

Safe Harbor Statement

Certain matters discussed in this presentation, including, but not limited to, the statements regarding our intentions, beliefs or current expectations concerning, among other things, our financial performance; financial condition; operations and services; prospects; growth; strategies; and guidance for fiscal 2020, are "forwardlooking statements" intended to qualify for the safe harbors from liability established by the Private Securities Litigation Reform Act of 1995. These forward-looking statements can generally be identified as such by the context of the statements, including words such as "believe," "expect," "anticipate," "plan," "may," "would," "intend," "estimate," "will," "guidance" and other similar expressions, whether in the negative or affirmative. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which the Company operates and management's beliefs and assumptions. The Company cannot guarantee that it actually will achieve the financial results, plans, intentions, expectations or guidance disclosed in the forward-looking statements made. Such forward-looking statements, and all phases of the Company's operations, involve a number of risks and uncertainties, any one or more of which could cause actual results to differ materially from those described in its forwardlooking statements.

Such risks and uncertainties include or relate to, among other things, the following: the Company may be unable to adequately increase prices to offset increased costs and inflationary pressures; it is challenging to predict the duration and scope of the COVID-19 pandemic and its negative effect on the economy, our operations and financial results; the capping and closure of the Southbridge Landfill and the lawsuit relating to our landfill in Bethlehem New Hampshire could result in material unexpected costs; adverse weather conditions may negatively impact the Company's revenues and its operating margin; the Company may be unable to increase volumes at its landfills or improve its route profitability; the Company may be unable to reduce costs or increase pricing or volumes sufficiently to achieve estimated Adjusted EBITDA and other targets; landfill operations and permit status may be affected by factors outside the Company's control; the Company may be required to incur capital expenditures in excess of its estimates; the Company's i

insurance coverage and self-insurance reserves may be inadequate to cover all of its significant risk exposures; fluctuations in energy pricing or the commodity pricing of its recyclables may make it more difficult for the Company to predict its results of operations or meet its estimates; the Company may be unable to achieve its acquisition or development targets on favorable pricing or at all; the Company may not be able to successfully integrate acquired businesses; and the Company may incur environmental charges or asset impairments in the future.

There are a number of other important risks and uncertainties that could cause the Company's actual results to differ materially from those indicated by such forward-looking statements. These additional risks and uncertainties include, without limitation, those detailed in Item 1A, "Risk Factors" in the Company's most recently filed Form 10-K and in other filings that the Company may make with the Securities and Exchange Commission in the future.

The Company undertakes no obligation to update publicly any forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.



Casella Waste Systems - Overview

Casella provides integrated solid waste, recycling and resource services.

- \$847.6mm of revenues for the 12-months ended 9/30/21.
- Integrated operations located in seven northeast states.
- Emphasis on integrated solid waste and recycling operations including collection, disposal, and Resource Solutions.

Focused on providing customers with waste and resource solutions.

- Waste and resource assets are well positioned in the northeast.
- Robust transfer network allows us to effectively move waste and recyclables to our disposal & processing facilities.
- Provide customers with value-added Resource Solutions services.



Environmental, Social, and Governance (ESG)

Strategic alignment to ESG.

- We take pride in our history of better enabling our customers and the communities we serve to meet sustainability related goals.
- Emphasis on providing safe and sustainable environmental services.
- Founding member of EPA Climate Leaders program in 2005, with a reduction of our Scope 1 and 2 greenhouse gas emissions of -45% from 2005 to 2010.

Focus on enhancing public disclosures.

ESG related disclosures, such as our most recent Sustainability Accounting Standards Board ("SASB") report, Carbon Disclosure Project ("CDP") questionnaire response, and our Sustainability Report are located within our ESG Practices website.

ir.casella.com/esq-practices

2030 GOALS

We have established ten sustainability goals for 2030. Every Casella employee has an important role to play in advancing these essential elements of our



HEALTH & SAFETY

Improve our safety performance, reducing our Total Recordable Incident Rate (TRIR), a measure of accidents and injuries compared to hours worked

2019

2030

4.0 OR LESS

ENGAGEMENT

Enhance employee engagement, reducing total employee turnover, including voluntary and involuntary turnover as a percentage of total workforce

2019 **36**% 2030

OR LOWER



RESOURCE SOLUTIONS

Grow our Resource Solutions business to reduce, reuse, or recycle over 2 Million tons of solid waste materials per year by 2030

2019

2030

2.000.000

RENEWABLE ENERGY

Double the renewable energy from our facilities, including landfill gas, solar, and geothermal energy from Casellaowned and partner facilities, in MMBTU with a 2019 baseline

2019

2030

733.560 MMBTU

1.454.000



ENVIRONMENTAL COMPLIANCE

Maintain strong environmental compliance, reducing our number of sanctions including notices of violation, enforcement orders, and notices of non-compliance/deficiencies

2019

2030

FUEL EFFICIENCY

Improve our fuel efficiency, reducing our Gigajoules (GJ) of fuel consumed per ton of waste and recycling collected by 20% below a 2019 baseline

2019

2030

0.495 GJ/TON

0.396GJ/TON



GHG EMISSIONS

Further reduce our carbon footprint, measured in metric tons of carbon dioxide equivalents (CO2e) from scopes 1 and 2 with a 2010 baseline

2019

33%

BELOW 2010

2030

40% **BELOW 2010**

NET CLIMATE BENEFIT

Grow our Net Climate Benefit Factor, which is the sum of the GHG emission benefits of our recycling, renewable energy, and carbon sequestration activities, divided by our Scope 1 and 2 emissions

2019

2030

2.9x

5.0x

2030



COMMUNITY GIVING

Increase our community giving, including charitable donations, in-kind services, and local community sponsorships

