



The Timeline

History

- ▶ 2013: End of Long-Term Disposal Agreements, Municipalities Enter Into New Contracts
- ▶ Summer 2014: Incineration Capacity Drops After RRB Ends
- ▶ April 2015: RRB Settlement Allocates Assets and Liabilities
- ▶ May 2015: Waste Management Closes North Incinerator
- ▶ June 2016: Alpha 250 Sale Paused In Favor of Study
- ▶ June 2017: Arcadis Selected To Conduct Solid Waste Study
- ▶ December 2018: Arcadis Releases Final Report and Finding
- ▶ Summer 2019: County and Cities Agree on Memorandum of Understanding
- ▶ November 2019: Solid Waste Working Group Formed

Exhibit A
Milestone Schedule

| Milestone Description | Milestone Dates |
|---|------------------------|
| County Approval of the MOU | June 11, 2019 |
| Participating Municipality Approval of the MOU | September 30, 2019 |
| Designation of Working Group | November 15, 2019 |
| Designation of Technical Group | December 15, 2019 |
| Retention of consultants and/or any required legal counsel | December 15, 2019 |
| Determination as to form of governance for the regional solid waste management system (e.g., interlocal agreement, special district*) | April 20, 2020 |
| *Finalization of the necessary creation documents (which would permit timely submission to the Florida Legislature if an independent special district is to be pursued) | September 30, 2020 |

Memorandum of Understanding

RENEWALS

- First Renewal Term started = 7/3/18
- Second Renewal Term would start = 7/3/23
- Final Renewal Term would start = 7/3/28



SECOND RENEWAL

- Deadline to Renew = 1/15/22
- All Contracted Processable Waste would be required to be delivered to South Waste-to-Energy Plant
- Two Preconditions on Renewal



SECOND RENEWAL PRECONDITIONS

- 425,000 tons of Contracted Processable Waste delivered each year of current contract term ✓
- Binding commitment from local governments whose residents and businesses have generated **at least 500,000 tons of waste/year** to deliver all Contracted Processable Waste to South Waste-to-Energy Plant
 - Commitment may be by ILA or direct contract
 - The 500,000 tons based on tonnage provided to WES during last contract year
 - For governments not currently participating, it will be based on an affidavit





The Need

Table 5A
Final Disposition of Municipal Solid Waste (2013)
 Excludes recycling credits for renewable energy and yard trash beneficially using landfill gas.
 By Descending Population

| County | Population ¹ | Total MSW Collected Tons | Municipal Solid Waste | | | | | | | | |
|--------------|-------------------------|--------------------------|-----------------------|--------------------|------------|---------------------------|-------------------------|-----------|-----------|---------|-----|
| | | | Recycled | | | | Landfilled | | Combusted | | |
| | | | Certified Tons | Non-Certified Tons | Total Tons | Unadjusted Recycling Rate | Adjusted Recycling Rate | Tons | % | Tons | % |
| Miami-Dade | 2,582,375 | 3,476,874 | 561,492 | 462,299 | 1,023,791 | 29% | 29% | 1,519,699 | 44% | 933,384 | 27% |
| Broward | 1,784,715 | 3,285,645 | 1,336,669 | 161,125 | 1,497,794 | 46% | 46% | 1,235,030 | 38% | 552,821 | 17% |
| Palm Beach | 1,345,652 | 2,496,469 | 809,352 | 153,782 | 963,134 | 39% | 39% | 831,854 | 33% | 701,481 | 28% |
| Hillsborough | 1,276,410 | 1,803,829 | 577,740 | 197,226 | 774,966 | 43% | 43% | 324,042 | 18% | 704,821 | 39% |

2019

Final Disposition of Municipal Solid Waste
 Excludes recycling credits for renewable energy and yard trash beneficially using landfill gas.
 By Descending Population

