



City and County of Honolulu
Department of Environmental Services
Refuse Division



Quarterly Status Report on Reducing and/or Continuing the Use of Waimānalo Gulch Sanitary Landfill

July 20, 2021 10:00 am



EXHIBIT K456

LUC Order

- ENV holds a public hearing every three months in accordance with LUC Order (Docket SP09-403) conditions:
 - *"The Applicant shall report to the public every three months on the efforts of the City Council and the City Administration in regard to the continued use of the WGSL, including any funding arrangements that are being considered by the City Council and the City Administration."*
 - *"The Applicant shall have a public hearing every three months in either Wai'anae, Mā'ili, or Nānākuli to report on their efforts to either reduce or continue the use of the WGSL."*
- Complete LUC Order available at LUC website: <https://luc.hawaii.gov/>



COVID-19 Pandemic

- July 12, 2021 letter: City notified LUC and Planning Commission of the need to hold this meeting remotely via WebEx
- Meeting room at Kalanianaʻole Beach Park in Nānākuli still closed to the public
- City to resume meetings at Kalanianaʻole Beach Park when the meeting rooms reopen

Meeting Notices and Q&A

Meeting Notice: Posted July 9, 2021

- Honolulu StarAdvertiser
- City's Refuse Division Website: www.Opala.org

Q&A:

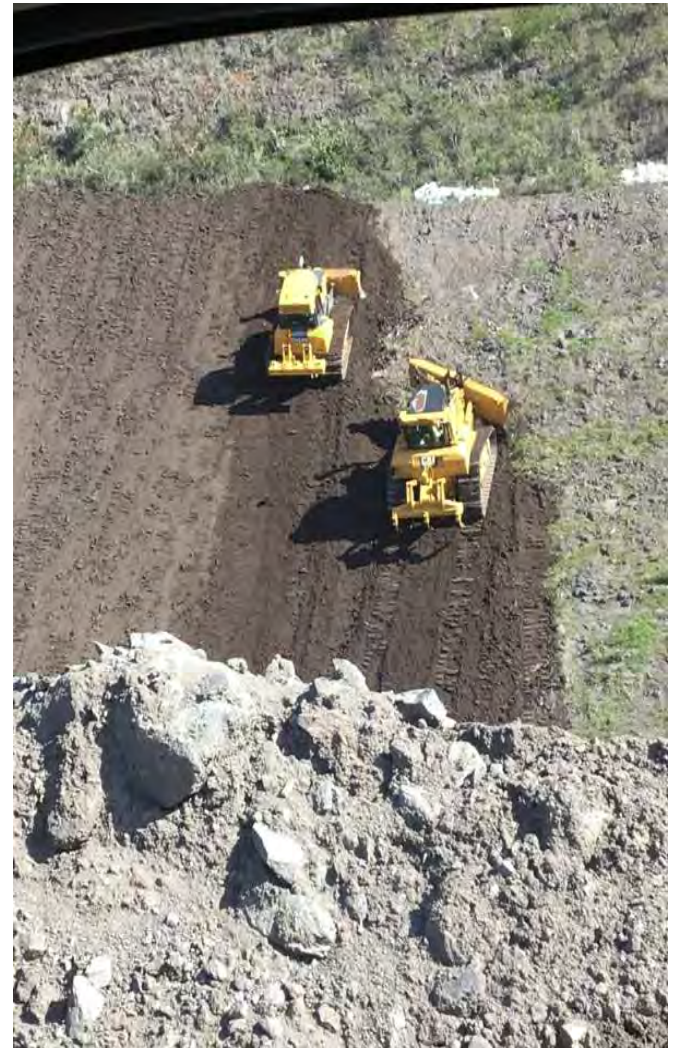
- Use Chat Box to ask questions during meeting
- E-mail questions and comments to disposal@honolulu.gov within 30 days of each meeting. If submitted, written questions and comments, including commenter's address, e-mail address and phone number, will be available to the public on www.Opala.org
- Meeting notes updated and posted on website, including Q&A

