	0.1%	0.1%	12
Other PETE Containers	0.1%	0.1%	13	**INERTS & OTHER**	**44.7%**	**28.8%**	**6,454**
HDPE Containers	0.3%	0.3%	39	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.0%	0.0%	3	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.4%	0.4%	62	Asphalt Composition Shingles	0.2%	0.3%	29
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	0.3%	0.2%	45	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.1%	0.1%	13	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.6%	0.8%	84	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.4%	0.7%	63	Clean Dimensional Lumbar	20.2%	25.2%	2,911
Other Film	1.1%	1.1%	161	Clean Engineered Wood	2.2%	2.5%	320
Rigid Plastic Drip Lines	0.1%	0.2%	21	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.6%	0.7%	85	Other Wood Waste	7.6%	5.4%	1,102
Other Non-Recyclable Rigid Plastic	0.4%	0.5%	63	Clean Gypsum Board	4.0%	6.4%	573
R/C Plastic	2.1%	1.1%	305	Painted/Demolition Gypsum Board	0.7%	0.9%	99
GLASS	**8.0%**	**8.9%**	**1,152**	Rock, Soil, & Fines	7.5%	8.9%	1,083
Clear Glass Bottles Containers	1.4%	1.9%	207	Textiles - Synthetic, Mixed, & Unknown	2.0%	1.5%	294
Green Glass Bottles Containers	0.5%	0.7%	68	R/C Inerts & Other	0.3%	0.4%	41
Brown Glass Bottles Containers	0.6%	1.0%	92	**ELECTRONICS**	**1.6%**	**2.7%**	**237**
Other Colored Glass Containers	0.0%	0.0%	0	E-Waste	1.6%	2.7%	237
Flat Glass	5.4%	8.8%	784	**HHW**	**0.0%**	**0.0%**	**0**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.0%	0.0%	0
METAL	**6.7%**	**4.5%**	**972**	**SPECIAL WASTE**	**13.7%**	**16.1%**	**1,970**
Tin/Steel Cans	0.6%	0.6%	83	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	2	Mattresses	4.3%	5.4%	614
Other Ferrous	0.5%	0.5%	73	Bulky Items	9.4%	10.7%	1,356
Aluminum Cans	0.3%	0.4%	42	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.3%	0.4%	40	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	2.0%	2.8%	284	R/C Special Waste	0.0%	0.0%	0
R/C Metal	3.1%	3.6%	448	**MIXED RESIDUE**	**0.0%**	**0.0%**	**3**
				Mixed Residue	0.0%	0.0%	3
Recoverable Paper	7.6%	6.1%	1,090	**Potentially Recoverable**	50.4%	24.9%	7,266
Other Recoverables	7.5%	6.9%	1,080	**Problem Materials**	32.3%	17.6%	4,652
Compostable/Potentially Compostable	2.3%	2.0%	334				
Sample Count			**12**	**Total Tons**			**14,422**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 50. Detailed Material Composition, Ferndale, Overall

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**16.0%**	**3.6%**	**207**	**OTHER ORGANIC**	**41.1%**	**6.1%**	**534**
Uncoated Corrugated Cardboard	0.9%	0.5%	12	Food - Potentially Donatable	3.0%	1.6%	39
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	29.7%	8.3%	386
Paper Bags	0.3%	0.1%	4	Leaves Grass	0.5%	0.4%	7
Other Recyclable Paper	4.6%	1.5%	60	Prunings Trimmings	0.3%	0.1%	3
Paper Cups - Compostable	0.1%	0.0%	1	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.2%	0.0%	2	Manures	0.0%	0.0%	0
Compostable Paper	4.8%	1.0%	63	Textiles - Organic	2.1%	1.9%	27
R/C Paper	5.0%	1.4%	65	Carpet	0.0%	0.0%	0
PLASTIC	**8.3%**	**1.4%**	**108**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.3%	0.1%	4	R/C Organic	5.6%	2.1%	73
Other PETE Containers	0.7%	0.2%	9	**INERTS & OTHER**	**15.7%**	**7.8%**	**204**
HDPE Containers	0.5%	0.2%	6	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.1%	0.1%	1	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.6%	0.2%	8	Asphalt Composition Shingles	0.4%	0.7%	6
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.6%	0.4%	7
Plastic Trash Bags	1.7%	0.2%	23	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.2%	0.1%	3	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.2%	0.2%	3	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.2%	0.3%	3	Clean Dimensional Lumbar	3.3%	2.3%	43
Other Film	2.1%	0.4%	28	Clean Engineered Wood	4.5%	3.5%	58
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.2%	0.2%	2	Other Wood Waste	2.7%	1.7%	35
Other Non-Recyclable Rigid Plastic	0.8%	0.5%	11	Clean Gypsum Board	0.1%	0.1%	2
R/C Plastic	0.5%	0.2%	7	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**3.7%**	**3.2%**	**48**	Rock, Soil, & Fines	0.2%	0.2%	2
Clear Glass Bottles Containers	3.1%	3.2%	40	Textiles - Synthetic, Mixed, & Unknown	1.2%	0.8%	15
Green Glass Bottles Containers	0.2%	0.1%	3	R/C Inerts & Other	2.7%	1.9%	35
Brown Glass Bottles Containers	0.3%	0.3%	4	**ELECTRONICS**	**0.2%**	**0.3%**	**3**
Other Colored Glass Containers	0.1%	0.1%	2	E-Waste	0.2%	0.3%	3
Flat Glass	0.0%	0.0%	0	**HHW**	**0.2%**	**0.1%**	**2**
R/C Glass	0.0%	0.1%	1	Household Hazardous Waste	0.2%	0.1%	2
METAL	**5.6%**	**2.8%**	**73**	**SPECIAL WASTE**	**0.2%**	**0.2%**	**3**
Tin/Steel Cans	0.7%	0.3%	9	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.1%	0.1%	1
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	2.0%	1.8%	26	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.5%	0.6%	6	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.4%	0.2%	6	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.6%	0.8%	7	R/C Special Waste	0.2%	0.1%	2
R/C Metal	1.4%	0.8%	18	**MIXED RESIDUE**	**8.9%**	**7.9%**	**116**
				Mixed Residue	8.9%	7.7%	116
Recoverable Paper	5.8%	1.8%	76	**Potentially Recoverable**	15.1%	6.2%	197
Other Recoverables	9.5%	5.8%	124	**Problem Materials**	31.1%	8.0%	404
Compostable/Potentially Compostable	38.4%	7.7%	499				
Sample Count			**15**	**Total Tons**			**1,299**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 53. Composition by Recoverability Group, Ferndale, Commercial

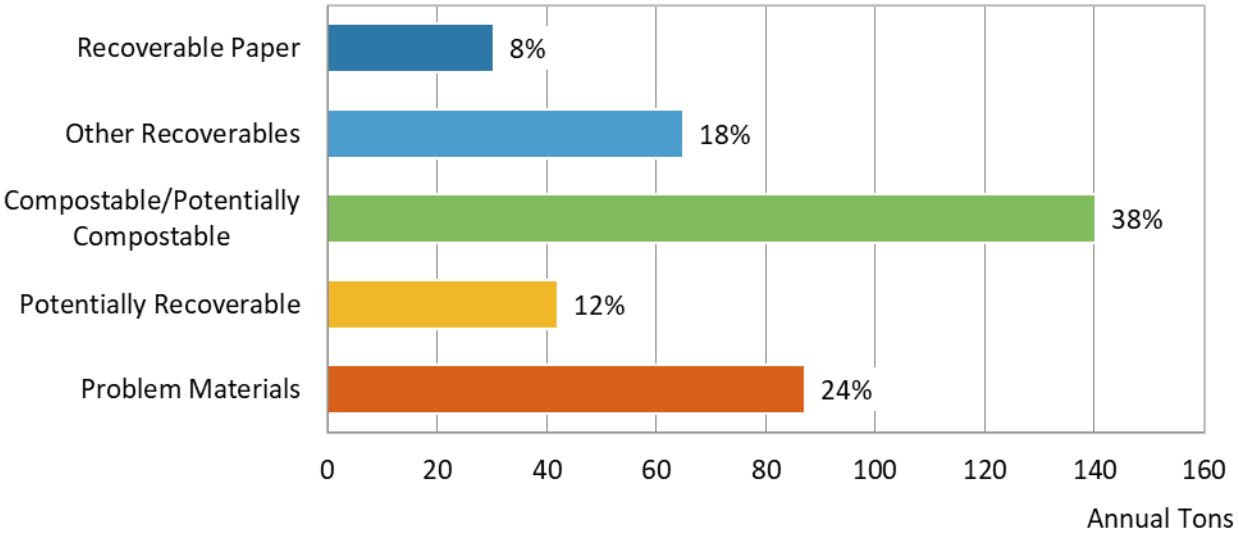


Figure 54. Composition by Material Class, Ferndale, Commercial

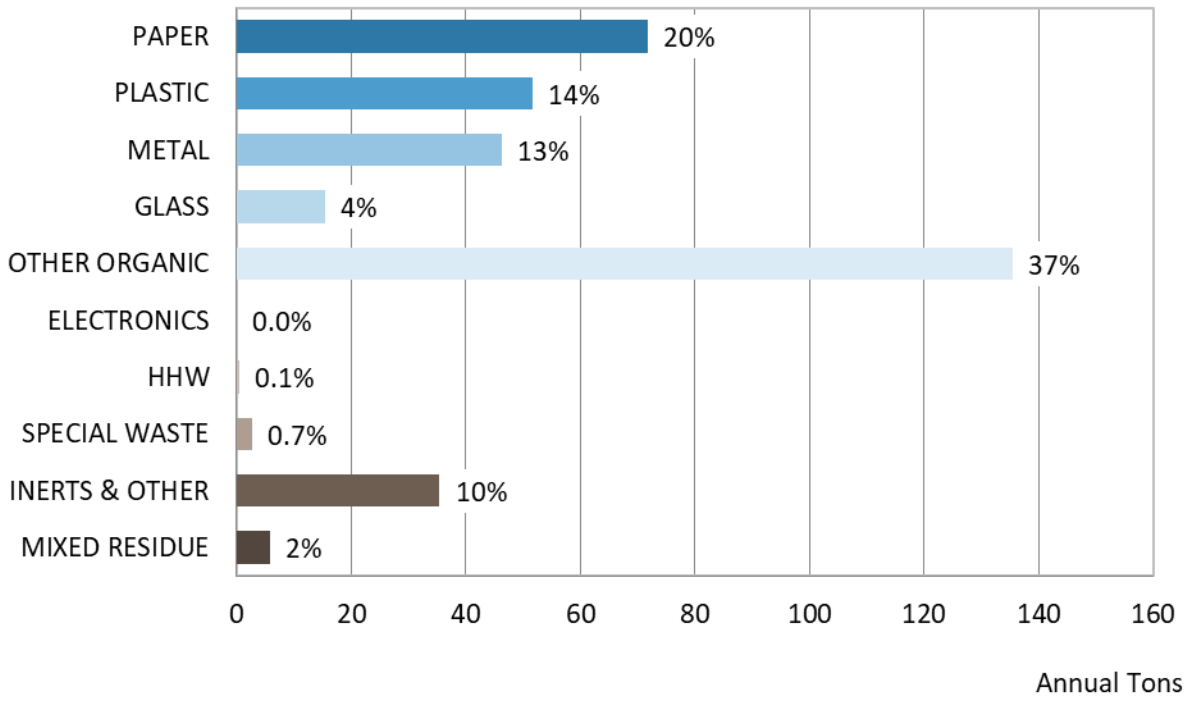


Table 51. Ten Most Prevalent Materials, Ferndale, Commercial

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	25.8%	94
Compostable Paper	7.6%	28
Other Ferrous	7.0%	26
Other Recyclable Paper	6.5%	24
Other Wood Waste	5.6%	20
R/C Organic	5.1%	19
Other Film	4.3%	16
Plastic Trash Bags	3.5%	13
R/C Paper	3.3%	12
Clear Glass Bottles Containers	2.6%	9
Total for Top Materials	**71.2%**	**260**

Table 52. Detailed Material Composition, Ferndale, Commercial

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**19.6%**	**7.9%**	**72**	**OTHER ORGANIC**	**37.1%**	**5.4%**	**135**
Uncoated Corrugated Cardboard	1.6%	1.4%	6	Food - Potentially Donatable	2.6%	1.8%	9
Waxed Corrugated Cardboard	0.1%	0.1%	0	Food - Not Donatable	25.8%	6.1%	94
Paper Bags	0.3%	0.1%	1	Leaves Grass	1.7%	1.3%	6
Other Recyclable Paper	6.5%	2.2%	24	Prunings Trimmings	0.7%	0.3%	2
Paper Cups - Compostable	0.1%	0.0%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.3%	0.1%	1	Manures	0.0%	0.0%	0
Compostable Paper	7.6%	2.7%	28	Textiles - Organic	1.4%	1.0%	5
R/C Paper	3.3%	2.7%	12	Carpet	0.0%	0.0%	0
PLASTIC	**14.1%**	**1.5%**	**52**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.2%	0.1%	1	R/C Organic	5.1%	3.0%	19
Other PETE Containers	0.8%	0.5%	3	**INERTS & OTHER**	**9.7%**	**7.4%**	**35**
HDPE Containers	0.8%	0.3%	3	Concrete	0.0%	0.1%	0
Polystyrene Food Service Items	0.1%	0.1%	0	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.3%	0.7%	5	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.3%	0.5%	1
Plastic Trash Bags	3.5%	0.8%	13	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.2%	0.1%	1	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.9%	0.6%	3	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.0%	0.0%	0	Clean Dimensional Lumbar	1.4%	1.5%	5
Other Film	4.3%	1.2%	16	Clean Engineered Wood	0.7%	0.8%	3
Rigid Plastic Drip Lines	0.0%	0.1%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.2%	0.2%	1	Other Wood Waste	5.6%	5.3%	20
Other Non-Recyclable Rigid Plastic	1.2%	0.8%	4	Clean Gypsum Board	0.4%	0.4%	2
R/C Plastic	0.7%	0.4%	3	Painted/Demolition Gypsum Board	0.1%	0.1%	0
GLASS	**4.2%**	**3.8%**	**15**	Rock, Soil, & Fines	0.1%	0.1%	0
Clear Glass Bottles Containers	2.6%	3.5%	9	Textiles - Synthetic, Mixed, & Unknown	0.6%	0.3%	2
Green Glass Bottles Containers	0.7%	0.4%	3	R/C Inerts & Other	0.5%	0.7%	2
Brown Glass Bottles Containers	0.8%	0.9%	3	**ELECTRONICS**	**0.0%**	**0.0%**	**0**
Other Colored Glass Containers	0.2%	0.3%	1	E-Waste	0.0%	0.0%	0
Flat Glass	0.0%	0.0%	0	**HHW**	**0.1%**	**0.1%**	**1**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.1%	0.1%	1
METAL	**12.7%**	**9.2%**	**46**	**SPECIAL WASTE**	**0.7%**	**0.6%**	**3**
Tin/Steel Cans	1.7%	0.9%	6	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.2%	0.4%	1
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	7.0%	6.2%	26	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.2%	0.0%	1	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.8%	0.6%	3	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	2.0%	2.7%	7	R/C Special Waste	0.5%	0.5%	2
R/C Metal	1.1%	0.6%	4	**MIXED RESIDUE**	**1.6%**	**2.1%**	**6**
				Mixed Residue	1.6%	2.1%	6
Recoverable Paper	8.3%	3.3%	30	**Potentially Recoverable**	11.5%	7.0%	42
Other Recoverables	17.8%	13.1%	65	**Problem Materials**	23.9%	3.4%	87
Compostable/Potentially Compostable	38.4%	6.0%	140				
Sample Count			**6**	**Total Tons**			**365**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 55. Composition by Recoverability Group, Ferndale, Residential

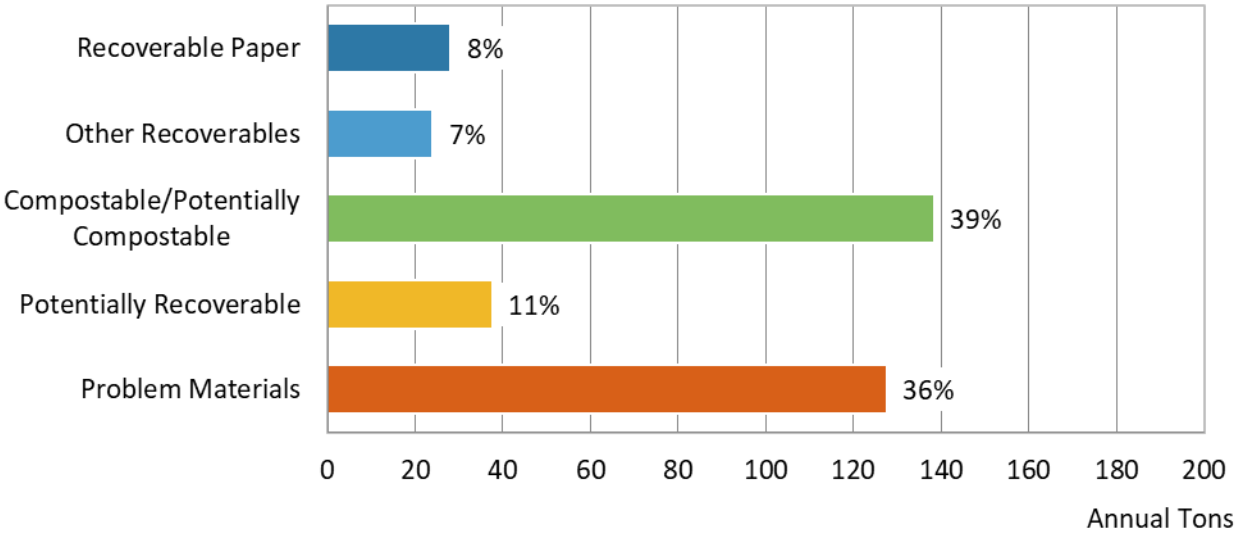


Figure 56. Composition by Material Class, Ferndale, Residential

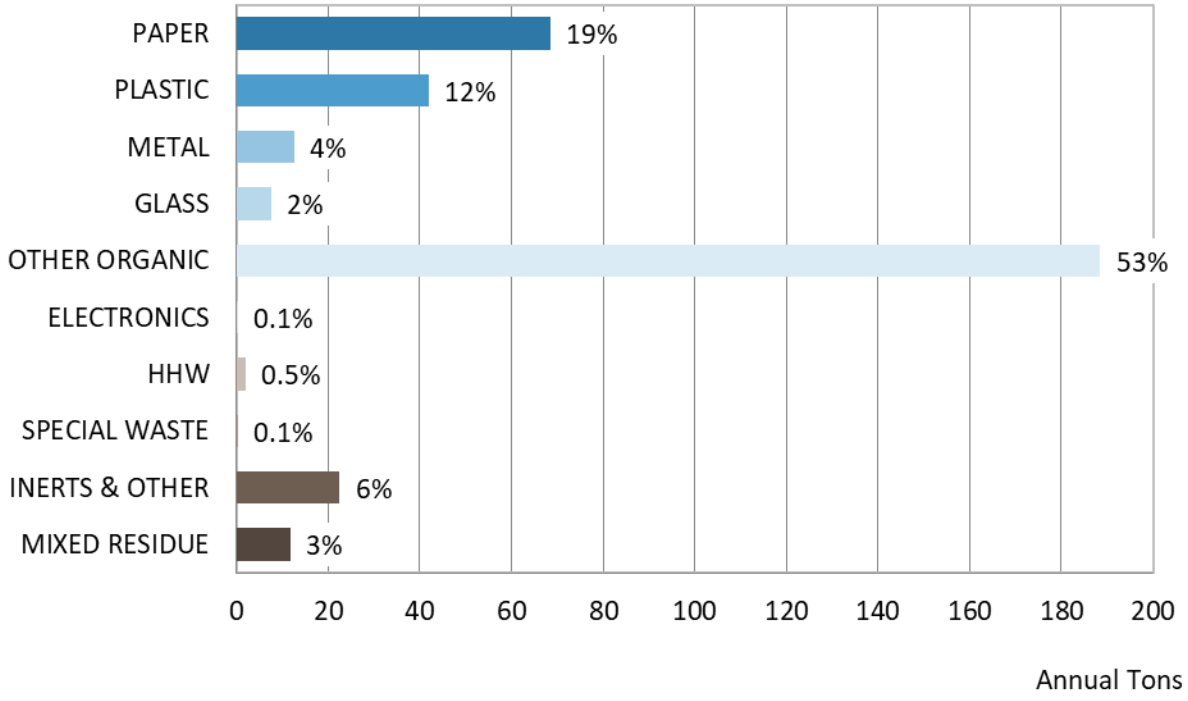


Table 53. Ten Most Prevalent Materials, Ferndale, Residential

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	28.9%	103
R/C Organic	15.2%	54
Compostable Paper	7.1%	25
Other Recyclable Paper	6.5%	23
Textiles - Organic	6.1%	22
R/C Paper	3.7%	13
Mixed Residue	3.3%	12
Other Film	3.2%	11
Food - Potentially Donatable	2.4%	9
R/C Inerts & Other	2.2%	8
Total for Top Materials	**78.7%**	**280**

Table 54. Detailed Material Composition, Ferndale, Residential

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**19.2%**	**1.0%**	**68**	**OTHER ORGANIC**	**53.0%**	**7.1%**	**189**
Uncoated Corrugated Cardboard	0.9%	0.4%	3	Food - Potentially Donatable	2.4%	1.8%	9
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	28.9%	16.9%	103
Paper Bags	0.5%	0.4%	2	Leaves Grass	0.0%	0.0%	0
Other Recyclable Paper	6.5%	2.3%	23	Prunings Trimmings	0.2%	0.2%	1
Paper Cups - Compostable	0.2%	0.2%	1	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.3%	0.1%	1	Manures	0.0%	0.0%	0
Compostable Paper	7.1%	1.4%	25	Textiles - Organic	6.1%	6.8%	22
R/C Paper	3.7%	1.3%	13	Carpet	0.0%	0.0%	0
PLASTIC	**11.8%**	**3.7%**	**42**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.9%	0.4%	3	R/C Organic	15.2%	6.9%	54
Other PETE Containers	1.2%	0.4%	4	**INERTS & OTHER**	**6.3%**	**4.7%**	**23**
HDPE Containers	0.6%	0.4%	2	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.2%	0.2%	1	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.1%	0.5%	4	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	1.8%	0.3%	6	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.4%	0.3%	2	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.0%	0.0%	0	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.0%	0.0%	0	Clean Dimensional Lumbar	0.8%	1.2%	3
Other Film	3.2%	0.7%	11	Clean Engineered Wood	0.0%	0.0%	0
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.5%	0.5%	2	Other Wood Waste	1.0%	1.1%	4
Other Non-Recyclable Rigid Plastic	1.2%	1.7%	4	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	0.8%	0.3%	3	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**2.1%**	**0.3%**	**8**	Rock, Soil, & Fines	0.5%	0.7%	2
Clear Glass Bottles Containers	1.4%	0.3%	5	Textiles - Synthetic, Mixed, & Unknown	1.8%	2.5%	6
Green Glass Bottles Containers	0.1%	0.1%	0	R/C Inerts & Other	2.2%	3.1%	8
Brown Glass Bottles Containers	0.2%	0.3%	1	**ELECTRONICS**	**0.1%**	**0.1%**	**0**
Other Colored Glass Containers	0.2%	0.3%	1	E-Waste	0.1%	0.1%	0
Flat Glass	0.0%	0.0%	0	**HHW**	**0.5%**	**0.4%**	**2**
R/C Glass	0.2%	0.2%	1	Household Hazardous Waste	0.5%	0.4%	2
METAL	**3.5%**	**2.7%**	**13**	**SPECIAL WASTE**	**0.1%**	**0.2%**	**0**
Tin/Steel Cans	0.9%	0.5%	3	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	0.0%	0.0%	0	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.3%	0.1%	1	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.6%	0.2%	2	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.0%	0.0%	0	R/C Special Waste	0.1%	0.2%	0
R/C Metal	1.8%	2.4%	6	**MIXED RESIDUE**	**3.3%**	**3.4%**	**12**
				Mixed Residue	3.3%	3.4%	12
Recoverable Paper	7.9%	2.1%	28	**Potentially Recoverable**	10.6%	9.5%	38
Other Recoverables	6.8%	1.3%	24	**Problem Materials**	35.8%	10.5%	128
Compostable/Potentially Compostable	38.9%	19.1%	139				
Sample Count			**3**	**Total Tons**			**356**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 57. Composition by Recoverability Group, Ferndale, Self-haul