| County | Population ¹ | Total MSW Collected Tons | Certified MSW Tons Recycled | Non-Certified MSW Tons Recycled | Total MSW Tons Recycled | Unadjusted Recycling Rate | Adjusted Recycling Rate | MSW Tons Landfilled | % | MSW Tons Combusted | % |
|--------------|-------------------------|--------------------------|-----------------------------|---------------------------------|-------------------------|---------------------------|-------------------------|---------------------|-----|--------------------|-----|
| Miami-Dade | 2,812,130 | 4,264,169 | 562,271 | 172,066 | 734,337 | 17% | 17% | 3,048,221 | 71% | 481,611 | 11% |
| Broward | 1,919,644 | 3,905,355 | 599,399 | 610,545 | 1,209,944 | 31% | 31% | 2,134,756 | 55% | 560,655 | 14% |
| Palm Beach | 1,447,857 | 3,433,090 | 478,960 | 1,058,603 | 1,537,563 | 45% | 45% | 832,808 | 24% | 1,062,719 | 31% |
| Hillsborough | 1,444,870 | 2,061,922 | 551,186 | 882,951 | 1,434,137 | 47% | 47% | 1,218,865 | 40% | 408,620 | 12% |



The Cost

| Facility | 2025 | | | 2040 | | | 2060 | | |
|--|---------------------------|----------------------------------|-----------------------------------|---------------------------|----------------------------------|-----------------------------------|---------------------------|----------------------------------|-----------------------------------|
| | Processing Lines Required | Facilities Required ¹ | Est. Facility Cost (2020 dollars) | Processing Lines Required | Facilities Required ¹ | Est. Facility Cost (2020 dollars) | Processing Lines Required | Facilities Required ¹ | Est. Facility Cost (2020 dollars) |
| Common Elements | | | | | | | | | |
| Materials Recycling Facility | 5 | 3 | \$ 63,000,000 | 5 | 3 | \$ 63,000,000 | 6 | 3 | \$ 76,000,000 |
| Combined Bulky Waste/Yard Trash/C&D Facility | 10 | 5 | \$ 39,000,000 | 11 | 6 | \$ 42,000,000 | 12 | 6 | \$ 46,000,000 |
| Yard Trash Facility | 1 | 1 | \$ 3,000,000 | 1 | 1 | \$ 3,000,000 | 2 | 1 | \$ 6,000,000 |
| Constants Subtotal | | | \$ 105,000,000 | | | \$ 108,000,000 | | | \$ 128,000,000 |
| Scenario A | | | | | | | | | |
| Mixed Waste Processing Facility | 10 | 5 | \$ 172,000,000 | 10 | 5 | \$ 172,000,000 | 11 | 6 | \$ 189,000,000 |
| Organics Processing Facility (excludes Yard Trash) | 4 | 2 | \$ 52,000,000 | 4 | 2 | \$ 52,000,000 | 4 | 2 | \$ 52,000,000 |
| Waste-to-Energy (WTE) | | | | | | | | | |
| WSB Expansion (Add 4th 750 tpd Boiler Unit) | 0 | 0 | \$ - | 0 | 0 | \$ - | 1 | 0 | \$ 180,000,000 |
| OR | | | | | | | | | |
| New WTE Facility (750 tpd Boiler Units) | 3 | 1 | \$ 675,000,000 | 3 | 1 | \$ 675,000,000 | 4 | 1 | \$ 900,000,000 |
| Scenario A (4th WTE Unit at WSB) TOTAL | | 16 | \$ 329,000,000 | | 17 | \$ 332,000,000 | | 18 | \$ 549,000,000 |
| Scenario A (New WTE Facility) TOTAL | | 17 | \$ 1,004,000,000 | | 18 | \$ 1,007,000,000 | | 19 | \$ 1,269,000,000 |
| Scenario B | | | | | | | | | |
| Mixed Waste Processing Facility | 10 | 5 | \$ 172,000,000 | 10 | 5 | \$ 172,000,000 | 11 | 6 | \$ 189,000,000 |
| Waste-to-Energy (WTE) | | | | | | | | | |
| WSB Expansion (Add 4th 750 tpd Boiler Unit) | 1 | 0 | \$ 180,000,000 | 1 | 0 | \$ 180,000,000 | 1 | 0 | \$ 180,000,000 |
| OR | | | | | | | | | |
| New WTE Facility (1,050 tpd Boiler Units) | 3 | 1 | \$ 945,000,000 | 3 | 1 | \$ 945,000,000 | 3 | 1 | \$ 945,000,000 |
| Scenario B (4th WTE Unit at WSB) TOTAL | | 14 | \$ 457,000,000 | | 15 | \$ 460,000,000 | | 16 | \$ 497,000,000 |
| Scenario B (New WTE Facility) TOTAL | | 15 | \$ 1,222,000,000 | | 16 | \$ 1,225,000,000 | | 17 | \$ 1,262,000,000 |
| Scenario C² | | | | | | | | | |
| Waste-to-Energy (WTE) | | | | | | | | | |
| WSB Expansion (Add 4th 750 tpd Boiler Unit) | 1 | 0 | \$ 180,000,000 | 1 | 0 | \$ 180,000,000 | 1 | 0 | \$ 180,000,000 |
| OR | | | | | | | | | |
| New WTE Facility (1,050 tpd Boiler Units) | 3 | 1 | \$ 945,000,000 | 3 | 1 | \$ 945,000,000 | 4 | 1 | \$ 1,260,000,000 |
| Scenario C (4th WTE Unit at WSB) TOTAL | | 9 | \$ 285,000,000 | | 10 | \$ 288,000,000 | | 10 | \$ 308,000,000 |
| Scenario C (New WTE Facility) TOTAL | | 10 | \$ 1,050,000,000 | | 11 | \$ 1,053,000,000 | | 11 | \$ 1,388,000,000 |