*Virtual Tour: Waimānalo Gulch
Sanitary Landfill (WGSL)*





More Like a Quarry
than a Landfill





*Householder Drop Off
and Cleanout Area*

Ash Disposal

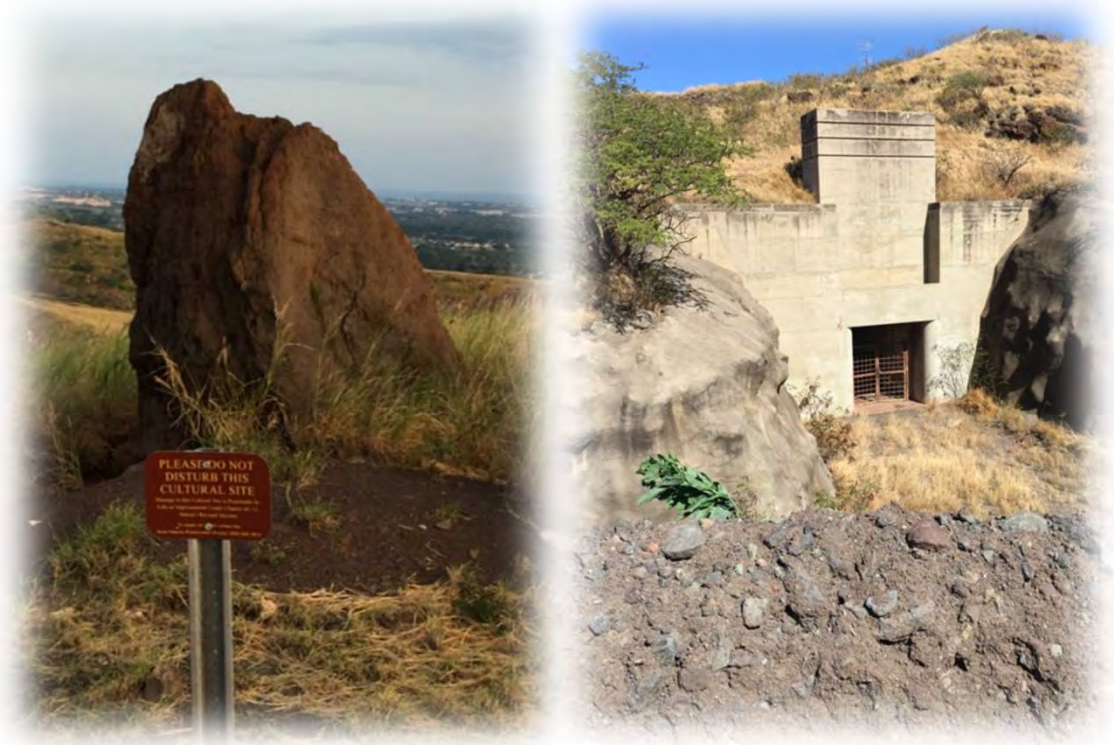


Ash Disposal (Back of Landfill)



So Much More Than a Landfill

- Services residents (300/mo)
- Battery Arizona- historic site
- Pōhaku- cultural site
- Kahe Point- NOAA whale counts
- Public Education: “Tour de Trash”



Future Landfill Siting and WGSL Closure

- 2008: City filed application for new SUP (SP 09-403) to use 92.5 acres more at WGSL and to operate to capacity
- November 1, 2019: SUP approved by LUC with conditions:
 - *“By no later than December 31, 2022, the Applicant shall identify an alternative landfill site that may be used upon closure of WGSL.”*
 - *“WGSL shall close by no later than March 2, 2028. The WGSL shall not accept any form of waste after March 2, 2028.”*

Progress Towards Another Landfill Site

- District Boundary Amendment (DBA): ENV had planned on beginning the environmental review process for DBA, but has stopped pursuing the DBA at this time pending further development of future landfill siting activities.
- Act 73 (2020): Among other things, Act 73 prohibits construction, modification, or expansion of waste disposal facilities without first establishing a buffer zone of no less than one-half mile
 - Although not required, the active area of WGSF already complies with Act 73
 - ENV and consultant re-evaluating sites, including, but not limited to the sites identified in the 2012 and 2017 reports
 - Public Outreach

