

# MOA Annual Presentation



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# Site Map 2022

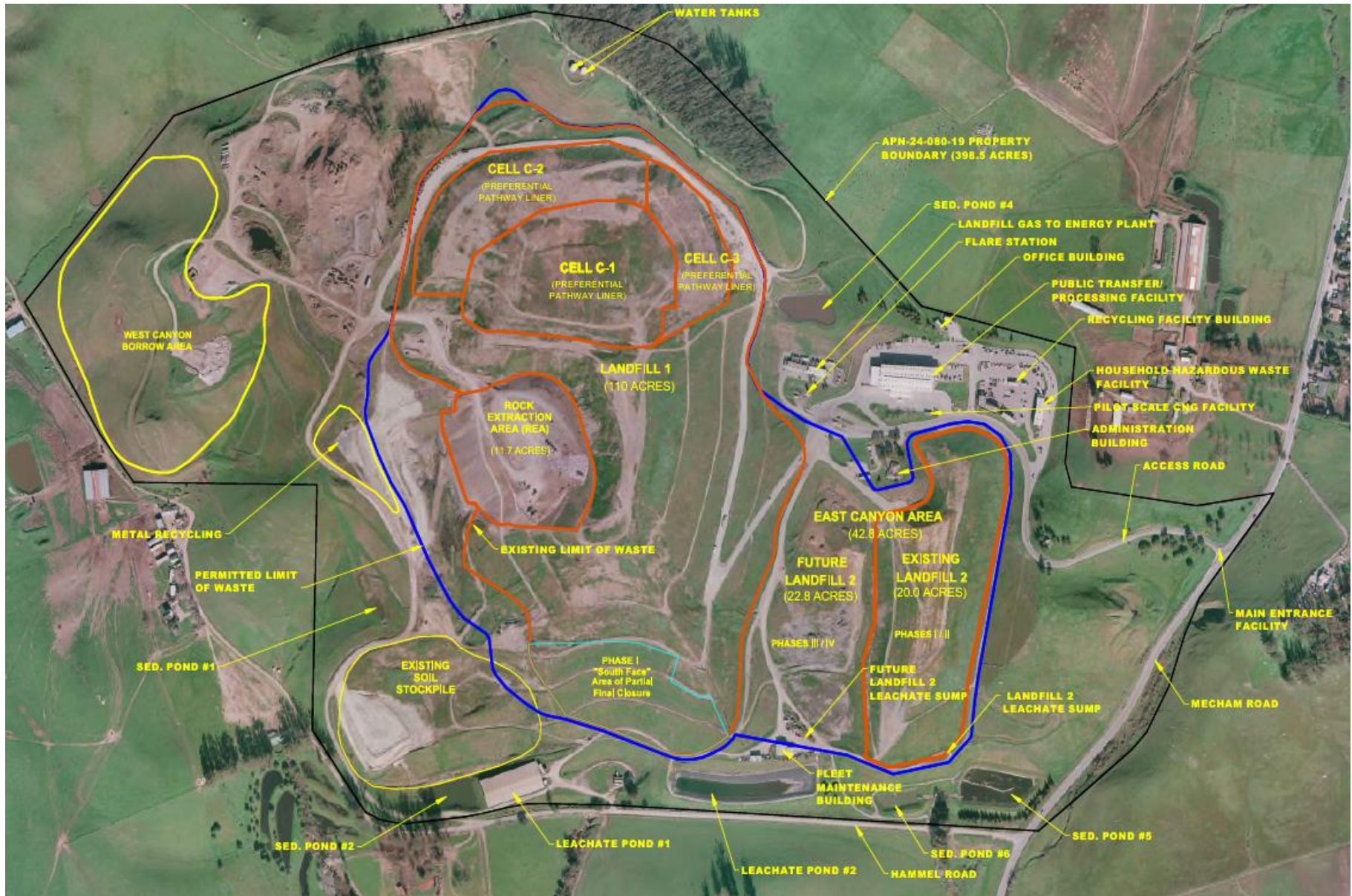


Photo 01/2022

# Landfill Airspace

As of 12/31/2021

Projected Airspace Volume Consumed	24,651,989 Cubic Yards
Achieved Density Between Survey Dates	1,855 lb/CY
Remaining Airspace of the Landfill	7,998,010 Cubic Yards