2019

2030

EMPLOYEE VOLUNTEERING

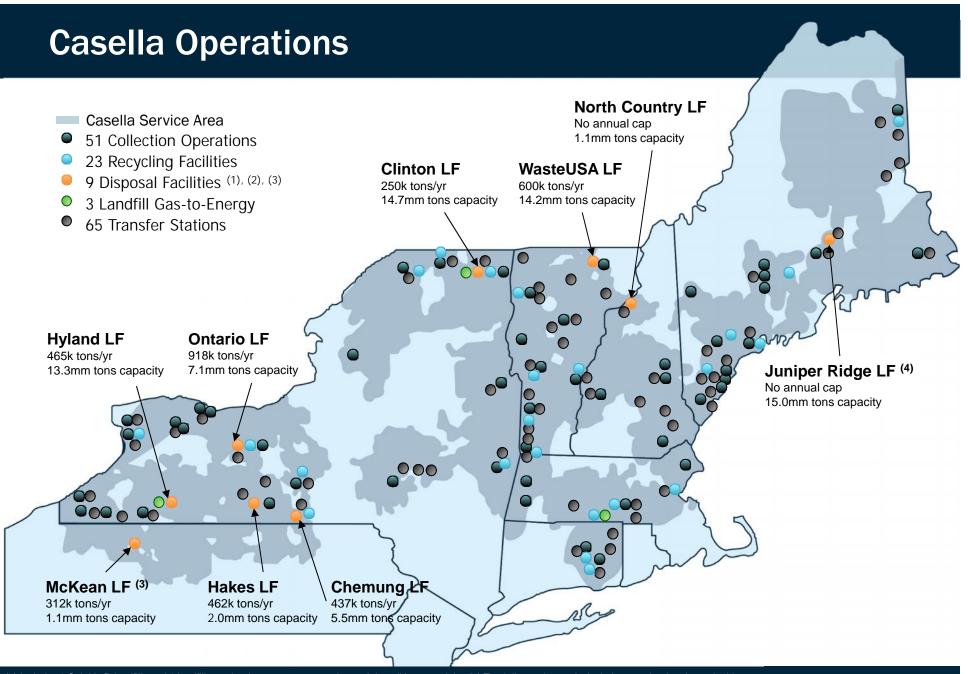
Increase volunteering in our communities, as measured by employee volunteer hours

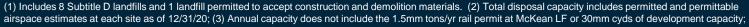
2019

TRACKING TO BEGIN IN 2021

TARGET TO BE ANNOUNCED IN 2022

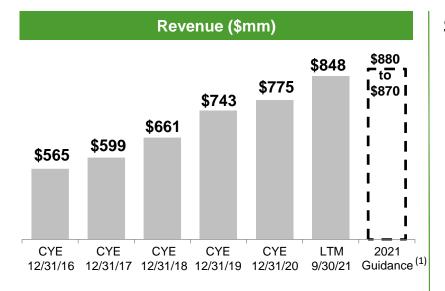


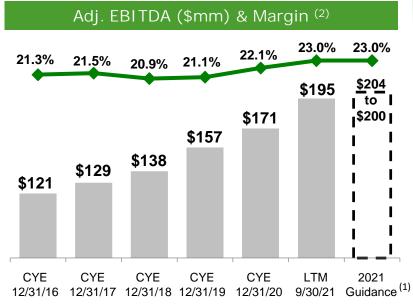






Results up significantly on strategic execution





Solid results for Q3 2021 year-over-year:

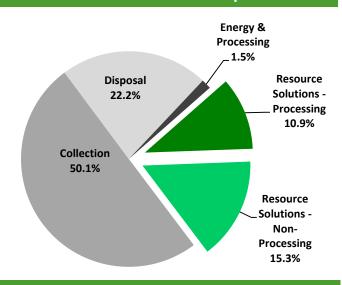
- Consolidated revenues up +19.4% YOY in Q3 2021.
- Revenue growth driven by +4.1% Solid Waste price,
 +2.8% Solid Waste volumes, +9.4% acquisitions, and
 +27.8% Resource Solutions.
 - Q3 collection price up +4.6% YOY.
- Net Income up +\$0.8mm in Q3 2021.
- Adj. EBITDA up +\$10.0mm (or +19.4%) in Q3 2021; driven by positive solid waste pricing & volumes, recycling improvement, acquisition activity, and strategic execution.

⁽¹⁾ CY 2021 Guidance as announced on 2/18/21, updated on 4/29/21, raised on 7/29/21, raised on 10/28/21.

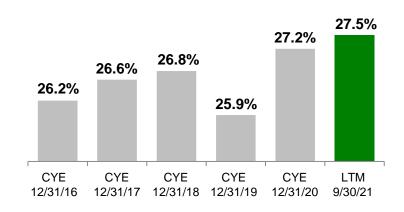
⁽²⁾ Please refer to the appendix for further information and a reconciliation of Adjusted EBITDA to the most directly comparable GAAP measure, which is Net Income (Loss). Net loss was (\$11.8mm) for the fiscal year ended 12/31/15, (\$6.9mm) for the fiscal year ended 12/31/16, and (\$21.8mm) for the fiscal year ended 12/31/17. Net income was \$6.4mm for the fiscal year ended 12/31/18, \$31.7 for the fiscal year ended 12/31/19, \$91.1mm for the fiscal year ended 12/31/20, and \$94.9mm for the 12-months ended 9/30/21.

Solid Waste operations driving improving margins

LTM 9/30/21 - Revenue Splits



Solid Waste Adjusted EBITDA Margins



~74% revenues in Solid Waste.

- Solid Waste consists of integrated collection, transfer, landfill, energy, and processing services.
- Focus on pricing programs, cost efficiencies, and asset utilization, and acquisitions.
- SW Adj. EBITDA margins up +160bps since 2019.

~26% revenues in Resource Solutions.

- Resource Solutions consists of processing operations such as recycling and organic material processing facilities and non-processing operations such as brokerage and resource management services.
- Recycling business implementation of our SRA Fee, contract resets, and operating efficiencies driving higher margins.

2021 guidance ranges

On 10/28/21, we raised our guidance ranges for revenue, net income, Adjusted EBITDA, net cash provided by operating activities, and Adjusted Free Cash Flow.

	CY 2020 Actuals		CY 2021 Guidance Ranges ⁽¹⁾	
Revenues	\$774.6mm	•	\$870mm to \$880mm	+12.7% to +13.6%
Net Income (2)	\$91.1mm		\$37mm to \$41mm	2020 included reversal of tax valuation allowance
Adjusted EBITDA (3)	\$171.4mm	•	\$200mm to \$204mm	+16.7% to +19.0%
Net Cash Provided by Operating Activities	\$139.9mm		\$162mm to \$166mm	+15.8% to +18.7%
Adjusted Free Cash Flow (4)	\$69.1mm	→	\$85mm to \$89mm	+23.0% to +28.8%

⁽¹⁾ CY 2021 Guidance Ranges as announced on 2/18/21, updated on 4/29/21, raised on 7/29/21, and raised on 10/28/21.

⁽⁴⁾ Please refer to appendix for a reconciliation of Adjusted Free Cash Flow to the most directly comparable GAAP measure, which is net cash provided by operating activities.



⁽²⁾ Net income for the fiscal year ended 12/31/20 includes a \$55.0mm benefit to income taxes due to the reversal of a valuation allowance on the majority of our net operating loss carryforwards and other deferred tax assets,. Given this reversal, we now expect an income statement tax provision of approximately 30.5% in fiscal year 2021. However, our cash taxes are expected to remain at approximately \$1.5 million in fiscal year 2021.

⁽³⁾ Please refer to appendix for a reconciliation of Adjusted EBITDA to the most directly comparable GAAP measure, which is Net income (loss).