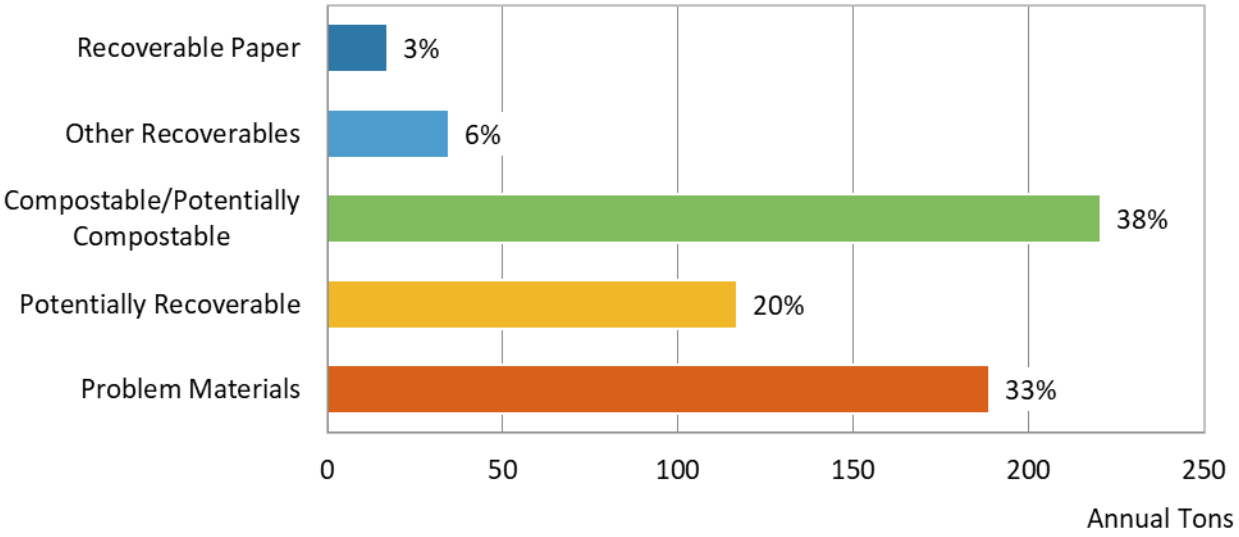


Figure 58. Composition by Material Class, Ferndale, Self-haul

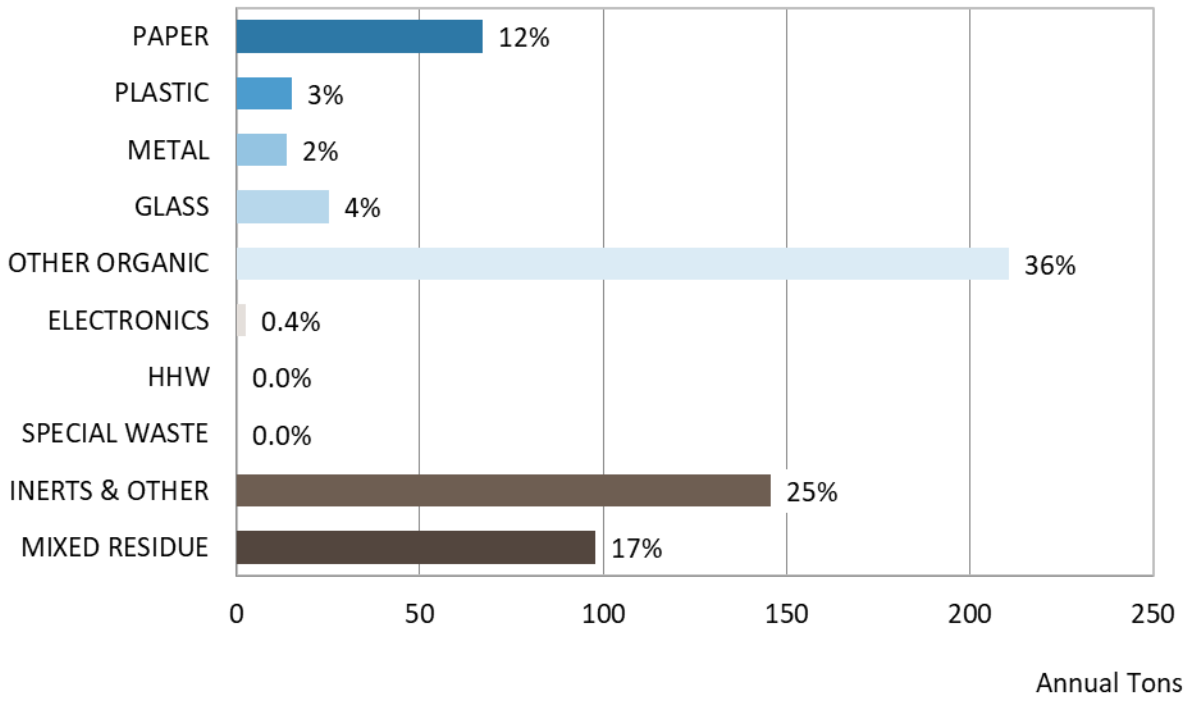


Table 55. Ten Most Prevalent Materials, Ferndale, Self-haul

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	32.7%	189
Mixed Residue	17.0%	98
Clean Engineered Wood	9.6%	56
R/C Paper	6.9%	40
Clean Dimensional Lumbar	6.1%	35
R/C Inerts & Other	4.5%	26
Clear Glass Bottles Containers	4.4%	25
Food - Potentially Donatable	3.6%	21
Other Recyclable Paper	2.3%	13
Other Wood Waste	1.9%	11
Total for Top Materials	**88.9%**	**514**

Table 56. Detailed Material Composition, Ferndale, Self-haul

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**11.6%**	**6.5%**	**67**	**OTHER ORGANIC**	**36.4%**	**12.6%**	**211**
Uncoated Corrugated Cardboard	0.6%	0.5%	3	Food - Potentially Donatable	3.6%	3.3%	21
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	32.7%	15.0%	189
Paper Bags	0.1%	0.1%	1	Leaves Grass	0.1%	0.2%	1
Other Recyclable Paper	2.3%	2.6%	13	Prunings Trimmings	0.0%	0.0%	0
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.0%	0.0%	0	Manures	0.0%	0.0%	0
Compostable Paper	1.7%	1.0%	10	Textiles - Organic	0.0%	0.0%	0
R/C Paper	6.9%	2.5%	40	Carpet	0.0%	0.0%	0
PLASTIC	**2.6%**	**2.1%**	**15**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.0%	0.0%	0	R/C Organic	0.0%	0.0%	0
Other PETE Containers	0.3%	0.3%	2	**INERTS & OTHER**	**25.2%**	**16.7%**	**146**
HDPE Containers	0.2%	0.2%	1	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.0%	0.0%	0	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.0%	0.0%	0	Asphalt Composition Shingles	1.0%	1.7%	6
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	1.1%	0.9%	6
Plastic Trash Bags	0.6%	0.1%	3	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.1%	0.1%	0	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.0%	0.0%	0	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.5%	0.6%	3	Clean Dimensional Lumbar	6.1%	5.0%	35
Other Film	0.1%	0.1%	1	Clean Engineered Wood	9.6%	7.9%	56
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.0%	0.1%	0	Other Wood Waste	1.9%	1.6%	11
Other Non-Recyclable Rigid Plastic	0.4%	0.4%	3	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	0.2%	0.2%	1	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**4.4%**	**6.8%**	**25**	Rock, Soil, & Fines	0.0%	0.0%	0
Clear Glass Bottles Containers	4.4%	6.8%	25	Textiles - Synthetic, Mixed, & Unknown	1.2%	1.0%	7
Green Glass Bottles Containers	0.0%	0.0%	0	R/C Inerts & Other	4.5%	3.7%	26
Brown Glass Bottles Containers	0.0%	0.0%	0	**ELECTRONICS**	**0.4%**	**0.8%**	**3**
Other Colored Glass Containers	0.0%	0.0%	0	E-Waste	0.4%	0.8%	3
Flat Glass	0.0%	0.0%	0	**HHW**	**0.0%**	**0.0%**	**0**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.0%	0.0%	0
METAL	**2.4%**	**2.1%**	**14**	**SPECIAL WASTE**	**0.0%**	**0.0%**	**0**
Tin/Steel Cans	0.0%	0.1%	0	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	0.0%	0.0%	0	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.8%	1.3%	5	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.1%	0.3%	1	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.0%	0.0%	0	R/C Special Waste	0.0%	0.0%	0
R/C Metal	1.4%	0.8%	8	**MIXED RESIDUE**	**17.0%**	**17.7%**	**98**
				Mixed Residue	17.0%	17.1%	98
Recoverable Paper	3.0%	3.2%	17	**Potentially Recoverable**	20.2%	11.8%	117
Other Recoverables	6.0%	10.2%	35	**Problem Materials**	32.7%	16.6%	189
Compostable/Potentially Compostable	38.1%	12.2%	220				
Sample Count			**6**	**Total Tons**			**578**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 57. Detailed Material Composition, Rio Dell, Overall

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**18.6%**	**4.2%**	**341**	**OTHER ORGANIC**	**24.1%**	**2.2%**	**441**
Uncoated Corrugated Cardboard	2.5%	1.8%	46	Food - Potentially Donatable	2.3%	0.9%	43
Waxed Corrugated Cardboard	0.0%	0.1%	1	Food - Not Donatable	13.2%	2.5%	241
Paper Bags	0.5%	0.2%	9	Leaves Grass	0.8%	0.7%	14
Other Recyclable Paper	6.3%	1.8%	115	Prunings Trimmings	1.8%	1.5%	34
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.1%	0.1%	2
Paper Cups - Not Compostable	0.2%	0.1%	4	Manures	0.0%	0.0%	0
Compostable Paper	5.6%	1.7%	103	Textiles - Organic	3.8%	2.3%	69
R/C Paper	3.4%	1.0%	62	Carpet	0.2%	0.3%	4
PLASTIC	**15.2%**	**1.8%**	**278**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.4%	0.1%	8	R/C Organic	1.9%	0.7%	34
Other PETE Containers	0.7%	0.2%	13	**INERTS & OTHER**	**12.6%**	**4.2%**	**230**
HDPE Containers	0.8%	0.2%	15	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.3%	0.1%	5	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.1%	0.4%	21	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.8%	1.2%	15
Plastic Trash Bags	1.8%	0.5%	32	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.6%	0.2%	11	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	1.7%	1.3%	32	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	1.8%	2.1%	33	Clean Dimensional Lumbar	0.4%	0.5%	8
Other Film	2.7%	1.0%	49	Clean Engineered Wood	0.3%	0.4%	5
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.5%	0.7%	9
Other Recyclable Rigid Plastic	0.8%	0.3%	15	Other Wood Waste	1.2%	1.0%	22
Other Non-Recyclable Rigid Plastic	1.4%	0.8%	25	Clean Gypsum Board	0.8%	1.4%	15
R/C Plastic	1.1%	0.4%	19	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**2.5%**	**1.3%**	**46**	Rock, Soil, & Fines	0.0%	0.0%	0
Clear Glass Bottles Containers	1.4%	0.7%	26	Textiles - Synthetic, Mixed, & Unknown	6.6%	2.9%	121
Green Glass Bottles Containers	0.1%	0.1%	1	R/C Inerts & Other	2.0%	2.6%	36
Brown Glass Bottles Containers	0.5%	0.5%	10	**ELECTRONICS**	**0.6%**	**0.8%**	**11**
Other Colored Glass Containers	0.2%	0.2%	3	E-Waste	0.6%	0.8%	11
Flat Glass	0.3%	0.4%	6	**HHW**	**0.1%**	**0.1%**	**2**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.1%	0.1%	2
METAL	**5.3%**	**1.6%**	**98**	**SPECIAL WASTE**	**1.3%**	**1.0%**	**25**
Tin/Steel Cans	2.4%	1.8%	44	Ash	0.1%	0.2%	3
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	0.3%	0.3%	5	Bulky Items	0.6%	0.8%	10
Aluminum Cans	0.7%	0.7%	13	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	1.0%	0.8%	18	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.4%	0.4%	8	R/C Special Waste	0.6%	0.4%	12
R/C Metal	0.5%	0.5%	9	**MIXED RESIDUE**	**19.7%**	**6.6%**	**361**
				Mixed Residue	19.7%	3.7%	361
Recoverable Paper	9.3%	3.0%	171	**Potentially Recoverable**	16.9%	3.9%	311
Other Recoverables	9.8%	2.5%	179	**Problem Materials**	40.1%	4.2%	734
Compostable/Potentially Compostable	23.9%	3.1%	438				
Sample Count			**15**	**Total Tons**			**1,833**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 59. Composition by Recoverability Group, Rio Dell, Commercial

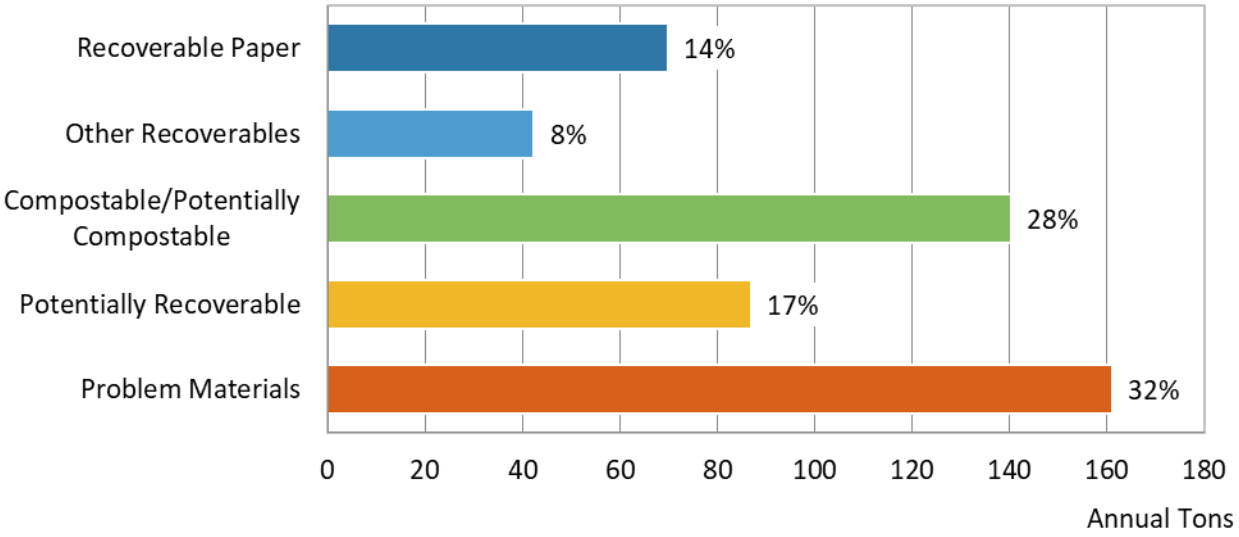


Figure 60. Composition by Material Class, Rio Dell, Commercial

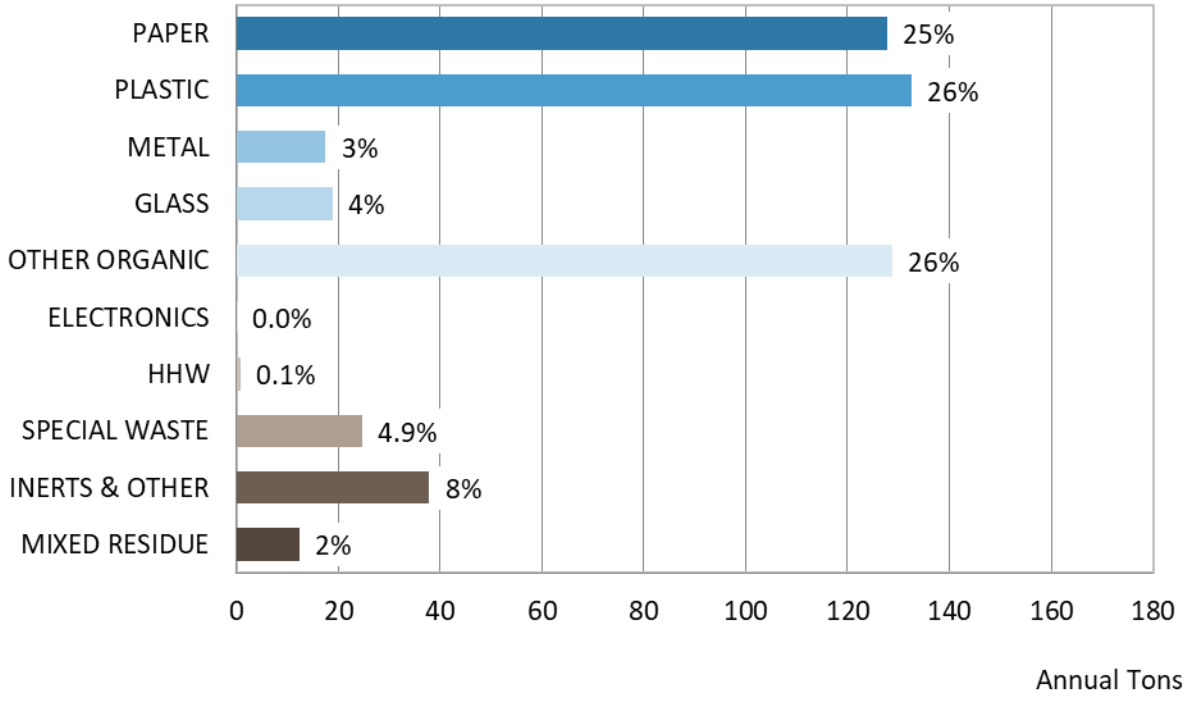


Table 58. Ten Most Prevalent Materials, Rio Dell, Commercial

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	14.7%	74
Compostable Paper	8.2%	41
Other Recyclable Paper	7.8%	39
Non-Bag Industrial Packaging Film	6.4%	32
Uncoated Corrugated Cardboard	5.6%	28
Film Products	5.0%	25
Other Film	4.4%	22
R/C Organic	3.3%	17
R/C Paper	2.7%	14
Food - Potentially Donatable	2.7%	13
Total for Top Materials	**60.8%**	**305**

Table 59. Detailed Material Composition, Rio Dell, Commercial

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**25.5%**	**7.9%**	**128**	**OTHER ORGANIC**	**25.7%**	**5.8%**	**129**
Uncoated Corrugated Cardboard	5.6%	6.0%	28	Food - Potentially Donatable	2.7%	2.4%	13
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	14.7%	3.9%	74
Paper Bags	0.6%	0.1%	3	Leaves Grass	0.3%	0.4%	1
Other Recyclable Paper	7.8%	2.2%	39	Prunings Trimmings	2.1%	2.2%	10
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.6%	0.3%	3	Manures	0.0%	0.0%	0
Compostable Paper	8.2%	3.7%	41	Textiles - Organic	2.6%	0.9%	13
R/C Paper	2.7%	1.0%	14	Carpet	0.0%	0.0%	0
PLASTIC	**26.5%**	**5.2%**	**133**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.4%	0.2%	2	R/C Organic	3.3%	1.7%	17
Other PETE Containers	0.8%	0.4%	4	**INERTS & OTHER**	**7.6%**	**5.4%**	**38**
HDPE Containers	0.7%	0.3%	4	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.3%	0.2%	2	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.3%	0.4%	6	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	2.0%	0.5%	10	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.9%	0.4%	4	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	6.4%	4.8%	32	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	5.0%	7.5%	25	Clean Dimensional Lumbar	0.2%	0.2%	1
Other Film	4.4%	2.2%	22	Clean Engineered Wood	0.0%	0.0%	0
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	1.7%	2.6%	9
Other Recyclable Rigid Plastic	0.5%	0.3%	3	Other Wood Waste	2.5%	2.9%	13
Other Non-Recyclable Rigid Plastic	1.2%	0.9%	6	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	2.5%	1.2%	13	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**3.8%**	**2.5%**	**19**	Rock, Soil, & Fines	0.0%	0.0%	0
Clear Glass Bottles Containers	1.3%	0.7%	7	Textiles - Synthetic, Mixed, & Unknown	2.4%	2.1%	12
Green Glass Bottles Containers	0.1%	0.1%	0	R/C Inerts & Other	0.7%	0.9%	3
Brown Glass Bottles Containers	0.6%	0.4%	3	**ELECTRONICS**	**0.0%**	**0.1%**	**0**
Other Colored Glass Containers	0.6%	0.9%	3	E-Waste	0.0%	0.1%	0
Flat Glass	1.1%	1.3%	6	**HHW**	**0.1%**	**0.1%**	**1**
R/C Glass	0.0%	0.1%	0	Household Hazardous Waste	0.1%	0.1%	1
METAL	**3.5%**	**1.9%**	**17**	**SPECIAL WASTE**	**4.9%**	**3.7%**	**25**
Tin/Steel Cans	0.9%	0.5%	4	Ash	0.5%	0.8%	3
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	0.9%	1.1%	5	Bulky Items	2.0%	3.0%	10
Aluminum Cans	0.4%	0.1%	2	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.4%	0.2%	2	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.9%	1.0%	4	R/C Special Waste	2.4%	1.3%	12
R/C Metal	0.0%	0.0%	0	**MIXED RESIDUE**	**2.4%**	**2.0%**	**12**
				Mixed Residue	2.4%	2.0%	12
Recoverable Paper	13.9%	7.4%	70	**Potentially Recoverable**	17.4%	9.5%	87
Other Recoverables	8.5%	3.2%	42	**Problem Materials**	32.2%	7.9%	161
Compostable/Potentially Compostable	28.0%	5.3%	140				
Sample Count			**6**	**Total Tons**			**501**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 61. Composition by Recoverability Group, Rio Dell, Residential

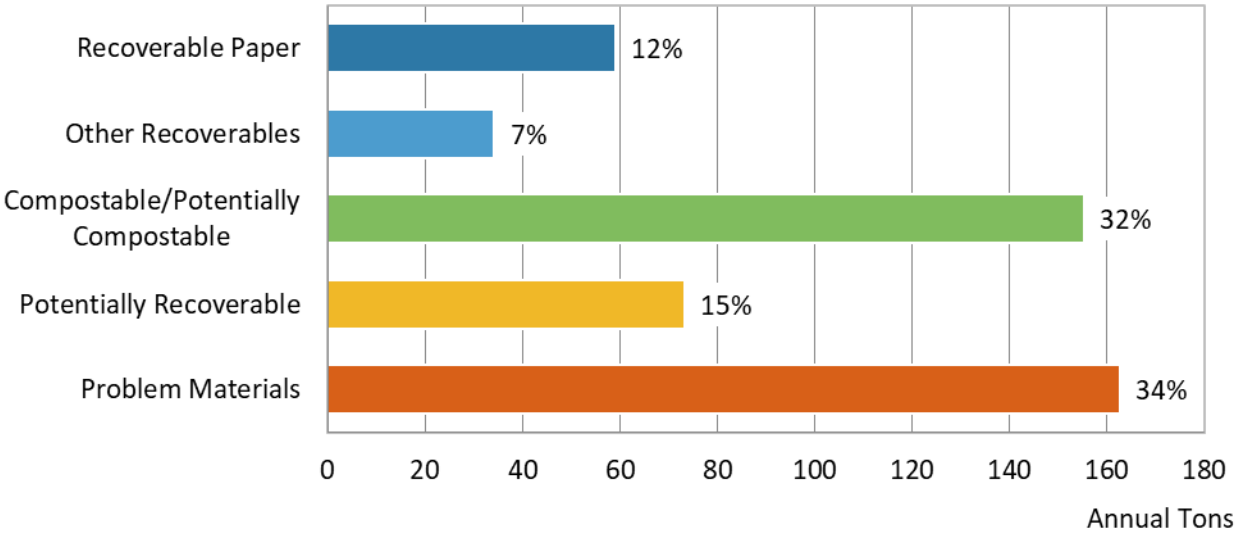


Figure 62. Composition by Material Class, Rio Dell, Residential

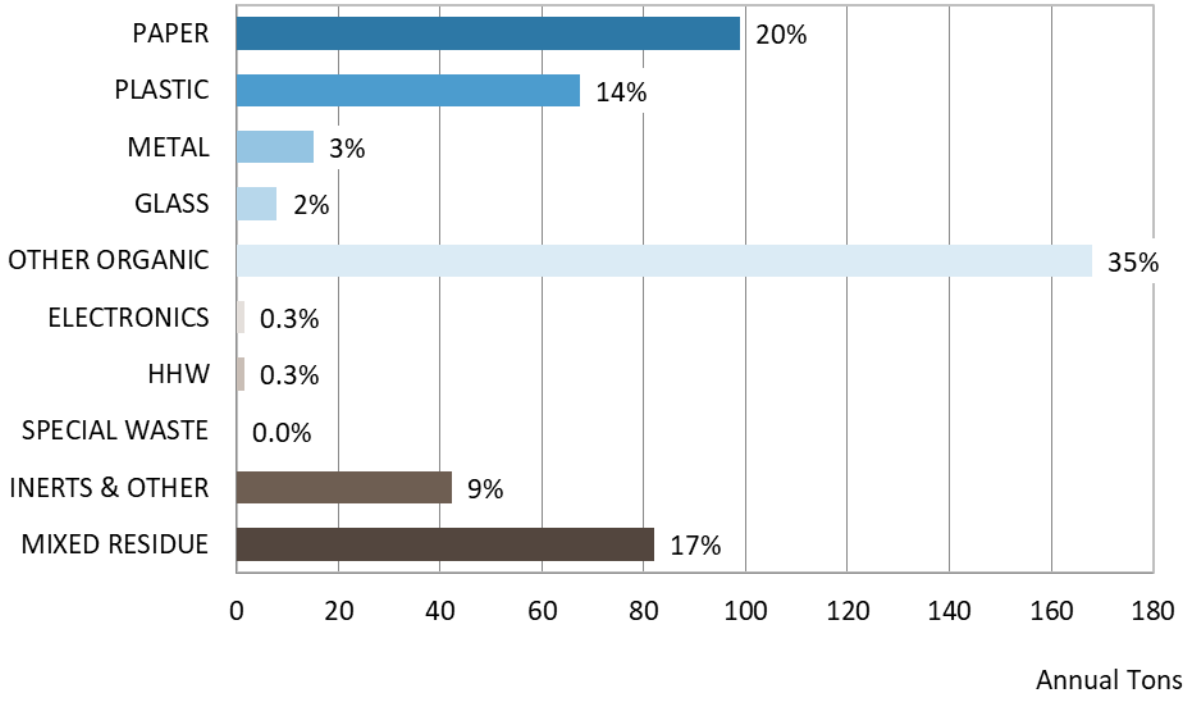


Table 60. Ten Most Prevalent Material Types, Rio Dell, Residential

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	18.3%	89
Mixed Residue	16.9%	82
Other Recyclable Paper	9.9%	48
Textiles - Synthetic, Mixed, & Unknown	8.4%	41
Food - Potentially Donatable	6.1%	29
Compostable Paper	5.7%	28
Textiles - Organic	4.0%	19
R/C Organic	3.6%	17
Other Film	3.0%	15
R/C Paper	2.2%	11
Total for Top Materials	**78.0%**	**378**