Airspace Consumed  
(Annual Survey Date 1/31/2020 – 1/17/2021)

- Solid Waste Placed (CY)	465,396 Cubic Yards
- Tonnage Accepted Between Surveys:	
MSW	306,238 Tons
Fire Debris	1,204 Tons
Total	307,442 Tons

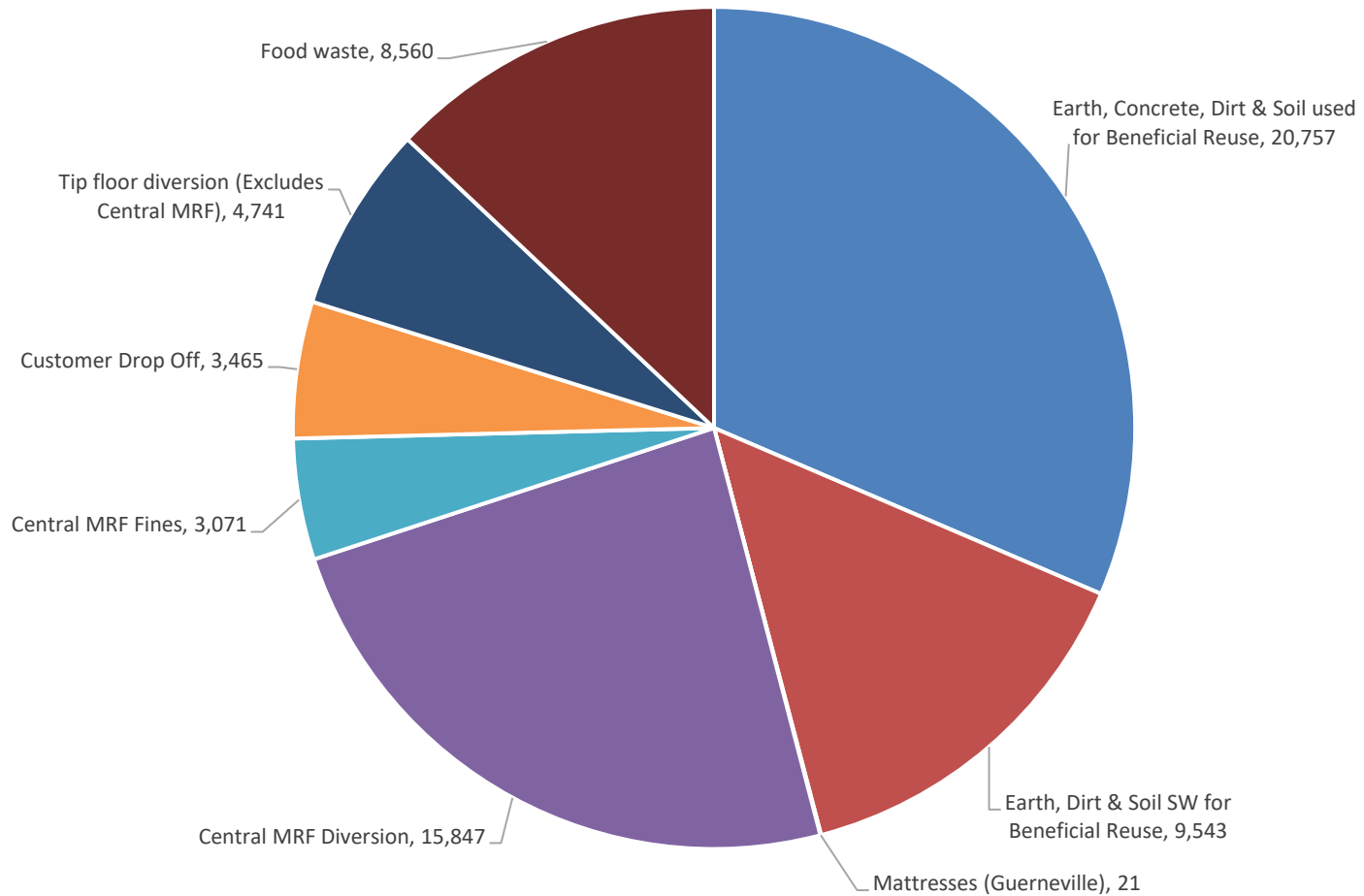
# Landfill Site Life

Density	Remaining Tons	Annual Tons*	Remaining Life
1,250	4,998,756	325,000	15.4 years
1,350	5,398,657	325,000	16.6 years
1,450	5,798,557	325,000	17.8 years
1,550	6,198,458	325,000	19.1 years
*Based off of the Joint Technical Documents projection for annual waste tons accepted at the facility.			

# Diversion Analysis

		6/2021-5/2022	
Earth, Concrete, Dirt & Soil used for Beneficial Reuse		20,757	
Earth, Dirt & Soil SW for Beneficial Reuse		9,543	
Mattresses (Guerneville)		21	
Central MRF Diversion		15,847	
Central MRF Fines		3,071	
Customer Drop Off		3,465	
Tip floor diversion (Excludes Central MRF)		4,741	
Food waste		8,560	
<b>Annual Goal</b>	<b>67,000</b>	<b>Total</b>	<b>66,004</b>

# Diversion Analysis



# How to achieve Annual Diversion Tonnage

<u>Initiative</u>	<u>Projected</u>	<u>2021 Totals</u>
Central MRF Diversion	17,432 Tons (10% Increase)	15,847 Tons
Tip Floor Diversion	4,978 Tons (5% Increase)	4,741 Tons
*All Others	26,000 Tons (43% Decrease)	45,416 Tons
<b>Totals</b>	<b>48,410</b>	<b>66,004</b>
<b>**Diversion Goal</b>	<b>44,735</b>	

**\*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**



# Green House Gas Update

This GHG inventory represents a snapshot of GHG emissions at Central Landfill from 2018 to 2021. 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.

Source	2018	2019	2020	2021
Landfill Methane	64,000	76,010	72,343	68,886
