UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2022
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from __________ to __________

Commission file number 000-23211

CASELLA WASTE SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**03-0338873**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
25 Greens Hill Lane, Rutland, Vermont	**05701**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (802) 775-0325

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class A common stock, $0.01 par value per share	CWST	The Nasdaq Stock Market LLC (Nasdaq Global Select Market)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The number of shares outstanding of each of the registrant's classes of common stock, as of October 15, 2022:

Class A common stock, $0.01 par value per share:	50,692,053
Class B common stock, $0.01 par value per share:	988,200

PART I.

ITEM 1. FINANCIAL STATEMENTS

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands)

	September 30, 2022 (Unaudited)	December 31, 2021
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	$ 47,934	$ 33,809
Accounts receivable, net of allowance for credit losses of $4,265 and $3,276, respectively	108,010	86,979
Prepaid expenses	14,998	12,766
Inventory	13,432	9,729
Other current assets	7,109	3,196
Total current assets	191,483	146,479
Property, plant and equipment, net of accumulated depreciation and amortization of $1,038,576 and $973,094, respectively	685,348	644,604
Operating lease right-of-use assets	93,066	93,799
Goodwill	272,442	232,860
Intangible assets, net	94,792	93,723
Restricted assets	1,705	2,122
Cost method investments	10,967	11,264
Deferred income taxes	25,549	43,957
Other non-current assets	23,995	14,772
Total assets	$ 1,399,347	$ 1,283,580

The accompanying notes are an integral part of these consolidated financial statements.

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS (Continued)
(in thousands, except for share and per share data)

	September 30, 2022 (Unaudited)	December 31, 2021
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Current maturities of debt	$ 8,337	$ 9,901
Current operating lease liabilities	6,898	7,307
Accounts payable	71,074	63,086
Accrued payroll and related expenses	20,056	22,210
Accrued interest	2,956	2,042
Contract liabilities	3,891	3,404
Current accrued final capping, closure and post-closure costs	10,880	7,915
Other accrued liabilities	38,740	36,328
Total current liabilities	162,832	152,193
Debt, less current portion	578,462	542,503
Operating lease liabilities, less current portion	58,528	56,375
Accrued final capping, closure and post-closure costs, less current portion	83,727	78,999
Deferred income taxes	522	868
Other long-term liabilities	28,717	30,185
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY:		
Class A common stock, $0.01 par value per share; 100,000,000 shares authorized; 50,692,000 and 50,423,000 shares issued and outstanding, respectively	507	504
Class B common stock, $0.01 par value per share; 1,000,000 shares authorized; 988,000 shares issued and outstanding, respectively; 10 votes per share	10	10
Additional paid-in capital	658,453	652,045
Accumulated deficit	(180,341)	(224,999)
Accumulated other comprehensive income (loss), net of tax	7,930	(5,103)
Total stockholders' equity	486,559	422,457
Total liabilities and stockholders' equity	$ 1,399,347	$ 1,283,580

The accompanying notes are an integral part of these consolidated financial statements.

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
UNAUDITED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except for per share data)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Revenues	$ 295,268	$ 241,969	$ 812,962	$ 647,375
Operating expenses:				
Cost of operations	190,285	153,892	538,779	419,583
General and administration	34,348	30,993	97,702	87,336
Depreciation and amortization	32,527	27,491	93,106	74,510
Expense from acquisition activities	816	1,904	3,878	3,950
Environmental remediation charge	759	—	759	—
Southbridge Landfill closure charge	245	302	563	653
	258,980	214,582	734,787	586,032
Operating income	36,288	27,387	78,175	61,343
Other expense (income):				
Interest income	(178)	(61)	(260)	(191)
Interest expense	6,177	5,164	17,078	15,928
Other income	(1,523)	(178)	(1,978)	(825)
Other expense, net	4,476	4,925	14,840	14,912
Income before income taxes	31,812	22,462	63,335	46,431
Provision for income taxes	9,140	6,601	18,677	14,476
Net income	$ 22,672	$ 15,861	$ 44,658	$ 31,955
Basic earnings per share attributable to common stockholders:				
Weighted average common shares outstanding	51,677	51,389	51,604	51,312
Basic earnings per common share	$ 0.44	$ 0.31	$ 0.87	$ 0.62
Diluted earnings per share attributable to common stockholders:				
Weighted average common shares outstanding	51,806	51,586	51,749	51,506
Diluted earnings per common share	$ 0.44	$ 0.31	$ 0.86	$ 0.62

The accompanying notes are an integral part of these consolidated financial statements.

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
UNAUDITED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	**2021**	**2022**	**2021**
Net income	$ 22,672	$ 15,861	$ 44,658	$ 31,955
Other comprehensive income (loss), before tax:				
Hedging activity:				
Interest rate swap settlements	(129)	(1,205)	(2,224)	(3,551)
Interest rate swap amounts reclassified into interest expense	14	1,204	2,136	3,551
Unrealized gain resulting from changes in fair value of derivative instruments	5,493	1,215	17,362	5,866
Other comprehensive income, before tax	5,378	1,214	17,274	5,866
Income tax provision related to items of other comprehensive income	1,468	322	4,241	1,379
Other comprehensive income, net of tax	3,910	892	13,033	4,487
Comprehensive income	$ 26,582	$ 16,753	$ 57,691	$ 36,442

The accompanying notes are an integral part of these consolidated financial statements.

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
UNAUDITED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

		Casella Waste Systems, Inc. Stockholders' Equity						
		Class A Common Stock		Class B Common Stock				
	Total	Shares	Amount	Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)
Balance, December 31, 2021	$ 422,457	50,423	$ 504	988	$ 10	$ 652,045	$ (224,999)	$ (5,103)
Issuances of Class A common stock	19	227	2	—	—	17	—	—
Stock-based compensation	2,241	—	—	—	—	2,241	—	—
Comprehensive income:								
Net income	4,190	—	—	—	—	—	4,190	—
Other comprehensive income:								
Hedging activity	6,143	—	—	—	—	—	—	6,143
Balance, March 31, 2022	435,050	50,650	506	988	10	654,303	(220,809)	1,040
Issuances of Class A common stock	803	40	1	—	—	802	—	—
Stock-based compensation	937	—	—	—	—	937	—	—
Comprehensive income:								
Net income	17,796	—	—	—	—	—	17,796	—
Other comprehensive income:								
Hedging activity	2,980	—	—	—	—	—	—	2,980
Balance, June 30, 2022	457,566	50,690	507	988	10	656,042	(203,013)	4,020
Issuances of Class A common stock	—	2	—	—	—	—	—	—
Stock-based compensation	2,411	—	—	—	—	2,411	—	—
Comprehensive income:								
Net income	22,672	—	—	—	—	—	22,672	—
Other comprehensive income:								
Hedging activity	3,910	—	—	—	—	—	—	3,910
Balance, September 30, 2022	$ 486,559	50,692	$ 507	988	$ 10	$ 658,453	$ (180,341)	$ 7,930

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
UNAUDITED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (Continued)
(in thousands)

		Casella Waste Systems, Inc. Stockholders' Equity						
		Class A Common Stock		Class B Common Stock				
	Total	Shares	Amount	Shares	Amount	Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss
Balance, December 31, 2020	$ 362,142	50,101	$ 501	988	$ 10	$ 639,247	$ (266,099)	$ (11,517)
Issuances of Class A common stock	112	273	3	—	—	109	—	—
Stock-based compensation	2,941	—	—	—	—	2,941	—	—
Comprehensive income:								
Net income	4,311	—	—	—	—	—	4,311	—
Other comprehensive income:								
Hedging activity	3,830	—	—	—	—	—	—	3,830
Balance, March 31, 2021	373,336	50,374	504	988	10	642,297	(261,788)	(7,687)
Issuances of Class A common stock	492	24	—	—	—	492	—	—
Stock-based compensation	3,116	—	—	—	—	3,116	—	—
Comprehensive income:								
Net income	11,783	—	—	—	—	—	11,783	—
Other comprehensive loss:								
Hedging activity	(235)	—	—	—	—	—	—	(235)
Balance, June 30, 2021	388,492	50,398	504	988	10	645,905	(250,005)	(7,922)
Issuances of Class A common stock	51	12	—	—	—	51	—	—
Stock-based compensation	2,655	—	—	—	—	2,655	—	—
Comprehensive income:								
Net income	15,861	—	—	—	—	—	15,861	—
Other comprehensive income:								
Hedging activity	892	—	—	—	—	—	—	892
Balance, September 30, 2021	$ 407,951	50,410	$ 504	988	$ 10	$ 648,611	$ (234,144)	$ (7,030)

The accompanying notes are an integral part of these consolidated financial statements.

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
UNAUDITED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Nine Months Ended September 30,	
	2022	2021
Cash Flows from Operating Activities:		
Net income	$ 44,658	$ 31,955
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	93,106	74,510
Interest accretion on landfill and environmental remediation liabilities	6,018	5,915
Amortization of debt issuance costs	1,414	1,716
Stock-based compensation	5,589	8,712
Operating lease right-of-use assets expense	10,405	9,981
Gain on sale of property and equipment	(580)	—
Non-cash expense from acquisition activities	298	532
Deferred income taxes	13,819	12,974
Changes in assets and liabilities, net of effects of acquisitions and divestitures:		
Accounts receivable	(14,230)	(10,943)
Landfill operating lease contract expenditures	(3,336)	(3,646)
Accounts payable	7,946	20,318
Prepaid expenses, inventories and other assets	(5,799)	(14,391)
Accrued expenses, contract liabilities and other liabilities	(6,877)	(3,544)
Net cash provided by operating activities	152,431	134,089
Cash Flows from Investing Activities:		
Acquisitions, net of cash acquired	(73,963)	(153,112)
Additions to property, plant and equipment	(87,667)	(81,577)
Proceeds from sale of property and equipment	571	593
Net cash used in investing activities	(161,059)	(234,096)
Cash Flows from Financing Activities:		
Proceeds from debt borrowings	82,200	500
Principal payments on debt	(57,407)	(8,517)
Payments of debt issuance costs	(1,232)	—
Payments of contingent consideration	(1,000)	—
Proceeds from the exercise of share based awards	192	163
Net cash provided by (used in) financing activities	22,753	(7,854)
Net increase (decrease) in cash and cash equivalents	14,125	(107,861)
Cash and cash equivalents, beginning of period	33,809	154,342
Cash and cash equivalents, end of period	$ 47,934	$ 46,481
Supplemental Disclosure of Cash Flow Information:		
Cash interest payments	$ 14,750	$ 14,378
Cash income tax payments	$ 2,875	$ 597
Right-of-use assets obtained in exchange for financing lease obligations	$ 9,420	$ 18,153
Right-of-use assets obtained in exchange for operating lease obligations	$ 7,672	$ 3,566

The accompanying notes are an integral part of these consolidated financial statements.

