



Metropolitan Nashville Solid Waste Region Board

# Southern Services C&D Landfill Proposed Expansion





# Agenda

- Introductions
- Background on Southern Services Landfill and EcoPark
- Overview of Proposed Expansion
- Conformance to Solid Waste Master Plan
- Discussion and Questions



# Presenters

## **Don Gentilcore**

Waste Management

Don Gentilcore is a Senior District Manager with Waste Management. He has over 25 years of experience in the solid waste industry managing post collection operations, including the operations of landfills, recycling facilities, organic recovery operations and transfer stations. As the Senior District Manager, he is responsible for the oversight of Waste Management's Tennessee post collections operations, which in Davidson County includes the Southern Services Landfill and MTEC C&D Recycling Facility.

## **Nancy Sullivan, P.E**

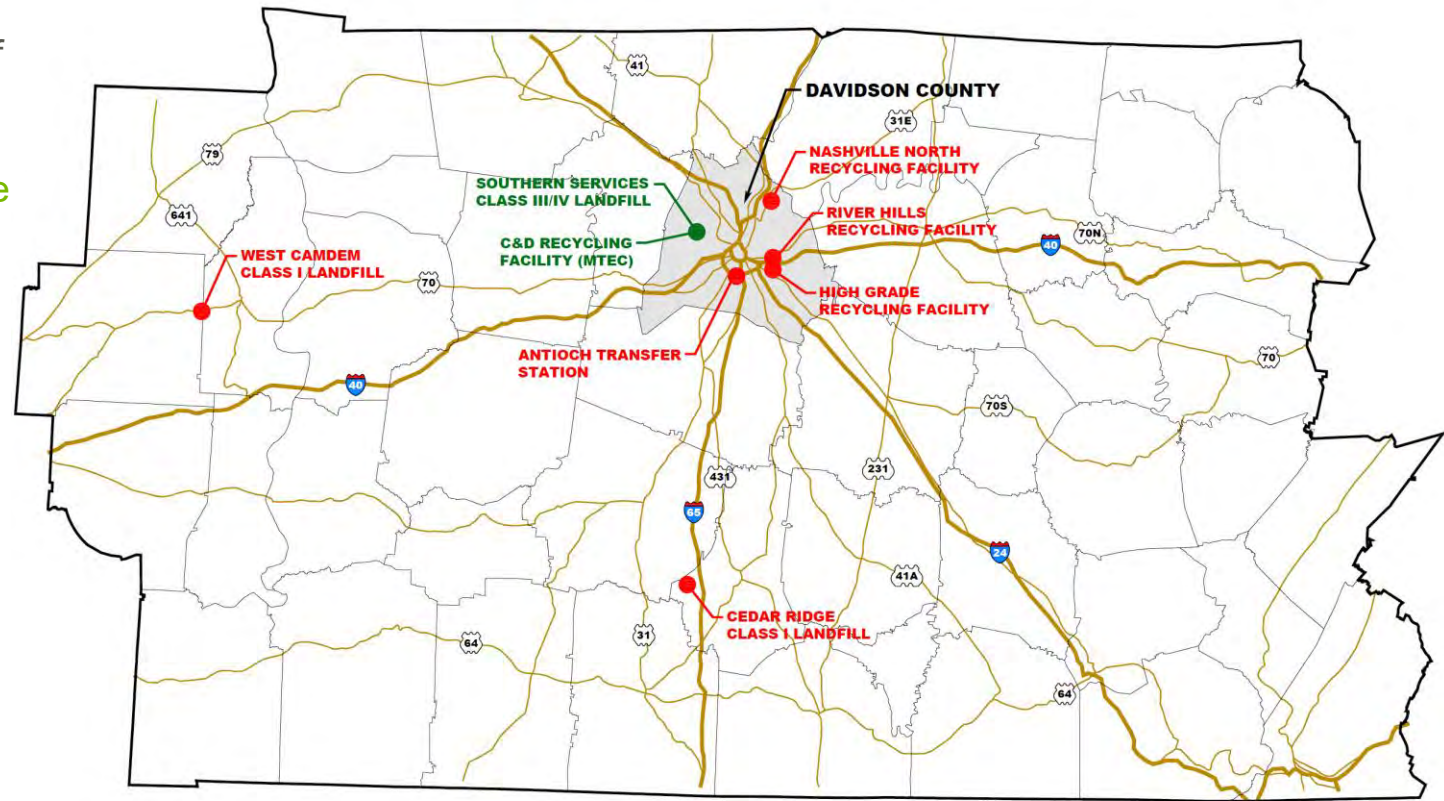
TriAD Environmental Consultants

Nancy Sullivan P.E. is a Principal Engineer with TriAD Environmental Consultants, Inc. She has more than thirty-five years of experience in the civil and environmental engineering field including solid waste management, landfill design, construction management, and environmental monitoring. She has worked with Waste Management at the Southern Services Landfill since their acquisition to permit two expansions as well as provide construction and environmental monitoring services.