2021 Strategic plan expected to further drive shareholder value

In Aug 2017 we launched 2021 plan that focuses on the following strategies to enhance free cash flow growth, while reducing leverage:

Key Strategies

- 1 Increasing landfill returns
- Driving additional profitability in collection operations
- Creating incremental value through Resource Solutions
- Using technology to drive profitable growth & efficiencies
- Allocating capital to balance delevering with smart growth

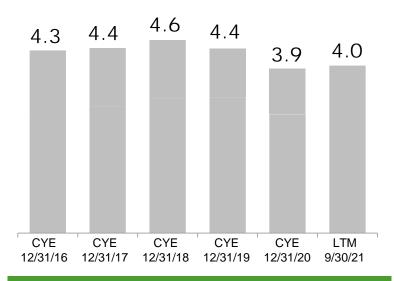
Financial framework

- Organic revenue growth targeted at +3% to +4% per year (including -2% from the closure of Southbridge landfill).
- \$20mm to \$40mm per year of <u>acquisition</u> or <u>development activity</u>. Opportunistic, not budgeted, with strict capital hurdle rates and process.
- Adjusted Free Cash Flow growth of +10% to +15% per year.
- Consolidated Net Leverage targeted between 3.00x and 3.25x.

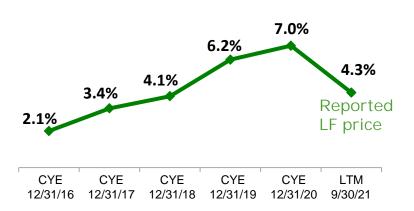
(1)

Increasing landfill returns

Annual Landfill Volumes (mm Tons) (1)



Landfill Price Growth



Landfill Highlights:

- Total disposal capacity ~73.9mm tons.⁽²⁾
- Roughly 0.9mm tons/yr of excess annual permitted capacity at 12/31/20.
- Jan 2016 Hyland LF annual permit increased by +150k tons/yr.
- Jan 2016 Ontario LF total permitted capacity increased by +15.7mm cyds.
- Jun 2016 Chemung LF total permitted capacity increased by +8.2mm cyds and increased the annual permit by 237k tons/yr.
- Jun 2017 Juniper Ridge LF total permitted capacity increased by +9.4mm cyds.
- Aug 2018 Clinton LF annual permit increased by +75k tons/yr.
- Jul 2019 WasteUSA LF total permitted capacity increased by +13.7mm CYDS.
- Dec 2019 Hakes LF permitted capacity increased by +2.7mm cyds.
- Oct 2020 North Country LF permitted capacity increased by +1.2mm cyds.



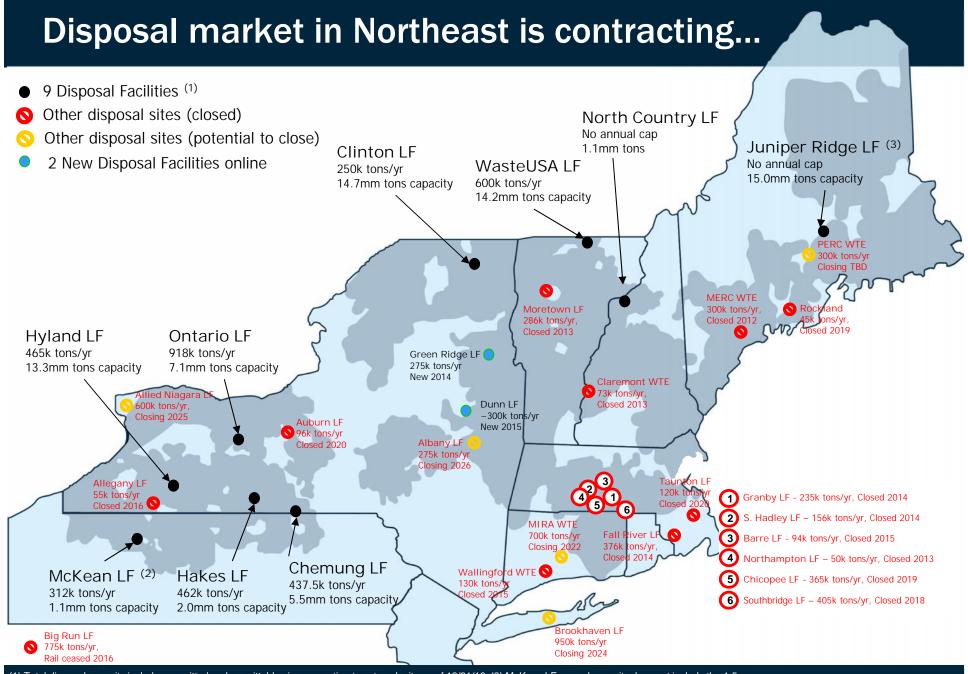
Increasing landfill returns - continued

Strategy capitalizes on improving market and asset positioning to further improve landfill returns.

- 9/30/21 LTM reported landfill price up +4.3% with continued tightening disposal capacity across the northeast.
- Landfill tons up slightly (+0.7%) YOY in Q3.
- Landfill tonnage trends continued to improve sequentially through September 2021;
 continuing to modestly narrow the gap to normal seasonal levels.

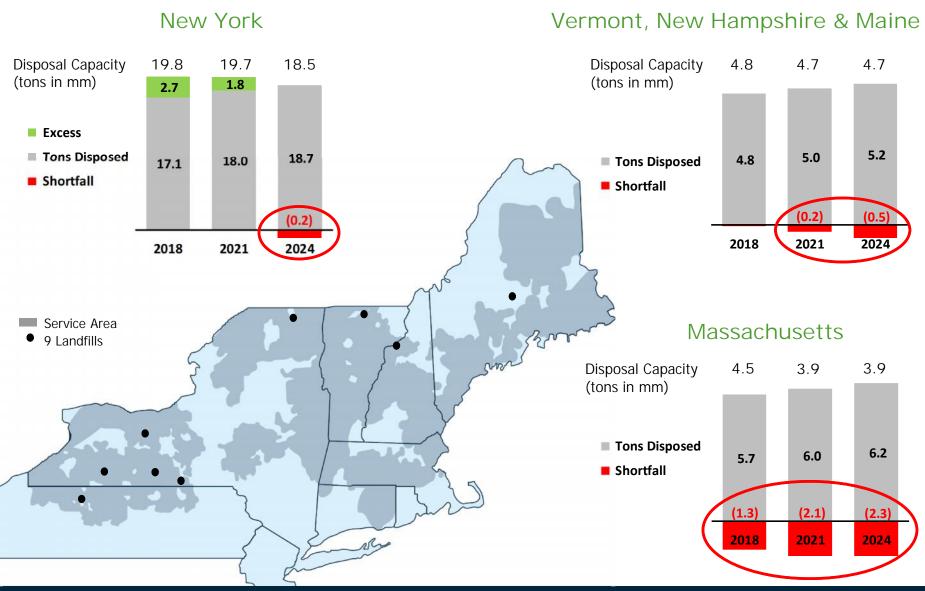
Market dynamics are improving across our footprint area.