1. BASIS OF PRESENTATION

Casella Waste Systems, Inc. (“Parent”), and its subsidiaries (collectively, “we”, “us” or “our”), is a regional, vertically integrated solid waste services company. We provide resource management expertise and services to residential, commercial, municipal, institutional and industrial customers, primarily in the areas of solid waste collection and disposal, transfer, recycling and organics services. We provide integrated solid waste services in seven states: Vermont, New Hampshire, New York, Massachusetts, Connecticut, Maine and Pennsylvania, with our headquarters located in Rutland, Vermont. We manage our solid waste operations on a geographic basis through two regional operating segments, the Eastern and Western regions, each of which provides a full range of solid waste services. We manage our resource-renewal operations through the Resource Solutions operating segment, which leverages our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver a comprehensive solution for our larger commercial, municipal, institutional and industrial customers that have more diverse waste and recycling needs. Legal, tax, information technology, human resources, certain finance and accounting and other administrative functions are included in our Corporate Entities segment.

The accompanying unaudited consolidated financial statements, which include the accounts of the Parent and our wholly-owned subsidiaries, have been prepared in accordance with generally accepted accounting principles in the United States (“GAAP”) pursuant to the rules and regulations of the Securities and Exchange Commission (“SEC”). All significant intercompany accounts and transactions are eliminated in consolidation. Investments in entities in which we do not have a controlling financial interest are accounted for under either the equity method or the cost method of accounting, as appropriate. Our significant accounting policies are more fully discussed in Item 8. "*Financial Statements and Supplementary Data*" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 ("fiscal year 2021"), which was filed with the SEC on February 18, 2022.

Preparation of our consolidated financial statements in accordance with GAAP requires management to make certain estimates and assumptions. These estimates and assumptions affect the accounting for and recognition and disclosure of assets, liabilities, equity, revenues and expenses. We must make these estimates and assumptions because certain information that we use is dependent on future events, cannot be calculated with a high degree of precision given the available data, or simply cannot be readily calculated. In the opinion of management, these consolidated financial statements include all adjustments, which include normal recurring and nonrecurring adjustments, necessary for a fair presentation of the financial position, results of operations and cash flows for the periods presented. The results for the three and nine months ended September 30, 2022 may not be indicative of the results for any other interim period or the entire fiscal year. The consolidated financial statements presented herein should be read in conjunction with our audited consolidated financial statements included in our Annual Report on Form 10-K for fiscal year 2021.

Subsequent Events

We have evaluated subsequent events or transactions that have occurred after the consolidated balance sheet date of September 30, 2022 through the date of filing of the consolidated financial statements with the SEC on this Quarterly Report on Form 10-Q. We have determined that there are no subsequent events that require disclosure in this Quarterly Report on Form 10-Q.

2. ACCOUNTING CHANGES

A table providing a brief description of recent Accounting Standards Updates ("ASUs") to the Accounting Standards Codification ("ASC") issued by the Financial Accounting Standards Board (“FASB”) that are pending adoption and deemed to have a possible material impact on our consolidated financial statements based on current account balances and activity follows:

Standard	Description	Effect on the Financial Statements or Other Significant Matters
Accounting standards issued pending adoption		
ASU No. 2020-04: Reference Rate Reform (Topic 848), as amended through January 2021	Provides temporary optional guidance to ease the potential burden in applying GAAP to contract modifications and hedging relationships that reference London Inter-Bank Offered Rate ("LIBOR") or another reference rate expected to be discontinued, subject to meeting certain criteria.	We currently have interest rate derivative agreements with hedging relationships that reference LIBOR. This guidance provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. We are currently reviewing and updating our existing contracts, as applicable, for transition or fallback language that specifies how a replacement rate for LIBOR will be identified. We are also no longer using LIBOR as a reference rate for any new contracts. We do not expect that the adoption of this guidance will have a material impact on our consolidated financial statements and related disclosures. This guidance will be in effect from March 12, 2020 through December 31, 2022. See Note 7, Debt for further disclosure over our interest rate derivative agreements and debt instruments that reference LIBOR.
ASU No. 2021-08: Accounting for Contract Assets and Contract Liabilities from Contracts with Customers (Topic 805)	Requires entities to apply ASC 606 to recognize and measure contract assets and contract liabilities in a business combination. This guidance improves comparability after the business combination by providing consistent recognition and measurement guidance for revenue contracts with customers acquired in a business combination and revenue contracts with customers not acquired in a business combination.	We have made in the past, and we may make in the future, acquisitions to densify existing operations, expand service areas, and grow services for our customers, and these acquisitions may include contract assets or contract liabilities. We do not expect that the adoption of this guidance will have a material impact on our consolidated financial statements and related disclosures. This guidance is effective January 1, 2023 with early adoption permitted.

3. REVENUE RECOGNITION

Revenues associated with our solid waste operations are derived mainly from solid waste collection and disposal services, including landfill, transfer station and transportation services, landfill gas-to-energy services and processing services. Revenues associated with our resource-renewal services are derived from processing and non-processing services.

The following tables set forth revenues disaggregated by service line and timing of revenue recognition by operating segment for each of the three and nine months ended September 30, 2022 and 2021:

Three Months Ended September 30, 2022

	Eastern	Western	Resource Solutions	Total Revenues
Collection	$ 61,875	$ 82,242	$ —	$ 144,117
Landfill	7,900	20,240	—	28,140
Transfer station	19,525	13,230	—	32,755
Transportation	1,233	4,019	—	5,252
Landfill gas-to-energy	205	1,438	—	1,643
Processing	2,399	734	32,159	35,292
Non-processing	—	—	48,069	48,069
Total revenues	$ 93,137	$ 121,903	$ 80,228	$ 295,268
Transferred at a point-in-time	$ 115	$ 439	$ 12,380	$ 12,934
Transferred over time	93,022	121,464	67,848	282,334
Total revenues	$ 93,137	$ 121,903	$ 80,228	$ 295,268

Three Months Ended September 30, 2021

	Eastern	Western	Resource Solutions	Total Revenues
Collection	$ 48,951	$ 69,921	$ —	$ 118,872
Landfill	6,622	18,201	—	24,823
Transfer station	16,948	10,375	—	27,323
Transportation	54	3,393	—	3,447
Landfill gas-to-energy	269	984	—	1,253
Processing	2,310	649	27,418	30,377
Non-processing	—	—	35,874	35,874
Total revenues	$ 75,154	$ 103,523	$ 63,292	$ 241,969
Transferred at a point-in-time	$ 43	$ 296	$ 19,927	$ 20,266
Transferred over time	75,111	103,227	43,365	221,703
Total revenues	$ 75,154	$ 103,523	$ 63,292	$ 241,969

Nine Months Ended September 30, 2022

	Eastern	Western	Resource Solutions	Total Revenues
Collection	$ 172,671	$ 228,239	$ —	$ 400,910
Landfill	19,819	53,028	—	72,847
Transfer station	48,431	33,055	—	81,486
Transportation	4,470	10,700	—	15,170
Landfill gas-to-energy	727	5,323	—	6,050
Processing	5,602	2,281	93,421	101,304
Non-processing	—	—	135,195	135,195
Total revenues	$ 251,720	$ 332,626	$ 228,616	$ 812,962
Transferred at a point-in-time	$ 352	$ 1,467	$ 46,279	$ 48,098
Transferred over time	251,368	331,159	182,337	764,864
Total revenues	$ 251,720	$ 332,626	$ 228,616	$ 812,962

Nine Months Ended September 30, 2021

	Eastern	Western	Resource Solutions	Total Revenues
Collection	$ 124,389	$ 199,278	$ —	$ 323,667
Landfill	18,143	48,336	—	66,479
Transfer station	39,847	27,498	—	67,345
Transportation	148	8,646	—	8,794
Landfill gas-to-energy	784	2,873	—	3,657
Processing	5,246	1,508	65,721	72,475
Non-processing	—	—	104,958	104,958
Total revenues	$ 188,557	$ 288,139	$ 170,679	$ 647,375
Transferred at a point-in-time	$ 125	$ 1,284	$ 44,964	$ 46,373
Transferred over time	188,432	286,855	125,715	601,002
Total revenues	$ 188,557	$ 288,139	$ 170,679	$ 647,375

Payments to customers that are not in exchange for a distinct good or service are recorded as a reduction of revenues. Rebates to certain customers associated with payments for recycled or organic materials that are received and subsequently processed and sold to other third-parties amounted to $5,460 and $15,162 in the three and nine months ended September 30, 2022, respectively, and $4,341 and $8,440 in the three and nine months ended September 30, 2021, respectively. Rebates are generally recorded as a reduction of revenues upon the sale of such materials, or upon receipt of the recycled materials at our facilities. We did not record any revenues in the three and nine months ended September 30, 2022 or September 30, 2021 from performance obligations satisfied in previous periods.

Contract receivables, which are included in Accounts receivable, net are recorded when billed or when related revenue is earned, if earlier, and represent claims against third-parties that will be settled in cash. Accounts receivable, net includes gross receivables from contracts of $111,256 and $89,232 as of September 30, 2022 and December 31, 2021, respectively. Certain customers are billed in advance and, accordingly, recognition of the related revenues is deferred as a contract liability until the services are provided and control transferred to the customer. We recognized contract liabilities of $3,891 and $3,404 as of September 30, 2022 and December 31, 2021, respectively. Due to the short term nature of advanced billings, substantially all of the deferred revenue recognized as a contract liability as of December 31, 2021 and December 31, 2020 was recognized as revenue during the nine months ended September 30, 2022 and September 30, 2021, respectively, when the services were performed.

