

Infrastructure Analysis and Costing Update (Scenarios 1 through 5)

December 21, 2021



Engagement Activities

- Conducting one-one meetings with **waste haulers** to explore
 - Concerns
 - Key decision-making criteria
 - Location impacts
- Working with Economic Alliance
 - Survey to all members distributed
 - Presentations in November and December meetings

Feedback – New Regional Partners

- The Solid Waste Agency is exploring opportunities to partner with neighboring communities.
- Meeting with potential new regional partners
 - January 12, 2022
 - 9:30 to 11:00 a.m.
 - <https://meethdr.webex.com/meethdr/j.php?MTID=m2d23dc2e3a151bcd313986ce6f3b7f7b>
 - Email [Kate Bartelt](#) for a meeting invitation

Infrastructure Analysis

- Today – highlighting costs
 - One component of decision-making tools
 - Next steps environmental benefits
 - Next steps risk and full pro/con
- Pricing includes the development of a full campus – per Board's goals

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WASTE SOLUTION SCENARIOS

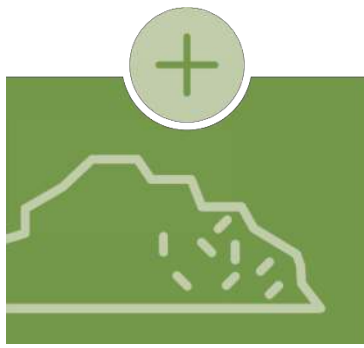
Waste Solution Scenarios								
						Partner / Regional Approach		
	1	2	3	4	5	6	7	8
New Landfill (CRLCSWA Owned)	X		X	X	X			
Partner Landfill		X				X	X	X
Waste Transfer		X				X	X	X
HHM	X	X	X	X	X	X	X	X
Resource Recovery Center (RRC)	X	X	X	X	X	X	X	X
Aerobic Organics Composting	X	X	X	X	X	X	X	X
Anaerobic Digestion (Green Waste/Food)				X			X	
RDF (mixed waste) Processing			X			X		
Direct Combustion (WTE)					X			X



Scenario 1: New Landfill

Parcel Size - 320 Acres

- Landfill
- Compost Facility
- Scalehouse
- Administration and Educational Center
- RRC/HHW
- Maintenance Shop
- Citizen Drop-off



Scenario 1: New Landfill

- **Capital - \$150 Million**
- **Financing - \$30 Million**
- **Net Annual - \$9.4 Million**
 - **Annual Operating Costs - \$9 Million**
 - **Annual Post Closure Care Cost - \$640,000**
 - **Annual Revenues - \$2.5 Million**
- **Average Tipping Fee - \$43/Ton**



Scenario 2: **Transfer to Landfill**

NOT OWNED BY CRLCSWA

Two Campus Approach

Parcel Size – 15 Acres for Transfer
Station w/ Scalehouse

Parcel Size – 50 Acres for All Other
Facilities including Scalehouse

- Transfer Station
- Compost Facility
- Scalehouse
- Administration and Educational Center
- RRC/HHW
- Maintenance Shop
- Citizen Drop-off



Scenario 2:

Transfer to Landfill

NOT OWNED BY CRLCSWA

- **Capital – \$67 Million**
- **Financing - \$29 Million**
- **Net Annual – \$18.9 Million**
 - **Annual Operating Costs including hauling and landfill disposal - \$21 Million**
 - **Annual Revenues - \$2.1 Million**
- **Average Tipping Fee - \$96/Ton**





Scenario 3:

Mixed Waste Processing with New Landfill
CRLCSWA OWNED

Parcel Size - 320 Acres

- Mixed Waste Processing – Refuse Derived Fuel Facility
- Landfill
- Compost Facility
- Scalehouse
- Administration and Educational Center
- RRC/HHW
- Maintenance Shop
- Citizen Drop-off





Scenario 3:

Mixed Waste Processing with New Landfill
CRLCSWA OWNED

- **Capital** - \$251 Million
- **Financing** - \$97 Million
- **Net Annual** - \$16.6 Million
 - **Annual Operating Costs including hauling** - \$19 Million
 - **Annual Post Closure Care Cost** - \$380,000
 - **Annual Revenues** - \$2.8 Million
- **Average Tipping Fee** - \$92/Ton





Scenario 4:

Anaerobic Digestion with New Landfill
CRLCSWA OWNED

Parcel Size - 320 Acres

- Anaerobic Digestion Facility
- Landfill
- Compost Facility
- Scalehouse
- Administration and Educational Center
- RRC/HHW
- Maintenance Shop
- Citizen Drop-off

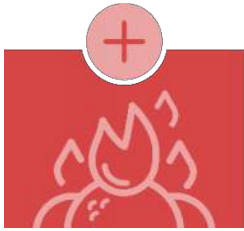


Scenario 4:

Anaerobic Digestion with New Landfill
CRLCSWA OWNED

- **Capital – \$173 Million**
- **Financing - \$46 Million**
- **Net Annual - \$8.9 Million**
 - **Annual Operating Costs - \$11 Million**
 - **Annual Post Closure Care Cost - \$580,000**
 - **Annual Revenues - \$2.7 Million**
- **Average Tipping Fee - \$50/Ton**





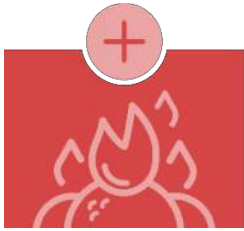
Scenario 5:

Direct Combustion with New Landfill
CRLCSWA OWNED

Parcel Size - 320 Acres

- Waste to Energy Facility
- Landfill
- Compost Facility
- Scalehouse
- Administration and Educational Center
- RRC/HHW
- Maintenance Shop
- Citizen Drop-off





Scenario 5:

Direct Combustion with New Landfill
CRLCSWA OWNED

- **Capital**– \$625 Million
- **Financing** - \$270 Million
- **Net Annual** – \$22 Million
 - **Annual Operating Costs** - \$28 Million
 - **Annual Post Closure Care Cost** - \$260,000
 - **Annual Revenues** - \$6.1 Million
- **Average Tipping Fee** - \$153/Ton



Findings – Investment

- All of the scenarios require a capital investment
- Capital investment as compared to annual operating costs need to be considered
 - Some scenarios have a more substantial up-front capital investment but lower annual operating costs
- Financing assumed for capital expenditures

Findings – Flexibility

- Scenarios were designed by Board in it's strategic planning goals
- Designed to improve flexibility for the Agency
 - Maximize use of artificial intelligence when separating materials
 - Material composition and types to change over next 50-years
 - Support use of waste diversion from landfill activities to lower overall risk and long-term investment needed by the Agency
 - Designed as a waste campus theory – allows for changes as needed to adjust to waste streams

Finding – Land Requirements

- Assumes needing to purchase a new site for development
- Size range from 50 to 320 acres
- Waste Campus: Assumes currently non-developed land in Linn County
- Transfer Station: Assumes one campus size 15 acres for transfer station assuming industrial site

Continued Efforts

- **Sustainable Return on Investment:** Conduct analysis to quantify benefits from investing in each scenario to quantifies financial and non-financial benefits
 - Expresses the monetary benefits in terms of cost
- **Environmental Justice:** Evaluate potential impacts of each of the new solid waste system scenarios to understand
 - Impact in environmental justice tracts
 - Potential risks and impacts
- **Engagement:** Host meetings with public, business, and regional stakeholders

Lee County Tour – Waste Facility Tours, Fort Myers, FL

- Agenda
 - Arrive – Tuesday, Feb 22nd
 - Depart – Friday, Feb 25th
- Hotel
 - Hotel recommendation: Holiday Inn Fort Myers – Downtown Area (Ihg.com)
- Logistics
 - Hotel – Agency will reserve room
 - Flights – Book your own
 - Expense will be reimbursed by Agency
- **Need travel confirmation by: Friday, January 14th**

COVID – may need to cancel – Travel Restriction - subject to travel restrictions

Wrap-up!