Act 73's Affect on PVT and WGSL

- PVT Landfill accepts Construction & Demolition (C&D) waste
 - Expansion denied
 - May be closing in 5 to 9 years
 - If/when PVT closes, WGSL may need to accept C&D waste.
 - City currently drafting C&D recycling legislation and permit modifications for H-POWER.
 - January 1, 2021: PVT ceased accepting asbestos containing material (ACM)
 - WGSL obtained DOH approval and is accepting ACM one day per week (Wednesdays) as of January 6, 2021

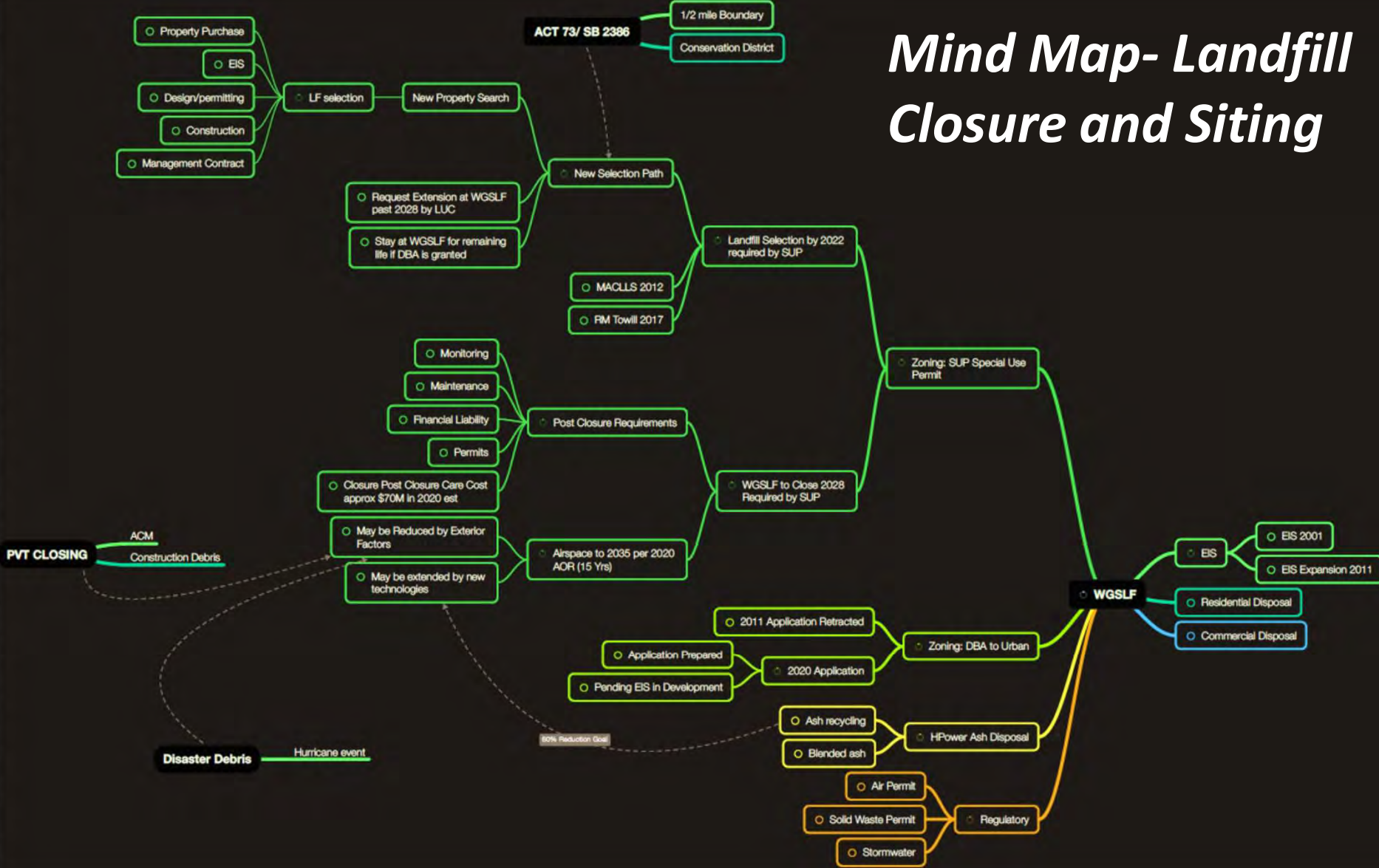
Landfill Airspace is Priceless

- It is not common to close a landfill that still has airspace
- WGS� still has 5M cu yd or 15 years of capacity
- In 2028, at current disposal rates, could have 2.5M cu yd remaining
- Sunk cost: \$254M spent on WGS� (1990-2020)
- Initial cost of closure: \$55M
- Post closure care costs for 30 years: \$15M
- Cost of developing new landfill: ~\$100M minimum
- WGS� most economical site

Future Landfill Challenges

- Exploring future sites using siting criteria, but Act 73 further limits options
- “Not in my backyard” pushback from communities
- 10 year industry standard time to site, permit, and develop a new landfill
- EIS alone could take at least 4 years
- Potential PVT closure could double required landfill capacity