4. BUSINESS COMBINATIONS

In the nine months ended September 30, 2022, we acquired twelve businesses, including: an organic materials management business and a full service solid waste collection, recycling and transportation business in our Resource Solutions operating segment; a closed waste-to-energy facility that is being decommissioned and rebuilt as a transfer station, a transfer station, and six tuck-in solid waste collection businesses in our Western region; a portable toilets business in our Eastern region; and a scrap metal collection business whose assets are allocated between our Eastern region and Resource Solutions operating segments. In the nine months ended September 30, 2021, we acquired eight businesses, including: a residential, commercial and roll-off collection business in eastern Connecticut that operates a rail-served construction and demolition processing and waste transfer facility, a waste transfer station, a single-stream recycling facility, and several other recycling operations whose assets and liabilities are allocated between our Eastern region and Resource Solutions operating segments; a septic and portable toilet business, a tuck-in solid waste collection business and a solid waste collection business that operates a waste transfer station in our Eastern region; and a waste composting and food-scrap hauling business, a solid waste collection business that operates a waste transfer station, and two tuck-in solid waste collection businesses in our Western region.

The operating results of these businesses are included in the accompanying unaudited consolidated statements of operations from each date of acquisition, and the purchase price has been allocated to the net assets acquired based on fair values at each date of acquisition with the residual amounts recorded as goodwill. Purchase price allocations are based on information existing at the acquisition dates or upon closing the transactions, including contingent consideration. Acquired intangible assets other than goodwill that are subject to amortization include customer relationships, trade names and covenants not-to-compete. Such assets are amortized over a two-year to ten-year period from the date of acquisition. All amounts recorded to goodwill are expected to be deductible for tax purposes.

A summary of the purchase price paid and the purchase price allocation for acquisitions follows:

	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
Purchase Price:		
Cash used in acquisitions, net of cash acquired	$ 72,731	$ 150,364
Other non-cash consideration	1,220	—
Holdbacks to sellers and contingent consideration	4,112	4,865
Total consideration	$ 78,063	$ 155,229
Allocated as follows:		
Current assets	$ 7,599	$ 7,260
Property, plant and equipment:		
Land	3,141	803
Finance lease right-of-use-assets	—	31,467
Buildings and improvements	8,566	8,468
Machinery and equipment	10,296	42,458
Operating lease right-of-use assets	405	6,500
Intangible assets:		
Trade names	—	8,350
Covenants not-to-compete	2,034	3,069
Customer relationships	11,417	30,340
Other non-current assets	40	—
Current liabilities	(3,721)	(5,952)
Other long-term liabilities	(123)	—
Financing lease liabilities, less current portion	—	(10,535)
Operating lease liabilities, less current portion	(282)	—
Fair value of assets acquired and liabilities assumed	39,372	122,228
Excess purchase price allocated to goodwill	$ 38,691	$ 33,001

Certain purchase price allocations are preliminary and are based on information existing at the acquisition dates or upon closing the transaction. Accordingly, the purchase price allocations are subject to change. Unaudited pro forma combined information that shows our operational results as though each acquisition completed since the beginning of the prior fiscal year had occurred as of January 1, 2021 is as follows:

	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021
Revenues	$ 295,512	$ 262,000	$ 825,020	$ 733,819
Operating income	$ 36,247	$ 28,516	$ 79,473	$ 64,360
Net income	$ 22,635	$ 15,308	$ 44,888	$ 27,993
Basic earnings per share attributable to common stockholders:				
Weighted average common shares outstanding	51,677	51,389	51,604	51,312
Basic earnings per common share	$ 0.44	$ 0.30	$ 0.87	$ 0.55
Diluted earnings per share attributable to common stockholders:				
Weighted average common shares outstanding	51,806	51,586	51,749	51,506
Diluted earnings per common share	$ 0.44	$ 0.30	$ 0.87	$ 0.54

The unaudited pro forma results set forth in the table above have been prepared for comparative purposes only and are not necessarily indicative of the actual results of operations had the acquisitions occurred as of January 1, 2021 or of the results of our future operations. Furthermore, the unaudited pro forma results do not give effect to all cost savings or incremental costs that may occur as a result of the integration and consolidation of the completed acquisitions.

5. GOODWILL AND INTANGIBLE ASSETS

A summary of the activity and balances related to goodwill by operating segment is as follows:

	December 31, 2021	Acquisitions	Adjustments to Acquisitions	September 30, 2022
Eastern	$ 52,072	$ 93	$ 241	$ 52,406
Western	163,728	16,892	650	181,270
Resource Solutions	17,060	21,706	—	38,766
	$ 232,860	$ 38,691	$ 891	$ 272,442

Summaries of intangible assets by type follows:

	Covenants Not-to-Compete	Customer Relationships	Trade Names	Total
Balance, September 30, 2022				
Intangible assets	$ 30,812	$ 126,372	$ 8,350	$ 165,534
Less accumulated amortization	(23,609)	(43,254)	(3,879)	(70,742)
	$ 7,203	$ 83,118	$ 4,471	$ 94,792

	Covenants Not-to-Compete	Customer Relationships	Trade Names	Total
Balance, December 31, 2021				
Intangible assets	$ 28,777	$ 115,005	$ 8,350	$ 152,132
Less accumulated amortization	(22,148)	(34,809)	(1,452)	(58,409)
	$ 6,629	$ 80,196	$ 6,898	$ 93,723

Intangible amortization expense was $4,281 and $12,333 during the three and nine months ended September 30, 2022, respectively, and $3,133 and $7,175 during the three and nine months ended September 30, 2021, respectively.

A summary of intangible amortization expense estimated for the five fiscal years following fiscal year 2021 and thereafter follows:

Estimated Future Amortization Expense as of September 30, 2022	
Fiscal year ending December 31, 2022	$ 4,194
Fiscal year ending December 31, 2023	$ 15,918
Fiscal year ending December 31, 2024	$ 15,278
Fiscal year ending December 31, 2025	$ 14,244
Fiscal year ending December 31, 2026	$ 12,579
Thereafter	$ 32,579

6. ACCRUED FINAL CAPPING, CLOSURE AND POST CLOSURE

Accrued final capping, closure and post-closure costs include the current and non-current portion of costs associated with obligations for final capping, closure and post-closure of our landfills. We estimate our future final capping, closure and post-closure costs in order to determine the final capping, closure and post-closure expense per ton of waste placed into each landfill. The anticipated time frame for paying these costs varies based on the remaining useful life of each landfill as well as the duration of the post-closure monitoring period.

A summary of the changes to accrued final capping, closure and post-closure liabilities follows:

	Nine Months Ended September 30,	
	2022	2021
Beginning balance	$ 86,914	$ 82,533
Obligations incurred	3,592	3,638
Revision in estimates (1)	1,443	—
Accretion expense	5,685	5,496
Obligations settled (2)	(3,027)	(5,394)
Ending balance	$ 94,607	$ 86,273

(1) Relates to a change in estimates concerning anticipated capping costs at one of our landfills.

(2) May include amounts that are being processed through accounts payable as a part of our disbursements cycle.

7. DEBT

A summary of debt is as follows:

	September 30, 2022	December 31, 2021
Senior Secured Credit Facility:		
Term loan A facility ("Term Loan Facility") due December 2026; bearing interest at LIBOR plus 1.375%	$ 350,000	$ 350,000
Revolving credit facility ("Revolving Credit Facility") due December 2026; bearing interest at LIBOR plus 1.375%	—	—
Tax-Exempt Bonds:		
New York State Environmental Facilities Corporation Solid Waste Disposal Revenue Bonds Series 2014 ("New York Bonds 2014R-1") due December 2044 - fixed rate interest period through 2029; bearing interest at 2.875%	25,000	25,000
New York State Environmental Facilities Corporation Solid Waste Disposal Revenue Bonds Series 2014R-2 ("New York Bonds 2014R-2") due December 2044 - fixed rate interest period through 2026; bearing interest at 3.125%	15,000	15,000
New York State Environmental Facilities Corporation Solid Waste Disposal Revenue Bonds Series 2020 ("New York Bonds 2020") due September 2050 - fixed rate interest period through 2025; bearing interest at 2.750%	40,000	40,000
Finance Authority of Maine Solid Waste Disposal Revenue Bonds Series 2005R-3 ("FAME Bonds 2005R-3") due January 2025 - fixed rate interest period through 2025; bearing interest at 5.25%	25,000	25,000
Finance Authority of Maine Solid Waste Disposal Revenue Bonds Series 2015R-1 ("FAME Bonds 2015R-1") due August 2035 - fixed rate interest period through 2025; bearing interest at 5.125%	15,000	15,000
Finance Authority of Maine Solid Waste Disposal Revenue Bonds Series 2015R-2 ("FAME Bonds 2015R-2") due August 2035 - fixed rate interest period through 2025; bearing interest at 4.375%	15,000	15,000
Vermont Economic Development Authority Solid Waste Disposal Long-Term Revenue Bonds Series 2013 ("Vermont Bonds 2013") due April 2036 - fixed rate interest period through 2028; bearing interest at 4.625%	16,000	16,000
Vermont Economic Development Authority Solid Waste Disposal Long-Term Revenue Bonds Series 2022A-1 ("Vermont Bonds 2022A-1") due June 2052 - fixed rate interest period through 2027; bearing interest at 5.00%	35,000	—
Business Finance Authority of the State of New Hampshire Solid Waste Disposal Revenue Bonds Series 2013 ("New Hampshire Bonds") due April 2029 - fixed rate interest period through 2029; bearing interest at 2.95%	11,000	11,000
Other:		
Finance leases maturing through December 2107; bearing interest at a weighted average of 3.6%	49,070	45,724
Notes payable maturing through August 2024; bearing interest at a weighted average of 1.6%	712	4,846
Principal amount of debt	596,782	562,570
Less—unamortized debt issuance costs (1)	9,983	10,166
Debt less unamortized debt issuance costs	586,799	552,404
Less—current maturities of debt	8,337	9,901
	$ 578,462	$ 542,503