# WM in Middle Tennessee

Waste Management currently partners with Nashville on **multiple solid waste management** endeavors in support of the region's solid waste goals. These include:

- Operation of the only existing **single-stream recyclable material recovery facility** on Riverhills Drive (Riverhills MRF).
- Operation of two additional **material recycling facilities** on Myatt Drive (Nashville North) and Riverhills Drive (High Grade).
- Operation of a **transfer station** on Antioch Pike in Antioch, Tennessee to collect and transfer municipal solid waste out of Davidson County.
- Operation of the only **mixed C&D waste material recovery facility** in Nashville, MTEC, co-located with the Southern Services landfill.
- Operation of **Southern Services Landfill** - the only mixed C&D landfill in Davidson County.



**WM MIDDLE TENNESSEE FACILITIES**



# Southern Services Landfill and EcoPark

The Southern Services site has been used as a scrap operation and then as a **construction and demolition (C&D) landfill for more than 35 years**. WM currently owns and operates the Landfill, which is located off Briley Parkway in an industrial area.

- Southern Services **accepts only C&D materials** like concrete, metal, asphalt, brick, glass, dirt, drywall, and plaster from residential and commercial building projects.
- Southern Services **is not permitted to accept hazardous materials**, or materials that react to water and could lead to runoff or contamination risks.

Waste Management employs **23 full-time workers** at the Southern Services site and employs **250 workers** in Middle Tennessee.







ASHLAND CITY HIGHWAY

CONSTRUCTION COMPANY

MULCH YARD

CONCRETE PLANT

ECOPARK

CONSTRUCTION COMPANY

CSX RAILROAD

COMPOSTING OPERATIONS

METAL STORAGE

CONSTRUCTION MATERIAL UNLOADING AND STORAGE

AMY LYNN DRIVE

SOUTHERN SERVICES CLASS III/IV LANDFILL

SCRAP YARD

METAL PROCESSING

TENNESSEE STATE PRISON

CUMBERLAND RIVER

BRILEY PARKWAY

JOHN C. TUNE AIRPORT

OIL STORAGE

FREIGHT AND TRANSPORTATION





SECTION AREAS	
SECTION	ACRES
EXISTING PERMITTED FACILITY	183
EXISTING LANDFILL FOOTPRINT	77
PROPOSED PERMITTED FACILITY	200
PROPOSED LANDFILL FOOTPRINT	95
ECOPARK	23
WETLAND HABITAT/ WETLANDS AREA	28

**EXISTING FACILITY**



# Environmental Stewardship

The site today is 183 acres, and the currently permitted Landfill takes up less than half of that. The remaining acreage is devoted to conservation and operational support services.

## Conservation at the Site:

- The Wildlife Habitat Council has declared 28 **acres of freshwater wetlands** at the Southern Services site as a Certified Wildlife Habitat.
- Reclaimed wood received at the landfill is diverted from disposal and used to build **bird boxes for woodland ducks and blue birds**.
- WM has developed a **partnership with the Tennessee Ornithological Society** of Nashville to monitor the variety of birds at the wetlands on the Site.

## Operations:

- Southern Services is home to the **only mixed C&D waste recycling and recovery facility** in Davidson County called the Middle Tennessee Environmental Center (MTEC).
- Recovered materials include metal, untreated wood, concrete, and uncontaminated cardboard.





