

MOA Annual Presentation



Table of Contents

Summary of Landfill Airspace	4 - 5
Diversion Analysis	6 - 9
Green House Gas Update	10
Food Waste Update	11
New Developments	12
Visual Updates	13 - 15

Site Map 2023



Photo 01/2022

Landfill Airspace

As of 12/31/2022

Projected Airspace Volume Consumed	25,101,966.79 Cubic Yards
In Place Waste Density (3-Year Average)	1,749 lb/CY
Remaining Airspace of the Landfill	7,548,033.21 Cubic Yards

Airspace Consumed
(Annual Survey Date 1/22/2022 – 1/18/2023)

- Solid Waste Placed (CY)	429,113 Cubic Yards
- Tonnage Accepted Between Surveys:	
MSW	318,841 Tons
Fire Debris	0 Tons
Total	318,841 Tons

Landfill Site Life

Density	Remaining Tons	Annual Tons*	Remaining Life
1,250	4,717,521	325,000	14.1 years
1,350	5,094,922	325,000	15.2 years
1,450	5,472,324	325,000	16.3 years
1,550	5,849,726	325,000	17.4 years

*Based off of the Joint Technical Documents projection for annual waste tons accepted at the facility.

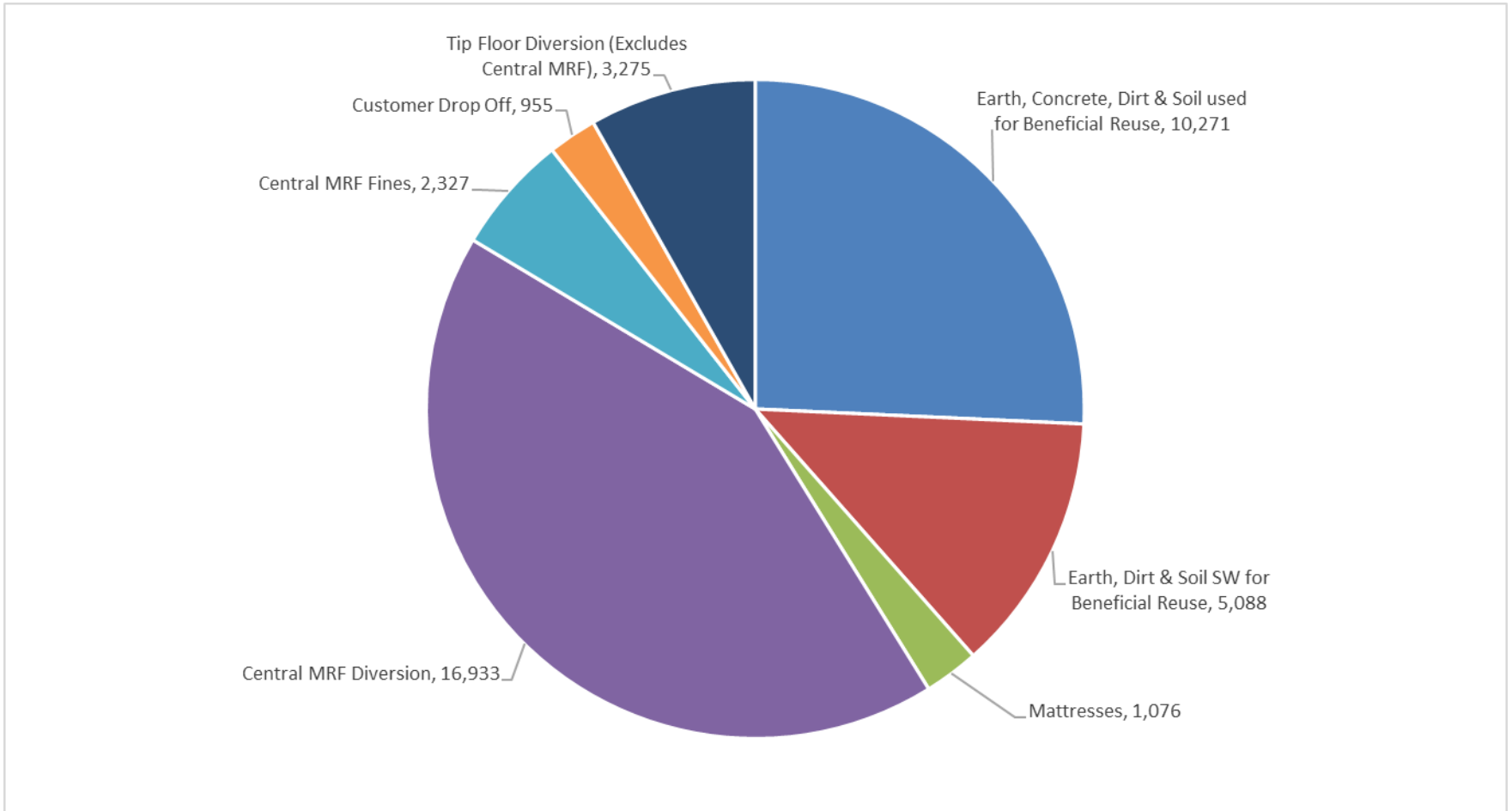
Diversion Analysis

6/2022-5/2023

Earth, Concrete, Dirt & Soil used for Beneficial Reuse	10,271
Earth, Dirt & Soil SW for Beneficial Reuse	5,088
Mattresses	1,076
Central MRF Diversion	16,933
Central MRF Fines	2,327
Customer Drop Off	955
Tip Floor Diversion (Excludes Central MRF)	3,275

Annual Goal	44,735	Total	39,925
--------------------	---------------	--------------	---------------

Diversion Analysis



How to Achieve Diversion Goals

<u>Initiative</u>	<u>Projected</u>	<u>2022 Totals</u>
Central MRF Diversion	17,780 Tons (5% Increase)	16,933 Tons
Tip Floor Diversion	3,766 Tons (15% Increase)	3,275 Tons
*All Others	23,660 Tons (20% Increase)	19,716 Tons
Totals	45,206	39,925
**Diversion Goal	44,735	

***Includes: Appliances, Soils, E-Waste, Mattresses, Tires, and Treated Wood**

****Food waste has been removed from the diversion goal for Republic and included in the contract with Recology**

Achieving Diversion Goals

Central MRF Diversion (Projected 5% Increase)

-Assess production hours at the MRF, and work with Recology to increase the diversion efficiency of the equipment.

All Other (Projected 20% Increase)

-Work with local contractors to identify material generated at job sites that can be utilized for onsite beneficial reuse at the Sonoma Central Disposal Site.



"Committed to Serve"

Green House Gas Update

This GHG inventory represents a snapshot of GHG emissions at Central Landfill from 2019 to 2022. LFG-derived GHG emissions would have occurred because of placement of the waste at any landfill facility in the region.