(1) A summary of unamortized debt issuance costs by debt instrument follows:

	September 30, 2022	December 31, 2021
Revolving Credit Facility and Term Loan Facility (collectively, the "Credit Facility")	$ 5,011	$ 5,884
New York Bonds 2014R-1	882	933
New York Bonds 2014R-2	223	268
New York Bonds 2020	1,150	1,283
FAME Bonds 2005R-3	198	262
FAME Bonds 2015R-1	361	413
FAME Bonds 2015R-2	212	268
Vermont Bonds 2013	392	433
Vermont Bonds 2022A-1	1,176	—
New Hampshire Bonds	378	422
	$ 9,983	$ 10,166

Financing Activities

In the nine months ended September 30, 2022, we completed the issuance of $35,000 aggregate principal amount of Vermont Bonds 2022A-1. The Vermont Bonds 2022A-1, which are unsecured and guaranteed jointly and severally, fully and unconditionally by all of our significant wholly-owned subsidiaries, accrue interest at 5.00% per annum from June 1, 2022 through May 31, 2027, at which time they may be converted to a variable interest rate period or to a new term interest rate period. The Vermont Bonds 2022A-1 mature on June 1, 2052. We borrowed and used the proceeds from the Vermont Bonds 2022A-1 to finance or reimburse certain noncurrent asset costs associated with capital projects in the State of Vermont.

Credit Facility

We are party to an amended and restated credit agreement ("Credit Agreement"), which provides for a $350,000 aggregate principal amount Term Loan Facility and a $300,000 Revolving Credit Facility, with a $75,000 sublimit for letters of credit. We have the right to request, at our discretion, an increase in the amount of loans under the Credit Facility by an aggregate amount of $125,000, subject to the terms and conditions set forth in the Credit Agreement. The Credit Facility has a 5-year term that matures in December 2026 and bears interest at a rate of LIBOR plus 1.375% per annum, which will be reduced to a rate of LIBOR plus as low as 1.125% upon us reaching a consolidated net leverage ratio of less than 2.25x. The Credit Agreement contains customary benchmark replacement provisions pursuant to which, upon certain triggering events, the LIBOR benchmark used to calculate the LIBOR rate will be replaced with a secured overnight financing rate, as adjusted, on the terms and conditions in the Credit Agreement. The Credit Facility is guaranteed jointly and severally, fully and unconditionally by all of our significant wholly-owned subsidiaries and secured by substantially all of our assets. As of September 30, 2022, further advances were available under the Revolving Credit Facility in the amount of $271,805. The available amount is net of outstanding irrevocable letters of credit totaling $28,195, and as of September 30, 2022 no amount had been drawn.

Cash Flow Hedges

Our strategy to reduce exposure to interest rate risk involves entering into interest rate derivative agreements to hedge against adverse movements in interest rates related to the variable rate portion of our long-term debt. We have designated these derivative instruments as highly effective cash flow hedges, and therefore the change in their fair value is recorded in stockholders' equity as a component of accumulated other comprehensive income (loss), net of tax and included in interest expense at the same time as interest expense is affected by the hedged transactions. Differences paid or received over the life of the agreements are recorded as additions to or reductions of interest expense on the underlying debt and included in cash flows from operating activities.

As of September 30, 2022 and December 31, 2021, our active interest rate derivative agreements had total notional amounts of $190,000 and $195,000, respectively. According to the terms of the agreements, we receive interest based on the 1-month LIBOR index, in some instances restricted by a 0.0% floor, and pay interest at a weighted average rate of approximately 2.20%. The agreements mature between May 2023 and June 2027.

As of December 31, 2021, we had forward starting interest rate derivative agreements with a total notional amount of $85,000 outstanding. As of September 30, 2022, we have a forward starting interest rate derivative agreement with a total notional amount of $20,000 after considering any forward starting interest rate derivative agreements that became effective in the current period. According to the terms of this agreement, we will receive interest based on the 1-month LIBOR index, restricted by a 0.0% floor, and will pay interest at a rate of 1.29%. The agreement matures in May 2028.

A summary of the effect of cash flow hedges related to derivative instruments on the consolidated balance sheet follows:

		Fair Value	
	Balance Sheet Location	September 30, 2022	December 31, 2021
Interest rate swaps	Other current assets	$ 3,526	$ —
Interest rate swaps	Other non-current assets	8,814	424
		$ 12,340	$ 424
Interest rate swaps	Other accrued liabilities	$ —	$ 3,796
Interest rate swaps	Other long-term liabilities	—	1,380
		$ —	$ 5,176
Interest rate swaps	Accumulated other comprehensive income (loss), net of tax	$ 12,340	$ (4,935)
Interest rate swaps - tax effect	Accumulated other comprehensive income (loss), net of tax	(4,410)	(168)
		$ 7,930	$ (5,103)

8. COMMITMENTS AND CONTINGENCIES

Legal Proceedings

In the ordinary course of our business and as a result of the extensive governmental regulation of the solid waste industry, we are subject to various judicial and administrative proceedings involving state and local agencies. In these proceedings, an agency may seek to impose fines or to revoke or deny renewal of an operating permit held by us. From time to time, we may also be subject to actions brought by special interest or other groups, adjacent landowners or residents in connection with the permitting and licensing of landfills and transfer stations, or allegations of environmental damage or violations of the permits and licenses pursuant to which we operate. In addition, we may be named defendants in various claims and suits pending for alleged damages to persons and property, alleged violations of certain laws and alleged liabilities arising out of matters occurring during the ordinary operation of a waste management business. The plaintiffs in some actions seek unspecified damages or injunctive relief, or both. These actions fall within various procedural stages at any point in time, and some are covered in part by insurance.

In accordance with FASB ASC 450 - Contingencies, we accrue for legal proceedings, inclusive of legal costs, when losses become probable and reasonably estimable. We have recorded an aggregate accrual of $1,071 relating to our outstanding legal proceedings as of September 30, 2022. As of the end of each applicable reporting period, we review each of our legal proceedings to determine whether it is probable, reasonably possible or remote that a liability has been incurred and, if it is at least reasonably possible, whether a range of loss can be reasonably estimated under the provisions of FASB ASC 450-20. In instances where we determine that a loss is probable and we can reasonably estimate a range of loss we may incur with respect to such a matter, we record an accrual for the amount within the range that constitutes our best estimate of the possible loss. If we are able to reasonably estimate a range, but no amount within the range appears to be a better estimate than any other, we record an accrual in the amount that is the low end of such range. When a loss is reasonably possible, but not probable, we will not record an accrual, but we will disclose our estimate of the possible range of loss where such estimate can be made in accordance with FASB ASC 450-20. We disclose outstanding matters that we believe could have a material adverse effect on our financial condition, results of operations or cash flows.

North Country Environmental Services Expansion Permit

On October 9, 2020, our subsidiary, North Country Environmental Services, Inc. ("NCES"), received a Type I-A Permit Modification ("Permit") for Expansion in the Stage VI area of the NCES landfill located in Bethlehem, New Hampshire. On November 9, 2020, the Conservation Law Foundation ("CLF") filed an appeal of the Permit to the New Hampshire Waste Management Council (“Council”) on the grounds it failed to meet the public benefit criteria.

Throughout 2021 and early 2022 a number of motions were filed by both NCES and CLF with the Council and in February 2022 the Council held a hearing on the CLF appeal.

The Council ruled in favor of NCES on all motions concerning questions of fact, and indicating that a written decision incorporating the Hearing Officer’s decision as to questions of law would follow. On May 11, 2022, an Order was issued denying all of CLF’s arguments on appeal, with the exception of one; the Hearing Officer held that based on his interpretation of the relevant statute, the public benefit determination made by the New Hampshire Department of Environmental Services (“DES”), in issuing the Permit to NCES, was unlawful, and remanded the Permit to the DES with regard to this determination.

DES filed a Motion for Reconsideration with the Council on May 31, 2022 (“DES Reconsideration Motion”) and NCES filed a Motion for Rehearing on June 10, 2022 (“NCES Rehearing Motion”). The Hearing Officer suspended his May 11, 2022 decision by Order dated June 20, 2022, pending consideration of the DES Reconsideration Motion and NCES Rehearing Motion.

On September 20, 2022, NCES and our subsidiary, Granite State Landfill, LLC (“GSL”), filed a Petition for Declaratory Judgment ("Petition") in Merrimack Superior Court seeking a determination of the meaning and constitutionality of New Hampshire’s public benefit requirement. On September 21, 2022, NCES filed a Motion to Stay the Council proceedings pending resolution of the Petition action. DES assented to the relief sought by that motion, and CLF filed an Objection to the Motion to Stay on September 26, 2022. On October 3, 2022, NCES filed a Motion for Leave to File Reply together with its Reply to CLF’s Objection to Motion to Stay. The aforesaid Motions remain pending before the Council as does the Petition before the Merrimack Superior Court. NCES will continue to vigorously defend the litigation before the Council and together with GSL will continue to pursue Declaratory Judgment before the Merrimack Superior Court.

Environmental Remediation Liabilities

We are subject to liability for environmental damage, including personal injury and property damage, that our solid waste, recycling and power generation facilities may cause to neighboring property owners, particularly as a result of the contamination of drinking water sources or soil, possibly including damage resulting from conditions that existed before we acquired the facilities. We may also be subject to liability for similar claims arising from off-site environmental contamination caused by pollutants or hazardous substances if we or our predecessors arrange or arranged to transport, treat or dispose of those materials.