# Nashville/Davidson County C&D Waste

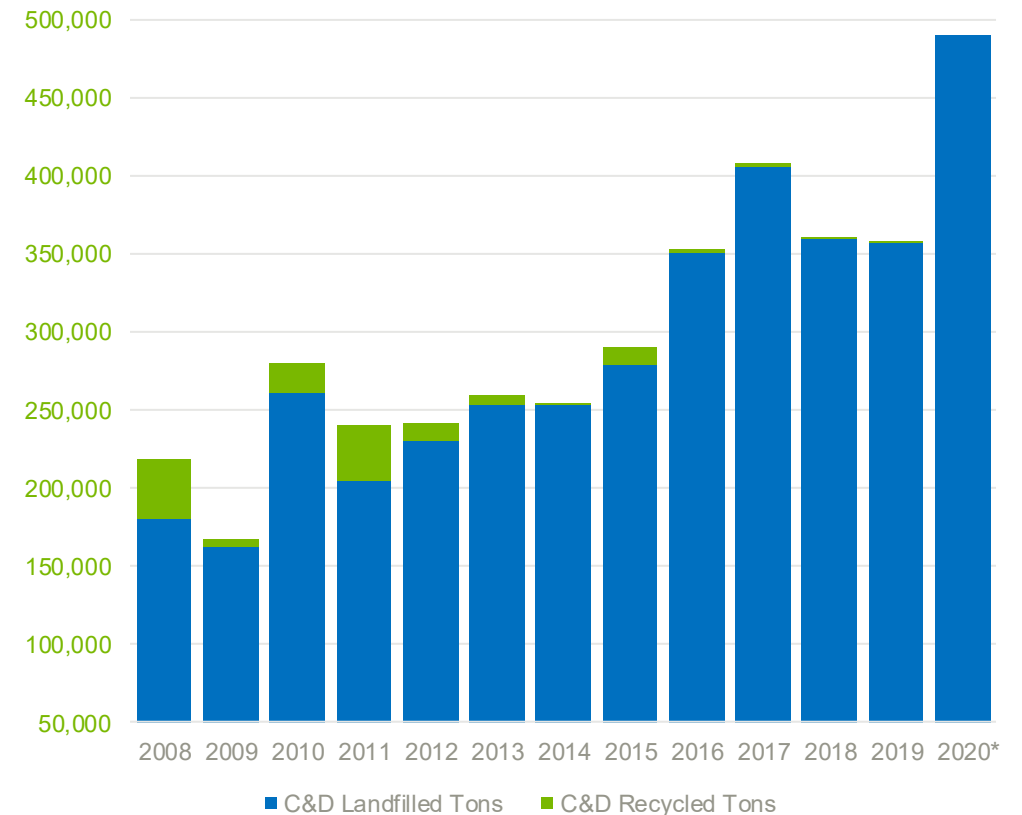
The volume of C&D waste generated in Davidson County has **increased significantly** in the last decade, to nearly double what it was in 2008. The amount of C&D waste being recycled, while never significant, has decreased over that same time.

More than **90% of the C&D material generated** in Davidson County is sent to the Southern Services Site.

Following the March 2020 tornado, WM projects that Southern Services Landfill has only **2 to 3 years of capacity** left.

Without approval for expansion, WM will need to take actions to extend the life of the currently permitted Landfill space, which could include **increasing disposal rates** and **limiting the type or volume of material** WM will accept at the Landfill.

Nashville C&D Waste Landfilled and Recycled



Graph design and 2008-2016 figures are from the Solid Waste Master Plan Executive Summary (page 5); we have added in the 2017-2019 data via the Solid Waste Region Board's annual reports.

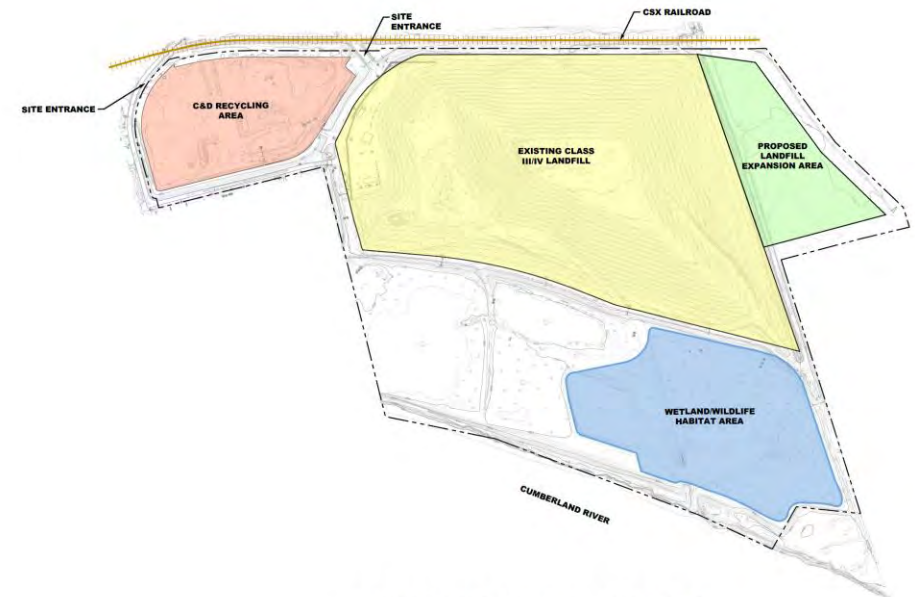
\*2020 numbers reflect only Southern Services Landfilled Tonnage.