Table 61. Detailed Material Composition, Rio Dell, Residential

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**20.4%**	**4.9%**	**99**	**OTHER ORGANIC**	**34.7%**	**0.2%**	**168**
Uncoated Corrugated Cardboard	1.6%	1.9%	8	Food - Potentially Donatable	6.1%	2.5%	29
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	18.3%	4.5%	89
Paper Bags	0.7%	0.3%	4	Leaves Grass	1.9%	2.5%	9
Other Recyclable Paper	9.9%	4.5%	48	Prunings Trimmings	0.0%	0.1%	0
Paper Cups - Compostable	0.0%	0.1%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.3%	0.1%	1	Manures	0.0%	0.0%	0
Compostable Paper	5.7%	1.4%	28	Textiles - Organic	4.0%	2.2%	19
R/C Paper	2.2%	0.2%	11	Carpet	0.8%	1.1%	4
PLASTIC	**13.9%**	**2.0%**	**68**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	1.0%	0.3%	5	R/C Organic	3.6%	2.2%	17
Other PETE Containers	0.7%	0.5%	3	**INERTS & OTHER**	**8.7%**	**4.8%**	**42**
HDPE Containers	1.0%	0.4%	5	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.6%	0.1%	3	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.6%	0.6%	8	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.1%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	1.8%	0.3%	9	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	1.3%	0.6%	6	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.0%	0.0%	0	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.1%	0.1%	0	Clean Dimensional Lumbar	0.0%	0.0%	0
Other Film	3.0%	0.9%	15	Clean Engineered Wood	0.0%	0.1%	0
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.7%	0.4%	3	Other Wood Waste	0.0%	0.0%	0
Other Non-Recyclable Rigid Plastic	1.4%	2.3%	7	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	0.8%	0.4%	4	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**1.6%**	**1.2%**	**8**	Rock, Soil, & Fines	0.0%	0.0%	0
Clear Glass Bottles Containers	1.2%	0.8%	6	Textiles - Synthetic, Mixed, & Unknown	8.4%	4.8%	41
Green Glass Bottles Containers	0.2%	0.3%	1	R/C Inerts & Other	0.2%	0.1%	1
Brown Glass Bottles Containers	0.2%	0.1%	1	**ELECTRONICS**	**0.3%**	**0.4%**	**1**
Other Colored Glass Containers	0.0%	0.0%	0	E-Waste	0.3%	0.4%	1
Flat Glass	0.0%	0.0%	0	**HHW**	**0.3%**	**0.3%**	**2**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.3%	0.3%	2
METAL	**3.1%**	**1.2%**	**15**	**SPECIAL WASTE**	**0.0%**	**0.0%**	**0**
Tin/Steel Cans	0.9%	0.1%	4	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	0.0%	0.0%	0	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.4%	0.2%	2	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.7%	0.1%	3	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.1%	0.1%	0	R/C Special Waste	0.0%	0.0%	0
R/C Metal	1.0%	1.4%	5	**MIXED RESIDUE**	**Opps**	**5.4%**	**82**
				Mixed Residue	16.9%	5.4%	82
Recoverable Paper	12.2%	5.7%	59	**Potentially Recoverable**	15.1%	1.6%	73
Other Recoverables	7.1%	2.1%	34	**Problem Materials**	33.6%	10.1%	163
Compostable/Potentially Compostable	32.0%	5.8%	155				
Sample Count			**3**	**Total Tons**			**485**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 63. Composition by Recoverability Group, Rio Dell, Self-haul

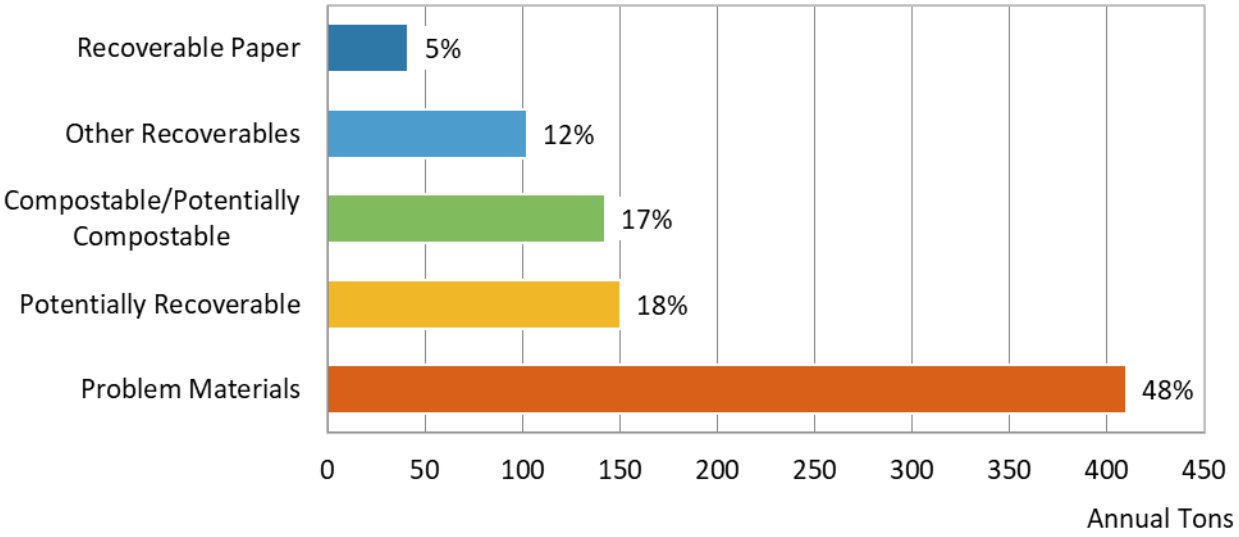


Figure 64. Composition by Material Class, Rio Dell, Self-haul

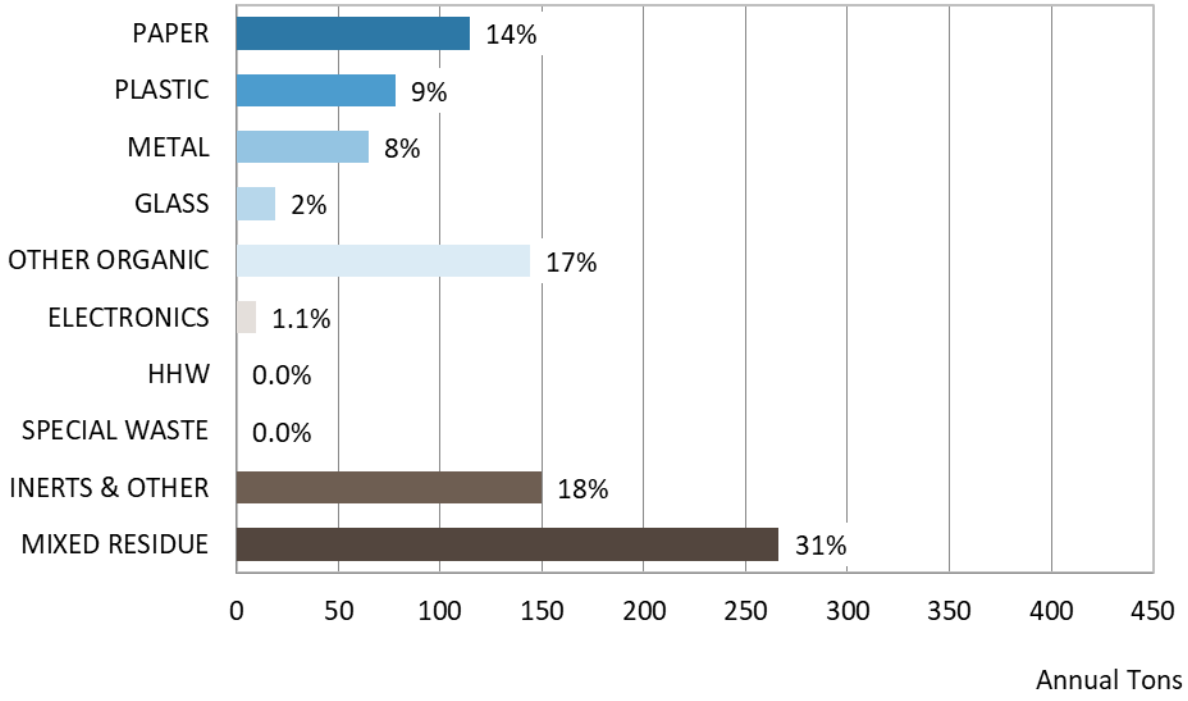


Table 62. Ten Most Prevalent Materials, Rio Dell, Self-haul

Material	Estimated Percent	Estimated Tons
Mixed Residue	31.4%	266
Food - Not Donatable	9.3%	79
Textiles - Synthetic, Mixed, & Unknown	8.0%	68
R/C Paper	4.5%	38
Textiles - Organic	4.3%	37
Tin/Steel Cans	4.2%	35
Compostable Paper	4.0%	34
R/C Inerts & Other	3.8%	32
Other Recyclable Paper	3.4%	28
Prunings Trimmings	2.7%	23
Total for Top Materials	**75.7%**	**641**

Table 63. Detailed Material Composition, Rio Dell, Self-haul

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**13.5%**	**7.2%**	**115**	**OTHER ORGANIC**	**17.0%**	**3.3%**	**144**
Uncoated Corrugated Cardboard	1.3%	0.9%	11	Food - Potentially Donatable	0.0%	0.0%	0
Waxed Corrugated Cardboard	0.1%	0.2%	1	Food - Not Donatable	9.3%	4.1%	79
Paper Bags	0.3%	0.4%	2	Leaves Grass	0.5%	0.7%	4
Other Recyclable Paper	3.4%	2.7%	28	Prunings Trimmings	2.7%	2.9%	23
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.2%	0.3%	2
Paper Cups - Not Compostable	0.0%	0.0%	0	Manures	0.0%	0.0%	0
Compostable Paper	4.0%	2.8%	34	Textiles - Organic	4.3%	4.8%	37
R/C Paper	4.5%	2.0%	38	Carpet	0.0%	0.0%	0
PLASTIC	**9.2%**	**1.9%**	**78**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.1%	0.1%	1	R/C Organic	0.0%	0.0%	0
Other PETE Containers	0.7%	0.1%	6	**INERTS & OTHER**	**17.7%**	**8.1%**	**150**
HDPE Containers	0.8%	0.3%	7	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.1%	0.1%	1	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.8%	0.8%	7	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	1.7%	2.5%	15
Plastic Trash Bags	1.6%	1.1%	14	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.1%	0.0%	0	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.0%	0.0%	0	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.9%	0.6%	8	Clean Dimensional Lumbar	0.7%	1.1%	6
Other Film	1.4%	1.8%	12	Clean Engineered Wood	0.6%	0.8%	5
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	1.0%	0.6%	9	Other Wood Waste	1.1%	1.1%	9
Other Non-Recyclable Rigid Plastic	1.4%	1.2%	12	Clean Gypsum Board	1.8%	3.0%	15
R/C Plastic	0.3%	0.3%	3	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**2.3%**	**2.4%**	**19**	Rock, Soil, & Fines	0.0%	0.0%	0
Clear Glass Bottles Containers	1.6%	1.5%	13	Textiles - Synthetic, Mixed, & Unknown	8.0%	5.4%	68
Green Glass Bottles Containers	0.0%	0.0%	0	R/C Inerts & Other	3.8%	5.5%	32
Brown Glass Bottles Containers	0.7%	1.1%	6	**ELECTRONICS**	**1.1%**	**1.6%**	**9**
Other Colored Glass Containers	0.0%	0.0%	0	E-Waste	1.1%	1.6%	9
Flat Glass	0.0%	0.0%	0	**HHW**	**0.0%**	**0.0%**	**0**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.0%	0.0%	0
METAL	**7.7%**	**3.1%**	**65**	**SPECIAL WASTE**	**0.0%**	**0.0%**	**0**
Tin/Steel Cans	4.2%	3.9%	35	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	0.1%	0.2%	1	Bulky Items	0.0%	0.0%	0
Aluminum Cans	1.1%	1.5%	9	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	1.5%	1.6%	13	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.3%	0.5%	3	R/C Special Waste	0.0%	0.0%	0
R/C Metal	0.5%	0.7%	4	**MIXED RESIDUE**	**31.4%**	**13.8%**	**266**
				Mixed Residue	31.4%	7.2%	266
Recoverable Paper	4.9%	3.6%	42	**Potentially Recoverable**	17.7%	6.3%	150
Other Recoverables	12.1%	5.0%	103	**Problem Materials**	48.4%	5.2%	410
Compostable/Potentially Compostable	16.8%	5.0%	142				
Sample Count			**6**	**Total Tons**			**847**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 64. Detailed Material Composition, Unincorporated County, Overall

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**20.1%**	**5.3%**	**8,938**	**OTHER ORGANIC**	**29.6%**	**6.7%**	**13,172**
Uncoated Corrugated Cardboard	3.4%	1.0%	1,521	Food - Potentially Donatable	2.7%	1.4%	1,216
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	15.3%	3.1%	6,783
Paper Bags	0.8%	0.3%	370	Leaves Grass	1.7%	0.9%	750
Other Recyclable Paper	7.7%	3.8%	3,407	Prunings Trimmings	1.4%	0.8%	609
Paper Cups - Compostable	0.1%	0.1%	31	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.2%	0.1%	103	Manures	0.0%	0.0%	0
Compostable Paper	5.4%	0.9%	2,420	Textiles - Organic	3.3%	2.7%	1,487
R/C Paper	2.4%	0.8%	1,086	Carpet	0.5%	0.3%	205
PLASTIC	**12.0%**	**1.7%**	**5,355**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.6%	0.2%	250	R/C Organic	4.8%	1.4%	2,122
Other PETE Containers	0.7%	0.2%	328	**INERTS & OTHER**	**11.7%**	**6.0%**	**5,207**
HDPE Containers	0.5%	0.1%	244	Concrete	0.0%	0.1%	19
Polystyrene Food Service Items	0.1%	0.0%	54	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.9%	0.3%	397	Asphalt Composition Shingles	0.0%	0.0%	2
Compostable Plastics	0.0%	0.0%	7	Roofing Tar Paper/Felt	0.0%	0.0%	9
Plastic Trash Bags	1.6%	0.4%	725	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.3%	0.1%	133	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	1.2%	0.6%	544	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.7%	0.5%	315	Clean Dimensional Lumbar	0.6%	0.7%	269
Other Film	2.7%	0.5%	1,197	Clean Engineered Wood	1.6%	2.0%	719
Rigid Plastic Drip Lines	0.0%	0.0%	5	Clean Pallets Crates	0.1%	0.2%	56
Other Recyclable Rigid Plastic	0.7%	0.5%	298	Other Wood Waste	2.5%	2.9%	1,099
Other Non-Recyclable Rigid Plastic	0.8%	0.3%	369	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.1%	0.4%	490	Painted/Demolition Gypsum Board	0.0%	0.0%	7
GLASS	**4.0%**	**2.1%**	**1,767**	Rock, Soil, & Fines	0.3%	0.4%	143
Clear Glass Bottles Containers	3.4%	2.1%	1,519	Textiles - Synthetic, Mixed, & Unknown	2.0%	0.8%	890
Green Glass Bottles Containers	0.1%	0.1%	66	R/C Inerts & Other	4.5%	4.5%	1,995
Brown Glass Bottles Containers	0.3%	0.1%	114	**ELECTRONICS**	**0.7%**	**0.7%**	**314**
Other Colored Glass Containers	0.0%	0.0%	17	E-Waste	0.7%	0.7%	314
Flat Glass	0.0%	0.1%	16	**HHW**	**0.3%**	**0.2%**	**132**
R/C Glass	0.1%	0.0%	34	Household Hazardous Waste	0.3%	0.2%	132
METAL	**16.6%**	**10.4%**	**7,384**	**SPECIAL WASTE**	**2.1%**	**1.9%**	**926**
Tin/Steel Cans	0.7%	0.2%	307	Ash	0.0%	0.0%	1
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.1%	0.1%	39
Other Ferrous	5.1%	4.5%	2,251	Bulky Items	1.8%	1.9%	803
Aluminum Cans	0.5%	0.2%	215	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.7%	0.5%	300	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.4%	0.3%	192	R/C Special Waste	0.2%	0.2%	83
R/C Metal	9.3%	10.3%	4,119	**MIXED RESIDUE**	**2.8%**	**0.7%**	**1,251**
				Mixed Residue	2.8%	0.7%	1,251
Recoverable Paper	12.0%	4.5%	5,337	**Potentially Recoverable**	13.2%	6.5%	5,884
Other Recoverables	13.7%	5.1%	6,101	**Problem Materials**	34.5%	13.0%	15,336
Compostable/Potentially Compostable	26.5%	6.1%	11,788				
Sample Count			**47**	**Total Tons**			**44,446**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 65. Composition by Recoverability Group, Unincorporated County, Commercial

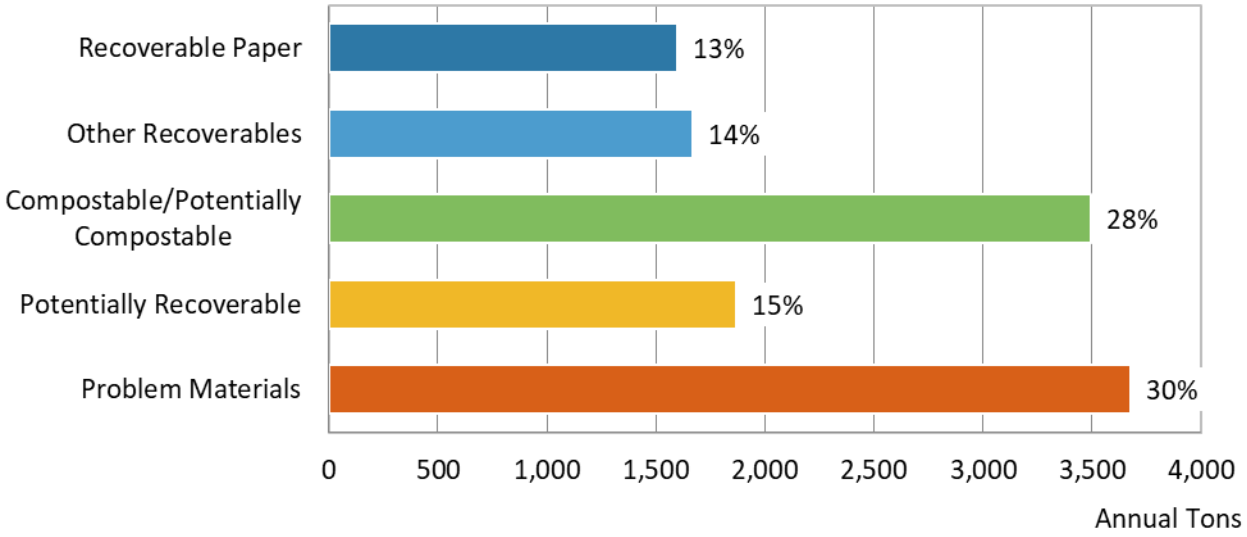


Figure 66. Composition by Material Class, Unincorporated County, Commercial

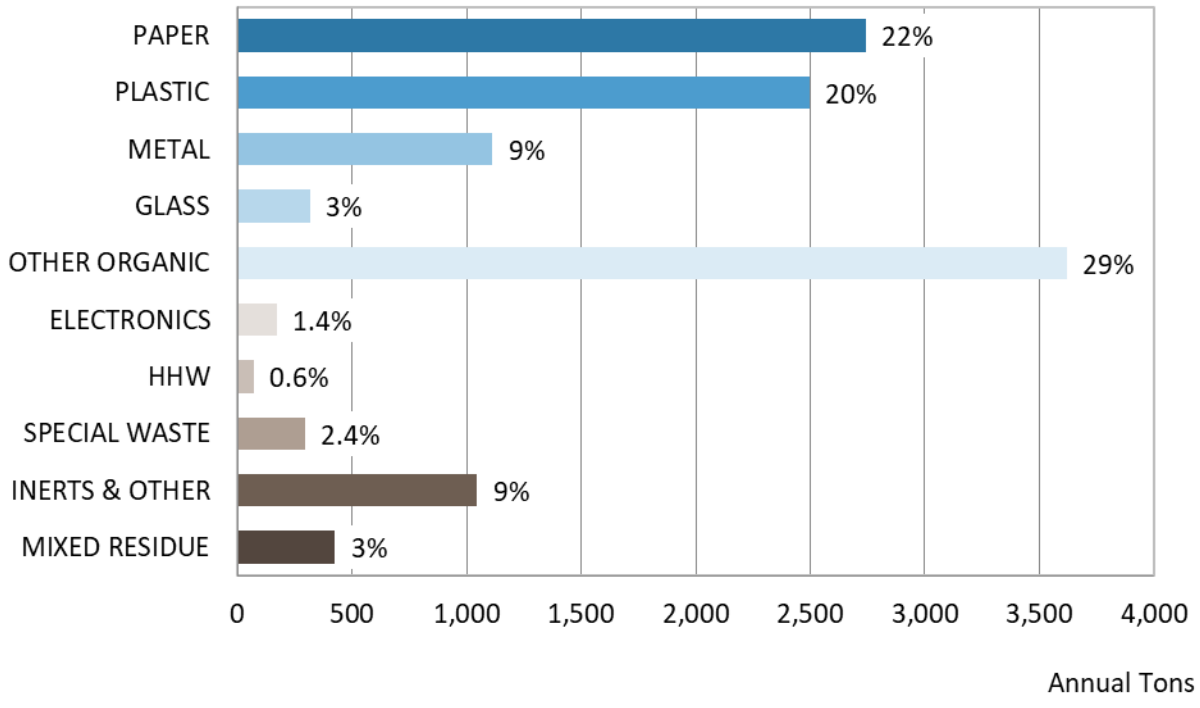


Table 65. Ten Most Prevalent Materials, Unincorporated County, Commercial

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	15.4%	1,898
Uncoated Corrugated Cardboard	6.6%	807
Compostable Paper	6.3%	776
Other Recyclable Paper	5.7%	707
R/C Organic	5.6%	689
Other Ferrous	5.1%	629
Non-Bag Industrial Packaging Film	4.2%	520
Leaves Grass	3.7%	455
Mixed Residue	3.5%	426
Other Film	3.3%	408
Total for Top Materials	**59.4%**	**7,314**