We accrue for costs associated with environmental remediation obligations when such costs become both probable and reasonably estimable. Determining the method and ultimate cost of remediation requires that a number of assumptions be made. There can sometimes be a range of reasonable estimates of the costs associated with remediation of a site. In these cases, we use the amount within the range that constitutes our best estimate. In the early stages of the remediation process, particular components of the overall liability may not be reasonably estimable; in this instance we use the components of the liability that can be reasonably estimated as a surrogate for the liability. It is reasonably possible that we will need to adjust the liabilities recorded for remediation to reflect the effects of new or additional information, to the extent such information impacts the costs, timing or duration of the required actions. Future changes in our estimates of the cost, timing or duration of the required actions could have a material adverse effect on our consolidated financial position, results of operations and cash flows. We disclose outstanding environmental remediation matters that remain unsettled or are settled in the reporting period that we believe could have a material adverse effect on our financial condition, results of operations or cash flows.

We inflate the estimated costs in current dollars to the expected time of payment and discount the total cost to present value using a risk-free interest rate. The risk-free interest rates associated with our environmental remediation liabilities as of September 30, 2022 range between 1.5% and 4.1%. A summary of the changes to the aggregate environmental remediation liabilities for the nine months ended September 30, 2022 and 2021 follows:

	Nine Months Ended September 30,	
	2022	2021
Beginning balance	$ 5,887	$ 5,200
Accretion expense	79	82
Obligations incurred (1)	759	—
Obligations settled (2)	(353)	(281)
Ending balance	6,372	5,001
Less: current portion	646	375
Long-term portion	$ 5,726	$ 4,626

(1) Associated with the investigation of potential remediation at an inactive waste disposal site that adjoins one of the landfills that we operate.

(2) May include amounts paid and amounts that are being processed through accounts payable as a part of our disbursement cycle.

9. STOCKHOLDERS' EQUITY

Stock Based Compensation

Shares Available For Issuance

In the fiscal year ended December 31, 2016, we adopted the 2016 Incentive Plan (“2016 Plan”). Under the 2016 Plan, we may grant awards up to an aggregate amount of shares equal to the sum of: (i) 2,250 shares of Class A common stock (subject to adjustment in the event of stock splits and other similar events), plus (ii) such additional number of shares of Class A common stock (up to 2,723 shares) as is equal to the sum of the number of shares of Class A common stock that remained available for grant under the 2006 Stock Incentive Plan (“2006 Plan”) immediately prior to the expiration of the 2006 Plan and the number of shares of Class A common stock subject to awards granted under the 2006 Plan that expire, terminate or are otherwise surrendered, canceled, forfeited or repurchased by us. As of September 30, 2022, there were 793 Class A common stock equivalents available for future grant under the 2016 Plan.

Stock Options

Stock options are granted at a price equal to the prevailing fair value of our Class A common stock at the date of grant. Generally, stock options granted have a term not to exceed ten years and vest over a one-year to five-year period from the date of grant.

The fair value of each stock option granted is estimated using a Black-Scholes option-pricing model, which requires extensive use of accounting judgment and financial estimation, including estimates of the expected term stock option holders will retain their vested stock options before exercising them and the estimated volatility of our Class A common stock price over the expected term.

A summary of stock option activity follows:

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding, December 31, 2021	77	$ 15.68		
Granted	75	$ 82.47		
Exercised	(23)	$ 8.56		
Forfeited	—	$ —		
Outstanding, September 30, 2022	129	$ 55.60	7.4	$ 3,148
Exercisable, September 30, 2022	49	$ 12.88	3.5	$ 3,105

Stock-based compensation expense related to stock options was $89 and $122 during the three and nine months ended September 30, 2022, respectively, as compared to $11 during both the three and nine months ended September 30, 2021. As of September 30, 2022, we had $2,225 of unrecognized stock-based compensation expense related to outstanding stock options to be recognized over a weighted average period of 4.7 years.

During the three and nine months ended September 30, 2022, the aggregate intrinsic value of stock options exercised was zero dollars and $1,467, respectively.

Other Stock Awards

Restricted stock awards, restricted stock units and performance stock units, with the exception of market-based performance stock units, are granted at a price equal to the fair value of our Class A common stock at the date of grant. The fair value of each market-based performance stock unit is estimated using a Monte Carlo pricing model, which requires extensive use of accounting judgment and financial estimation, including the estimated share price appreciation plus, if applicable, the value of dividends of our Class A common stock as compared to the Russell 2000 Index over the requisite service period.

Generally, restricted stock awards granted to non-employee directors vest incrementally over a three year period beginning on the first anniversary of the date of grant. Restricted stock units granted to non-employee directors vest in full on the first anniversary of the grant date. Restricted stock units granted to employees vest incrementally over an identified service period, typically three years, beginning on the grant date based on continued employment. Performance stock units granted to employees, including market-based performance stock units, vest at a future date following the grant date and are based on the attainment of performance targets and market achievements, as applicable.

A summary of restricted stock award, restricted stock unit and performance stock unit activity follows:

	Restricted Stock Awards, Restricted Stock Units, and Performance Stock Units (1)	Weighted Average Grant Date Fair Value	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding, December 31, 2021	249	$ 55.40		
Granted	82	$ 94.23		
Class A Common Stock Vested	(65)	$ 49.85		
Forfeited	(34)	$ 67.92		
Outstanding, September 30, 2022	232	$ 68.83	1.7	$ 17,692
Unvested, September 30, 2022	416	$ 68.95	1.4	$ 31,751

(1) Market-based performance stock unit grants are included at the 100% attainment level. Attainment of the maximum performance targets and market achievements would result in the issuance of an additional 184 shares of Class A common stock currently included in unvested.

Stock-based compensation expense related to restricted stock awards, restricted stock units and performance stock units was $2,225 and $5,204 during the three and nine months ended September 30, 2022, respectively, as compared to $2,576 and $8,505 during the three and nine months ended September 30, 2021, respectively.

During the three and nine months ended September 30, 2022, the total fair value of other stock awards vested was $218 and $5,577, respectively.

As of September 30, 2022, total unrecognized stock-based compensation expense related to outstanding restricted stock awards was $46, which will be recognized over a weighted average period of 1.3 years. As of September 30, 2022, total unrecognized stock-based compensation expense related to outstanding restricted stock units was $4,611, which will be recognized over a weighted average period of 1.8 years. As of September 30, 2022, total expected unrecognized stock-based compensation expense related to outstanding performance stock units was $5,592 to be recognized over a weighted average period of 1.6 years.

We also recorded $97 and $262 of stock-based compensation expense related to our Amended and Restated 1997 Employee Stock Purchase Plan during the three and nine months ended September 30, 2022, respectively, as compared to $67 and $196 during the three and nine months ended September 30, 2021, respectively.

Accumulated Other Comprehensive Income (Loss), Net of Tax

A summary of the changes in the balances of each component of accumulated other comprehensive income (loss), net of tax follows:

	Interest Rate Swaps
Balance, December 31, 2021	$ (5,103)
Other comprehensive income before reclassifications	15,138
Amounts reclassified from accumulated other comprehensive income (loss)	2,136
Income tax provision related to items of other comprehensive income	(4,241)
Net current-period other comprehensive income	13,033
Balance, September 30, 2022	$ 7,930

A summary of reclassifications out of accumulated other comprehensive income (loss), net of tax into earnings follows:

Details About Accumulated Other Comprehensive Income (Loss), Net of Tax Components	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021	Affected Line Item in the Consolidated Statements of Operations
	Amounts Reclassified Out of Accumulated Other Comprehensive Income (Loss), Net of Tax				
Interest rate swaps	$ 14	$ 1,204	$ 2,136	$ 3,551	Interest expense
	(14)	(1,204)	(2,136)	(3,551)	Income before income taxes
	—	(496)	(190)	(765)	Provision for income taxes
	$ (14)	$ (708)	$ (1,946)	$ (2,786)	Net income

10. EARNINGS PER SHARE

Basic earnings per share is computed by dividing net income by the weighted average number of common shares outstanding during the period. Diluted earnings per share is calculated based on the combined weighted average number of common shares and potentially dilutive shares, which include the assumed exercise of employee stock options, unvested restricted stock awards, unvested restricted stock units and unvested performance stock units, including market-based performance units based on the expected achievement of performance targets. In computing diluted earnings per share, we utilize the treasury stock method.

A summary of the numerator and denominators used in the computation of earnings per share follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Numerator:				
Net income	$ 22,672	$ 15,861	$ 44,658	$ 31,955
Denominators:				
Number of shares outstanding, end of period:				
Class A common stock	50,692	50,410	50,692	50,410
Class B common stock	988	988	988	988
Unvested restricted stock	(1)	(2)	(1)	(2)
Effect of weighted average shares outstanding	(2)	(7)	(75)	(84)
Basic weighted average common shares outstanding	51,677	51,389	51,604	51,312
Impact of potentially dilutive securities:				
Dilutive effect of stock options and other stock awards	129	197	145	194
Diluted weighted average common shares outstanding	51,806	51,586	51,749	51,506
Anti-dilutive potentially issuable shares	84	12	115	12

11. OTHER ITEMS AND CHARGES

Expense from Acquisition Activities

In the three and nine months ended September 30, 2022, we recorded charges of $816 and $3,878, respectively, and in the three and nine months ended September 30, 2021, we recorded charges of $1,904 and $3,950, respectively, comprised primarily of legal, consulting and other similar costs associated with due diligence and the acquisition and integration of acquired businesses or select development projects.

Environmental Remediation Charge

In the three and nine months ended September 30, 2022, we recorded a charge of $759 associated with the investigation of potential remediation at an inactive waste disposal site that adjoins one of the landfills we operate.

12. FAIR VALUE OF FINANCIAL INSTRUMENTS

We use a three-tier fair value hierarchy to classify and disclose all assets and liabilities measured at fair value on a recurring basis, as well as assets and liabilities measured at fair value on a non-recurring basis, in periods subsequent to their initial measurement. These tiers include: Level 1, defined as quoted market prices in active markets for identical assets or liabilities; Level 2, defined as inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; and Level 3, defined as unobservable inputs that are not corroborated by market data.

We use valuation techniques that maximize the use of market prices and observable inputs and minimize the use of unobservable inputs. In measuring the fair value of our financial assets and liabilities, we rely on market data or assumptions that we believe market participants would use in pricing an asset or a liability.