Mind Map- Landfill Closure and Siting



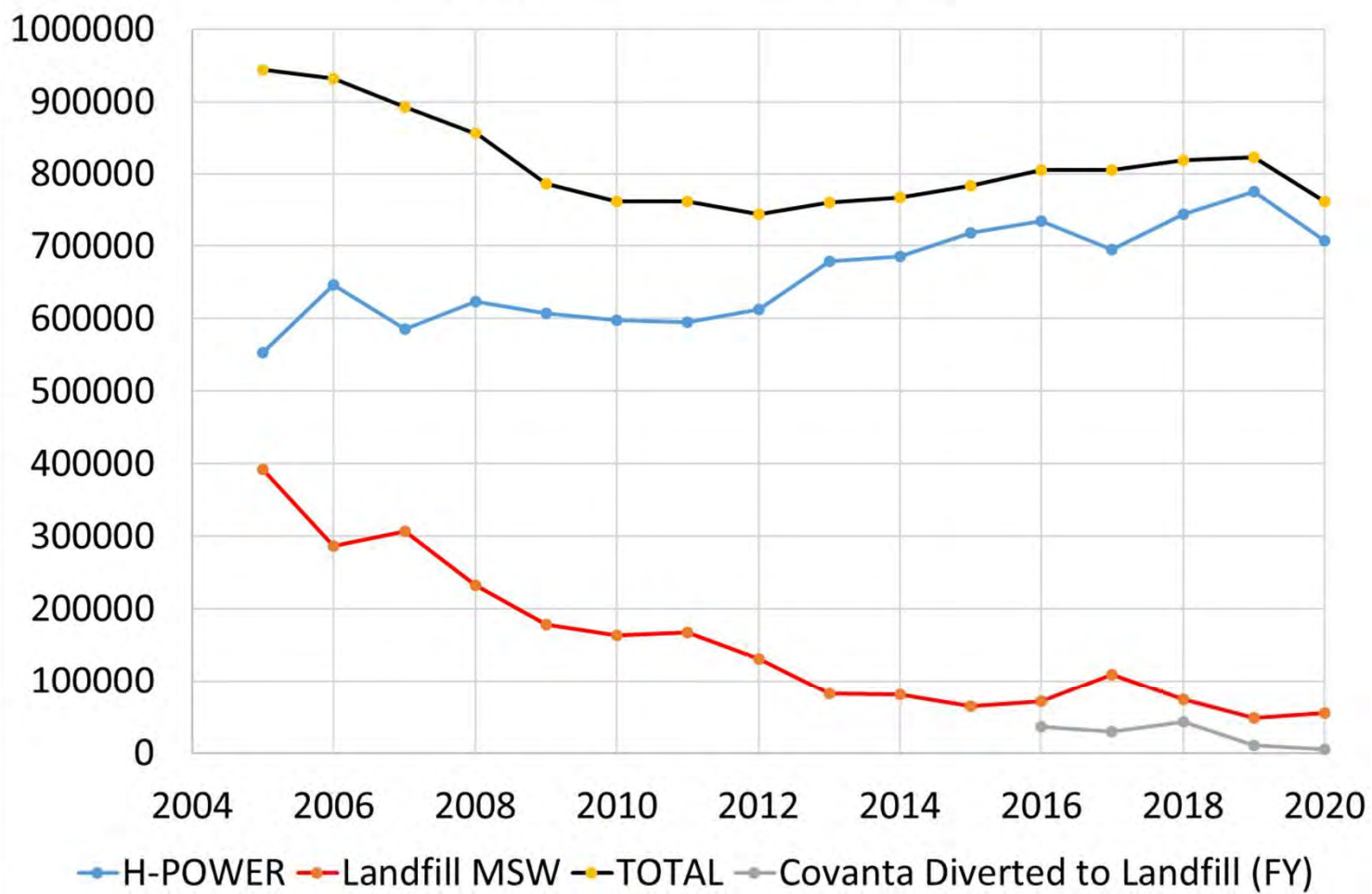
WGSL Operations Updates

- Tonnages:

MONTH	MSW*	ASH	RESIDUE
April 2021	3,895.81	11,052.65	4,510.44
May 2021	36,563.00	6,806.47	522.06
June 2021	19,202.30	8,768.10	1,451.15

- During the reporting period, there was one odor complaint from Ko 'Olina on April 21, 2021. A private hauler arrived at the gate with an odorous load before the facility opened at 7:00 am.
- Staff contacted hauler and generator to explain permit conditions and acceptable odorous load hours (8:30am-2:30pm), and suggested use of an odor suppressant.