- Disposal site closures (and expected closures) are creating a supply-demand imbalance.
- Within our footprint, roughly 2.7mm tons/yr of disposal capacity has closed since Dec 2012, and an additional 2.8mm tons/yr of disposal capacity is expected to permanently close in the next several years, offset by 0.4mm tons/yr of new disposal capacity (= net closure of -5.1mm tons/yr).



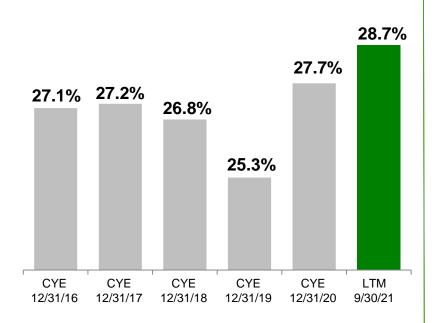


...creating a supply-demand imbalance



Driving additional profitability in collection operations

Collection Adjusted EBITDA Margins



Strategies to improve Collection profitability:

- Pricing over inflation;
- 2) Operating efficiencies; and
- 3) Improving density through profitable organic growth and acquisitions.

Collection margin improvement.

- Effectively flexed variable costs in Q1 2021 and 2020 to fully offset the negative volume impact related to COVID-19.
- Direct labor and disposal cost inflation, along with acquisition activity weighed on margins in 2018 and 2019.
- Slight margin headwind in Q3 2021 with heightened wage inflation.

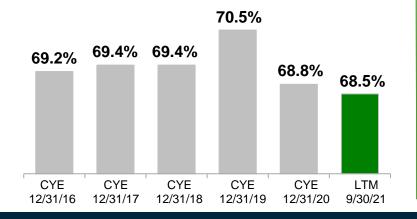
Driving additional profitability in collection operations - continued

Collection Price





Collection Cost of Operations as % of Collection Revenues



(1) Focus on pricing discipline.

- Collection pricing up +4.6% YOY in Q3 2021.
- Focused on pricing in excess of inflation.
- Pricing discipline maintained through COVID-19 pandemic. Created additional service level flexibility for customers.
- Use floating fees to manage risk SRA fee for recycling commodities and E&E fee to offset fuel volatility and environmental inflation.

(2) Focus on operating efficiencies.

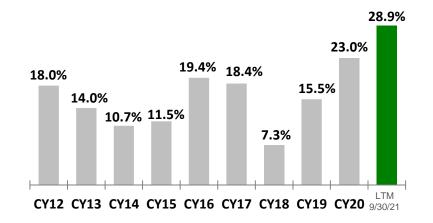
- Business Intelligence tools and robust operating programs enabled rapid flexing of variable operating costs during COVID-19.
- Route profitability new dynamic routing tools, new on-board computers, Service Excellence program, roll-off profitability initiative.
- Fleet optimization standardized fleet selection, automation, reducing maintenance costs.

Creating incremental value through Resource Solutions

Average Commodity Revenue per ton (ACR)



Recycling Adjusted EBITDA Margins



Reshaped recycling model to improve returns and reduce commodity risk.

- Increased <u>revenue share thresholds</u> for 3rd party recycling customers.
- Introduced the <u>Sustainability Recycling</u>
 <u>Adjustment fee (SRA)</u> for collection customers.
- Pass back increased processing costs to customers with <u>Net Average Commodity Rate</u>.

LTM Recycling Adj. EBITDA margins of +26.4% up +1,340bps from 2019.

- Driven by higher recycling commodity prices, processing fees, and operational improvements.
- We continue to improve our revenue model, focus on operational improvements, and make return driven investments on equipment.



Using technology to drive profitable growth & efficiencies

Technology Strategy focuses on investment in core systems and infrastructure to drive cost efficiencies, customer value, and growth.

Profitable revenue growth

Optimize sales organization and activities.

- Migrated from 5 CRM systems to MS Dynamics CRM & Case Management.
- Sustainable Growth team focused on resource solutions, opportunity and retention activities, cross-selling, and driving higher salesforce effectiveness and efficiency.

Operating efficiencies

Leveraging technology to help drive operating efficiencies.

- Utilizing MS PowerBi to gain real-time business intelligence to drive higher accountability and more efficient decision making.
- Easyroute implemented as new route optimization platform and piloting RouteWare as new on-board computing platform to drive efficiencies, enhance safety, and improve billings.
- Developing new MS D365 service management system, including customer portals, dispatch, work-order-management, billing, credit & collections.

Back-office efficiencies

Update key systems to drive finance and back-office transformation.

- NetSuite implemented as new ERP system in Feb 2018 (on-time and on-budget).
- Updating procurement systems with the implementation of Coupa, digitization and automation of key processes, and spend category management.



Allocating capital for smart growth

Acquisition activity Recent Acquisitions (since Q3 2017) **Collection Operations Recycling Facilities Disposal Facilities** Landfill Gas-to-Energy **Transfer Stations**

Acquisition program ramped up over last 3-years

- 2018: 10 acquisitions with \$77mm revenues.
- 2019: 9 acquisitions with \$53mm revenues.
- 2020: 10 acquisitions with \$22mm revenues.

Completed 9 acquisition with \$86mm of annualized revenues in 2021 to date.

 Continued focus in 2021 on effectively integrating past acquisitions, driving synergies, and further strategic growth.

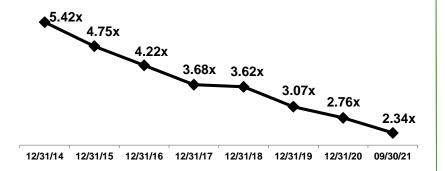
Robust pipeline of acquisitions.

- We have over \$500mm of potential acquisitions in our mid-term pipeline across our northeast markets.
- Acquisitions will be opportunistic and will strictly adhere to our disciplined capital return hurdles and review process.