Table 66. Detailed Material Composition, Unincorporated County, Commercial

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**22.3%**	**3.2%**	**2,743**	**OTHER ORGANIC**	**29.4%**	**4.6%**	**3,620**
Uncoated Corrugated Cardboard	6.6%	2.6%	807	Food - Potentially Donatable	1.6%	0.8%	197
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	15.4%	3.4%	1,898
Paper Bags	0.7%	0.2%	83	Leaves Grass	3.7%	2.7%	455
Other Recyclable Paper	5.7%	1.2%	707	Prunings Trimmings	1.1%	0.9%	141
Paper Cups - Compostable	0.2%	0.2%	26	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.5%	0.2%	59	Manures	0.0%	0.0%	0
Compostable Paper	6.3%	1.4%	776	Textiles - Organic	1.2%	0.6%	153
R/C Paper	2.3%	0.5%	285	Carpet	0.7%	0.6%	88
PLASTIC	**20.3%**	**3.4%**	**2,497**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.9%	0.3%	106	R/C Organic	5.6%	2.3%	689
Other PETE Containers	0.8%	0.2%	103	**INERTS & OTHER**	**8.5%**	**3.0%**	**1,047**
HDPE Containers	0.7%	0.2%	86	Concrete	0.1%	0.2%	18
Polystyrene Food Service Items	0.1%	0.1%	18	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.8%	1.0%	224	Asphalt Composition Shingles	0.0%	0.0%	2
Compostable Plastics	0.0%	0.0%	2	Roofing Tar Paper/Felt	0.0%	0.0%	6
Plastic Trash Bags	2.5%	0.8%	313	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.4%	0.1%	48	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	4.2%	2.2%	520	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	1.9%	1.5%	230	Clean Dimensional Lumbar	0.3%	0.2%	38
Other Film	3.3%	0.8%	408	Clean Engineered Wood	1.6%	2.3%	193
Rigid Plastic Drip Lines	0.0%	0.0%	2	Clean Pallets Crates	0.4%	0.7%	55
Other Recyclable Rigid Plastic	0.8%	0.6%	97	Other Wood Waste	1.9%	1.9%	230
Other Non-Recyclable Rigid Plastic	1.2%	0.8%	144	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.6%	0.9%	198	Painted/Demolition Gypsum Board	0.0%	0.0%	4
GLASS	**2.6%**	**0.9%**	**318**	Rock, Soil, & Fines	1.1%	1.3%	140
Clear Glass Bottles Containers	1.6%	0.6%	200	Textiles - Synthetic, Mixed, & Unknown	2.1%	1.0%	256
Green Glass Bottles Containers	0.2%	0.1%	26	R/C Inerts & Other	0.9%	0.7%	106
Brown Glass Bottles Containers	0.5%	0.3%	61	**ELECTRONICS**	**1.4%**	**2.2%**	**172**
Other Colored Glass Containers	0.0%	0.1%	4	E-Waste	1.4%	2.2%	172
Flat Glass	0.1%	0.2%	16	**HHW**	**0.6%**	**0.6%**	**70**
R/C Glass	0.1%	0.1%	10	Household Hazardous Waste	0.6%	0.6%	70
METAL	**9.1%**	**4.9%**	**1,114**	**SPECIAL WASTE**	**2.4%**	**2.4%**	**297**
Tin/Steel Cans	0.8%	0.3%	95	Ash	0.0%	0.0%	1
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.3%	0.5%	39
Other Ferrous	5.1%	4.1%	629	Bulky Items	1.4%	2.3%	177
Aluminum Cans	0.5%	0.1%	66	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.4%	0.2%	49	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	1.2%	0.9%	142	R/C Special Waste	0.7%	0.5%	81
R/C Metal	1.1%	0.6%	132	**MIXED RESIDUE**	**3.5%**	**1.4%**	**426**
				Mixed Residue	3.5%	1.4%	426
Recoverable Paper	13.0%	2.6%	1,596	**Potentially Recoverable**	15.2%	4.1%	1,870
Other Recoverables	13.5%	4.6%	1,666	**Problem Materials**	29.9%	3.6%	3,677
Compostable/Potentially Compostable	28.4%	5.0%	3,495				
Sample Count			**21**	**Total Tons**			**12,304**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 67. Composition by Recoverability Group, Unincorporated County, Residential

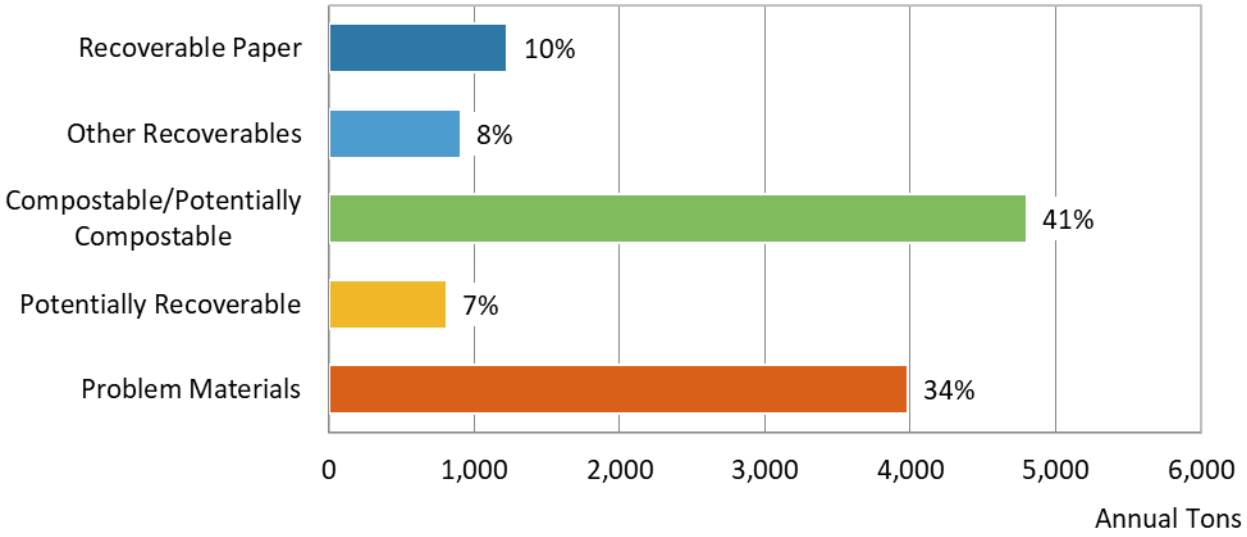


Figure 68. Composition by Material Class, Unincorporated County, Residential

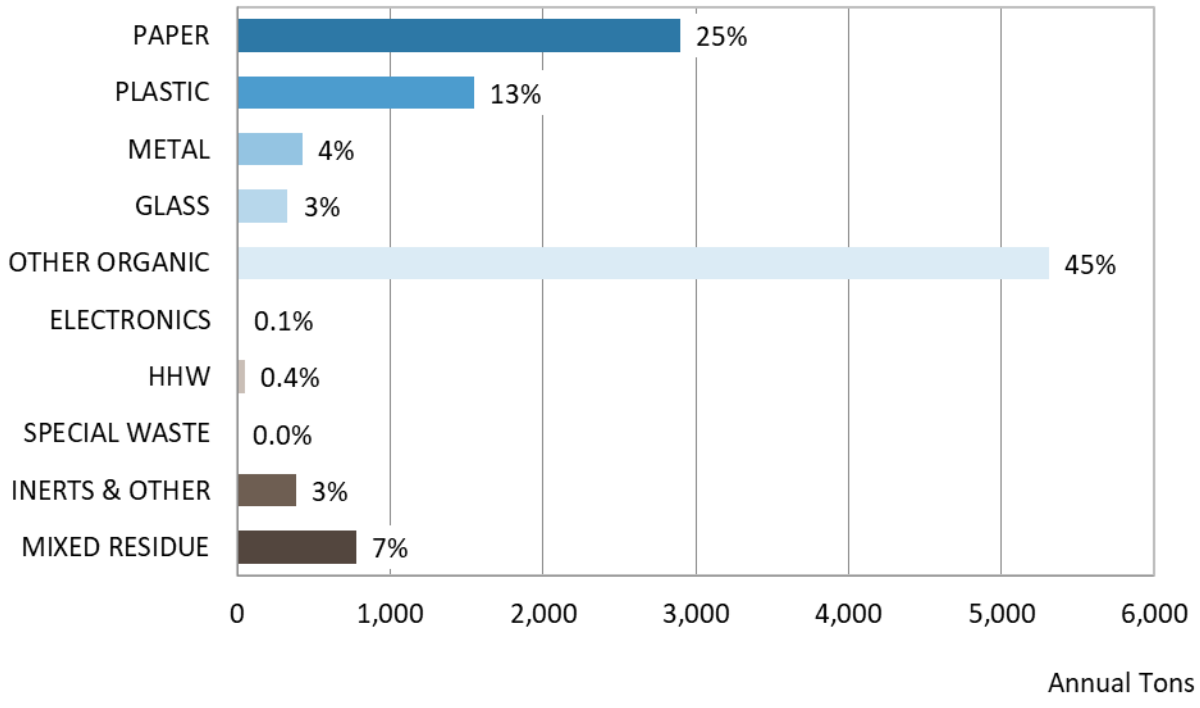


Table 67. Ten Most Prevalent Materials, Unincorporated County, Residential

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	23.9%	2,804
Compostable Paper	10.3%	1,206
R/C Organic	10.1%	1,182
Other Recyclable Paper	7.6%	897
Mixed Residue	6.6%	778
Other Film	5.2%	606
Textiles - Organic	4.2%	497
R/C Paper	3.7%	429
Leaves Grass	2.4%	282
Prunings Trimmings	2.2%	264
Total for Top Materials	**76.2%**	**8,946**

Table 68. Detailed Material Composition, Unincorporated County, Residential

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**24.7%**	**3.5%**	**2,896**	**OTHER ORGANIC**	**45.3%**	**6.0%**	**5,312**
Uncoated Corrugated Cardboard	2.1%	1.0%	241	Food - Potentially Donatable	2.1%	1.0%	241
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	23.9%	3.9%	2,804
Paper Bags	0.8%	0.3%	92	Leaves Grass	2.4%	1.9%	282
Other Recyclable Paper	7.6%	1.8%	897	Prunings Trimmings	2.2%	1.7%	264
Paper Cups - Compostable	0.0%	0.0%	3	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.2%	0.1%	27	Manures	0.0%	0.0%	0
Compostable Paper	10.3%	1.7%	1,206	Textiles - Organic	4.2%	1.7%	497
R/C Paper	3.7%	1.2%	429	Carpet	0.3%	0.5%	41
PLASTIC	**13.2%**	**2.6%**	**1,552**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.3%	0.1%	36	R/C Organic	10.1%	4.1%	1,182
Other PETE Containers	1.0%	0.4%	112	**INERTS & OTHER**	**3.3%**	**1.4%**	**386**
HDPE Containers	0.5%	0.1%	55	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.3%	0.1%	31	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	1.0%	0.3%	121	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	5	Roofing Tar Paper/Felt	0.0%	0.0%	2
Plastic Trash Bags	2.0%	0.7%	238	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.4%	0.2%	46	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.0%	0.0%	6	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.5%	0.7%	55	Clean Dimensional Lumbar	0.0%	0.0%	1
Other Film	5.2%	1.2%	606	Clean Engineered Wood	0.0%	0.0%	0
Rigid Plastic Drip Lines	0.0%	0.0%	4	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.2%	0.1%	28	Other Wood Waste	0.2%	0.2%	25
Other Non-Recyclable Rigid Plastic	0.4%	0.3%	46	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.4%	0.6%	163	Painted/Demolition Gypsum Board	0.0%	0.0%	4
GLASS	**2.8%**	**0.5%**	**329**	Rock, Soil, & Fines	0.0%	0.0%	0
Clear Glass Bottles Containers	2.0%	0.5%	238	Textiles - Synthetic, Mixed, & Unknown	1.4%	0.3%	159
Green Glass Bottles Containers	0.2%	0.2%	23	R/C Inerts & Other	1.7%	1.5%	196
Brown Glass Bottles Containers	0.4%	0.2%	46	**ELECTRONICS**	**0.1%**	**0.1%**	**7**
Other Colored Glass Containers	0.1%	0.1%	13	E-Waste	0.1%	0.1%	7
Flat Glass	0.0%	0.0%	0	**HHW**	**0.4%**	**0.4%**	**47**
R/C Glass	0.1%	0.1%	10	Household Hazardous Waste	0.4%	0.4%	47
METAL	**3.6%**	**1.0%**	**428**	**SPECIAL WASTE**	**0.0%**	**0.0%**	**0**
Tin/Steel Cans	1.1%	0.4%	128	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	0.4%	0.5%	49	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.3%	0.1%	34	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.8%	0.4%	96	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.4%	0.4%	46	R/C Special Waste	0.0%	0.0%	0
R/C Metal	0.6%	0.6%	73	**MIXED RESIDUE**	**6.6%**	**2.1%**	**778**
				Mixed Residue	6.6%	2.1%	778
Recoverable Paper	10.5%	2.4%	1,230	**Potentially Recoverable**	6.9%	2.1%	809
Other Recoverables	7.7%	1.2%	909	**Problem Materials**	33.9%	3.0%	3,982
Compostable/Potentially Compostable	41.0%	4.0%	4,806				
Sample Count			**8**	**Total Tons**			**11,736**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 69. Composition by Recoverability Group, Unincorporated County, Combined

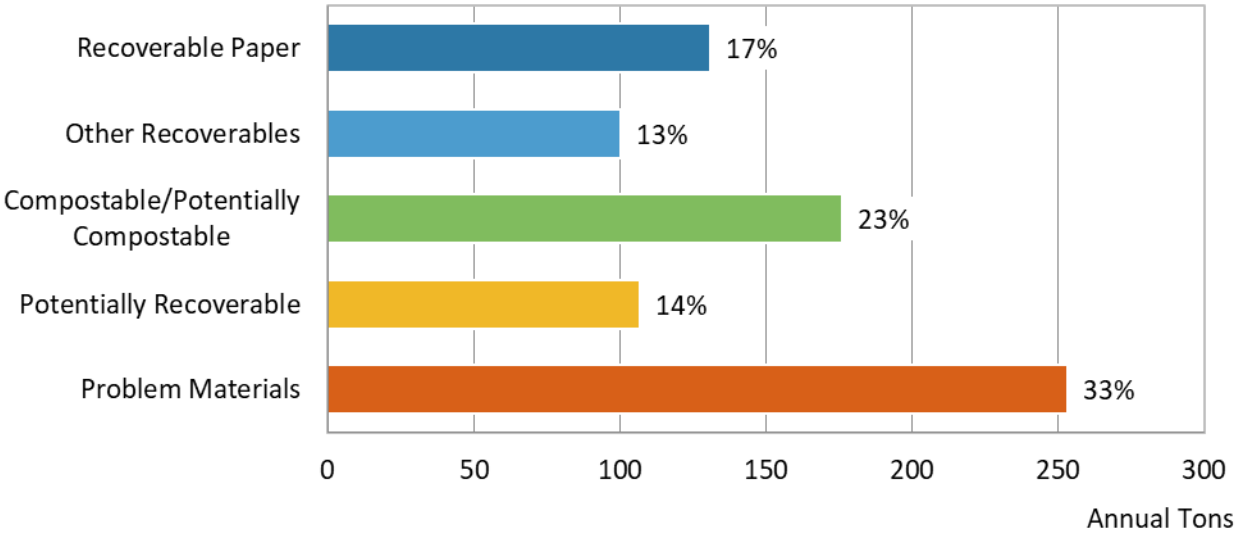


Figure 70. Composition by Material Class, Unincorporated County, Combined

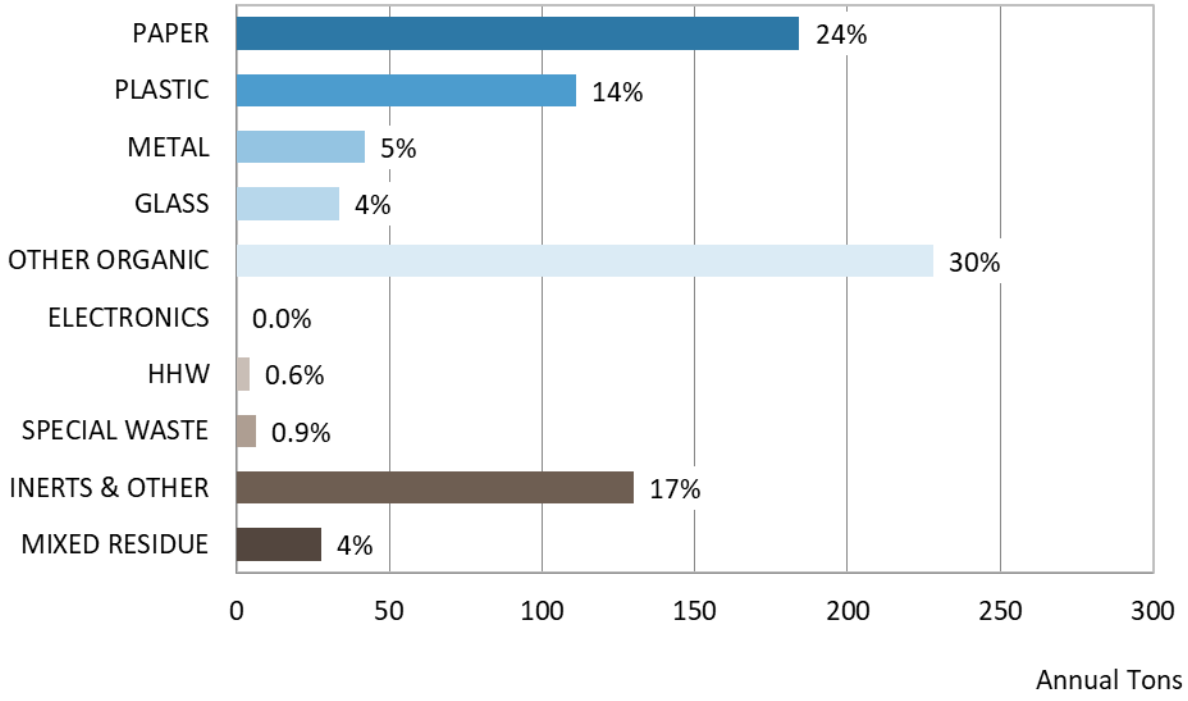


Table 69. Ten Most Prevalent Materials, Unincorporated County, Combined

Material	Estimated Percent	Estimated Tons
Food - Not Donatable	15.8%	121
Uncoated Corrugated Cardboard	8.3%	64
R/C Organic	7.7%	59
Other Recyclable Paper	7.4%	57
Textiles - Synthetic, Mixed, & Unknown	5.1%	39
Compostable Paper	4.6%	36
Rock, Soil, & Fines	4.4%	34
Other Film	4.4%	33
R/C Inerts & Other	3.6%	28
Mixed Residue	3.6%	28
Total for Top Materials	**64.9%**	**498**

Table 70. Detailed Material Composition, Unincorporated County, Combined

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**24.0%**	**6.8%**	**184**	**OTHER ORGANIC**	**29.7%**	**6.7%**	**228**
Uncoated Corrugated Cardboard	8.3%	6.0%	64	Food - Potentially Donatable	2.1%	1.2%	16
Waxed Corrugated Cardboard	0.2%	0.3%	1	Food - Not Donatable	15.8%	4.4%	121
Paper Bags	1.3%	0.5%	10	Leaves Grass	0.0%	0.0%	0
Other Recyclable Paper	7.4%	2.8%	57	Prunings Trimmings	0.2%	0.1%	1
Paper Cups - Compostable	0.0%	0.0%	0	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.4%	0.1%	3	Manures	0.0%	0.0%	0
Compostable Paper	4.6%	1.9%	36	Textiles - Organic	3.3%	2.1%	25
R/C Paper	1.7%	0.5%	13	Carpet	0.6%	1.0%	5
PLASTIC	**14.5%**	**2.4%**	**111**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.7%	0.3%	6	R/C Organic	7.7%	1.6%	59
Other PETE Containers	1.2%	0.7%	10	**INERTS & OTHER**	**16.9%**	**9.1%**	**130**
HDPE Containers	1.1%	0.9%	8	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.3%	0.1%	3	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.8%	0.3%	6	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	2.7%	0.3%	21	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.3%	0.1%	2	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.4%	0.3%	3	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.0%	0.0%	0	Clean Dimensional Lumbar	0.1%	0.1%	1
Other Film	4.4%	0.8%	33	Clean Engineered Wood	0.2%	0.3%	2
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.7%	0.8%	6	Other Wood Waste	3.5%	4.4%	27
Other Non-Recyclable Rigid Plastic	0.4%	0.3%	3	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	1.3%	1.0%	10	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**4.4%**	**1.6%**	**34**	Rock, Soil, & Fines	4.4%	4.8%	34
Clear Glass Bottles Containers	2.4%	1.1%	18	Textiles - Synthetic, Mixed, & Unknown	5.1%	4.1%	39
Green Glass Bottles Containers	0.5%	0.4%	4	R/C Inerts & Other	3.6%	5.2%	28
Brown Glass Bottles Containers	1.5%	0.7%	11	**ELECTRONICS**	**0.0%**	**0.0%**	**0**
Other Colored Glass Containers	0.0%	0.0%	0	E-Waste	0.0%	0.0%	0
Flat Glass	0.0%	0.0%	0	**HHW**	**0.6%**	**0.7%**	**4**
R/C Glass	0.0%	0.0%	0	Household Hazardous Waste	0.6%	0.7%	4
METAL	**5.5%**	**2.6%**	**42**	**SPECIAL WASTE**	**0.9%**	**1.3%**	**7**
Tin/Steel Cans	0.9%	0.3%	7	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	1.8%	2.1%	13	Bulky Items	0.0%	0.0%	0
Aluminum Cans	0.9%	0.5%	7	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.4%	0.3%	3	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.9%	1.3%	7	R/C Special Waste	0.9%	1.3%	7
R/C Metal	0.6%	0.7%	5	**MIXED RESIDUE**	**3.6%**	**2.1%**	**28**
				Mixed Residue	3.6%	2.1%	28
Recoverable Paper	17.1%	6.0%	131	**Potentially Recoverable**	13.9%	9.1%	107
Other Recoverables	13.0%	4.2%	100	**Problem Materials**	33.0%	8.1%	253
Compostable/Potentially Compostable	22.9%	5.7%	176				
Sample Count			**6**	**Total Tons**			**768**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 71. Composition by Recoverability Group, Unincorporated County, Self-haul

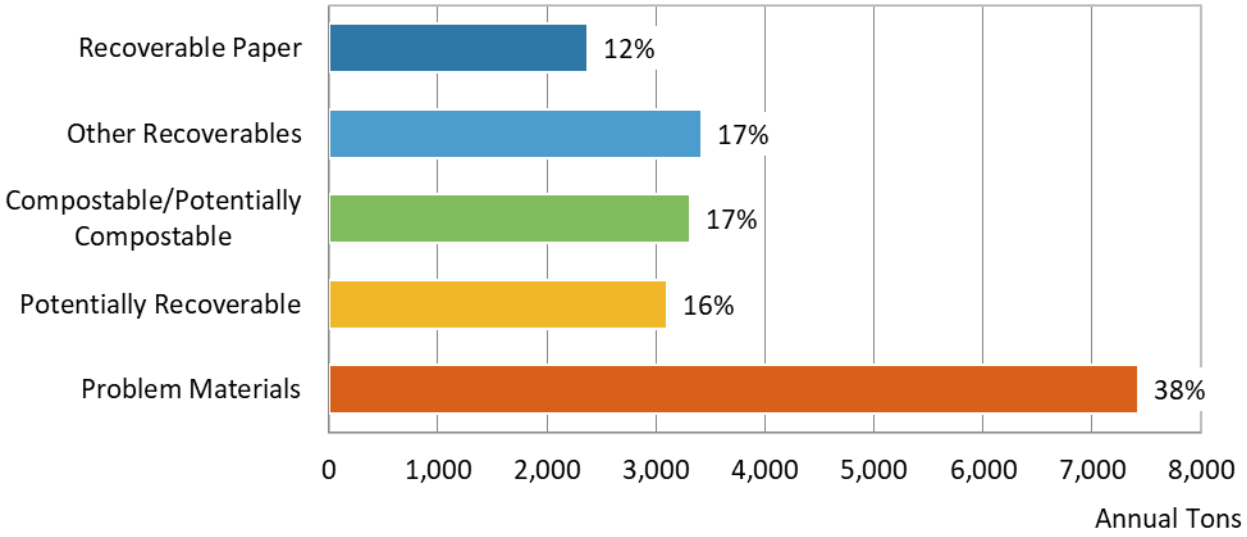


Figure 72. Composition by Material Class, Unincorporated County, Self-haul

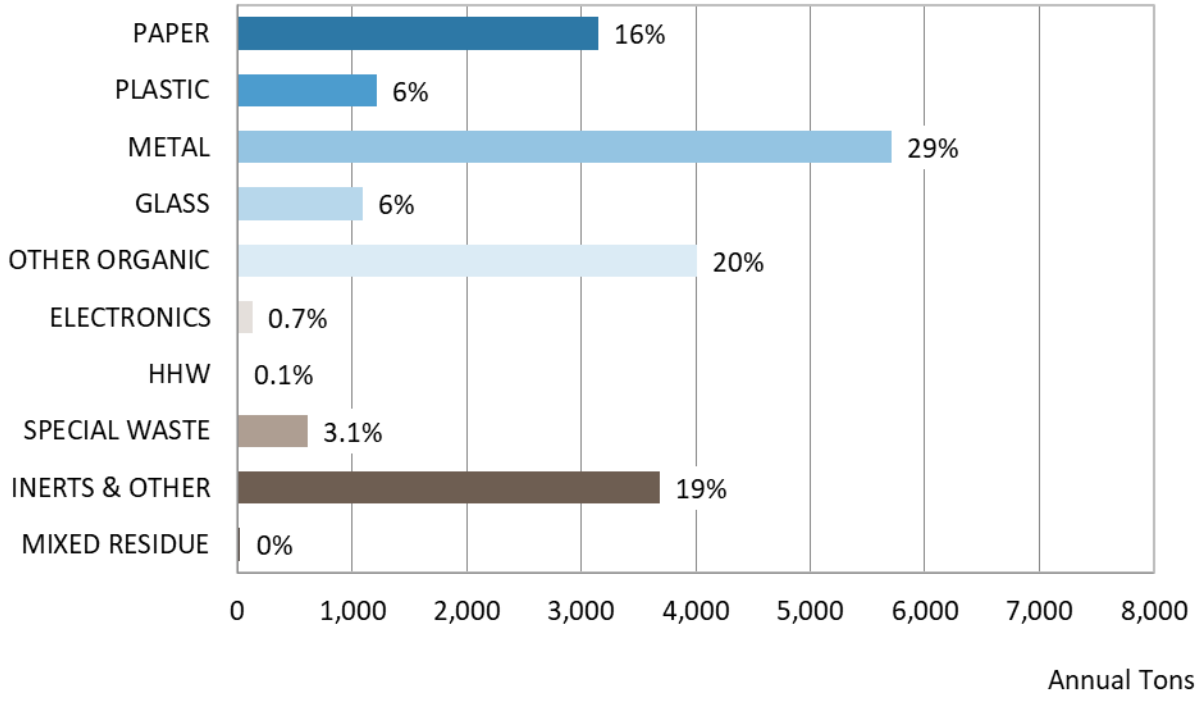


Table 71. Ten Most Prevalent Materials, Unincorporated County, Self-haul

Material	Estimated Percent	Estimated Tons
R/C Metal	19.6%	3,843
Food - Not Donatable	10.0%	1,964
Other Recyclable Paper	8.9%	1,744
R/C Inerts & Other	8.5%	1,659
Other Ferrous	7.8%	1,533
Clear Glass Bottles Containers	5.4%	1,055
Other Wood Waste	4.2%	826
Textiles - Organic	4.1%	810
Food - Potentially Donatable	3.9%	757
Bulky Items	3.1%	612
Total for Top Materials	**75.4%**	**14,803**