Assets and Liabilities Accounted for at Fair Value

Our financial instruments include cash and cash equivalents, accounts receivable, restricted investment securities held in trust on deposit with various banks as collateral for our obligations relative to our landfill final capping, closure and post-closure costs, interest rate derivatives, contingent consideration related to acquisitions, trade payables and debt. The carrying values of cash and cash equivalents, accounts receivable and trade payables approximate their respective fair values due to their short-term nature. The fair value of restricted investment securities held in trust, which are valued using quoted market prices, are included as restricted assets in the Level 1 tier below. The fair value of the interest rate derivatives included in the Level 2 tier below is calculated using discounted cash flow valuation methodologies based upon the one-month LIBOR yield curves that are observable at commonly quoted intervals for the full term of the swaps. We recognize all derivatives accounted for on the balance sheet at fair value.

Recurring Fair Value Measurements

Summaries of our financial assets and liabilities that are measured at fair value on a recurring basis follow:

	Fair Value Measurement at September 30, 2022 Using:		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:			
Restricted investment securities - landfill closure	$ 1,705	$ —	$ —
Interest rate swaps	—	12,340	—
	$ 1,705	$ 12,340	$ —

	Fair Value Measurement at December 31, 2021 Using:		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:			
Restricted investment securities - landfill closure	$ 2,122	$ —	$ —
Interest rate swaps	—	424	—
	$ 2,122	$ 424	$ —
Liabilities:			
Interest rate swaps	$ —	$ 5,176	$ —

Fair Value of Debt

As of September 30, 2022, the fair value of our fixed rate debt, including our FAME Bonds 2005R-3, FAME Bonds 2015R-1, FAME Bonds 2015R-2, Vermont Bonds 2013, Vermont Bonds 2022A-1, New York Bonds 2014R-1, New York Bonds 2014R-2, New York Bonds 2020 and New Hampshire Bonds (collectively, the "Industrial Revenue Bonds") was approximately $185,533 and the carrying value was $197,000. The fair value of the Industrial Revenue Bonds is considered to be Level 2 within the fair value hierarchy as the fair value is determined using market approach pricing provided by a third-party that utilizes pricing models and pricing systems, mathematical tools and judgment to determine the evaluated price for the security based on the market information of each of the bonds or securities with similar characteristics.

As of September 30, 2022, the carrying value of our Term Loan Facility was $350,000 and the carrying value of our Revolving Credit Facility was zero dollars. Their fair values are based on current borrowing rates for similar types of borrowing arrangements, or Level 2 inputs, and approximate their carrying values.

Although we have determined the estimated fair value amounts of the Industrial Revenue Bonds using available market information and commonly accepted valuation methodologies, a change in available market information, and/or the use of different assumptions and/or estimation methodologies could have a material effect on the estimated fair values. These amounts have not been revalued, and current estimates of fair value could differ significantly from the amounts presented.

13. SEGMENT REPORTING

We report selected information about our reportable operating segments in a manner consistent with that used for internal management reporting. We classify our solid waste operations on a geographic basis through regional operating segments, our Eastern and Western regions. Revenues associated with our solid waste operations are derived mainly from solid waste collection and disposal services, including landfill, transfer station and transportation services, landfill gas-to-energy services, and processing services in the northeastern United States. Our Resource Solutions operating segment leverages our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver a comprehensive solution for our larger commercial, municipal, institutional and industrial customers that have more diverse waste and recycling needs. Revenues associated with our Resource Solutions operations are derived from two lines-of-service: processing and non-processing. Revenues from processing services are derived from customers in the form of processing fees, tipping fees, commodity sales, and organic material sales. Revenues from non-processing services are derived from brokerage services and overall resource management services providing a wide range of environmental services and resource management solutions to large and complex organizations, as well as traditional collection, disposal and recycling services provided to large account multi-site customers. Legal, tax, information technology, human resources, certain finance and accounting and other administrative functions are included in our Corporate Entities segment, which is not a reportable operating segment. Corporate Entities results reflect those costs not allocated to our reportable operating segments.

Three Months Ended September 30, 2022

Segment	Outside revenues	Inter-company revenues	Depreciation and amortization	Operating income (loss)	Total assets
Eastern	$ 93,137	$ 23,027	$ 11,907	$ 10,061	$ 361,950
Western	121,903	40,703	16,778	22,405	725,232
Resource Solutions	80,228	1,579	3,138	4,526	189,854
Corporate Entities	—	—	704	(704)	122,311
Eliminations	—	(65,309)	—	—	—
	$ 295,268	$ —	$ 32,527	$ 36,288	$ 1,399,347

Three Months Ended September 30, 2021

Segment	Outside revenues	Inter-company revenues	Depreciation and amortization	Operating income (loss)	Total assets
Eastern	$ 75,154	$ 18,768	$ 9,407	$ 5,374	$ 352,067
Western	103,523	35,523	15,710	15,805	673,608
Resource Solutions	63,292	156	1,903	6,679	126,529
Corporate Entities	—	—	471	(471)	128,193
Eliminations	—	(54,447)	—	—	—
	$ 241,969	$ —	$ 27,491	$ 27,387	$ 1,280,397

Nine Months Ended September 30, 2022

Segment	Outside revenues	Inter-company revenues	Depreciation and amortization	Operating income (loss)	Total assets
Eastern	$ 251,720	$ 61,842	$ 34,895	$ 13,981	$ 361,950
Western	332,626	112,687	47,376	51,565	725,232
Resource Solutions	228,616	2,673	9,011	14,453	189,854
Corporate Entities	—	—	1,824	(1,824)	122,311
Eliminations	—	(177,202)	—	—	—
	$ 812,962	$ —	$ 93,106	$ 78,175	$ 1,399,347

Nine Months Ended September 30, 2021

Segment	Outside revenues	Inter-company revenues	Depreciation and amortization	Operating income (loss)	Total assets
Eastern	$ 188,557	$ 47,322	$ 23,342	$ 11,401	$ 352,067
Western	288,139	97,771	44,838	38,462	673,608
Resource Solutions	170,679	3,337	5,020	12,792	126,529
Corporate Entities	—	—	1,310	(1,312)	128,193
Eliminations	—	(148,430)	—	—	—
	$ 647,375	$ —	$ 74,510	$ 61,343	$ 1,280,397

A summary of our revenues attributable to services provided follows:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2022	2021	2022	2021
Collection	$ 144,117	$ 118,872	$ 400,910	$ 323,667
Disposal	66,147	55,593	169,503	142,618
Power generation	1,643	1,253	6,050	3,657
Processing	3,133	2,959	7,883	6,754
Solid waste operations	215,040	178,677	584,346	476,696
Processing	32,159	27,418	93,421	65,721
Non-processing	48,069	35,874	135,195	104,958
Resource Solutions operations	80,228	63,292	228,616	170,679
Total revenues	$ 295,268	$ 241,969	$ 812,962	$ 647,375

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with our unaudited consolidated financial statements and notes thereto included under Item 1. In addition, reference should be made to our audited consolidated financial statements and notes thereto and related *"Management's Discussion and Analysis of Financial Condition and Results of Operations*" appearing in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 filed with the Securities and Exchange Commission on February 18, 2022.

This Quarterly Report on Form 10-Q and, in particular, this "*Management's Discussion and Analysis of Financial Condition and Results of Operations*", may contain or incorporate a number of forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act of 1934, as amended, including statements regarding:

- the projected development of additional disposal capacity or expectations regarding permits for existing capacity;
- the outcome of any legal or regulatory matter;
- expected liquidity and financing plans;
- expected future revenues, operations, expenditures and cash needs;
- fluctuations in commodity pricing of our recyclables, increases in landfill tipping fees and fuel costs and general economic and weather conditions;
- projected future obligations related to final capping, closure and post-closure costs of our existing landfills and any disposal facilities which we may own or operate in the future;
- our ability to use our net operating losses and tax positions;
- our ability to service our debt obligations;
- the recoverability or impairment of any of our assets or goodwill;
- estimates of the potential markets for our products and services, including the anticipated drivers for future growth;
- sales and marketing plans or price and volume assumptions;
- potential business combinations or divestitures; and
- projected improvements to our infrastructure and the impact of such improvements on our business and operations.

In addition, any statements contained in or incorporated by reference into this report that are not statements of historical fact should be considered forward-looking statements. You can identify these forward-looking statements by the use of the words “believes”, “expects”, “anticipates”, “plans”, “may”, “will”, “would”, “intends”, “estimates” 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 we operate, as well as management's beliefs and assumptions, and should be read in conjunction with our consolidated financial statements and notes thereto. These forward-looking statements are not guarantees of future performance, circumstances or events. The occurrence of the events described and the achievement of the expected results depends on many events, some or all of which are not predictable or within our control. Actual results may differ materially from those set forth in the forward-looking statements.

There are a number of important risks and uncertainties that could cause our actual results to differ materially from those indicated by such forward-looking statements. These risks and uncertainties include, without limitation, those detailed in Item 1A. “*Risk Factors*” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021 and those included under Part II, Item 1A of this Quarterly Report on Form 10-Q.

There may be additional risks that we are not presently aware of or that we currently believe are immaterial, which could have an adverse impact on our business. We explicitly disclaim any obligation to update any forward-looking statements whether as a result of new information, future events or otherwise, except as otherwise required by law.

Company Overview

Casella Waste Systems, Inc., a Delaware corporation, and its wholly-owned subsidiaries (collectively, “we”, “us” or “our”), is a regional, vertically integrated solid waste services company. We provide resource management expertise and services to residential, commercial, municipal, institutional and industrial customers, primarily in the areas of solid waste collection and disposal, transfer, recycling and organics services. We provide integrated solid waste services in seven states: Vermont, New Hampshire, New York, Massachusetts, Connecticut, Maine and Pennsylvania, with our headquarters located in Rutland, Vermont. We manage our solid waste operations on a geographic basis through two regional operating segments, the Eastern and Western regions, each of which provides a full range of solid waste services. We manage our resource-renewal operations through the Resource Solutions operating segment, which leverages our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver a comprehensive solution for our larger commercial, municipal, institutional and industrial customers that have more diverse waste and recycling needs.