# Proposed Expansion

With only **2-3 years of capacity** left at the Southern Services Landfill and **no viable alternatives** to manage the region's large and growing volume of C&D waste, WM filed this request with the Solid Waste Region Board for an **expansion** of the currently permitted landfill area.

- The additional land is already owned by Waste Management and is **contiguous to the existing landfill** footprint.
- The expansion would provide an estimated **10-12 years of additional C&D disposal capacity** at the Landfill based on the current fill rate
- The expansion process will likely take an estimated 2-3 years and include engineering and environmental studies, as well as **multiple opportunities for public comment**.
- The proposed expansion allows for the **continued operation of Nashville's only active mixed C&D recycling facility**, MTEC, which is co-located with the Landfill and depends on the Landfill for disposal of non-recyclable residuals.



**PROPOSED SITE PLAN**



# Solid Waste Master Plan

WM is ready and willing to do its part to help the City of Nashville and Davidson County achieve the ambitious **zero-waste vision** (90% diversion) outlined in its Solid Waste Master Plan, but there is a long way to go.

The Plan outlines several **unique challenges** facing the City and Davidson County, including:

- **High volumes** of both commercial and C&D waste.
- **Low recycling** and diversion rates for C&D.
- **No existing guidelines for C&D waste disposal**, and limited existing infrastructure to help manage C&D material.
- **No market** for recovered C&D material.





# Solid Waste Master Plan

In addition to the challenges outlined in the Plan, several **recent and unexpected events** have impacted the plan's assumptions and progress toward implementation:

- The **March 2020 tornado** accelerated the filling of Southern Services Landfill, reducing the Landfill's life.
- The ongoing **COVID-19 pandemic** has delayed the implementation of Plan elements and led to a reduction in available funds for initiatives.
- The **2<sup>nd</sup> Avenue cleanup** and reconstruction will create additional, unplanned debris.
- The **closure of Atomic Resource Recovery** in September 2020 - the only other mixed C&D facility identified in the Plan - has left the City and Davidson County with only one such facility, which is WM's MTEC operations co-located with the Landfill and currently dependent on the Landfill expansion to continue operating.