Table 72. Detailed Material Composition, Unincorporated County, Self-haul

Material	Estimated Percent	+/-	Estimated Tons	Material	Estimated Percent	+/-	Estimated Tons
PAPER	**16.0%**	**11.7%**	**3,146**	**OTHER ORGANIC**	**20.4%**	**14.4%**	**4,012**
Uncoated Corrugated Cardboard	2.3%	1.6%	446	Food - Potentially Donatable	3.9%	3.1%	757
Waxed Corrugated Cardboard	0.0%	0.0%	0	Food - Not Donatable	10.0%	6.2%	1,964
Paper Bags	1.0%	0.7%	189	Leaves Grass	0.0%	0.0%	0
Other Recyclable Paper	8.9%	8.6%	1,744	Prunings Trimmings	1.0%	1.2%	193
Paper Cups - Compostable	0.0%	0.0%	1	Branches Stumps	0.0%	0.0%	0
Paper Cups - Not Compostable	0.1%	0.1%	16	Manures	0.0%	0.0%	0
Compostable Paper	2.0%	1.6%	396	Textiles - Organic	4.1%	6.0%	810
R/C Paper	1.8%	1.6%	353	Carpet	0.4%	0.6%	73
PLASTIC	**6.2%**	**2.8%**	**1,213**	Animal Carcasses	0.0%	0.0%	0
PETE Water Bottles	0.5%	0.5%	103	R/C Organic	1.1%	1.2%	215
Other PETE Containers	0.5%	0.4%	107	**INERTS & OTHER**	**18.8%**	**13.5%**	**3,684**
HDPE Containers	0.5%	0.3%	98	Concrete	0.0%	0.0%	0
Polystyrene Food Service Items	0.0%	0.0%	4	Asphalt Paving	0.0%	0.0%	0
#3-#7 Other Containers	0.2%	0.2%	45	Asphalt Composition Shingles	0.0%	0.0%	0
Compostable Plastics	0.0%	0.0%	0	Roofing Tar Paper/Felt	0.0%	0.0%	0
Plastic Trash Bags	0.8%	0.8%	162	Roofing Mastic	0.0%	0.0%	0
Plastic Grocery & Merchandise Bags	0.2%	0.2%	37	Built-up Roofing	0.0%	0.0%	0
Non-Bag Industrial Packaging Film	0.0%	0.1%	9	Other Asphalt Roofing Material	0.0%	0.0%	0
Film Products	0.1%	0.1%	25	Clean Dimensional Lumbar	1.1%	1.6%	225
Other Film	0.8%	0.8%	163	Clean Engineered Wood	2.6%	4.2%	513
Rigid Plastic Drip Lines	0.0%	0.0%	0	Clean Pallets Crates	0.0%	0.0%	0
Other Recyclable Rigid Plastic	0.9%	1.1%	168	Other Wood Waste	4.2%	6.3%	826
Other Non-Recyclable Rigid Plastic	0.9%	0.4%	172	Clean Gypsum Board	0.0%	0.0%	0
R/C Plastic	0.6%	0.6%	120	Painted/Demolition Gypsum Board	0.0%	0.0%	0
GLASS	**5.5%**	**4.6%**	**1,089**	Rock, Soil, & Fines	0.0%	0.0%	0
Clear Glass Bottles Containers	5.4%	4.7%	1,055	Textiles - Synthetic, Mixed, & Unknown	2.3%	1.7%	460
Green Glass Bottles Containers	0.1%	0.1%	16	R/C Inerts & Other	8.5%	10.2%	1,659
Brown Glass Bottles Containers	0.0%	0.0%	5	**ELECTRONICS**	**0.7%**	**0.8%**	**129**
Other Colored Glass Containers	0.0%	0.0%	0	E-Waste	0.7%	0.8%	129
Flat Glass	0.0%	0.0%	0	**HHW**	**0.1%**	**0.1%**	**13**
R/C Glass	0.1%	0.1%	13	Household Hazardous Waste	0.1%	0.1%	13
METAL	**29.1%**	**23.3%**	**5,714**	**SPECIAL WASTE**	**3.1%**	**4.0%**	**612**
Tin/Steel Cans	0.4%	0.3%	78	Ash	0.0%	0.0%	0
Major Appliances	0.0%	0.0%	0	Treated Medical Waste	0.0%	0.0%	0
Used Oil Filters	0.0%	0.0%	0	Mattresses	0.0%	0.0%	0
Other Ferrous	7.8%	9.9%	1,533	Bulky Items	3.1%	4.0%	612
Aluminum Cans	0.6%	0.4%	111	Vehicle & Truck Tires	0.0%	0.0%	0
Other Non-ferrous	0.8%	1.2%	150	Other Tires	0.0%	0.0%	0
Mixed Recoverable Metal	0.0%	0.0%	0	R/C Special Waste	0.0%	0.0%	0
R/C Metal	19.6%	23.2%	3,843	**MIXED RESIDUE**	**0.1%**	**0.1%**	**25**
				Mixed Residue	0.1%	0.1%	25
Recoverable Paper	12.1%	10.0%	2,379	**Potentially Recoverable**	15.8%	14.4%	3,099
Other Recoverables	17.4%	11.2%	3,425	**Problem Materials**	37.8%	29.3%	7,424
Compostable/Potentially Compostable	16.9%	13.2%	3,311				
Sample Count			**12**	**Total Tons**			**19,638**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Appendix E. Seasonal Comparison by Sector

Table 73. Detailed Material Composition, Season One

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**22.0%**	**1.8%**	**OTHER ORGANIC**	**31.8%**	**2.8%**
Uncoated Corrugated Cardboard	3.8%	0.9%	Food - Potentially Donatable	2.2%	0.6%
Waxed Corrugated Cardboard	0.1%	0.1%	Food - Not Donatable	17.0%	2.1%
Paper Bags	0.8%	0.1%	Leaves Grass	1.1%	0.8%
Other Recyclable Paper	7.3%	0.9%	Prunings Trimmings	1.0%	0.5%
Paper Cups - Compostable	0.2%	0.2%	Branches Stumps	0.0%	0.0%
Paper Cups - Not Compostable	0.4%	0.1%	Manures	0.0%	0.0%
Compostable Paper	6.8%	0.9%	Textiles - Organic	3.9%	1.1%
R/C Paper	2.7%	0.4%	Carpet	0.4%	0.3%
PLASTIC	**14.5%**	**1.4%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.6%	0.1%	R/C Organic	6.0%	1.3%
Other PETE Containers	0.5%	0.1%	**INERTS & OTHER**	**13.7%**	**3.3%**
HDPE Containers	0.7%	0.2%	Concrete	0.0%	0.1%
Polystyrene Food Service Items	0.1%	0.0%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	1.1%	0.2%	Asphalt Composition Shingles	0.2%	0.2%
Compostable Plastics	0.0%	0.0%	Roofing Tar Paper/Felt	0.1%	0.1%
Plastic Trash Bags	2.4%	0.3%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.2%	0.0%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	1.1%	0.5%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	0.7%	0.6%	Clean Dimensional Lumbar	1.6%	0.8%
Other Film	4.1%	0.6%	Clean Engineered Wood	0.7%	0.6%
Rigid Plastic Drip Lines	0.0%	0.0%	Clean Pallets Crates	0.0%	0.0%
Other Recyclable Rigid Plastic	1.3%	0.3%	Other Wood Waste	3.9%	1.7%
Other Non-Recyclable Rigid Plastic	0.2%	0.1%	Clean Gypsum Board	0.7%	1.0%
R/C Plastic	1.4%	0.3%	Painted/Demolition Gypsum Board	0.0%	0.0%
GLASS	**3.7%**	**1.7%**	Rock, Soil, & Fines	2.5%	1.8%
Clear Glass Bottles Containers	2.1%	0.9%	Textiles - Synthetic, Mixed, & Unknown	2.6%	0.6%
Green Glass Bottles Containers	0.2%	0.1%	R/C Inerts & Other	1.3%	0.5%
Brown Glass Bottles Containers	0.3%	0.1%	**ELECTRONICS**	**1.4%**	**0.8%**
Other Colored Glass Containers	0.0%	0.0%	E-Waste	1.4%	0.8%
Flat Glass	1.0%	1.4%	**HHW**	**0.8%**	**0.7%**
R/C Glass	0.2%	0.1%	Household Hazardous Waste	0.8%	0.7%
METAL	**6.7%**	**2.0%**	**SPECIAL WASTE**	**1.5%**	**1.0%**
Tin/Steel Cans	0.8%	0.2%	Ash	0.0%	0.1%
Major Appliances	0.0%	0.0%	Treated Medical Waste	0.0%	0.0%
Used Oil Filters	0.0%	0.0%	Mattresses	0.2%	0.2%
Other Ferrous	3.0%	1.8%	Bulky Items	0.9%	0.8%
Aluminum Cans	0.4%	0.1%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.5%	0.1%	Other Tires	0.0%	0.0%
Mixed Recoverable Metal	1.0%	0.5%	R/C Special Waste	0.4%	0.2%
R/C Metal	1.1%	0.6%	**MIXED RESIDUE**	**4.0%**	**1.0%**
			Mixed Residue	4.0%	1.0%
Recoverable Paper	11.9%	1.4%	**Potentially Recoverable**	17.3%	3.1%
Other Recoverables	11.3%	2.2%	**Problem Materials**	31.0%	2.7%
Compostable/Potentially Compostable	28.6%	2.8%			
Sample Count			**Total Tons**		

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 74. Detailed Material Composition, Season Two

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**20.0%**	**2.6%**	**OTHER ORGANIC**	**27.4%**	**3.6%**
Uncoated Corrugated Cardboard	4.0%	1.0%	Food - Potentially Donatable	1.7%	0.4%
Waxed Corrugated Cardboard	0.0%	0.0%	Food - Not Donatable	16.6%	2.7%
Paper Bags	0.8%	0.1%	Leaves Grass	0.8%	0.4%
Other Recyclable Paper	6.0%	1.4%	Prunings Trimmings	1.2%	0.5%
Paper Cups - Compostable	0.0%	0.0%	Branches Stumps	0.0%	0.1%
Paper Cups - Not Compostable	0.3%	0.1%	Manures	0.0%	0.0%
Compostable Paper	5.6%	0.9%	Textiles - Organic	2.0%	0.5%
R/C Paper	3.2%	0.5%	Carpet	1.3%	1.5%
PLASTIC	**14.1%**	**1.8%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.3%	0.1%	R/C Organic	3.6%	0.8%
Other PETE Containers	1.0%	0.1%	**INERTS & OTHER**	**15.2%**	**6.5%**
HDPE Containers	0.6%	0.1%	Concrete	0.0%	0.0%
Polystyrene Food Service Items	0.2%	0.0%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	1.3%	0.3%	Asphalt Composition Shingles	0.1%	0.1%
Compostable Plastics	0.0%	0.0%	Roofing Tar Paper/Felt	0.1%	0.1%
Plastic Trash Bags	1.9%	0.3%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.4%	0.1%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	1.5%	0.7%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	0.4%	0.2%	Clean Dimensional Lumbar	3.7%	4.9%
Other Film	3.6%	0.6%	Clean Engineered Wood	1.6%	1.2%
Rigid Plastic Drip Lines	0.1%	0.1%	Clean Pallets Crates	0.3%	0.3%
Other Recyclable Rigid Plastic	0.2%	0.1%	Other Wood Waste	3.5%	2.1%
Other Non-Recyclable Rigid Plastic	1.4%	0.3%	Clean Gypsum Board	0.1%	0.1%
R/C Plastic	1.5%	0.5%	Painted/Demolition Gypsum Board	0.3%	0.3%
GLASS	**2.8%**	**0.7%**	Rock, Soil, & Fines	0.4%	0.4%
Clear Glass Bottles Containers	1.4%	0.3%	Textiles - Synthetic, Mixed, & Unknown	3.1%	0.8%
Green Glass Bottles Containers	0.3%	0.2%	R/C Inerts & Other	2.1%	1.8%
Brown Glass Bottles Containers	0.8%	0.3%	**ELECTRONICS**	**1.0%**	**0.7%**
Other Colored Glass Containers	0.1%	0.1%	E-Waste	1.0%	0.7%
Flat Glass	0.0%	0.0%	**HHW**	**0.2%**	**0.1%**
R/C Glass	0.1%	0.1%	Household Hazardous Waste	0.2%	0.1%
METAL	**8.8%**	**4.3%**	**SPECIAL WASTE**	**4.8%**	**3.3%**
Tin/Steel Cans	0.8%	0.3%	Ash	0.2%	0.2%
Major Appliances	1.3%	1.2%	Treated Medical Waste	0.0%	0.0%
Used Oil Filters	0.0%	0.0%	Mattresses	1.4%	1.4%
Other Ferrous	1.8%	0.6%	Bulky Items	2.9%	2.5%
Aluminum Cans	0.6%	0.2%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.6%	0.2%	Other Tires	0.0%	0.0%
Mixed Recoverable Metal	0.4%	0.2%	R/C Special Waste	0.4%	0.2%
R/C Metal	3.3%	4.0%	**MIXED RESIDUE**	**5.7%**	**1.6%**
			Mixed Residue	5.7%	1.6%
Recoverable Paper	10.8%	2.0%	**Potentially Recoverable**	20.2%	6.5%
Other Recoverables	10.3%	1.9%	**Problem Materials**	32.6%	5.2%
Compostable/Potentially Compostable	26.1%	3.4%			
Sample Count			**Total Tons**		

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 73. Material Composition by Recoverability Group, Residential, Season One vs. Season Two

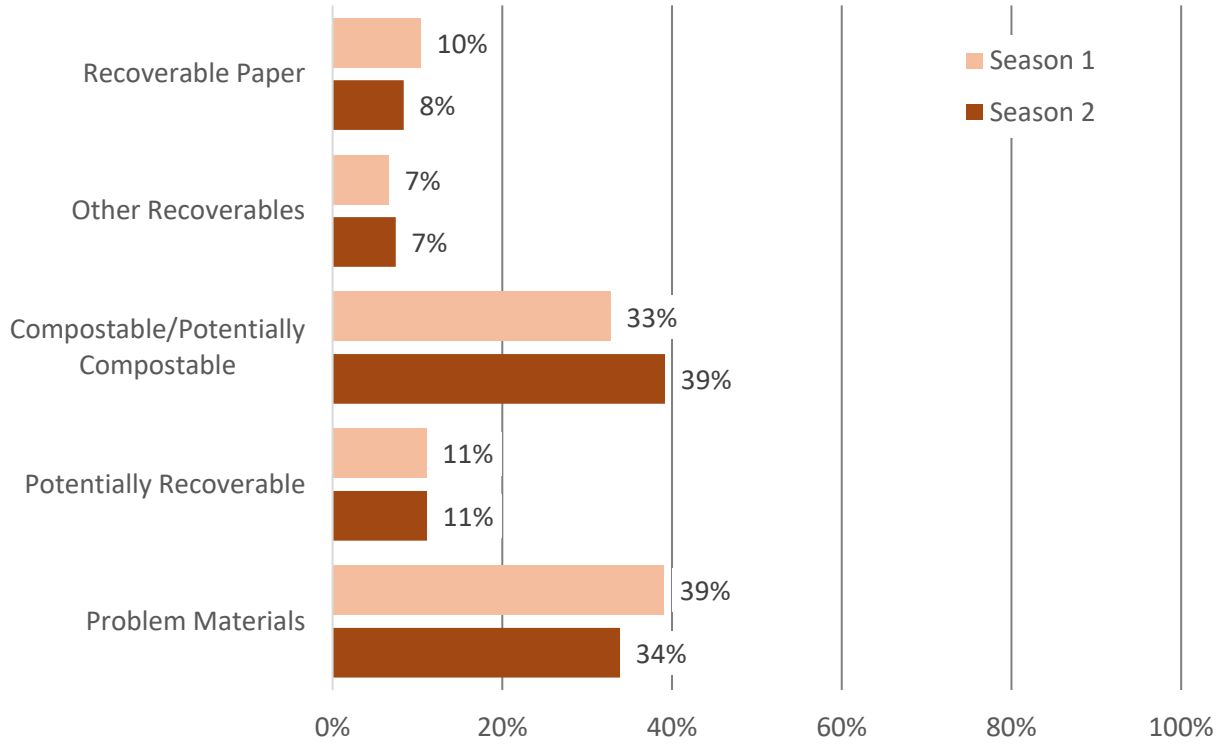


Figure 74. Composition by Material Class, Residential, Season One vs. Season Two

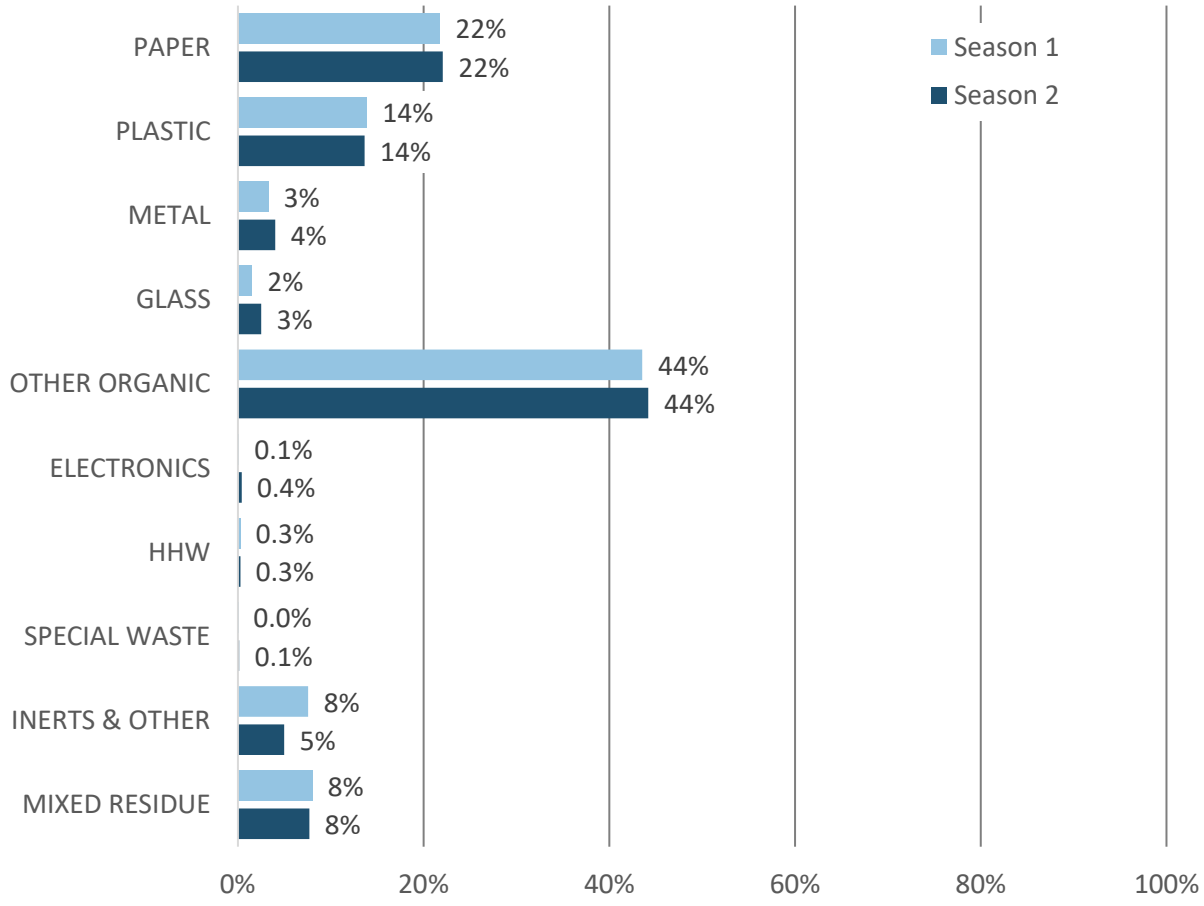


Table 75. Detailed Material Composition, Residential, Season One

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**21.8%**	**1.8%**	**OTHER ORGANIC**	**43.6%**	**4.2%**
Uncoated Corrugated Cardboard	1.1%	0.5%	Food - Potentially Donatable	2.5%	0.8%
Waxed Corrugated Cardboard	0.0%	0.0%	Food - Not Donatable	20.0%	2.9%
Paper Bags	0.9%	0.2%	Leaves Grass	1.2%	1.2%
Other Recyclable Paper	8.5%	1.1%	Prunings Trimmings	1.1%	1.2%
Paper Cups - Compostable	0.1%	0.0%	Branches Stumps	0.0%	0.0%
Paper Cups - Not Compostable	0.2%	0.1%	Manures	0.0%	0.0%
Compostable Paper	7.9%	1.1%	Textiles - Organic	4.6%	1.5%
R/C Paper	3.2%	0.5%	Carpet	0.0%	0.0%
PLASTIC	**13.9%**	**1.6%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.6%	0.1%	R/C Organic	14.1%	3.8%
Other PETE Containers	0.6%	0.2%	**INERTS & OTHER**	**7.6%**	**2.4%**
HDPE Containers	0.5%	0.1%	Concrete	0.0%	0.0%
Polystyrene Food Service Items	0.3%	0.1%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	1.3%	0.2%	Asphalt Composition Shingles	0.8%	1.2%
Compostable Plastics	0.0%	0.0%	Roofing Tar Paper/Felt	0.0%	0.0%
Plastic Trash Bags	2.6%	0.5%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.5%	0.2%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	0.2%	0.2%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	0.2%	0.3%	Clean Dimensional Lumbar	0.3%	0.3%
Other Film	4.8%	0.6%	Clean Engineered Wood	0.1%	0.0%
Rigid Plastic Drip Lines	0.0%	0.0%	Clean Pallets Crates	0.0%	0.0%
Other Recyclable Rigid Plastic	0.8%	0.3%	Other Wood Waste	0.6%	0.4%
Other Non-Recyclable Rigid Plastic	0.0%	0.0%	Clean Gypsum Board	0.0%	0.0%
R/C Plastic	1.5%	0.9%	Painted/Demolition Gypsum Board	0.0%	0.0%
GLASS	**1.5%**	**0.4%**	Rock, Soil, & Fines	0.1%	0.2%
Clear Glass Bottles Containers	1.0%	0.3%	Textiles - Synthetic, Mixed, & Unknown	3.7%	1.7%
Green Glass Bottles Containers	0.2%	0.1%	R/C Inerts & Other	1.9%	1.1%
Brown Glass Bottles Containers	0.2%	0.1%	**ELECTRONICS**	**0.1%**	**0.1%**
Other Colored Glass Containers	0.0%	0.0%	E-Waste	0.1%	0.1%
Flat Glass	0.0%	0.0%	**HHW**	**0.3%**	**0.1%**
R/C Glass	0.1%	0.1%	Household Hazardous Waste	0.3%	0.1%
METAL	**3.3%**	**0.8%**	**SPECIAL WASTE**	**0.0%**	**0.0%**
Tin/Steel Cans	0.9%	0.2%	Ash	0.0%	0.0%
Major Appliances	0.0%	0.0%	Treated Medical Waste	0.0%	0.0%
Used Oil Filters	0.0%	0.0%	Mattresses	0.0%	0.0%
Other Ferrous	0.6%	0.4%	Bulky Items	0.0%	0.0%
Aluminum Cans	0.3%	0.1%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.5%	0.2%	Other Tires	0.0%	0.0%
Mixed Recoverable Metal	0.3%	0.2%	R/C Special Waste	0.0%	0.0%
R/C Metal	0.6%	0.5%	**MIXED RESIDUE**	**8.0%**	**2.2%**
			Mixed Residue	8.0%	2.2%
Recoverable Paper	10.4%	1.3%	**Potentially Recoverable**	11.1%	2.8%
Other Recoverables	6.6%	0.9%	**Problem Materials**	39.1%	3.8%
Compostable/Potentially Compostable	32.8%	4.1%			
Sample Count			**Total Tons**		