Annual MSW Tonnage



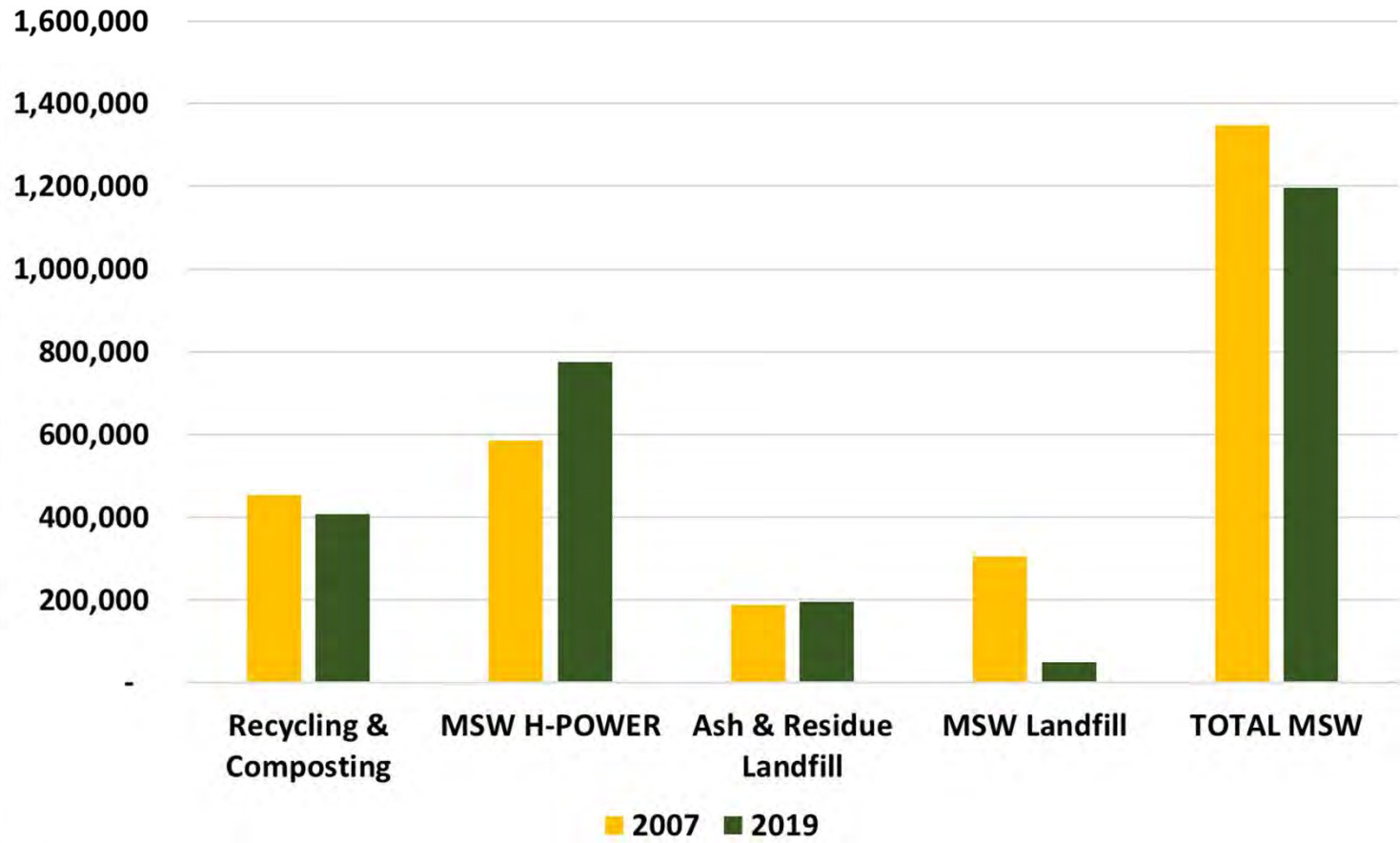
Landfill MSW Down 85% since 2007

- Economic recession 2008
- Diverted since 2012 :
 - Bulky items
 - City tires
 - Sludge
 - Petroleum contaminated soils
 - Expired food waste
 - Treated medical waste
 - Householders with combustible items

Landfill Still Vital For:

- H-POWER ash and residue (200,000 tpy)
- H-POWER diversion maintenance outages
- ASR (35,000 tpy)
- WWTP grit/bar screenings (1,000 tpy)
- Residential rock, dirt, concrete (300/mo)
- Dead animals
- HECO/refinery sludges
- Medical waste sharps
- ACM (3,000 tpy) as of Jan 1, 2021
- C&D waste diverted from PVT Landfill (future)
- Disaster debris

Source Reduction & Landfill Diversion
Progress



“Moving the Needle”

- MSW tonnage is a leading indicator of the economy
- 2007 (before recession) vs. 2019 (before COVID-19)
- Trends:
 - 10% reduction in overall MSW (measure of source reduction)
 - 85% reduction in MSW landfilled (measure of landfill diversion)
 - LF diversion rate increased from 63% to 82%

H-POWER Updates


- Mobile baling equipment was tested in March 2021, which will allow storage of waste during extended maintenance outages to improve landfill diversion
- DOH approval pending for operation and storing of bales
- Anticipating 100,000 tons MSW landfilled in 2021
 - 50,000 tons higher than 2020
 - Due to once in 6-year major overhaul of turbine generator #1 (completed in June 2021)