The Site has implemented several programs and projects that directly or indirectly lead to lowered GHG emissions. Waste diverted from disposal at the MRF results in GHG reductions. Though those reductions will be indirect and offsite, the reductions are attributable to development of the MRF. Improved LFG capture could also achieve GHG emission reductions, which could result from improvements to the GCCS and/or cover management practices.

Landfill Methane	76,010	72,343	68,886	62,183
Landfill Equipment	1,267	1,513	1,277	1,977
	77,277	73,856	70,163	64,160
	16,846	16,761	15,481	12,679

All emissions in MTCO₂e

SB 1383 Organics Program Update

- SB 1383 was enacted on January 1st, 2022. A robust sampling/record keeping program has been put in place at the transfer stations to meet all requirements set forth by the new regulation. Sampling is performed by a Republic supervisor for each facility.
- Republic Services is in the process of implementing a food waste processing program at the Central Transfer Station utilizing a Mega Thor system. The program is currently in the planning on permitting phase and the equipment is expected to be operational by late 2024.
- Recology route trucks will bring food waste to the Central Transfer Station for processing, the waste stream will then be diverted to a facility that is equipped to utilize the material as beneficial reuse.
- SB 1383 sampling is being performed quarterly by Republic at all the transfer station facilities.
- Food waste tonnage numbers by calendar year:

- 2017	4,332
- 2018	5,879
- 2019	7,148
- 2020	5,840
- 2021	8,560
- 2022	8,658

New Developments

Central Landfill Improvements 2022

- Completed construction of Cell R-2
- Installed 8 vertical gas wells and 1000' of horizontal gas collectors
- Installed new storm water drainage channel along the western edge of Cell R-2
- Performed two overhauls on LFGTE plant engines

Transfer Station Improvements 2022

- Replacing sections of concrete tipping floor at Sonoma TS, Guerneville TS, and Healdsburg TS
- Installed metal push wall at Guerneville TS

Current Year Developments

- Construct Cell R-4
- Construct additional dual leachate/gas extraction wells
- Replacing sections of concrete tipping floor at Sonoma TS & Guerneville TS
- Complete permitting for food waste processing equipment

Cell R-2 Construction Photos (June 2022)



Cell R-2 Construction (July 2022)



Cell R-2 Construction Photos (August 2022)



Cell R-2 Construction Photos (September 2022)