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 76. Detailed Material Composition, Residential, Season Two

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**22.1%**	**3.1%**	**OTHER ORGANIC**	**44.2%**	**4.1%**
Uncoated Corrugated Cardboard	1.7%	1.1%	Food - Potentially Donatable	2.2%	0.9%
Waxed Corrugated Cardboard	0.0%	0.0%	Food - Not Donatable	23.0%	3.8%
Paper Bags	1.0%	0.2%	Leaves Grass	1.5%	1.1%
Other Recyclable Paper	5.7%	1.9%	Prunings Trimmings	3.5%	2.2%
Paper Cups - Compostable	0.1%	0.0%	Branches Stumps	0.0%	0.0%
Paper Cups - Not Compostable	0.4%	0.1%	Manures	0.0%	0.0%
Compostable Paper	8.9%	1.0%	Textiles - Organic	4.8%	1.4%
R/C Paper	4.3%	0.9%	Carpet	0.5%	0.4%
PLASTIC	**13.6%**	**1.3%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.2%	0.1%	R/C Organic	8.7%	2.5%
Other PETE Containers	1.4%	0.3%	**INERTS & OTHER**	**5.0%**	**2.3%**
HDPE Containers	0.6%	0.2%	Concrete	0.0%	0.0%
Polystyrene Food Service Items	0.3%	0.1%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	1.4%	0.2%	Asphalt Composition Shingles	0.0%	0.0%
Compostable Plastics	0.1%	0.0%	Roofing Tar Paper/Felt	0.0%	0.0%
Plastic Trash Bags	1.8%	0.3%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.7%	0.2%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	0.1%	0.0%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	0.0%	0.0%	Clean Dimensional Lumbar	0.1%	0.1%
Other Film	4.8%	0.8%	Clean Engineered Wood	0.0%	0.0%
Rigid Plastic Drip Lines	0.0%	0.0%	Clean Pallets Crates	0.0%	0.0%
Other Recyclable Rigid Plastic	0.2%	0.0%	Other Wood Waste	0.9%	0.9%
Other Non-Recyclable Rigid Plastic	1.2%	0.5%	Clean Gypsum Board	0.0%	0.0%
R/C Plastic	0.8%	0.3%	Painted/Demolition Gypsum Board	0.1%	0.1%
GLASS	**2.5%**	**0.4%**	Rock, Soil, & Fines	0.0%	0.0%
Clear Glass Bottles Containers	1.5%	0.2%	Textiles - Synthetic, Mixed, & Unknown	3.1%	2.0%
Green Glass Bottles Containers	0.1%	0.1%	R/C Inerts & Other	0.8%	0.8%
Brown Glass Bottles Containers	0.6%	0.2%	**ELECTRONICS**	**0.4%**	**0.5%**
Other Colored Glass Containers	0.2%	0.1%	E-Waste	0.4%	0.5%
Flat Glass	0.0%	0.0%	**HHW**	**0.3%**	**0.2%**
R/C Glass	0.0%	0.0%	Household Hazardous Waste	0.3%	0.2%
METAL	**4.0%**	**0.9%**	**SPECIAL WASTE**	**0.1%**	**0.1%**
Tin/Steel Cans	0.8%	0.2%	Ash	0.1%	0.1%
Major Appliances	0.0%	0.0%	Treated Medical Waste	0.0%	0.0%
Used Oil Filters	0.1%	0.1%	Mattresses	0.0%	0.0%
Other Ferrous	0.6%	0.3%	Bulky Items	0.0%	0.0%
Aluminum Cans	0.3%	0.1%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.7%	0.1%	Other Tires	0.0%	0.0%
Mixed Recoverable Metal	0.3%	0.3%	R/C Special Waste	0.1%	0.1%
R/C Metal	1.4%	0.7%	**MIXED RESIDUE**	**7.7%**	**2.9%**
			Mixed Residue	7.7%	2.9%
Recoverable Paper	8.4%	2.9%	**Potentially Recoverable**	11.1%	3.4%
Other Recoverables	7.5%	0.8%	**Problem Materials**	33.9%	4.5%
Compostable/Potentially Compostable	39.2%	4.2%			
Sample Count			**Total Tons**		

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 75. Composition by Recoverability Group, Commercial, Season One vs. Season Two

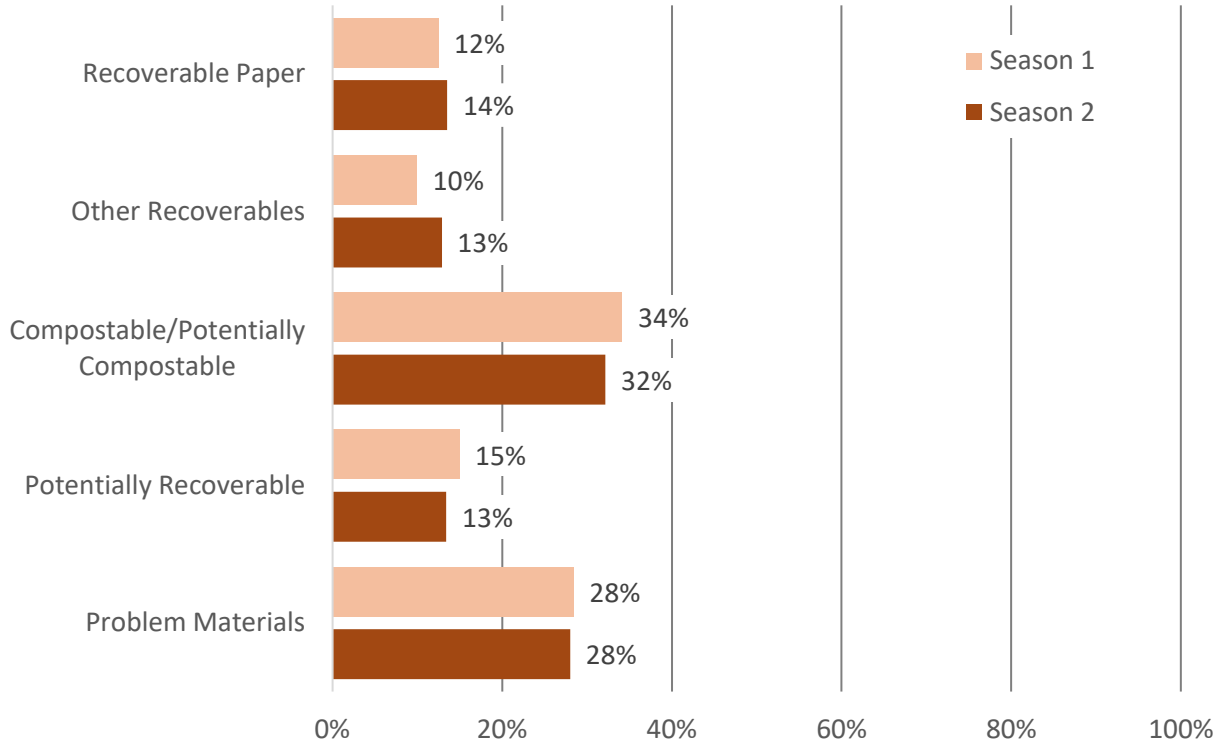


Figure 76. Composition by Material Class, Commercial, Season One vs. Season Two

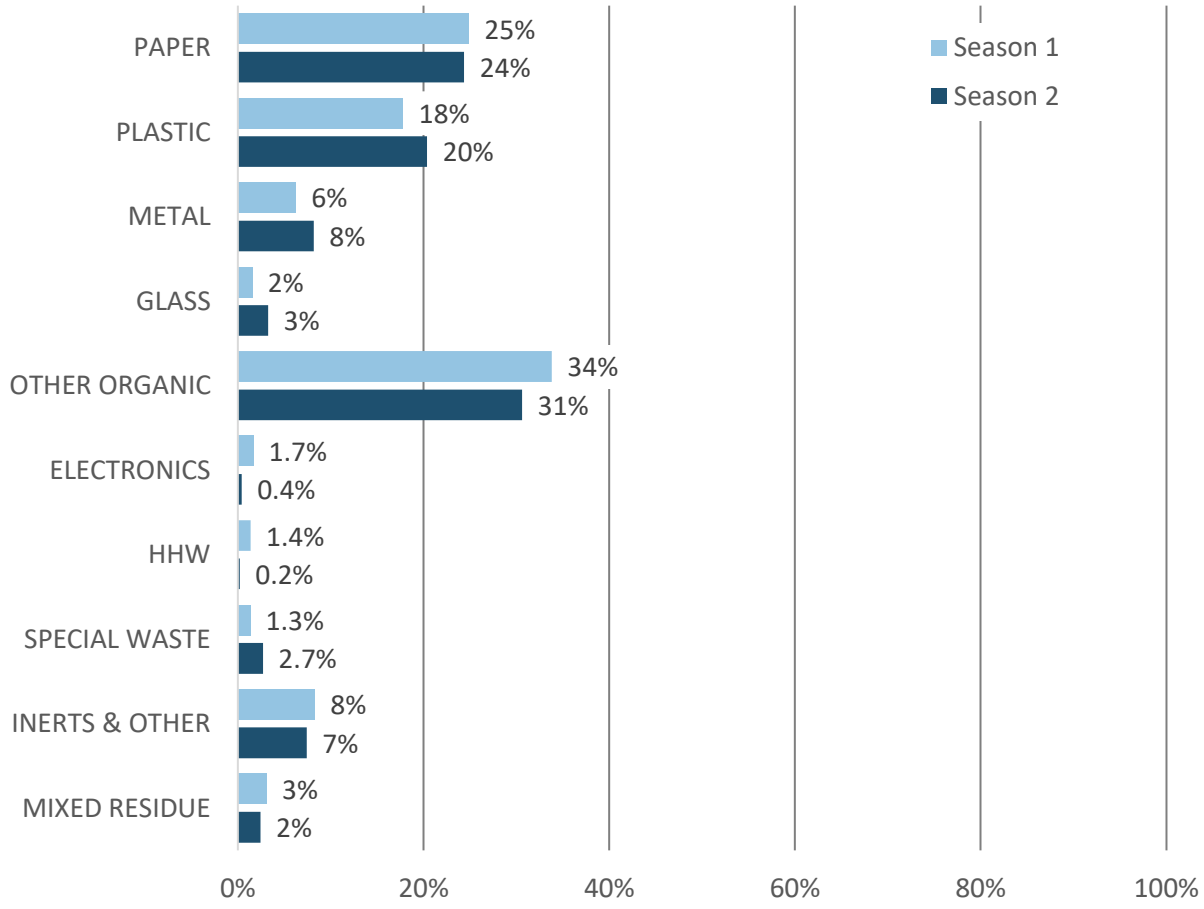


Table 77. Detailed Material Composition, Commercial, Season One

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**24.9%**	**2.3%**	**OTHER ORGANIC**	**33.8%**	**3.2%**
Uncoated Corrugated Cardboard	4.7%	1.2%	Food - Potentially Donatable	2.0%	0.8%
Waxed Corrugated Cardboard	0.1%	0.1%	Food - Not Donatable	20.6%	3.1%
Paper Bags	0.7%	0.1%	Leaves Grass	1.2%	1.4%
Other Recyclable Paper	7.0%	0.9%	Prunings Trimmings	1.2%	0.9%
Paper Cups - Compostable	0.4%	0.4%	Branches Stumps	0.0%	0.1%
Paper Cups - Not Compostable	0.6%	0.2%	Manures	0.0%	0.0%
Compostable Paper	8.6%	1.3%	Textiles - Organic	3.4%	1.3%
R/C Paper	2.7%	0.6%	Carpet	0.7%	0.6%
PLASTIC	**17.8%**	**2.1%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.6%	0.1%	R/C Organic	4.7%	1.2%
Other PETE Containers	0.4%	0.1%	**INERTS & OTHER**	**8.3%**	**2.2%**
HDPE Containers	1.0%	0.3%	Concrete	0.1%	0.1%
Polystyrene Food Service Items	0.1%	0.0%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	1.3%	0.2%	Asphalt Composition Shingles	0.0%	0.0%
Compostable Plastics	0.0%	0.0%	Roofing Tar Paper/Felt	0.1%	0.1%
Plastic Trash Bags	3.1%	0.4%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.2%	0.0%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	1.9%	1.0%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	1.2%	1.3%	Clean Dimensional Lumbar	1.0%	0.7%
Other Film	5.1%	1.0%	Clean Engineered Wood	0.1%	0.0%
Rigid Plastic Drip Lines	0.0%	0.0%	Clean Pallets Crates	0.0%	0.0%
Other Recyclable Rigid Plastic	1.2%	0.4%	Other Wood Waste	3.2%	1.6%
Other Non-Recyclable Rigid Plastic	0.2%	0.1%	Clean Gypsum Board	0.1%	0.1%
R/C Plastic	1.3%	0.4%	Painted/Demolition Gypsum Board	0.0%	0.0%
GLASS	**1.6%**	**0.4%**	Rock, Soil, & Fines	1.2%	1.4%
Clear Glass Bottles Containers	0.8%	0.2%	Textiles - Synthetic, Mixed, & Unknown	2.0%	0.7%
Green Glass Bottles Containers	0.1%	0.1%	R/C Inerts & Other	0.6%	0.3%
Brown Glass Bottles Containers	0.3%	0.1%	**ELECTRONICS**	**1.7%**	**1.4%**
Other Colored Glass Containers	0.0%	0.0%	E-Waste	1.7%	1.4%
Flat Glass	0.2%	0.2%	**HHW**	**1.4%**	**1.5%**
R/C Glass	0.1%	0.1%	Household Hazardous Waste	1.4%	1.5%
METAL	**6.2%**	**2.6%**	**SPECIAL WASTE**	**1.3%**	**0.7%**
Tin/Steel Cans	1.0%	0.4%	Ash	0.1%	0.1%
Major Appliances	0.0%	0.0%	Treated Medical Waste	0.0%	0.0%
Used Oil Filters	0.0%	0.0%	Mattresses	0.2%	0.2%
Other Ferrous	2.9%	2.1%	Bulky Items	0.3%	0.5%
Aluminum Cans	0.2%	0.0%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.5%	0.1%	Other Tires	0.0%	0.0%
Mixed Recoverable Metal	0.8%	0.5%	R/C Special Waste	0.8%	0.4%
R/C Metal	0.8%	0.3%	**MIXED RESIDUE**	**3.1%**	**0.8%**
			Mixed Residue	3.1%	0.8%
Recoverable Paper	12.5%	1.6%	**Potentially Recoverable**	15.0%	2.8%
Other Recoverables	10.0%	2.5%	**Problem Materials**	28.4%	2.7%
Compostable/Potentially Compostable	34.2%	3.7%			
Sample Count			**Total Tons**		

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 78. Detailed Material Composition, Commercial, Season Two

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**24.4%**	**3.0%**	**OTHER ORGANIC**	**30.6%**	**3.5%**
Uncoated Corrugated Cardboard	6.4%	1.8%	Food - Potentially Donatable	1.8%	0.6%
Waxed Corrugated Cardboard	0.0%	0.0%	Food - Not Donatable	20.4%	3.4%
Paper Bags	0.9%	0.2%	Leaves Grass	1.0%	0.6%
Other Recyclable Paper	6.3%	1.3%	Prunings Trimmings	1.1%	0.6%
Paper Cups - Compostable	0.1%	0.0%	Branches Stumps	0.1%	0.1%
Paper Cups - Not Compostable	0.5%	0.1%	Manures	0.0%	0.1%
Compostable Paper	7.6%	1.4%	Textiles - Organic	2.0%	0.6%
R/C Paper	2.7%	0.5%	Carpet	0.5%	0.4%
PLASTIC	**20.4%**	**2.2%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.4%	0.1%	R/C Organic	3.7%	1.1%
Other PETE Containers	1.2%	0.2%	**INERTS & OTHER**	**7.4%**	**2.2%**
HDPE Containers	0.7%	0.2%	Concrete	0.0%	0.0%
Polystyrene Food Service Items	0.2%	0.1%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	2.0%	0.6%	Asphalt Composition Shingles	0.0%	0.0%
Compostable Plastics	0.0%	0.0%	Roofing Tar Paper/Felt	0.0%	0.0%
Plastic Trash Bags	2.6%	0.4%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.5%	0.1%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	3.0%	1.5%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	0.5%	0.4%	Clean Dimensional Lumbar	0.3%	0.1%
Other Film	5.0%	1.1%	Clean Engineered Wood	1.3%	1.3%
Rigid Plastic Drip Lines	0.1%	0.1%	Clean Pallets Crates	0.7%	0.6%
Other Recyclable Rigid Plastic	0.2%	0.1%	Other Wood Waste	1.8%	1.2%
Other Non-Recyclable Rigid Plastic	1.8%	0.6%	Clean Gypsum Board	0.0%	0.0%
R/C Plastic	2.1%	0.9%	Painted/Demolition Gypsum Board	0.3%	0.4%
GLASS	**3.3%**	**0.9%**	Rock, Soil, & Fines	0.2%	0.2%
Clear Glass Bottles Containers	1.7%	0.6%	Textiles - Synthetic, Mixed, & Unknown	2.1%	0.7%
Green Glass Bottles Containers	0.4%	0.1%	R/C Inerts & Other	0.8%	0.5%
Brown Glass Bottles Containers	0.7%	0.2%	**ELECTRONICS**	**0.4%**	**0.5%**
Other Colored Glass Containers	0.2%	0.2%	E-Waste	0.4%	0.5%
Flat Glass	0.0%	0.0%	**HHW**	**0.2%**	**0.1%**
R/C Glass	0.2%	0.3%	Household Hazardous Waste	0.2%	0.1%
METAL	**8.2%**	**3.2%**	**SPECIAL WASTE**	**2.7%**	**1.7%**
Tin/Steel Cans	0.7%	0.2%	Ash	0.3%	0.5%
Major Appliances	2.2%	2.6%	Treated Medical Waste	0.0%	0.1%
Used Oil Filters	0.0%	0.0%	Mattresses	0.3%	0.5%
Other Ferrous	2.6%	1.3%	Bulky Items	1.4%	1.3%
Aluminum Cans	0.6%	0.1%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.5%	0.1%	Other Tires	0.1%	0.1%
Mixed Recoverable Metal	0.6%	0.5%	R/C Special Waste	0.6%	0.3%
R/C Metal	0.9%	0.4%	**MIXED RESIDUE**	**2.4%**	**0.9%**
			Mixed Residue	2.4%	0.9%

Recoverable Paper	13.5%	2.2%	**Potentially Recoverable**	13.4%	2.7%
Other Recoverables	12.9%	3.3%	**Problem Materials**	28.0%	2.9%
Compostable/Potentially Compostable	32.2%	3.7%			

Sample Count **Total Tons**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 77. Composition by Recoverability Group, Combined, Season One vs. Season Two