| Scenario ¹ | 2025 Est. Facility Cost (2020 dollars) | 2040 Est. Facility Cost (2020 dollars) | 2060 Est. Facility Cost (2020 dollars) |
|---------------------------------------|--|--|--|
| Scenario A² | | | |
| Assuming 4th WTE Unit @ South Broward | \$ 329,000,000 | \$ 332,000,000 | \$ 549,000,000 |
| Assuming New WTE Facility | \$ 1,004,000,000 | \$ 1,007,000,000 | \$ 1,269,000,000 |
| Scenario B | | | |
| Assuming 4th WTE Unit @ South Broward | \$ 457,000,000 | \$ 460,000,000 | \$ 497,000,000 |
| Assuming New WTE Facility | \$ 1,222,000,000 | \$ 1,225,000,000 | \$ 1,262,000,000 |
| Scenario C³ | | | |
| Assuming 4th WTE Unit @ South Broward | \$ 285,000,000 | \$ 288,000,000 | \$ 308,000,000 |
| Assuming New WTE Facility | \$ 1,050,000,000 | \$ 1,053,000,000 | \$ 1,388,000,000 |



Benefits and Drawbacks of Solid Waste Governing Structures

Interlocal Agreement

Benefits

- ▶ Meets criteria in terms of timeline, money raised, and capabilities.
- ▶ Local control over all elements after legal entity is formed.
- ▶ Flexibility in structure and composition.
- ▶ Can levy appropriate assessments.
- ▶ No restrictions on facilities, debt, or structure if created properly.

Drawbacks

- ▶ Requires cooperation and communication between all parties – trust is key.
- ▶ Less historical examples in Florida of raising required amount of money for new capital projects.
- ▶ Cannot levy taxes, though can levy assessments.
- ▶ Not all cities required to join.

Dependent Solid Waste District

Benefits

- ▶ Meets criteria in terms of timeline, money raised, and capabilities.
- ▶ Local control over all elements.
- ▶ Flexibility in structure and composition.
- ▶ Can levy appropriate assessments.
- ▶ No restrictions on facilities, debt, or structure.

Drawbacks

- ▶ Requires a working threshold of buy-in from municipalities.
- ▶ Requires the District to be dependent to the County in one of three criteria – approval of the membership, approval of budget, or serving as governing body.
- ▶ Potential issue with dual office holding.

Independent Solid Waste District

Benefits

- ▶ Meets criteria in terms of money raised, and capabilities.
- ▶ Independence - not bound to a single entity in anyway.
- ▶ If legislature allows, flexibility in terms of composition.
- ▶ Can levy appropriate assessments.
- ▶ No restrictions on facilities, debt, or structure.
- ▶ All cities required to participate.

Drawbacks

- ▶ Cedes local control of all elements, from facilities to composition of the District.
- ▶ Longest timeline – likely not ready until after contracts expire in 2023.
- ▶ Possible interference from state and other parties – loss of local control concerns.



Next Steps

Waste Generation Study



A waste generation study should be prioritized moving forward to determine composition of waste and create a basis for assessments.



County and municipalities will collaborate on amendment to Memorandum of Understanding to address cost-sharing and identification of consultant.



County has committed to paying 50% of cost for this study, with a formula based on population splitting the cost among cities.



Important Date

JANUARY 2022 – WHEELABRATOR RENEWALS