Landfill Equipment	3,485	1,267	1,513	1,277
Total GHG Emissions	67,485	77,277	73,856	70,163
Biogenic CO <sub>2</sub>	22,485	16,846	16,761	15,481

All emissions in MTCO<sub>2</sub>e

# Food Waste Program Update

- SB 1383 was enacted on January 1<sup>st</sup>, 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.
- 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 early 2023.
- 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 Recology (and supervised by Republic) at Sonoma TS and Annapolis TS. Republic is performing the sampling at Healdsburg TS, Guerneville TS, and Central TS.
- Tonnage numbers by calendar year:

– 2016	4,877
– 2017	4,332
– 2018	5,879
– 2019	7,148
– 2020	5,840
- 2021	8,560

# New Developments

## **Central Landfill Improvements 2021**

- Blasting and excavation for Cell R-2
- Installed 21 vertical gas wells, 6 being dual extraction, and 1 horizontal well
- Installed storm water infrastructure on side slopes of Landfill Two
- Performed two overhauls on LFGTE plant engines

## **Transfer Station Improvements 2021**

- Site paving at Guerneville TS and Healdsburg TS
- Guerneville TS mister system was installed

## **Current Year Developments**

- Cell R-2 Construction
- Gas Construction for Cell R-1
- Replacing sections of concrete tipping floor at Sonoma TS & Guerneville TS
- Misting system installed at the Central Transfer Station
- Installed a wheel wash at the exit of the landfill haul road

# Cell R-2 Blasting (December 2021)



# Cell R-2 Construction Photos (June 2022)





# Cell R-2 Construction Photos (May 2022)





# Cell R-2 Construction Photos (May 2022)