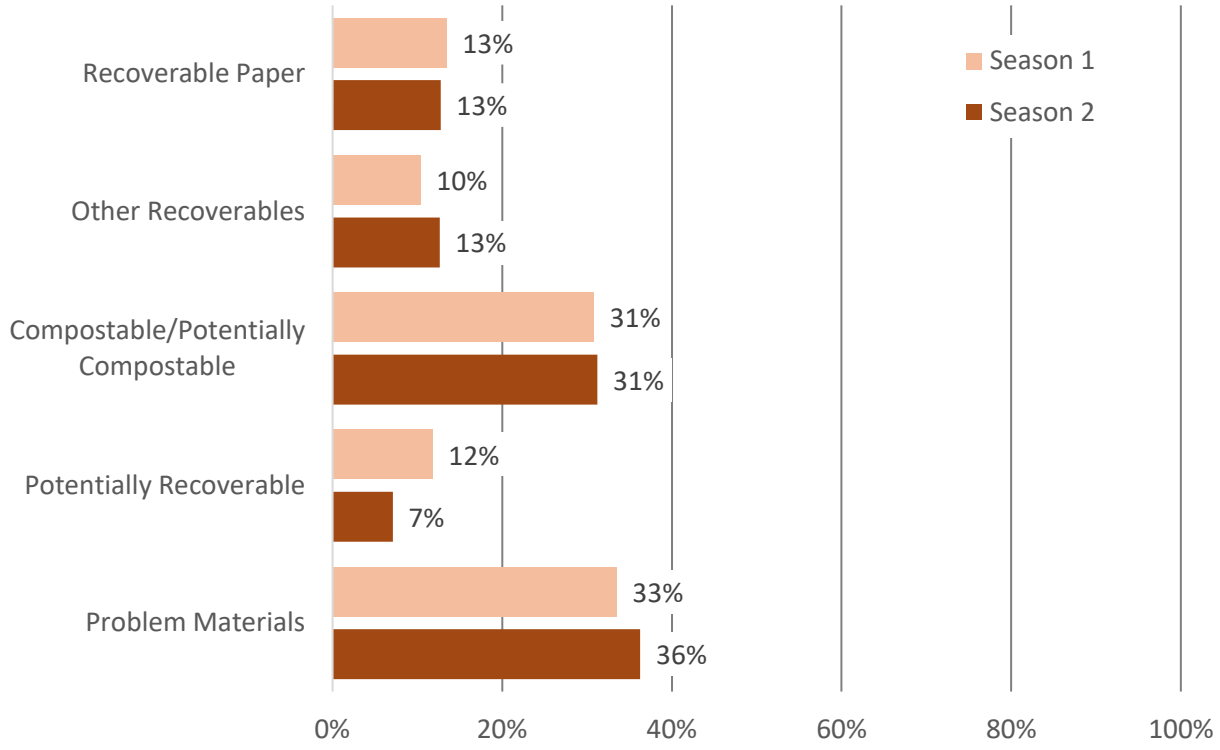


Figure 78. Composition by Material Class, Combined, Season One vs. Season Two

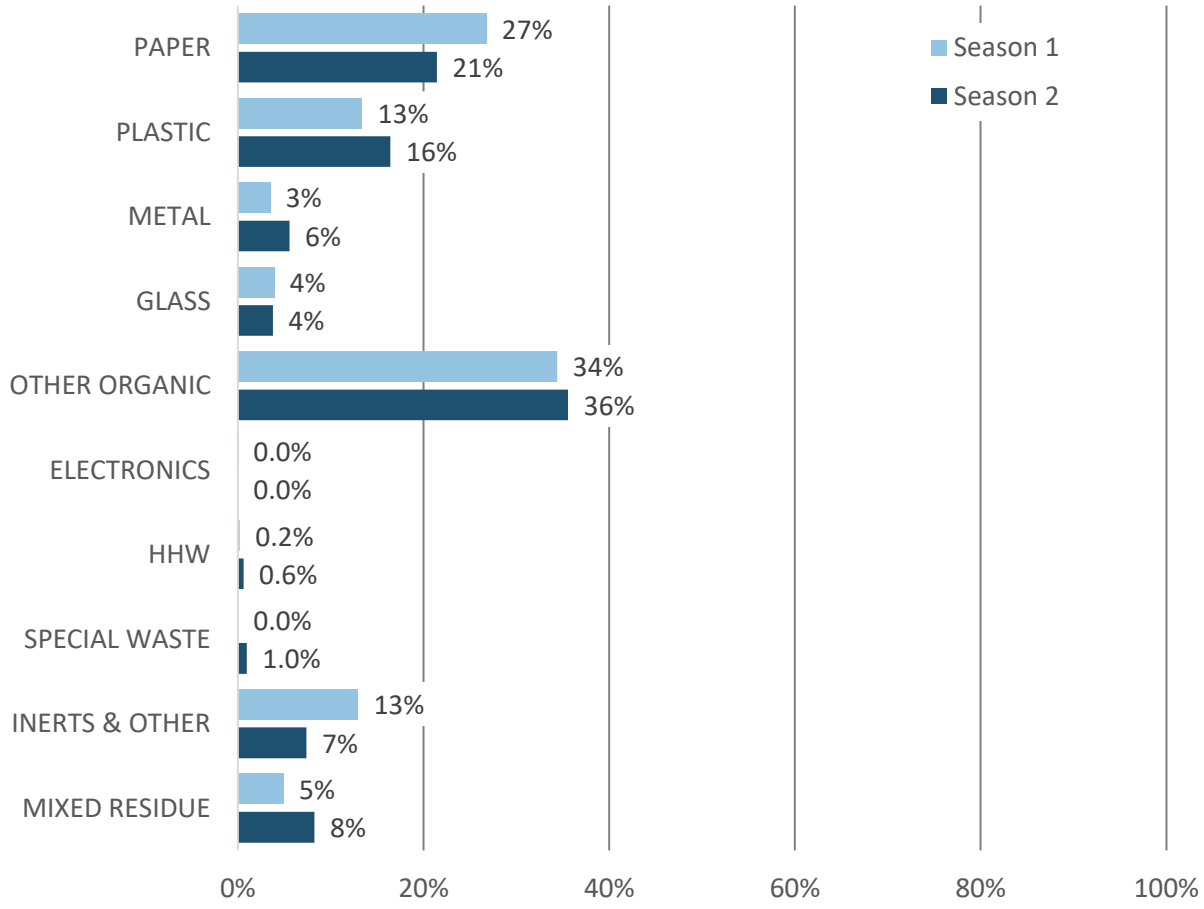


Table 79. Detailed Material Composition, Combined, Season One

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**26.7%**	**3.9%**	**OTHER ORGANIC**	**34.4%**	**5.7%**
Uncoated Corrugated Cardboard	4.1%	2.2%	Food - Potentially Donatable	2.2%	1.6%
Waxed Corrugated Cardboard	0.9%	1.2%	Food - Not Donatable	17.9%	5.4%
Paper Bags	1.3%	0.3%	Leaves Grass	0.1%	0.1%
Other Recyclable Paper	8.0%	2.1%	Prunings Trimmings	0.2%	0.2%
Paper Cups - Compostable	0.0%	0.0%	Branches Stumps	0.0%	0.0%
Paper Cups - Not Compostable	0.4%	0.2%	Manures	0.0%	0.0%
Compostable Paper	9.5%	3.1%	Textiles - Organic	3.3%	1.6%
R/C Paper	2.5%	0.8%	Carpet	0.0%	0.0%
PLASTIC	**13.4%**	**2.0%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.9%	0.3%	R/C Organic	10.7%	5.1%
Other PETE Containers	0.5%	0.2%	**INERTS & OTHER**	**12.9%**	**7.7%**
HDPE Containers	0.4%	0.2%	Concrete	0.0%	0.0%
Polystyrene Food Service Items	0.2%	0.1%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	0.7%	0.2%	Asphalt Composition Shingles	0.0%	0.0%
Compostable Plastics	0.0%	0.0%	Roofing Tar Paper/Felt	0.0%	0.0%
Plastic Trash Bags	2.6%	0.5%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.1%	0.1%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	0.1%	0.1%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	0.4%	0.3%	Clean Dimensional Lumbar	0.2%	0.1%
Other Film	4.4%	0.5%	Clean Engineered Wood	0.4%	0.2%
Rigid Plastic Drip Lines	0.0%	0.0%	Clean Pallets Crates	0.0%	0.0%
Other Recyclable Rigid Plastic	1.3%	0.8%	Other Wood Waste	2.9%	3.3%
Other Non-Recyclable Rigid Plastic	0.0%	0.0%	Clean Gypsum Board	0.0%	0.0%
R/C Plastic	1.7%	1.3%	Painted/Demolition Gypsum Board	0.0%	0.0%
GLASS	**3.9%**	**1.6%**	Rock, Soil, & Fines	2.2%	3.5%
Clear Glass Bottles Containers	2.7%	1.3%	Textiles - Synthetic, Mixed, & Unknown	4.4%	3.3%
Green Glass Bottles Containers	0.1%	0.1%	R/C Inerts & Other	2.8%	3.9%
Brown Glass Bottles Containers	1.0%	0.5%	**ELECTRONICS**	**0.0%**	**0.0%**
Other Colored Glass Containers	0.0%	0.0%	E-Waste	0.0%	0.0%
Flat Glass	0.1%	0.1%	**HHW**	**0.2%**	**0.2%**
R/C Glass	0.1%	0.1%	Household Hazardous Waste	0.2%	0.2%
METAL	**3.5%**	**1.8%**	**SPECIAL WASTE**	**0.0%**	**0.0%**
Tin/Steel Cans	0.6%	0.3%	Ash	0.0%	0.0%
Major Appliances	0.0%	0.0%	Treated Medical Waste	0.0%	0.0%
Used Oil Filters	0.0%	0.0%	Mattresses	0.0%	0.0%
Other Ferrous	0.2%	0.1%	Bulky Items	0.0%	0.0%
Aluminum Cans	0.7%	0.4%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.2%	0.1%	Other Tires	0.0%	0.0%
Mixed Recoverable Metal	1.8%	1.2%	R/C Special Waste	0.0%	0.0%
R/C Metal	0.0%	0.0%	**MIXED RESIDUE**	**4.9%**	**1.4%**
			Mixed Residue	4.9%	1.4%

Recoverable Paper	13.5%	2.7%	**Potentially Recoverable**	11.8%	7.0%
Other Recoverables	10.4%	3.1%	**Problem Materials**	33.5%	6.6%
Compostable/Potentially Compostable	30.8%	7.9%			

Sample Count	**Total Tons**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 80. Detailed Material Composition, Combined, Season Two

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**21.4%**	**5.6%**	**OTHER ORGANIC**	**35.6%**	**3.9%**
Uncoated Corrugated Cardboard	6.3%	5.4%	Food - Potentially Donatable	2.4%	0.9%
Waxed Corrugated Cardboard	0.1%	0.2%	Food - Not Donatable	20.2%	3.5%
Paper Bags	1.0%	0.4%	Leaves Grass	1.8%	1.6%
Other Recyclable Paper	5.4%	1.1%	Prunings Trimmings	1.4%	0.6%
Paper Cups - Compostable	0.0%	0.0%	Branches Stumps	0.0%	0.0%
Paper Cups - Not Compostable	0.3%	0.1%	Manures	0.3%	0.4%
Compostable Paper	5.4%	1.5%	Textiles - Organic	2.3%	1.5%
R/C Paper	2.9%	1.1%	Carpet	0.5%	0.8%
PLASTIC	**16.4%**	**2.2%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.6%	0.3%	R/C Organic	6.9%	2.0%
Other PETE Containers	2.0%	0.5%	**INERTS & OTHER**	**7.4%**	**4.8%**
HDPE Containers	1.1%	0.8%	Concrete	0.0%	0.0%
Polystyrene Food Service Items	0.4%	0.1%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	1.0%	0.2%	Asphalt Composition Shingles	0.1%	0.2%
Compostable Plastics	0.1%	0.1%	Roofing Tar Paper/Felt	0.0%	0.0%
Plastic Trash Bags	2.0%	0.5%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.7%	0.2%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	0.8%	0.4%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	0.0%	0.0%	Clean Dimensional Lumbar	0.0%	0.0%
Other Film	5.0%	1.2%	Clean Engineered Wood	0.0%	0.0%
Rigid Plastic Drip Lines	0.1%	0.1%	Clean Pallets Crates	0.0%	0.0%
Other Recyclable Rigid Plastic	0.2%	0.1%	Other Wood Waste	0.7%	0.6%
Other Non-Recyclable Rigid Plastic	1.0%	0.3%	Clean Gypsum Board	0.0%	0.0%
R/C Plastic	1.6%	0.9%	Painted/Demolition Gypsum Board	1.4%	2.1%
GLASS	**3.8%**	**1.2%**	Rock, Soil, & Fines	3.7%	4.3%
Clear Glass Bottles Containers	2.2%	0.8%	Textiles - Synthetic, Mixed, & Unknown	1.4%	0.6%
Green Glass Bottles Containers	0.5%	0.4%	R/C Inerts & Other	0.0%	0.0%
Brown Glass Bottles Containers	0.9%	0.5%	**ELECTRONICS**	**0.0%**	**0.0%**
Other Colored Glass Containers	0.2%	0.3%	E-Waste	0.0%	0.0%
Flat Glass	0.0%	0.0%	**HHW**	**0.6%**	**0.6%**
R/C Glass	0.0%	0.0%	Household Hazardous Waste	0.6%	0.6%
METAL	**5.6%**	**1.9%**	**SPECIAL WASTE**	**1.0%**	**1.0%**
Tin/Steel Cans	1.1%	0.2%	Ash	0.2%	0.3%
Major Appliances	0.0%	0.0%	Treated Medical Waste	0.0%	0.0%
Used Oil Filters	0.0%	0.0%	Mattresses	0.0%	0.0%
Other Ferrous	2.0%	1.8%	Bulky Items	0.0%	0.0%
Aluminum Cans	0.8%	0.2%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.6%	0.3%	Other Tires	0.0%	0.0%
Mixed Recoverable Metal	0.5%	0.8%	R/C Special Waste	0.8%	1.1%
R/C Metal	0.6%	0.6%	**MIXED RESIDUE**	**8.3%**	**5.7%**
			Mixed Residue	8.3%	5.7%

Recoverable Paper	12.8%	5.7%	**Potentially Recoverable**	7.1%	2.6%
Other Recoverables	12.6%	3.4%	**Problem Materials**	36.3%	5.0%
Compostable/Potentially Compostable	31.2%	4.7%			

Sample Count	**Total Tons**

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Figure 79. Composition by Recoverability Group, Self-haul, Season One vs. Season Two

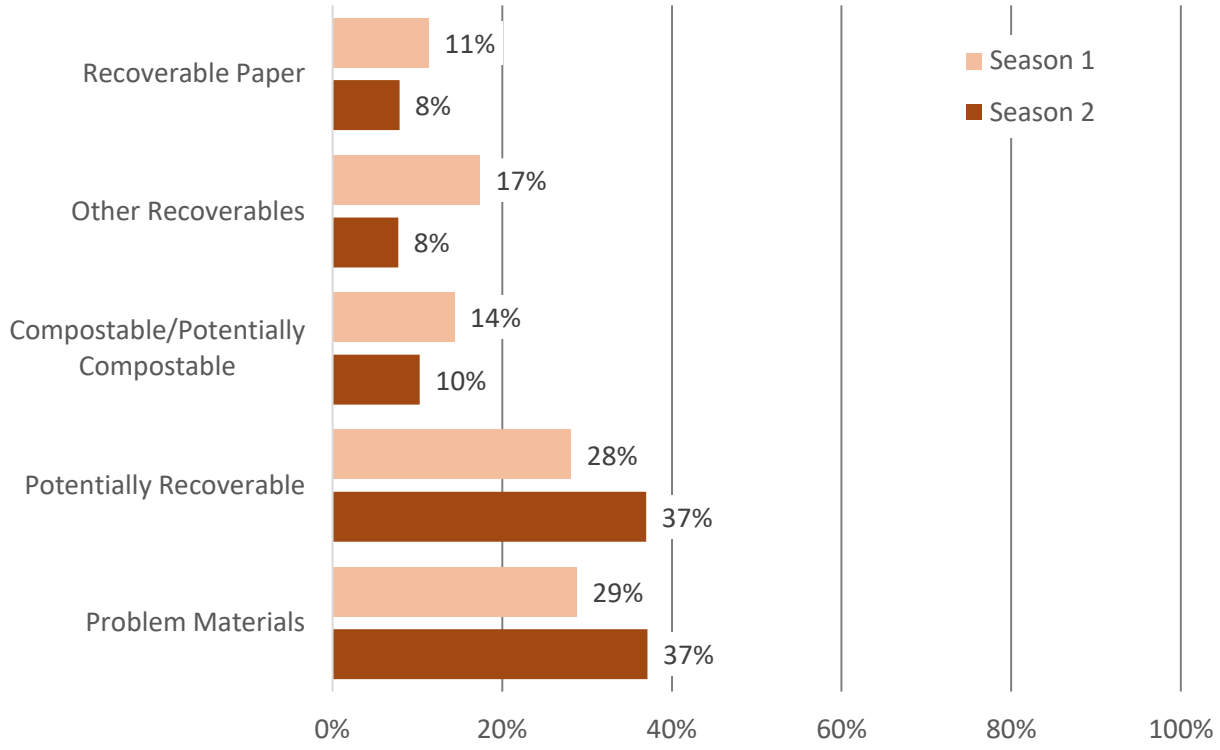


Figure 80. Composition by Material Class, Self-haul, Season One vs. Season Two

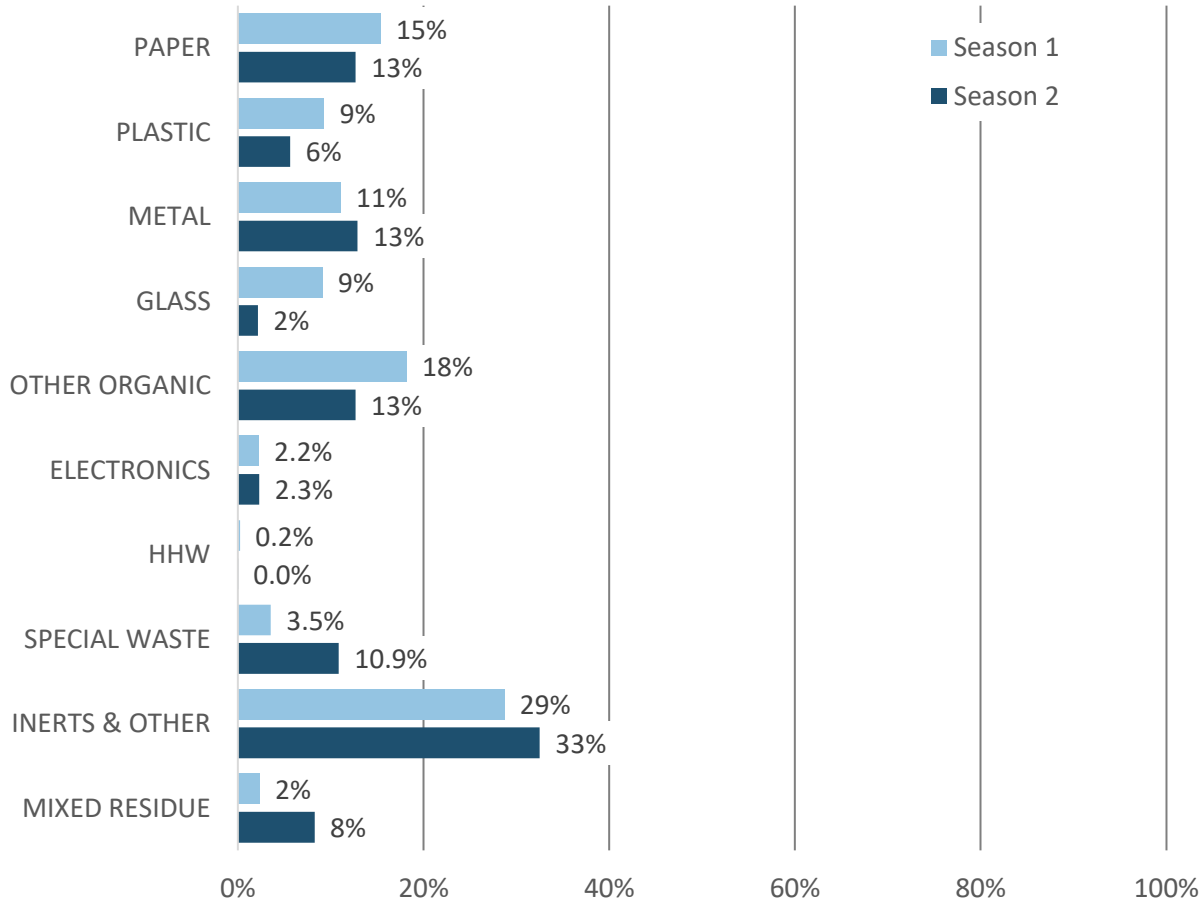


Table 81. Detailed Material Composition, Self-haul, Season One

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**15.4%**	**4.7%**	**OTHER ORGANIC**	**18.2%**	**6.2%**
Uncoated Corrugated Cardboard	4.0%	2.4%	Food - Potentially Donatable	2.5%	1.8%
Waxed Corrugated Cardboard	0.0%	0.0%	Food - Not Donatable	8.0%	4.2%
Paper Bags	0.7%	0.4%	Leaves Grass	1.3%	1.4%
Other Recyclable Paper	6.7%	3.0%	Prunings Trimmings	0.9%	0.7%
Paper Cups - Compostable	0.0%	0.0%	Branches Stumps	0.0%	0.1%
Paper Cups - Not Compostable	0.0%	0.0%	Manures	0.0%	0.0%
Compostable Paper	1.7%	0.8%	Textiles - Organic	4.7%	3.3%
R/C Paper	2.3%	1.0%	Carpet	0.2%	0.3%
PLASTIC	**9.3%**	**2.8%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.5%	0.3%	R/C Organic	0.6%	0.5%
Other PETE Containers	0.4%	0.2%	**INERTS & OTHER**	**28.7%**	**10.3%**
HDPE Containers	0.5%	0.2%	Concrete	0.0%	0.0%
Polystyrene Food Service Items	0.0%	0.0%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	1.0%	0.9%	Asphalt Composition Shingles	0.1%	0.2%
Compostable Plastics	0.0%	0.0%	Roofing Tar Paper/Felt	0.3%	0.5%
Plastic Trash Bags	0.7%	0.3%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.1%	0.1%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	0.7%	1.0%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	0.2%	0.1%	Clean Dimensional Lumbar	4.1%	2.8%
Other Film	1.6%	1.0%	Clean Engineered Wood	2.5%	2.4%
Rigid Plastic Drip Lines	0.0%	0.0%	Clean Pallets Crates	0.0%	0.0%
Other Recyclable Rigid Plastic	1.9%	1.0%	Other Wood Waste	8.2%	6.0%
Other Non-Recyclable Rigid Plastic	0.4%	0.2%	Clean Gypsum Board	2.5%	4.0%
R/C Plastic	1.3%	0.6%	Painted/Demolition Gypsum Board	0.0%	0.0%
GLASS	**9.1%**	**6.2%**	Rock, Soil, & Fines	6.9%	6.6%
Clear Glass Bottles Containers	4.9%	3.3%	Textiles - Synthetic, Mixed, & Unknown	2.4%	1.3%
Green Glass Bottles Containers	0.4%	0.5%	R/C Inerts & Other	1.7%	1.3%
Brown Glass Bottles Containers	0.1%	0.1%	**ELECTRONICS**	**2.2%**	**1.9%**
Other Colored Glass Containers	0.0%	0.0%	E-Waste	2.2%	1.9%
Flat Glass	3.4%	5.5%	**HHW**	**0.2%**	**0.2%**
R/C Glass	0.3%	0.4%	Household Hazardous Waste	0.2%	0.2%
METAL	**11.1%**	**6.2%**	**SPECIAL WASTE**	**3.5%**	**3.6%**
Tin/Steel Cans	0.4%	0.3%	Ash	0.0%	0.0%
Major Appliances	0.0%	0.0%	Treated Medical Waste	0.0%	0.0%
Used Oil Filters	0.0%	0.0%	Mattresses	0.4%	0.7%
Other Ferrous	5.7%	5.9%	Bulky Items	3.1%	3.1%
Aluminum Cans	0.6%	0.4%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.5%	0.5%	Other Tires	0.0%	0.0%
Mixed Recoverable Metal	1.5%	1.8%	R/C Special Waste	0.0%	0.0%
R/C Metal	2.4%	2.3%	**MIXED RESIDUE**	**2.3%**	**3.0%**
			Mixed Residue	2.3%	2.9%
Recoverable Paper	11.3%	4.5%	**Potentially Recoverable**	28.1%	9.8%
Other Recoverables	17.4%	6.9%	**Problem Materials**	28.8%	8.3%
Compostable/Potentially Compostable	14.4%	6.1%			
Sample Count			**Total Tons**		

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Table 82. Detailed Material Composition, Self-haul, Season Two

Material	Estimated Percent	+/-	Material	Estimated Percent	+/-
PAPER	**12.7%**	**5.2%**	**OTHER ORGANIC**	**12.7%**	**9.0%**
Uncoated Corrugated Cardboard	1.4%	0.6%	Food - Potentially Donatable	1.1%	1.0%
Waxed Corrugated Cardboard	0.0%	0.0%	Food - Not Donatable	7.5%	8.1%
Paper Bags	0.5%	0.3%	Leaves Grass	0.1%	0.1%
Other Recyclable Paper	6.0%	4.0%	Prunings Trimmings	0.3%	0.5%
Paper Cups - Compostable	0.0%	0.0%	Branches Stumps	0.0%	0.0%
Paper Cups - Not Compostable	0.1%	0.1%	Manures	0.0%	0.0%
Compostable Paper	1.2%	0.6%	Textiles - Organic	0.6%	0.6%
R/C Paper	3.4%	1.4%	Carpet	2.9%	4.5%
PLASTIC	**5.6%**	**2.1%**	Animal Carcasses	0.0%	0.0%
PETE Water Bottles	0.0%	0.0%	R/C Organic	0.3%	0.3%
Other PETE Containers	0.2%	0.1%	**INERTS & OTHER**	**32.5%**	**15.3%**
HDPE Containers	0.4%	0.2%	Concrete	0.0%	0.0%
Polystyrene Food Service Items	0.0%	0.0%	Asphalt Paving	0.0%	0.0%
#3-#7 Other Containers	0.4%	0.2%	Asphalt Composition Shingles	0.2%	0.4%
Compostable Plastics	0.0%	0.0%	Roofing Tar Paper/Felt	0.2%	0.3%
Plastic Trash Bags	0.9%	0.4%	Roofing Mastic	0.0%	0.0%
Plastic Grocery & Merchandise Bags	0.0%	0.0%	Built-up Roofing	0.0%	0.0%
Non-Bag Industrial Packaging Film	0.3%	0.4%	Other Asphalt Roofing Material	0.0%	0.0%
Film Products	0.5%	0.4%	Clean Dimensional Lumbar	10.9%	13.5%
Other Film	0.7%	0.6%	Clean Engineered Wood	3.2%	3.0%
Rigid Plastic Drip Lines	0.1%	0.1%	Clean Pallets Crates	0.0%	0.0%
Other Recyclable Rigid Plastic	0.2%	0.2%	Other Wood Waste	7.7%	5.8%
Other Non-Recyclable Rigid Plastic	0.9%	0.5%	Clean Gypsum Board	0.3%	0.4%
R/C Plastic	1.0%	0.6%	Painted/Demolition Gypsum Board	0.3%	0.5%
GLASS	**2.2%**	**1.8%**	Rock, Soil, & Fines	0.1%	0.2%
Clear Glass Bottles Containers	0.9%	0.6%	Textiles - Synthetic, Mixed, & Unknown	4.7%	2.0%
Green Glass Bottles Containers	0.4%	0.5%	R/C Inerts & Other	4.9%	4.7%
Brown Glass Bottles Containers	0.9%	0.7%	**ELECTRONICS**	**2.3%**	**1.8%**
Other Colored Glass Containers	0.0%	0.0%	E-Waste	2.3%	1.8%
Flat Glass	0.0%	0.0%	**HHW**	**0.0%**	**0.0%**
R/C Glass	0.0%	0.0%	Household Hazardous Waste	0.0%	0.0%
METAL	**12.9%**	**12.0%**	**SPECIAL WASTE**	**10.9%**	**9.1%**
Tin/Steel Cans	0.8%	0.7%	Ash	0.0%	0.0%
Major Appliances	0.9%	1.5%	Treated Medical Waste	0.0%	0.0%
Used Oil Filters	0.0%	0.0%	Mattresses	3.9%	4.0%
Other Ferrous	1.3%	0.9%	Bulky Items	6.9%	7.0%
Aluminum Cans	0.8%	0.5%	Vehicle & Truck Tires	0.0%	0.0%
Other Non-ferrous	0.7%	0.5%	Other Tires	0.0%	0.0%
Mixed Recoverable Metal	0.3%	0.2%	R/C Special Waste	0.1%	0.2%
R/C Metal	8.2%	11.4%	**MIXED RESIDUE**	**8.3%**	**4.1%**
			Mixed Residue	8.3%	4.1%
Recoverable Paper	7.9%	4.6%	**Potentially Recoverable**	37.0%	16.9%
Other Recoverables	7.7%	3.4%	**Problem Materials**	37.1%	15.2%
Compostable/Potentially Compostable	10.3%	8.3%			
Sample Count			**Total Tons**		

Confidence intervals calculated at the 90% confidence level. Percentages for material types may not total 100% due to rounding.