As of October 15, 2022, we owned and/or operated 49 solid waste collection operations, 65 transfer stations, 26 recycling facilities, eight Subtitle D landfills, three landfill gas-to-energy facilities and one landfill permitted to accept construction and demolition (“C&D”) materials.

Results of Operations

Revenues

We manage our solid waste operations, which include a full range of solid waste services, on a geographic basis through two regional operating segments, which we designate as the Eastern and Western regions. Revenues in our Eastern and Western regions consist primarily of fees charged to customers for solid waste collection and disposal services, including landfill, transfer station and transportation, landfill gas-to-energy, and processing services. We derive a substantial portion of our collection revenues from commercial, industrial and municipal services that are generally performed under service agreements or pursuant to contracts with municipalities. The majority of our residential collection services are performed on a subscription basis with individual property owners or occupants. Landfill and transfer customers are charged a tipping fee on a per ton basis for disposing of their solid waste at our disposal facilities and transfer stations. We also generate and sell electricity at certain of our landfill facilities. We manage our resource-renewal operations through the Resource Solutions operating segment, which includes processing and non-processing services. Revenues from processing services are derived from customers in the form of processing fees, tipping fees, and commodity sales, primarily comprised of newspaper, corrugated containers, plastics, ferrous and aluminum, and organic materials such as our earthlife® soils products including fertilizers, composts and mulches. Revenues from non-processing services are derived from brokerage services and overall resource management services providing a wide range of environmental services and resource management solutions to large and complex organizations, as well as traditional collection, disposal and recycling services provided to large account multi-site customers.

A summary of revenues attributable to services provided (dollars in millions and as a percentage of total revenues) follows:

	Three Months Ended September 30,				$ Change	Nine Months Ended September 30,				$ Change
	2022		2021			2022		2021		
Collection	$ 144.1	48.8 %	$ 118.9	49.1 %	$ 25.2	$ 400.9	49.3 %	$ 323.7	50.0 %	$ 77.2
Disposal	66.1	22.4 %	55.6	23.0 %	10.5	169.5	20.9 %	142.6	22.0 %	26.9
Power	1.6	0.6 %	1.3	0.5 %	0.3	6.1	0.7 %	3.7	0.6 %	2.4
Processing	3.2	1.0 %	2.9	1.2 %	0.3	7.8	1.0 %	6.7	1.0 %	1.1
Solid waste	215.0	72.8 %	178.7	73.8 %	36.3	584.3	71.9 %	476.7	73.6 %	107.6
Processing	32.2	10.9 %	27.4	11.4 %	4.8	93.5	11.5 %	65.7	10.2 %	27.8
Non-processing	48.1	16.3 %	35.9	14.8 %	12.2	135.2	16.6 %	105.0	16.2 %	30.2
Resource solutions	80.3	27.2 %	63.3	26.2 %	17.0	228.7	28.1 %	170.7	26.4 %	58.0
Total revenues	$ 295.3	100.0 %	$ 242.0	100.0 %	$ 53.3	$ 813.0	100.0 %	$ 647.4	100.0 %	$ 165.6

A summary of the period-to-period changes in solid waste revenues (dollars in millions and as percentage growth of solid waste revenues) follows:

	Period-to-Period Change for the Three Months Ended September 30, 2022 vs. 2021		Period-to-Period Change for the Nine Months Ended September 30, 2022 vs. 2021	
	Amount	% Growth	Amount	% Growth
Price	$ 11.9	6.6 %	$ 30.7	6.4 %
Volume	3.5	2.0 %	6.9	1.4 %
Surcharges and other fees	11.5	6.6 %	21.7	4.6 %
Commodity price and volume	0.4	0.2 %	2.7	0.6 %
Acquisitions	9.0	5.0 %	45.6	9.6 %
Solid waste revenues	$ 36.3	20.4 %	$ 107.6	22.6 %

Solid waste revenues

Price.

The price change component in quarterly solid waste revenues growth from the prior year period is the result of the following:

- $8.5 million from favorable collection pricing; and
- $3.4 million from favorable disposal pricing associated with our landfills, transfer stations and, to a lesser extent, transportation services in our Western region.

The price change component in year-to-date solid waste revenues growth from the prior year period is the result of the following:

- $23.1 million from favorable collection pricing; and
- $7.6 million from favorable disposal pricing associated with our landfills, transfer stations and, to a lesser extent, transportation services in our Western region.

Volume.

The volume change component in quarterly solid waste revenues growth from the prior year period is the result of higher disposal volumes ($2.1 million relates to higher third-party landfill volumes, $0.7 million relates to higher transfer station volumes and $0.7 million relates to higher transportation volumes).

The volume change component in year-to-date solid waste revenues growth from the prior year period is the result of higher disposal volumes ($3.2 million relates to higher third-party landfill volumes, $2.2 million relates to higher transfer station volumes and $1.5 million relates to higher transportation volumes).

Surcharges and other fees.

The surcharges and other fees change components in quarterly and year-to-date solid waste revenues growth from the prior year periods are the result of higher energy and environmental fee ("E&E Fee") revenues and higher sustainability recycling adjustment fee ("SRA Fee") revenues. Higher E&E Fee revenues associated with our fuel cost recovery program were a result of higher diesel fuel prices. Higher SRA Fee revenues were a result of lower recycled commodity prices in the quarter and a higher overall customer participation rate. See Item 3. *"Quantitative and Qualitative Disclosures about Market Risk"* included in this Quarterly Report on Form 10-Q for additional information regarding our E&E Fee and SRA Fee.

Commodity price and volume.

The commodity price and volume change components in quarterly and year-to-date solid waste revenues growth from the prior year periods are due primarily to favorable energy pricing and, to a lesser extent, higher landfill gas-to-energy and commodity processing volumes.

Acquisitions.

The acquisitions change components in quarterly and year-to-date solid waste revenues growth from the prior year periods are the result of increased acquisition activity within our Eastern and Western region operating segments in line with our growth strategy, including the timing and acquisition of ten businesses in the nine months ended September 30, 2022 and ten businesses in the fiscal year ended December 31, 2021.

Resource Solutions revenues

The change component in quarterly Resource Solutions revenues growth of $17.0 million from the prior year period is the result of the following:

- $11.5 million from acquisition activity; and
- $9.0 million from higher non-processing revenues due to higher volumes on organic business growth, favorable pricing and increased fees; partially offset by
- $(3.3) million primarily from the unfavorable impact of decreasing recycled commodity pricing on processing revenues, partially offset by higher tipping fees; and
- $(0.2) million from lower processing volumes mainly driven by lower recycled commodity volumes.

The change component in year-to-date Resource Solutions revenues growth of $58.0 million from the prior year period is the result of the following:

- $38.0 million from acquisition activity;
- $18.3 million from higher non-processing revenues due to higher volumes on organic business growth, favorable pricing and increased fees; and
- $2.1 million from the favorable impact of recycled commodity and other processing pricing on processing revenues, partially offset by lower tipping fees, partially offset by
- $(0.4) million from lower processing volumes mainly driven by lower recycled commodity volumes.

Operating Expenses

A summary of cost of operations, general and administration expense, and depreciation and amortization expense (dollars in millions and as a percentage of total revenues) is as follows:

	Three Months Ended September 30,				$ Change	Nine Months Ended September 30,				$ Change
	2022		2021			2022		2021		
Cost of operations	$ 190.3	64.4 %	$ 153.9	63.6 %	$ 36.4	$ 538.8	66.3 %	$ 419.6	64.8 %	$ 119.2
General and administration	$ 34.3	11.6 %	$ 31.0	12.8 %	$ 3.3	$ 97.7	12.0 %	$ 87.3	13.5 %	$ 10.4
Depreciation and amortization	$ 32.5	11.0 %	$ 27.5	11.4 %	$ 5.0	$ 93.1	11.5 %	$ 74.5	11.5 %	$ 18.6

Cost of Operations

Cost of operations includes (i) direct costs, which consist of the costs of purchased materials and third-party transportation and disposal costs, including third-party tipping fees, (ii) direct labor costs, which include salaries, wages, incentive compensation and related benefit costs such as health and welfare benefits and workers compensation, (iii) direct operational costs, which include landfill operating costs such as accretion expense related to final capping, closure and post-closure obligations, leachate treatment and disposal costs and depletion of landfill operating lease obligations, vehicle insurance costs, host community fees and royalties, (iv) fuel costs used by our vehicles and in conducting our operations, (v) maintenance and repair costs relating to our vehicles, equipment and containers and (vi) other operational costs including facility costs.

A summary of the major components of our cost of operations for the three and nine months ended September 30, 2022 and 2021 (dollars in millions and as a percentage of total revenues) is as follows:

	Three Months Ended September 30,				$ Change	Nine Months Ended September 30,				$ Change
	2022		2021			2022		2021		
Direct costs	$ 76.7	26.0 %	$ 60.5	25.0 %	$ 16.2	$ 210.8	25.9 %	$ 162.3	25.1 %	$ 48.5
Direct labor costs	37.3	12.6 %	32.1	13.3 %	5.2	107.8	13.3 %	85.3	13.2 %	22.5
Direct operational costs	22.9	7.8 %	21.2	8.8 %	1.7	66.0	8.1 %	58.4	9.0 %	7.6
Fuel costs	12.1	4.1 %	7.1	3.0 %	5.0	35.6	4.4 %	18.9	2.9 %	16.7
Maintenance and repair costs	21.0	7.0 %	16.3	6.6 %	4.7	59.7	7.4 %	45.5	7.0 %	14.2
Other operational costs	20.3	6.9 %	16.7	6.9 %	3.6	58.9	7.2 %	49.2	7.6 %	9.7
	$ 190.3	64.4 %	$ 153.9	63.6 %	$ 36.4	$ 538.8	66.3 %	$ 419.6	64.8 %	$ 119.2

These cost categories may change from time to time and may not be comparable to similarly titled categories presented by other companies.