- Future planned projects intended to further reduce the amount of MSW diverted to landfill during maintenance outages: infeed improvements, a common steam header, and second dump condenser

Recycling Updates

- Disposable Food Ware Ordinance (DFWO): Ordinance 19-30
 - DFWO affects all food vendors and businesses, effective January 1, 2021
 - DFWO amends the Plastic Bag Ban and restricts the use and sale of polystyrene foam food ware, disposable plastic food ware and disposable plastic service ware. It also dictates when disposable service ware may be provided.
 - City provided 90-day “Education Period” from January 1 to March 31, 2021
 - City suspending restrictions on disposable plastic service ware and polystyrene foam food ware from June 25, 2021 to September 5, 2021 (Section 41-27.2(b) and (d)), pursuant to the Mayor’s 14th Proclamation of Emergency or Disaster (COVID-19)
- www.Opala.org website upgrade in process

Bills and Resolutions Updates

21-102	Urging the City to assess the City's capability to implement a C&D waste recycling program	Resolution introduced 4/21/21
21-103	Requesting the City to evaluate potential landfill sites for compliance with Act 73	Resolution introduced 4/21/21
21-105	Adopting Climate Action Plan	Resolution adopted 6/2/21
15 (2021)	Solid waste special fund	Enacted as Ord. 21-18, effective 7/1/21



Questions and Answers