Balance sheet gives ample liquidity to meet needs

9/30/21 - Capitalization Table (\$mm)							
Cash	\$	46.5					
Revolver (\$200mm, L+150bps, due 2023)		-					
Term Loan A (L+150bps, due 2023)		347.4					
Industrial Revenue Bonds (2.75% - 5.25%, due 2025 - 2050)		162.0					
Notes Payable & Finance leases (3.5% - 5.0%)		49.2					
Total Debt		558.6					
Total Debt, Net of Unencumbered Cash	\$	514.1					
Consolidated Bank EBITDA (LTM)	\$	219.5					
Total Debt, Net / Consolidated Bank EBITDA	2	2.34x					
Total Debt (net all cash) / Consolidated Bank EBITDA	2	2.33x					
Available Liquidity (including Cash)	\$	218.5					

Consolidated Net Leverage Ratio (2)



Conservative capital structure – with adequate liquidity, covenant headroom, and no near-term maturities.

- Consolidated Net Leverage Ratio 2.34x at 6/30/21, or 2.33x after netting all cash against debt.
- Liquidity of \$218.5mm at 9/30/21, including \$46.5mm of cash.

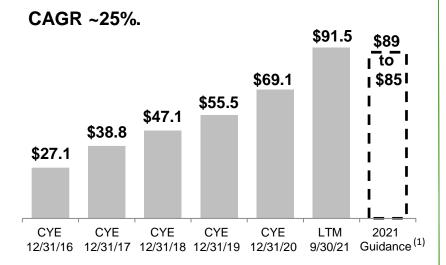
Credit Agreement only allows up to \$50mm of unencumbered cash to be netted against Total Debt, net for the purpose of calculating leverage ratio.

⁽²⁾ Defined as "Consolidated Net Leverage Ratio" in the Credit Agreement dated as of 10/17/16 for 12/31/16, 12/31/17, 12/31/18, 12/31/19, 12/31/20, 9/30/21; Total Debt-to-EBITDA as defined as "Consolidated Leverage Ratio" in the Loan & Security Agreement dated as of 2/27/15 ("ABL Revolver") for all other periods; see appendix for a reconciliation.

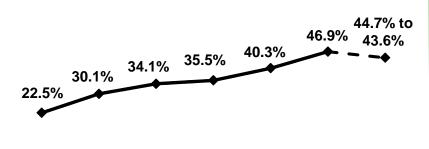
⁽³⁾ Leverage ratio after netting all cash against consolidated debt.

Strategic execution driving higher Free Cash Flows

Adjusted Free Cash Flow (\$mm) (1), (2)



Adjusted Free Cash Flow Yield (as % of Adj EBITDA) (1), (2)



	1	1	1	1	1	
				CYE	LTM	2021
12/31/16	12/31/17	12/31/18	12/31/19	12/31/20	9/30/21	Guidance (1)

Focused on improving Free Cash Flow:

- Goal to grow Adjusted FCF +10% to +15% per year.
- LTM 9/30/21 Adjusted FCF \$91.5mm (up +\$22.4mm vs 2020) on strong operating results and positive working capital management.
- Plan to use excess cash for select strategic tuck-in acquisitions or investments.
- Adjusted Tax loss carryforwards will continue to shield cash taxes for the next several years (as of 12/31/20, \$138.9mm of Federal NOLs).⁽³⁾

⁽¹⁾ CY 2021 Guidance as announced on 2/18/21, updated on 4/29/21, raised on 7/29/21, and raised 10/28/21.

⁽²⁾ See attached appendix for further information and for a reconciliation of Adjusted Free Cash Flow to net cash provided by operating activities, which is the most directly comparable GAAP measure. Net cash provided by operating activities for the periods presented above was \$70.5mm for CYE 12/31/15, \$80.4mm for CYE 12/31/16, \$107.5mm for CYE 12/31/17, \$120.8mm for CYE 12/31/18, \$116.8mm for CYE 12/31/19. \$139.9mm for CYE 12/31/20. and \$162.1mm for the 12-months ended 9/30/21.

⁽³⁾ Total tax carryforwards include \$138.9mm of Federal NOLs and \$6.4mm of Federal tax credits; total tax carry forwards exclude \$68.2mm of State NOLs and \$2.1mm of State tax credits.

Casella's value drivers...

Valuable integrated solid waste assets in disposal limited Northeast markets.

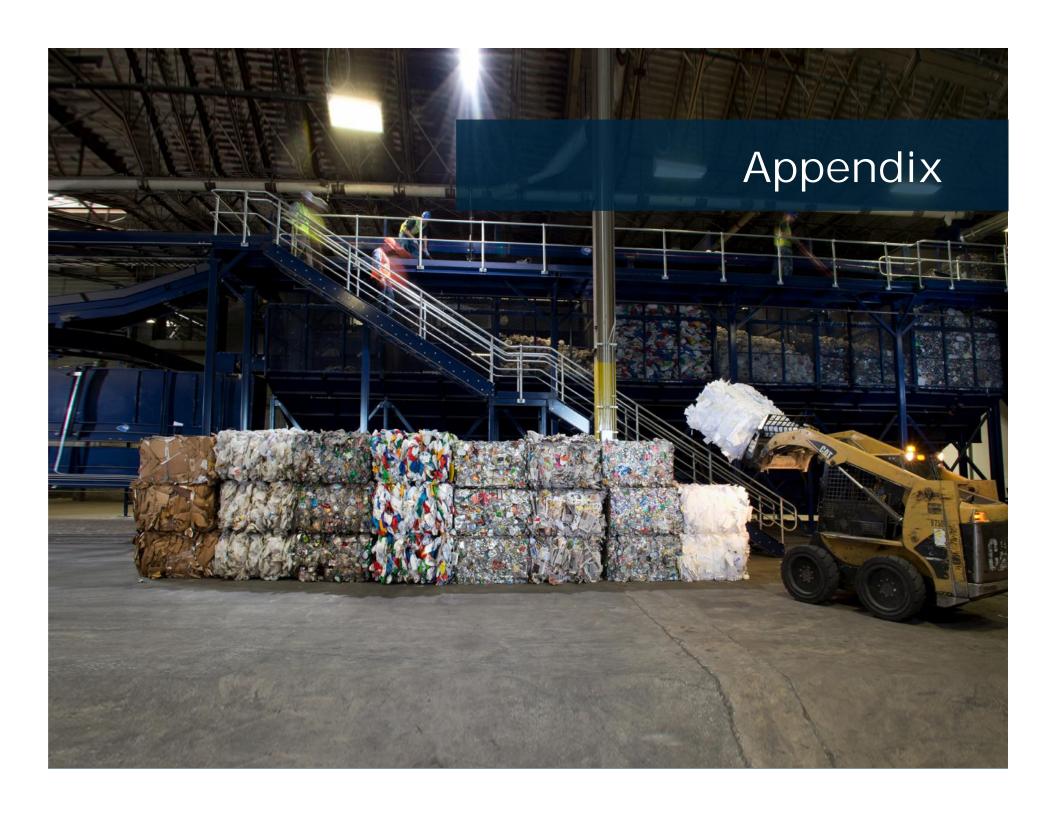
Management focused on increasing Free Cash Flow and reducing debt leverage.