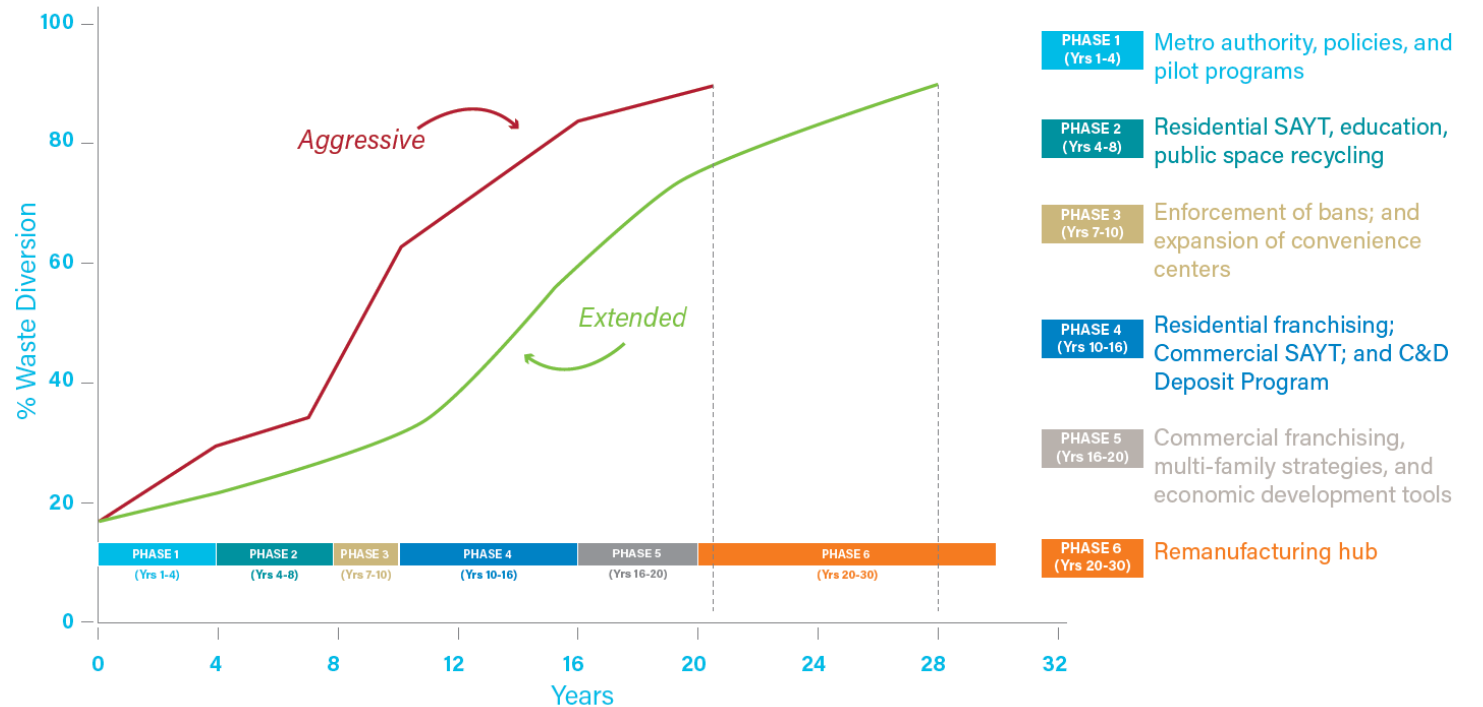


# Bridge to the Future

Until the initial phases of implementation are underway, **stopgap adjustments and solutions** will be needed to avoid setting the region's waste management goals back further.

A **modest, short-term expansion** of the Southern Services Landfill is the most effective, economic, environmentally-friendly way for the region to manage its C&D waste over the next decade; the current site could not be quickly or easily repurposed, and finding another location is cost- and time-prohibitive.

Implementing the Strategy in Phases



Graph is from page 17 of the Solid Waste Master Plan Executive Summary.



# Consequences of Denying the Proposed Expansion

- Disruption to Nashville's **development and growth**.
- **Potential closure of MTEC**, the only currently operating mixed C&D recycling facility in Davidson County.
- C&D material from Davidson County will need to be **hailed further away**, leading to:
  - An increase in **greenhouse gas emissions**.
  - Additional **traffic congestion**.
  - Significant **cost increases**.
  - Construction and Demolition **project delays**.
- **Disrupts progress** toward the goals and timeline of the Solid Waste Master Plan.
- **Loss to Metro of approximately \$2M per year** it receives from mandatory fees Southern Services Landfill pays. When the Landfill becomes full in 2 to 3 years and with no expansion, this significant source of revenue will be lost.





# A Constructive Partnership

WM currently partners with Metro on multiple solid waste management endeavors in support of the region's goals. WM is **committed to continuing that partnership** as Metro and the County implement the Plan.

Approving WM's application for expansion of the Southern Services Landfill is **consistent with the Plan** because it:

- Provides a **viable and affordable option** to assist Metro and the County in fulfilling the C&D deposit program and recycling goals set out in the Plan
- Supports the Plan's proposal to build **supporting infrastructure for waste diversion**.
- Reduces the **potential regional environmental impacts** of long-distance waste transportation and associated greenhouse gas generation.
- Allows Metro to **fund the initiatives and programs** necessary to achieve the Plan's zero waste goals from the revenue Metro receives on waste disposed at the Southern Services Landfill.



Mark Zaleski / The Tennessean



# Conclusion

The Board should **approve WM's application** to expand the Southern Services Landfill.

The expansion, which will provide approximately **10 to 12 years of additional waste capacity** at the Landfill, is **consistent with the Solid Waste Master Plan** because the expansion ensures that:

- MTEC – the only remaining **C&D recycling operation** currently in business in Davidson County – can continue operating for the next 10 to 12 years.
- Metro continues receiving its **fee on C&D waste disposed at the Southern Services Landfill** to fund the programs and initiatives required by the Plan. In 2019, WM paid Metro approximately \$2 million for waste disposed at the Landfill.
- The region is provided with **affordable C&D disposal capacity** at the Landfill to support the residential and commercial growth in the region.



# Conclusion, continued

WM's application for expansion is **consistent with the Solid Waste Master Plan** because the expansion ensures that:

- **Greenhouse gas emissions will be minimized** due to the convenient location of the Landfill. Without the expansion, the Southern Services Landfill is estimated to be full within 2 to 3 years and C&D waste will have to be transported for longer distances to a disposal facility outside Davidson County.
- **Illegal dumping of C&D waste is minimized.** With no other repositories for C&D waste, once Southern Services Landfill reaches capacity, the increased costs associated with transporting C&D material outside the County is likely to result in increased illegal dumping.
- Southern Services Landfill provides a **conveniently located and affordable disposal facility** for the County and City when they need such a facility to accept large volumes of C&D debris resulting from natural disasters, such as the 2020 tornado or the 2010 floods.



Questions?





Thank You





Metropolitan Nashville Solid Waste Region Board

# Southern Services C&D Landfill Proposed Expansion