Appendix F. Waste Composition Changes and Trends by Jurisdiction

Table 83. Waste Composition Changes and Trends, 2010 vs. 2020, Arcata Overall

Material Class	Composition† 2010	Composition† 2020	Change	Change in Composition	t-Statistic	p-Value	Strength of Results
Paper	21.7%	24.7%	13.9% ▲	3.0% ▲	1.23	0.221	not significant
Plastic	13.0%	14.5%	11.1% ▲	1.4% ▲	0.88	0.380	not significant
Glass	2.7%	2.0%	-25.5% ▼	-0.7% ▼	1.29	0.199	not significant
Metal	8.5%	5.1%	-39.5% ▼	-3.4% ▼	1.26	0.213	not significant
Other Organic	39.6%	27.6%	-30.3% ▼	-12.0% ▼	3.26	0.002 *	stat. significant
Inerts and Other	9.6%	14.1%	46.2% ▲	4.5% ▲	1.17	0.244	not significant
Electronics	1.2%	2.0%	64.3% ▲	0.8% ▲	0.68	0.500	not significant
Household Hazardous Waste	0.2%	0.3%	24.6% ▲	0.1% ▲	0.40	0.690	not significant
Special Waste	0.8%	4.5%	442.7% ▲	3.6% ▲	1.46	0.147	not significant
Mixed Residue	2.5%	5.2%	106.4% ▲	2.7% ▲	1.67	0.099	not significant
Number of Samples	**47**	**47**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Table 84. Waste Composition Changes and Trends, 2010 vs. 2020, Eureka Overall

Material Class	Composition† 2010	Composition† 2020	Change	Change in Composition	t-Statistic	p-Value	Strength of Results
Paper	24.8%	19.3%	-22.3% ▼	-5.6% ▼	2.27	0.026	not significant
Plastic	14.8%	15.1%	2.0% ▲	0.3% ▲	0.15	0.884	not significant
Glass	2.7%	3.6%	33.4% ▲	0.9% ▲	0.51	0.610	not significant
Metal	5.4%	5.6%	2.9% ▲	0.2% ▲	0.10	0.921	not significant
Other Organic	40.9%	30.0%	-26.6% ▼	-10.9% ▼	2.71	0.008 *	stat. significant
Inerts and Other	6.3%	17.7%	179.5% ▲	11.4% ▲	1.63	0.107	not significant
Electronics	0.7%	1.0%	39.0% ▲	0.3% ▲	0.39	0.694	not significant
Household Hazardous Waste	0.3%	1.0%	195.8% ▲	0.7% ▲	0.83	0.409	not significant
Special Waste	3.4%	5.1%	49.8% ▲	1.7% ▲	0.44	0.659	not significant
Mixed Residue	0.6%	1.7%	192.8% ▲	1.1% ▲	2.63	0.010 *	stat. significant
Number of Samples	**48**	**47**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Table 85. Waste Composition Changes and Trends, 2010 vs. 2020, Blue Lake Overall

	Composition†			Change in			
Material Class	2010	2020	Change	Composition	t-Statistic	p-Value	Strength of Results
Paper	23.1%	19.7%	-14.7% ▼	-3.4% ▼	0.76	0.453	not significant
Plastic	16.1%	12.2%	-24.4% ▼	-3.9% ▼	1.40	0.172	not significant
Glass	2.3%	4.4%	88.1% ▲	2.1% ▲	0.97	0.339	not significant
Metal	7.6%	10.7%	41.2% ▲	3.1% ▲	0.68	0.504	not significant
Other Organic	38.0%	27.1%	-28.6% ▼	-10.9% ▼	1.60	0.120	not significant
Inerts and Other	11.3%	16.5%	46.3% ▲	5.2% ▲	0.67	0.511	not significant
Electronics	0.2%	2.4%	1470.2% ▲	2.3% ▲	1.74	0.092	not significant
Household Hazardous Waste	0.2%	0.3%	45.3% ▲	0.1% ▲	0.47	0.639	not significant
Special Waste	0.6%	0.4%	-34.0% ▼	-0.2% ▼	0.31	0.761	not significant
Mixed Residue	0.7%	6.3%	800.5% ▲	5.6% ▲	2.84	0.008 *	stat. significant
Number of Samples	**15**	**15**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Table 86. Waste Composition Changes and Trends, 2010 vs. 2020, Ferndale Overall

	Composition†			Change in			
Material Class	2010	2020	Change	Composition	t-Statistic	p-Value	Strength of Results
Paper	21.7%	16.2%	-25.6% ▼	-5.6% ▼	1.29	0.207	not significant
Plastic	17.4%	8.8%	-49.3% ▼	-8.6% ▼	2.40	0.023	not significant
Glass	7.4%	3.9%	-47.2% ▼	-3.5% ▼	1.21	0.237	not significant
Metal	5.7%	6.6%	16.0% ▲	0.9% ▲	0.27	0.786	not significant
Other Organic	32.0%	39.8%	24.4% ▲	7.8% ▲	1.49	0.148	not significant
Inerts and Other	4.7%	15.6%	235.0% ▲	11.0% ▲	1.65	0.110	not significant
Electronics	0.4%	0.2%	-45.5% ▼	-0.2% ▼	0.56	0.583	not significant
Household Hazardous Waste	1.0%	0.2%	-83.8% ▼	-0.8% ▼	1.68	0.104	not significant
Special Waste	6.3%	0.3%	-95.0% ▼	-6.0% ▼	1.05	0.303	not significant
Mixed Residue	3.5%	8.4%	137.7% ▲	4.9% ▲	0.97	0.342	not significant
Number of Samples	**15**	**15**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Table 87. Waste Composition Changes and Trends, 2010 vs. 2020, Unincorporated Overall

Material Class	Composition† 2010	Composition† 2020	Change	Change in Composition	t-Statistic	p-Value	Strength of Results
Paper	20.9%	21.0%	0.5% ▲	0.1% ▲	0.05	0.958	not significant
Plastic	12.3%	14.3%	16.5% ▲	2.0% ▲	1.94	0.055	not significant
Glass	2.4%	3.2%	34.9% ▲	0.8% ▲	1.32	0.190	not significant
Metal	7.5%	7.7%	2.8% ▲	0.2% ▲	0.09	0.927	not significant
Other Organic	46.0%	29.6%	-35.7% ▼	-16.4% ▼	5.36	0.000 *	stat. significant
Inerts and Other	9.1%	14.5%	58.0% ▲	5.3% ▲	1.57	0.120	not significant
Electronics	0.4%	1.2%	207.5% ▲	0.8% ▲	2.16	0.033	not significant
Household Hazardous Waste	0.4%	0.5%	15.5% ▲	0.1% ▲	0.22	0.828	not significant
Special Waste	0.4%	3.2%	661.7% ▲	2.8% ▲	2.46	0.016	not significant
Mixed Residue	0.6%	4.8%	775.7% ▲	4.3% ▲	6.10	0.000 *	stat. significant
Number of Samples	**47**	**47**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Table 88. Waste Composition Changes and Trends, 2010 vs. 2020, Rio Dell Overall

Material Class	Composition† 2010	Composition† 2020	Change	Change in Composition	t-Statistic	p-Value	Strength of Results
Paper	18.1%	20.5%	13.4% ▲	2.4% ▲	0.62	0.541	not significant
Plastic	22.8%	18.1%	-20.4% ▼	-4.7% ▼	0.76	0.454	not significant
Glass	1.6%	2.8%	81.2% ▲	1.3% ▲	1.29	0.209	not significant
Metal	7.8%	4.8%	-38.8% ▼	-3.0% ▼	1.32	0.198	not significant
Other Organic	40.8%	24.7%	-39.5% ▼	-16.1% ▼	3.07	0.005 *	stat. significant
Inerts and Other	3.6%	11.2%	208.8% ▲	7.5% ▲	2.54	0.017	not significant
Electronics	0.5%	0.5%	-5.7% ▼	0.0% ▼	0.06	0.956	not significant
Household Hazardous Waste	0.3%	0.1%	-50.2% ▼	-0.1% ▼	0.57	0.577	not significant
Special Waste	3.2%	2.3%	-28.6% ▼	-0.9% ▼	0.33	0.745	not significant
Mixed Residue	1.4%	15.1%	947.1% ▲	13.6% ▲	3.24	0.003 *	stat. significant
Number of Samples	**15**	**15**					

†*Composition data is unweighted for the t-test*

**Statistically significant difference = 0.01 or less*

Five-Year CIWMP/RAIWMP Review Report Template

Public Resources Code (PRC) Sections 41770 and 41822, and Title 14, California Code of Regulations (CCR) Section 18788 require that each countywide or regional agency integrated waste management plan (CIWMP or RAIWMP), and the elements thereof, be reviewed, revised if necessary, and submitted to the Department of Resources Recycling and Recovery (CalRecycle) every five years. CalRecycle developed this Five-Year CIWMP/RAIWMP Review Report template to streamline the Five-Year CIWMP/RAIWMP review, reporting, and approval process.

A county or regional agency may use this template to document its compliance with these regulatory review and reporting requirements and as a tool in its review, including obtaining Local Task Force (LTF) comments on areas of the CIWMP or RAIWMP that need revision, if any. This template also can be finalized based on these comments and submitted to CalRecycle as the county or regional agency's Five-Year CIWMP or RAIWMP Review Report.

The Five-Year CIWMP/RAIWMP Review Report Template Instructions describe each section and provide general guidelines with respect to preparing the report. Completed and signed reports should be submitted to the CalRecycle's Local Assistance & Market Development (LAMD) Branch at the address below. Upon report receipt, LAMD staff may request clarification and/or additional information if the details provided in the report are not clear or are not complete. Within 90 days of receiving a *complete* Five–Year CIWMP/RAIWMP Review Report, LAMD staff will review the report and prepare their findings for CalRecycle consideration for approval.

If you have any questions about the Five–Year CIWMP/RAIWMP Review Report process or how to complete this template, please contact your LAMD representative at (916) 341-6199. Mail the completed and signed Five-Year CIWMP/RAIWMP Review Report to:

Dept. of Resources Recycling & Recovery
Local Assistance & Market Development, MS-9
P. O. Box 4025
Sacramento, CA 95812-4025

General Instructions: Please complete Sections 1 through 7, and all other applicable subsections. Double click on shaded text/areas ( ) to select or add text.

SECTION 1.0 COUNTY OR REGIONAL AGENCY INFORMATION			
I certify that the information in this document is true and correct to the best of my knowledge, and that I am authorized to complete this report and request approval of the CIWMP or RAIWMP Five-Year Review Report on behalf of:			
County or Regional Agency Name Humboldt County (Prepared by Humboldt Waste Management Authority)		County(s) [if a RAIWMP Review Report]	
Authorized Signature	Title Executive Director, HWMA		
Type/Print Name of Person Signing Jill K. Duffy		Date	Phone (707) 268-8680
Person Completing This Form (please print or type) Tyler Egerer		Title Adm. Svcs. Director	Phone (707) 268-8680
Mailing Address 1059 West Hawthorne Street	City Eureka	State CA	Zip 95501
E-mail Address jduffy@hwma.net			

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SECTION 2.0 BACKGROUND

This is the county's fifth Five–Year Review Report since the approval of the CIWMP.

The following changes have occurred since the approval of the county's planning documents or the last Five-Year CIWMP Review Report (whichever is most recent):

- ☐ Diversion goal reduction
- ☐ New regional agency
- ☐ Changes to regional agency
- ☐ New city (name(s) _____)
- ☐ Other _____

Additional Information (optional)

SECTION 3.0 LOCAL TASK FORCE REVIEW

a. In accordance with Title 14 CCR, Section 18788, the Local Task Force (LTF) reviewed each element and plan included in the CIWMP and finalized its comments
☒ at the _____ LTF meeting. ☐ electronically (fax, e-mail) ☐ other (Explain): _____

b. The county received the written comments from the LTF on _____.

c. A copy of the LTF comments
☐ is included as Appendix _____.
☐ was submitted to CalRecycle on _____.

SECTION 4.0 TITLE 14, CALIFORNIA CODE of REGULATIONS SECTION 18788 (3) (A) THROUGH (H)

The subsections below address not only the areas of change specified in the regulations, but also provide specific analyses regarding the continued adequacy of the planning documents in light of those changes, including a determination on any need for revision to one or more of the planning documents.

Section 4.1 Changes in Demographics in the County or Regional Agency

When preparing the CIWMP Review Report, the county or regional agency must address at least the changes in demographics.

The following resources are provided to facilitate this analysis:

1. Demographic data, including population, taxable sales, employment, and consumer price index by jurisdiction for years up to 2006, are available at: https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/AdjustmentFactors. Data for years beyond 2006 can be found on the following websites:
    - Population: Department of Finance E-4 Historical Population Estimates for Cities, Counties, and the State
    - Taxable Sales: Board of Equalization

- Employment: Employment Development Department Click on the link to Local Area Profile, select the county from the drop down menu, then click on the "View Local Are Profile" button.
- Consumer Price Index: Department of Industrial Relations

2. The Demographic Research Unit of the California Department of Finance is designated as the single official source of demographic data for State planning and budgeting (e.g., find E-5 City/County Population and Housing Estimates under Reports and Research Papers and then Estimates).

3. The Department of Finance's Demographic Research Unit also provides a list of State Census Data Center Network Regional Offices.

Analysis

Upon review of demographic changes since 2003:[1]

☒ The demographic changes since the development of the CIWMP do not warrant a revision to any of the countywide planning documents. Specifically, _____.

☐ These demographic changes since the development of the CIWMP warrant a revision to one or more of the countywide planning documents. Specifically, _____. See Section 7 for the revision schedule(s).

Additional Analysis (optional)

Between 2003-2021, with an annual population change of less than +/- 1% per year, and with less than a change of 0.5% most years, revising planning documents due to population changes is deemed unnecessary.

Section 4.2 Changes in Quantities of Waste within the County or Regional Agency; and Changes in Permitted Disposal Capacity and Waste Disposed in the County or Regional Agency

A number of tools to facilitate the analysis and review of such changes in the waste stream are available from the following CalRecycle sources:

1. Various statewide, regional, and local disposal reports are available at http://www.calrecycle.ca.gov/LGCentral/Reports/DRS/Default.aspx.
   a. CalRecycle's Disposal Reporting System tracks and reports the annual estimates of the disposal amounts for jurisdictions in California; additional California solid waste statistics are also available.
   b. CalRecycle's Waste Flow by Destination or Origin reports include solid waste disposal, export, and alternative daily cover. They show how much waste was produced within the boundaries of an individual city, or within all jurisdictions comprising a county or regional agency. These data also cover what was disposed at a particular facility or at all facilities within a county or regional agency.

[1] The year of the data included in the planning documents, which is generally 1990 or 1991.

2. The Waste Characterization Database provides estimates of the types and amounts of materials in the waste streams of *individual California jurisdictions* in 1999. For background information and more recent statewide characterizations, please see https://www2.calrecycle.ca.gov/WasteCharacterization/
3. CalRecycle's Countywide, Regionwide, and Statewide Jurisdiction Diversion Progress Report provides both summary and detailed information on compliance, diversion rates/50 percent equivalent per capita disposal target and rates, and waste diversion program implementation for all California jurisdictions. Diversion program implementation summaries are available at https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram

Together, these reports help illustrate changes in the quantities of waste within the county or regional agency as well as in permitted disposal capacity. This information also summarizes each jurisdiction's progress in implementing the Source Reduction and Recycling Element (SRRE) and complying with the 50 percent diversion rate requirement (now calculated as the 50 percent equivalent per capita disposal target), see Per Capita Disposal and Goal Measurement (2007 and Later) for details

☐ The county or regional agency (if it includes the entire county) continues to have adequate disposal capacity (i.e., equal to or greater than 15 years).
☒ The county does not have 15 years remaining disposal capacity within its physical boundaries, but the Siting Element does provide a strategy[2] for obtaining 15 years remaining disposal capacity.
☐ The county does not have 15 years remaining disposal capacity and the Siting Element does not provide a strategy[2] for obtaining 15 years remaining disposal capacity. See Section 7 for the revision schedule(s).

Analysis

☒ These changes in quantities of waste and changes in permitted disposal capacity since the development of the CIWMP do not warrant a revision to any of the countywide planning documents. Specifically, .

☐ These changes in quantities of waste and changes in permitted disposal capacity since the development of the CIWMP warrant a revision to one or more of the planning documents. Specifically, _____. See Section 7 for the revision schedule(s).

Additional Analysis (optional)

Letters regarding landfill disposal capacity, from Dry Creek Landfill and Anderson Landfill, are attached. These are the only landfills currently receiving solid wastes from the County of Humboldt.

[2] Such a strategy includes a description of the diversion or export programs to be implemented to address the solid waste capacity needs. The description shall identify the existing solid waste disposal facilities, including those outside of the county or regional agency, which will be used to implement these programs. The description should address how the proposed programs shall provide the county or regional agency with sufficient disposal capacity to meet the required minimum of 15 years of combined permitted disposal capacity.

Section 4.3 Changes in Funding Source for Administration of the Siting Element (SE) and Summary Plan (SP)

Since the approval of the CIWMP or the last Five-Year CIWMP Review Report (whichever is most recent), the county experienced the following significant changes in funding for the SE or SP:

- _____

Analysis

☒ There have been no significant changes in funding for administration of the SE and SP or the changes that have occurred do not warrant a revision to any of the countywide planning documents. Specifically, _____.

☐ These changes in funding for the administration of the SE and SP warrant a revision to one or more of the countywide planning documents. Specifically, _____. See Section 7 for the revision schedule(s).

Additional Analysis (optional)

_____

Section 4.4 Changes in Administrative Responsibilities

The county experienced significant changes in the following administrative responsibilities since the approval of the CIWMP or the last Five-Year CIWMP Review Report (whichever is most recent):

- _____

Analysis

☒ There have been no significant changes in administrative responsibilities or the changes in administrative responsibilities do not warrant a revision to any of the planning documents. Specifically, _____.

☐ These changes in administrative responsibilities warrant a revision to one or more of the planning documents. Specifically, _____. See Section 7 for the revision schedule(s).

Additional Analysis (optional)

_____

Section 4.5 Programs that Were Scheduled to Be Implemented, But Were Not

This section addresses programs that were scheduled to be implemented, but were not; why they were not implemented; the progress of programs that were implemented; a statement as to whether programs are meeting their goals; and if not, what contingency measures are being enacted to ensure compliance with Public Resources Code Section 41751.

1. Progress of Program Implementation
   a. SRRE and Household Hazardous Waste Element (HHWE)
      ☒ All program implementation information has been updated in the CalRecycle Electronic Annual Report (EAR), including the reason for not implementing specific programs, if applicable.

☐ All program implementation information has not been updated in the EAR. Attachment _____ lists the SRRE and/or HHWE programs selected for implementation, but which have not yet been implemented, including a statement as to why they were not implemented.

b. Nondisposal Facility Element (NDFE)
☒ There have been no changes in the use of nondisposal facilities (based on the current NDFEs and any amendments and/or updates).
☐ Attachment _____ lists changes in the use of nondisposal facilities (based on the current NDFEs).

c. Countywide Siting Element (SE)
☒ There have been no changes to the information provided in the current SE.
☐ Attachment _____ lists changes to the information provided in the current SE.

d. Summary Plan
☒ There have been no changes to the information provided in the current SP.
☐ Attachment _____ lists changes to the information provided in the current SP.

2. Statement regarding whether Programs are Meeting their Goals
☒ The programs are meeting their goals.
☐ The programs are not meeting their goals. The discussion that follows in the analysis section below addresses the contingency measures that are being enacted to ensure compliance with PRC Section 41751 (i.e., specific steps are being taken by local agencies, acting independently and in concert with _____, to achieve the purposes of the California Integrated Waste Management Act of 1989) and whether the listed changes in program implementation necessitate a revision to one or more of the planning documents. _____

Analysis
☐ The aforementioned changes in program implementation do not warrant a revision to any of the planning documents. Specifically, _____.
☐ Changes in program implementation warrant a revision to one or more of the planning documents. Specifically, _____. See Section 7 for the revision schedule(s).

Additional Analysis (optional)

Section 4.6 Changes in Available Markets for Recyclable Materials

The county experienced changes in the following available markets for recyclable materials since the approval of the CIWMP or the last Five-Year CIWMP Review Report (whichever is most recent):

Analysis
☒ There are no significant changes in available markets for recycled materials to warrant a revision to any of the planning documents. Specifically, _____.
☐ Changes in available markets for recycled materials warrant a revision to one or more of the planning documents. Specifically, _____. See Section 7 for the revision schedule(s).

Additional Analysis (optional)

Section 4.7 Changes in the Implementation Schedule

The following addresses changes to the county's implementation schedule that are not already addressed in Section 4.5:

Analysis

☒ There are no significant changes in the implementation schedule to warrant a revision to any of the planning documents. Specifically, _____.

☐ Changes in the implementation schedule warrant a revision to one or more of the planning documents. Specifically, _____.

Additional Analysis (optional)

Note: Consider for each jurisdiction within the county or regional agency the changes noted in Sections 4.1 through 4.7 and explain whether the changes necessitate revisions to any of the jurisdictions' planning documents.

SECTION 5.0 OTHER ISSUES OR SUPPLEMENTARY INFORMATION (optional)

The following addresses any other significant issues/changes in the county and whether these changes affect the adequacy of the CIWMP to the extent that a revision to one or more of the planning documents is needed:

Analysis

SECTION 6.0 ANNUAL REPORT REVIEW

☒ The Annual Reports for each jurisdiction in the county have been reviewed, specifically those sections that address the adequacy of the CIWMP elements. No jurisdictions reported the need to revise one or more of these planning documents.

☐ The Annual Reports for each jurisdiction in the county have been reviewed, specifically those sections that address the adequacy of the CIWMP (or RAIWMP) elements. The following jurisdictions reported the need to revise one or more of these planning documents, as listed.

_____

Analysis

The discussion below addresses the county's evaluation of the Annual Report data relating to planning document adequacy and includes determination regarding the need to revise one or more of the documents:

_____

SECTION 7.0 REVISION SCHEDULE (if required)

PO Box 3187
Central Point OR 97502
541 779 4161
Fax 541 779 4366

May 22, 2013

Ms. Karen Sherman
Senior Program Analyst
Humboldt Waste Management Authority
100 H Street
Suite 100
Eureka, CA 95501

RE: Dry Creek Landfill Capacity Declaration

Dear Ms. Sherman:

The purpose of this letter is to confirm that Dry Creek Landfill has more than 15 years of capacity for solid waste disposal. Current estimates on site life are in excess of 100 years for the Dry Creek site.

Please call me at 541-494-5411 if you have any questions.

Sincerely yours,

Lee Fortier, P.E.
General Manager
Dry Creek Landfill, Inc.

drycreeklandfill.com

June 17, 2021

Ms. Jill Duffy
Executive Director
Humboldt waste Management Authority
1059 W. Hawthorne Street
Eureka, California 95501

RE: 2020 Dry Creek Landfill Yearly Tonnage Report and Capacity Certification

Dear Ms. Duffy:

This letter shall serve as the Dry Creek Landfill Yearly Tonnage Report and Reserved Capacity Report. The following table presents the waste tonnage inflow to Dry Creek Landfill during 2020.

Dry Creek Landfill
Monthly Refuse Disposal Quantity
Year 2020

Month	Quantity (tons)
January	48,515
February	45,541
March	50,771
April	49,489
May	49,462
June	53,953
July	54,961
August	53,502
September	50,573
October	57,171
November	56,914
December	56,959
Total	627,811

The following table presents the annual waste tonnage into Dry Creek Landfill since it opened as a Subtitle D landfill in 1999. The waste fill mass (excluding daily and intermediate cover) is 67,579,015 tons (Approved Operations Plan for Dry Creek Landfill September 2019). The anticipated life of the landfill assuming a 1.2% growth rate extends into 2090.

Dry Creek Landfill
Annual Refuse Disposal Quantities
Years 1999 to 2020

Year	Quantity (tons)
1999	249,700
2000	259,050
2001	333,630
2002	344,010
2003	336,619
2004	338,210
2005	348,446
2006	376,682
2007	358,028
2008	338,073
2009	282,964
2010	298,462
2011	290,107
2012	316,830
2013	341,927
2014	395,853
2015	432,376
2016	461,712
2017	529,752
2018	581,265
2019	611,504
2020	627,258
Total	8,453,011

Thank you for your assistance and help in our effort to serve the community's solid waste needs to protect public health and safety and the environment in a cost-effective manner. Please call me at 541-494-5455 if you have any questions.

Sincerely,

Jenifer Stuber, P.E.

General Manager
Dry Creek Landfill, Inc.

WASTE MANAGEMENT

Anderson Landfill
18703 Cambridge Road
Anderson, California

August 9, 2021

Mr. Frank Nelson
Recology
555 Vance Avenue
Samoa, CA 95564

RE: Landfill Capacity Letter

Dear Mr. Nelson:,

Anderson Landfill Inc. (ALI) meets the 15-year available disposal capacity requirement with a current projected closure date beyond year 2050.

Regards,

Brad Meade
District Manager

Cc: Eric Mankins, Environmental Protection Manager
Cc: Kyle Scarbro, Environmental Protection Manager