Results demonstrate strong execution of plan.

Near term focus of team:

- Increasing landfill returns;
- Driving profitability of collection operations;
- Creating value through Resource Solutions;
- Using technology to drive profitable growth & efficiencies;
- Allocating capital to balance delevering with smart growth.





Reconciliation of Adjusted EBITDA

\$ in 000's

Non-GAAP Reconciliation of Adjusted Operating Income and Adjusted EBITDA to Net (loss) income (1)

	onths ended c. 31, 2016	months ended Dec. 31, 2017		12 months ended Dec. 31, 2018	2 months ended Dec. 31, 2019	1	2 months ended Dec. 31, 2020	1	2 months ended Sep. 30, 2021
Revenues	\$ 565,030	\$ 599,309	\$	660,660	\$ 743,290	\$	774,584	\$	847,615
Net (loss) income	\$ (6,858)	\$ (21,799)	\$	6,420	\$ 31,653	\$	91,106	\$	94,872
Provision (benefit) for income taxes	494	(15,253)		(384)	(1,874)		(52,804)		(39, 168)
Other income	(1,090)	(935)		(745)	(1,439)		(1,073)		(1,292)
Impairment of investments	-	-		1,069	-		-		-
Loss on debt extinguishment	13,747	517		7,352	-		-		-
Interest expense, net	38,652	24,887		26,021	24,735		22,068		21,139
Southbridge Landfill closure charge, net	-	65,183		8,054	2,709		4,587		1,425
Expense from acquisition activities and other items	-	176		1,872	2,687		1,862		4,279
Environmental remediation charge	900	-		-	-		-		-
Development project charge	-	-		311	-		-		-
Contract settlement charge	-	-		2,100	-		-		-
Withdrawal costs - multiemployer pension plan	-	-		-	3,591		-		-
Depreciation and amortization	61,856	62,102		70,508	79,790		90,782		98,011
Depletion of landfill operating lease obligations	9,295	9,646		9,724	7,711		7,781		7,862
Interest accretion on landfill and environmental remediation liabilities	 3,606	 4,482	_	5,708	6,976		7,090		7,681
Adjusted EBITDA	\$ 120,602	\$ 129,006	\$	138,010	\$ 156,539	\$	171,399	\$	194,809
Solid Waste	416,054	437,130		496,832	564,687		578,273		625,950
Resource Solutions	148,976	162,179		163,828	178,603		196,311		221,669
Third party revenues	\$ 565,030	\$ 599,309	\$	660,660	\$ 743,290	\$	774,584	\$	847,615
Adjusted EBITDA margins	<u>21.3</u> %	<u>21.5</u> %		<u>20.9</u> %	<u>21.1</u> %		<u>22.1</u> %		<u>23.0</u> %
Net (loss) income margins	- <u>1.2</u> %	- <u>3.6</u> %		<u>1.0</u> %	4.3%		<u>11.8</u> %		<u>11.2</u> %

⁽¹⁾ We present Adjusted EBITDA, which is a non-GAAP performance measure, to provide an understanding of operational performance because we consider it an important supplemental measure of our performance and believe it is frequently used by securities analysts, investors and other interested parties in the evaluation of our results. We also believe that identifying the impact of certain items as adjustments provides more transparency and comparability across periods. Management uses Adjusted EBITDA to further understand our "core operating performance" and believes our "core operating performance" is helpful in understanding our ongoing performance in the ordinary course of operations. We believe that providing Adjusted EBITDA to investors, in addition to the corresponding income statement measures, affords investors the benefit of viewing our performance using the same financial metrics that the management team uses in making many key decisions and understanding how the core business and our results of operations have performed.

Reconciliation of Adjusted Free Cash Flow

\$ in 000's

Non-GAAP Reconciliation of Adjusted Free Cash Flow to Net cash provided by operating activities

	onths ended . 31, 2016	12 months ended Dec. 31, 2017	i	12 months ended Dec. 31, 2018	1	12 months ended Dec. 31, 2019	2 months ended Dec. 31, 2020	months ended ep. 30, 2021
Net cash provided by operating activities (i)	\$ 80,434	\$ 107,53	8	\$ 120,834	\$	116,829	\$ 139,922	\$ 162,096
Capital expenditures	(54,238)	(64,86	2)	(73,232)		(103,165)	(108,108)	(112,414)
Payments on landfill operating lease contracts (i)	(7,249)	(7,24	0)	(7,415)		-	-	-
Proceeds from sale of property and equipment	1,362	71	1	870		750	533	696
Proceeds from property insurance settlement	-		-	992		332	-	-
Southbridge landfill closure and Potsdam environmental remediation (ii)	-	2,18	2	(2,827)		15,445	8,906	8,632
Interest payment on redemption of senior subordinated notes (iii)	6,770		-	-		-	-	-
Contract settlement costs (iv)	-		-	2,100		-	-	-
Cash outlays from acquisition activities and other items (v)	-		-	1,329		2,622	1,307	3,741
Waste USA Landfill phase VI capital expenditures (vi)	-		-	-		4,873	10,573	9,146
Post acquisition and development project capital expenditures (vii)	 38	46	9	4,402	_	17,782	 16,014	 19,555
Adjusted Free Cash Flow	\$ 27,117	\$ 38,79	8	\$ 47,053	\$	55,468	\$ 69,147	\$ 91,452

- (i) Effective January 1, 2019, as a part of implementing ASC Topic 842, Leases, cash payments on landfill operating lease contracts, which historically were capitalized as property, plant and equipment and presented in the Condensed Consolidated Statements of Cash Flows as cash outflows from investing activities, are classified as cash flows from operating activities that reduce net cash provided by operating activities.
- (ii) Southbridge Landfill closure and Potsdam environmental remediation are cash outlays (and inflows) associated with the unplanned closure of the Southbridge Landfill and the Company's portion of costs associated with environmental remediation at the Company's Potsdam, New York scrap yard which are added back when calculating Adjusted Free Cash Flow due to their non-recurring nature and the significance of the related cash flows. The Company initiated the unplanned closure of the Southbridge Landfill in the fiscal year ended December 31, 2017 and expects to incur cash outlays through completion of the closure and environmental remediation process. The Potsdam site was deemed a Superfund site in 2000 and is not associated with current operations.
- (iii) Includes interest payment required upon redemption of the 7.75% Senior Subordinated Notes due 2019.
- (iv) Includes a contract settlement cash outlay associated with exiting a contract.
- (v) Cash outlays from acquisition activities and other items are cash outlays for transaction and integration costs relating to specific acquisition transactions and include legal, environmental, valuation and consulting as well as asset, workforce and system integration costs as part of the Company's strategic growth initiative and other items.
- (vi) Waste USA Landfill phase VI capital expenditures are capital expenditures related to Waste USA Landfill phase VI construction and development that are added back when calculating Adjusted Free Cash Flow due to the specific nature of this investment in the development of long-term infrastructure which is different from landfill construction investments in the normal course of operations. This investment at the Waste USA Landfill is unique because the Company is investing in long-term infrastructure over an estimated four year period that will not yield a positive economic benefit until 2023 and extending over approximately 20 years.
- (vii) Post acquisition and development project capital expenditures are (x) acquisition related capital expenditures that are necessary to optimize strategic synergies associated with integrating newly acquired operations as contemplated by the discounted cash flow return analysis conducted by management as part of the acquisition investment decision; and (y) non-routine development investments that are expected to provide long-term returns. Acquisition related capital expenditures include the following costs required to achieve initial operating synergies: trucks, equipment and machinery; and facilities, land, IT infrastructure or related upgrades to integrate operations.
- (1) We present non-GAAP liquidity measures such as Adjusted Free Cash Flow, Bank Consolidated EBITDA, Consolidated Funded Debt, Net and Consolidated Net Leverage Ratio that provide an understanding of the Company's liquidity because we consider them important supplemental measures of our liquidity that are frequently used by securities analysts, investors and other interested parties in the evaluation of our cash flow generation from our core operations that are then available to be deployed for strategic acquisitions, growth, investments, development projects, unusual landfill closures, site improvements and remediation, and strengthening our balance sheet through paying down debt. We also believe that identifying the impact of certain items as adjustments provides more transparency and comparability across periods. Management uses non-GAAP liquidity measures to further understand our cash flow provided by operating activities after certain expenditures along with our consolidated Net Leverage Ratio that provide an understanding of the Company's liquidity to execute on our strategic initiatives. We believe that provided by operating activities after certain expenditures along with our consolidated net leverage Ratio that provide an understanding of the Company's liquidity measures and understanding how the core business and cash flow generation has performed.

Reconciliation of Consolidated Leverage Ratio

\$ in millions

Reconciliation of Consolidated EBITDA (as defined by the applicable credit facility agreement) to Net Cash Provided by Operating Activities

\$ in millions	12 months ended Dec. 31, 2014	12 months ended Dec. 31, 2015	12 months ended Dec. 31, 2016	12 months ended Dec. 31, 2017	12 months ended Dec. 31, 2018	12 months ended Dec. 31, 2019	12 months ended Dec. 31, 2020	12 months ended Sep. 30, 2021
Net cash provided by operating activities	\$ 62.2	\$ 70.5	\$ 80.4	\$ 107.5	\$ 120.8	\$ 116.8	\$ 139.9	\$ 162.1
Changes in assets and liabilities, net of effects of acquisitions and divestitures	(2.2)	(5.0)	9.4	4.6	5.4	28.7	25.2	24.9
Divestiture transactions	(6.9)	5.5	-	-	-	-	=	=
Gain (loss) on sale of property and equipment	0.5	0.1	0.6	(0.1)	0.5	0.9	(0.9)	(0.7)
Loss on sale of equity method investment	(0.2)	-	-	-	-	-	-	· -
Loss on debt extinguishment	-	(1.0)	(13.7)	(0.5)	(7.4)	-	-	-
Non-cash expense from acquisition activities and other items	-	· -	` -	· -	(0.8)	(0.1)	(0.6)	(0.5)
Stock based compensation and related severance expense, net of excess tax benefit	(2.3)	(2.9)	(3.4)	(6.4)	(8.4)	(7.2)	(8.2)	(11.6)
Development project charge	(1.4)	`	` -	`	(0.3)	`	` <u>-</u>	` <u>'</u>
Impairment of investments	(2.3)	(2.1)	_	_	(1.1)	-	_	-
Operating lease right-of-use assets expense	,	` -	-	-	` _′	(9.6)	(8.5)	(6.0)
Withdrawal costs - multiemployer pension plan	-	_	-	-	_	(2.2)	-	-
Loss on derivative instruments	(0.6)	(0.2)	-	-	_	` -	_	-
Southbridge Landfill non-cash closure charge	-		-	(63.5)	(16.2)	(0.1)	(0.3)	1.7
Southbridge Landfill insurance recovery for investing activities	-	_	-	· · · · · · ·	3.5	\ ' -	-	-
Interest expense, less amortization of debt issuance costs and discount on long-term debt	38.2	40.1	35.1	22.5	23.9	22.8	20.2	19.1
Provision (benefit) for income taxes, net of deferred taxes	0.2	0.6	(0.1)	0.3	(1.6)	(0.6)	(0.5)	1.7
Gain on settlement of acquisition related contingent consideration	11		()		(,	()	()	
Environmental remediation charge	""	_	(0.9)	_	_	_	_	_
EBITDA adjustment as allowed by the applicable credit facility agreement	7.5	(2.5)	(0.7)	_	_	_	_	_
Adjustments as allowed by the applicable credit facility agreement	5.3	7.4	17.1	71.0	34.7	20.5	14.1	28.8
Minimum Consolidated EBITDA	\$ 99.0	\$ 110.5	\$ 124.5	\$ 135.4	\$ 153.0	\$ 169.9	\$ 180.5	\$ 219.5
Consolidated Funded Debt (Total Debt)	\$ 537.0	\$ 525.0	\$ 525.6	\$ 497.7	\$ 555.2	\$ 522.7	\$ 548.4	\$ 558.6
Consolidated Net Leverage Ratio (Total Debt-to-EBITDA)	5.42	\$ 525.0 4.75	4.22	3.68	3.62	3.07	2.76	2.34

Capital Expenditure Detail

\$ in 000's

Capital Expenditure Detail (1)

(\$ in thousands)	12 months ended		ded 12 months ended		12 months ended		12 months ended		12 months ended		12 months ended	
	Dec.	31, 2015	Dec	. 31, 2016	De	c. 31, 2017	Dec	Dec. 31, 2018		Dec. 31, 2019		. 31, 2020
Growth Capital Expenditures:												
Post acquisition and development projects	\$	-	\$	-	\$	469	\$	4,402	\$	17,782	\$	16,014
Waste USA Landfill Phase VI		-		-		-		-		4,873		10,573
Other		7,244		5,373		3,552		4,260		1,582		4,362
Growth Capital Expenditures	\$	7,244	\$	5,373	\$	4,021	\$	8,662	\$	24,237	\$	30,949
Replacement Capital Expenditures:												
Landfill development		18,828		29,666		33,697		27,709		26,915		36,981
Vehicles, machinery, equipment, and containers		18,866		15,512		21,581		30,287		42,828		30,846
Facilities		2,873		2,581		3,155		4,985		7,001		5,170
Other		2,184		1,068		2,408		1,589		2,184		4,162
Total Replacement Capital Expenditures		42,751		48,827		60,841		64,570		78,928		77,159
Total Capital Expenditures	\$	49,995	\$	54,200	\$	64,862	\$	73,232	\$	103,165	\$	108,108
Replacement Capital Expenditures as % of Revenues		7.8%		8.6%		10.2%		9.8%		10.6%		10.0%
Total Capital Expenditures as % of Revenues		9.1%		9.6%		10.8%		11.1%		13.9%		14.0%

(1) The Company's capital expenditures are broadly defined as pertaining to either growth or replacement activities. Growth capital expenditures are defined as costs related to development projects, organic business growth, and the integration of newly acquired operations. Growth capital expenditures include costs related to the following: 1) post acquisition and development projects that are necessary to optimize strategic synergies associated with integrating newly acquired operations as contemplated by the discounted cash flow return analysis conducted by management as part of the acquisition investment decision as well as non-routine development investments that are expected to provide long-term returns and includes the following capital expenditures required to achieve initial operating synergies: trucks, equipment and machinery; and facilities, land, IT infrastructure or related upgrades to integrate operations; 2) Waste USA Landfill phase VI construction and development for long-term infrastructure, which is unique and different from landfill construction investments in the normal course of operations because the Company is investing in long-term infrastructure over an estimated four year period that will not yield a positive economic benefit until 2023 and extending over approximately 20 years; and 3) development of new airspace, permit expansions, and new recycling contracts, equipment added directly as a result of organic business growth and infrastructure added to increase throughput at transfer stations and recycling facilities. Replacement capital expenditures are defined as landfill cell construction costs not related to expansion airspace, costs for normal permit renewals, and replacement costs for equipment due to age or obsolescence.

Reconciliations for 2021 guidance ranges

\$ in 000's

Following is a reconciliation of the Company's estimated Adjusted EBITDA from estimated Net income for the fiscal year ending December 31, 2021

\$ in thousands	(Estimated) Fiscal Year Ending
	December 31, 2021
Net Income	\$37,000 - \$41,000
Interest expense, net	22,000
Other income	(1,000)
Provision for income taxes	18,000
Southbridge Landfill closure charge	1,000
Expense from acquisition activities	4,000
Depreciation and amortization	104,000
Depletion of landfill operating lease obligations	7,500
Interest accretion on landfill and environmental remediation liabilities	7,500
Adjusted EBITDA	<u>\$200,000 - \$204,000</u>

(1) We present Adjusted EBITDA, which is a non-GAAP performance measure, to provide an understanding of operational performance because we consider it an important supplemental measure of our performance and believe it is frequently used by securities analysts, investors and other interested parties in the evaluation of our results. We also believe that identifying the impact of certain items as adjustments provides more transparency and comparability across periods. Management uses Adjusted EBITDA to further understand our "core operating performance" and believes our "core operating performance" is helpful in understanding our ongoing performance in the ordinary course of operations. We believe that providing Adjusted EBITDA to investors, in addition to the corresponding income statement measures, affords investors the benefit of viewing our performance using the same financial metrics that the management team uses in making many key decisions and understanding how the core business and our results of operations have performed.

Reconciliations for 2021 guidance ranges (continued)

\$ in 000's

\$ in thousands	(Estimated) Fiscal Year Ending December 31, 2021
Net Cash Provided by Operating Activities	\$162,000 - \$166,000
Capital expenditures	(117,000)
Proceeds from sale of property and equipment	500
Southbridge Landfill closure and Potsdam environmental remediation (i)	6,500
Waste USA Landfill phase VI capital expenditures (ii)	13,000
Post acquisition and development project capital expenditures (iii)	16,000
Cash outlays from acquisition activities (iv)	4,000
Adjusted Free Cash Flow	\$85,000 - \$89,000

- (i) Southbridge Landfill closure and Potsdam environmental remediation are cash outlays associated with the unplanned closure of the Southbridge Landfill and the Company's portion of costs associated with environmental remediation at the Company's Potsdam, New York scrap yard which are added back when calculating Adjusted Free Cash Flow due to their non-recurring nature and the significance of the related cash flows. The Company initiated the unplanned closure of the Southbridge Landfill in the fiscal year ended December 31, 2017 and expects to incur cash outlays through completion of the closure and environmental remediation process. The Potsdam site was deemed a Superfund site in 2000 and is not associated with current operations.
- (ii) Waste USA Landfill phase VI capital expenditures are capital expenditures related to Waste USA Landfill phase VI construction and development that are added back when calculating Adjusted Free Cash Flow due to the specific nature of this investment in the development of long-term infrastructure which is different from landfill construction investments in the normal course of operations. This investment at the Waste USA Landfill is unique because the Company is investing in long-term infrastructure over an estimated four year period that will not yield a positive economic benefit until 2023 and extending over approximately 20 years.
- (iii) Post acquisition and development project capital expenditures are (x) acquisition related capital expenditures that are necessary to optimize strategic synergies associated with integrating newly acquired operations as contemplated by the discounted cash flow return analysis conducted by management as part of the acquisition investment decision; and (y) non-routine development investments that are expected to provide long-term returns. Acquisition related capital expenditures include the following costs required to achieve initial operating synergies: trucks, equipment and machinery; and facilities, land, IT infrastructure or related upgrades to integrate operations.
- (iv) Cash outlays from acquisition activities are cash outlays for transaction and integration costs relating to specific acquisition transactions and include legal, environmental, valuation and consulting as well as asset, workforce and system integration costs as part of the Company's strategic growth initiative.

(1) We present non-GAAP liquidity measures such as Adjusted Free Cash Flow, Bank Consolidated EBITDA, Consolidated Funded Debt. Net and Consolidated Net Leverage Ratio that provide an understanding of the Company's liquidity because we consider them important supplemental measures of our liquidity that are frequently used by securities analysts, investors and other interested parties in the evaluation of our cash flow generation from our core operations that are then available to be deployed for strategic acquisitions, growth, investments, development projects, unusual landfill closures, site improvements and remediation, and strengthening our balance sheet through paying down debt. We also believe that identifying the impact of certain items as adjustments provides more transparency and comparability across periods. Management uses non-GAAP liquidity measures to further understand our cash flow provided by operating activities after certain expenditures along with our consolidated net leverage and believes that these measures demonstrate our ability to execute on our strategic initiatives. We believe that providing such non-GAAP liquidity measures to investors, in addition to corresponding cash flow statement measures, affords investors the benefit of viewing our liquidity using the same financial metrics that the management team uses in making many key decisions and understanding how the core business and cash flow generation has performed.