The most significant items impacting the changes in our cost of operations during the three and nine months ended September 30, 2022 and 2021 are summarized below:

- Direct costs increased in aggregate dollars due primarily to higher hauling and third-party transportation and disposal costs on (i) higher solid waste volumes driven by acquisition activity, (ii) higher fuel surcharges from third party haulers due to higher diesel fuel prices, (iii) higher third-party disposal rates due to inflationary pressures and (iv) higher non-processing volumes in our Resource Solutions operating segment; and higher purchased material costs on acquisition activity and higher average commodity prices year-to-date;
- Direct labor costs increased in aggregate dollars due primarily to acquisition-related growth, wage inflation and higher workers compensation costs on claims activity associated with an increased headcount;
- Direct operational costs decreased as a percentage of revenues, while increasing in aggregate dollars due primarily to (i) higher landfill operating costs in our Western region due to severe winter weather earlier in the year and construction delays compounded with higher landfill volumes, (ii) higher vehicle insurance costs, (iii) acquisition-related growth and (iv) inflationary pressures; partially offset by lower host community and royalty fees;
- Fuel costs increased in aggregate dollars due primarily to higher fuel prices and higher volumes driven by acquisition activity and, to a lesser extent, organic business growth. See Item 3. "*Quantitative and Qualitative Disclosures about Market Risk*" included in this Quarterly Report on Form 10-Q for additional information regarding our fuel costs;
- Maintenance and repair costs increased in aggregate dollars due primarily to acquisition related growth and higher fleet and container maintenance costs associated with inflationary pressures; and
- Other operational costs increased in aggregate dollars due primarily to higher facility costs driven by acquisition activity and inflationary pressures.

General and Administration

General and administration expense includes (i) salaries, wages, incentive compensation and related benefit costs such as health and welfare benefits and workers compensation costs related to management, clerical and administrative functions, (ii) professional service fees, (iii) bad debt expense, and (iv) other overhead costs including those associated with marketing, sales force and community relations efforts.

A summary of the major components of our general and administration expenses for the three and nine months ended September 30, 2022 and 2021 (dollars in millions and as a percentage of total revenues) is as follows:

	Three Months Ended September 30,				$ Change	Nine Months Ended September 30,				$ Change
	2022		2021			2022		2021		
Labor costs	$ 23.5	7.9 %	$ 20.5	8.5 %	$ 3.0	$ 66.9	8.2 %	$ 61.6	9.5 %	$ 5.3
Professional fees	1.8	0.6 %	2.3	1.0 %	(0.5)	5.2	0.6 %	5.4	0.8 %	(0.2)
Provision for bad debt expense	0.8	0.3 %	0.9	0.4 %	(0.1)	1.9	0.2 %	1.3	0.2 %	0.6
Other	8.2	2.8 %	7.3	2.9 %	0.9	23.7	3.0 %	19.0	3.0 %	4.7
	$ 34.3	11.6 %	$ 31.0	12.8 %	$ 3.3	$ 97.7	12.0 %	$ 87.3	13.5 %	$ 10.4

These cost categories may change from time to time and may not be comparable to similarly titled categories presented by other companies.

The most significant items impacting the changes in our general and administration expenses during the three and nine months ended September 30, 2022 and 2021 are summarized below:

- Labor costs decreased as a percentage of revenues, while increasing in aggregate dollars due primarily to acquisition-related growth, wage inflation and higher accrued incentive compensation on improved performance, partially offset by lower equity compensation costs; and
- Other costs increased in aggregate dollars due primarily to inflationary pressures and an increase in general overhead costs to support business growth.

Depreciation and Amortization

Depreciation and amortization expense includes (i) depreciation of property and equipment (including assets recorded for finance leases) on a straight-line basis over the estimated useful lives of the assets, (ii) amortization of landfill costs (including those costs incurred and all estimated future costs for landfill development and construction, along with asset retirement costs arising from closure and post-closure obligations) on a units-of-consumption method as landfill airspace is consumed over the total estimated remaining capacity of a site, which includes both permitted capacity and unpermitted expansion capacity that meets certain criteria for amortization purposes, and amortization of landfill asset retirement costs arising from final capping obligations on a units-of-consumption method as airspace is consumed over the estimated capacity associated with each final capping event and (iii) amortization of intangible assets with a definite life, using either an economic benefit provided approach or on a straight-line basis over the definitive terms of the related agreements.

A summary of the components of depreciation and amortization expense (dollars in millions and as a percentage of total revenues) follows:

	Three Months Ended September 30,				$ Change	Nine Months Ended September 30,				$ Change
	2022		2021			2022		2021		
Depreciation	$ 19.7	6.7 %	$ 16.3	6.7 %	$ 3.4	$ 58.2	7.2 %	$ 45.1	7.0 %	$ 13.1
Landfill amortization	8.5	2.9 %	8.1	3.3 %	0.4	22.6	2.8 %	22.3	3.4 %	0.3
Other amortization	4.3	1.4 %	3.1	1.4 %	1.2	12.3	1.5 %	7.1	1.1 %	5.2
	$ 32.5	11.0 %	$ 27.5	11.4 %	$ 5.0	$ 93.1	11.5 %	$ 74.5	11.5 %	$ 18.6

The period-to-period increases in depreciation and other amortization expense can be primarily attributed to acquisition activity and increased investments in our fleet, whereas increases in landfill amortization expense can be attributed to increasing landfill volumes throughout the nine months ended September 30, 2022 and the volume mix at our landfills.

Expense from Acquisition Activities

In the three and nine months ended September 30, 2022, we recorded charges of $0.8 million and $3.9 million, respectively, and in the three and nine months ended September 30, 2021, we recorded charges of $1.9 million and $4.0 million, respectively, comprised primarily of legal, consulting and other similar costs associated with due diligence and the acquisition and integration of acquired businesses or select development projects.

Environmental Remediation Charge

In the three and nine months ended September 30, 2022, we recorded a charge of $0.8 million associated with the investigation of potential remediation at an inactive waste disposal site that adjoins one of our landfills.

Other Expenses

Interest Expense, net

Our interest expense, net increased $0.9 million quarterly and $1.1 million year-to-date compared to the same periods in the prior year due primarily to rising interest rates and higher average debt balances associated with the issuance in June 2022 of $35.0 million aggregate principal amount of Vermont Economic Development Authority Solid Waste Disposal Long-Term Revenue Bonds Series 2022A-1 ("Vermont Bonds 2022A-1").

Provision for Income Taxes

Our provision for income taxes increased $2.5 million quarterly and $4.2 million year-to-date as compared to the same periods in the prior year due primarily to higher income from operations between the periods. The provision for income taxes in the nine months ended September 30, 2022 included $4.9 million of current income taxes and $13.8 million of deferred income taxes. For the nine months ended September 30, 2021, the provision included $1.5 million of current income taxes and $13 million of deferred income taxes. The effective rate for the nine months ended September 30, 2022 was 31.2% and was computed based on the statutory rate of 21% adjusted primarily for state taxes and nondeductible officer compensation.

On December 22, 2017, the Tax Cuts and Jobs Act (the “TCJ Act”) was enacted. The TCJ Act significantly changed U.S. corporate income tax laws by, among other things, changing carryforward rules for net operating losses. Our $59.7 million in federal net operating loss carryforwards generated as of the end of 2017 continue to be carried forward for 20 years and are expected to be available to fully offset taxable income earned in the fiscal year ending December 31, 2022 ("fiscal year 2022") and future tax years. Federal net operating losses generated after 2017, totaling $46.5 million carried forward to fiscal year 2022, will be carried forward indefinitely, but generally may only offset up to 80% of taxable income earned in a tax year.

Segment Reporting

Revenues

A summary of revenues by operating segment (in millions) follows:

	Three Months Ended September 30,		$ Change	Nine Months Ended September 30,		$ Change
	2022	2021		2022	2021	
Eastern	$ 93.1	$ 75.2	$ 17.9	$ 251.7	$ 188.6	$ 63.1
Western	121.9	103.5	18.4	332.6	288.1	44.5
Resource solutions	80.3	63.3	17.0	228.7	170.7	58.0
Total revenues	$ 295.3	$ 242.0	$ 53.3	$ 813.0	$ 647.4	$ 165.6

Eastern Region

A summary of the period-to-period changes in solid waste revenues (dollars in millions and as percentage growth of solid waste revenues) follows:

	Period-to-Period Change for the Three Months Ended September 30, 2022 vs. 2021		Period-to-Period Change for the Nine Months Ended September 30, 2022 vs. 2021	
	Amount	% Growth	Amount	% Growth
Price	$ 5.5	7.4 %	$ 13.9	7.3 %
Volume	2.9	3.8 %	5.5	3.1 %
Surcharges and other fees	5.1	6.8 %	9.5	5.0 %
Commodity price and volume	(0.1)	(0.1)%	—	— %
Acquisitions	4.5	6.0 %	34.2	18.1 %
Solid waste revenues	$ 17.9	23.9 %	$ 63.1	33.5 %

Price.

The price change component in quarterly solid waste revenues growth from the prior year period is the result of the following:

- $3.8 million from favorable collection pricing; and
- $1.7 million from favorable disposal pricing related to transfer stations and, to a lesser extent, landfills.

The price change component in year-to-date solid waste revenues growth from the prior year period is the result of the following:

- $10.2 million from favorable collection pricing; and
- $3.7 million from favorable disposal pricing related to transfer stations and, to a lesser extent, landfills.

Volume.

The volume change component in quarterly solid waste revenues growth from the prior year period is the result of the following:

- $2.0 million from higher disposal volumes related to landfills, transportation services and, to a lesser extent, transfer stations; and
- $0.9 million from higher collection volumes as a result of organic business growth.

The volume change component in year-to-date solid waste revenues growth from the prior year period is the result of the following:

- $3.3 million from higher disposal volumes related to transfer stations, landfills and transportation services; and
- $2.2 million from higher collection volumes as a result of organic business growth.

Surcharges and other fees.

The surcharges and other fees change components in quarterly and year-to-date solid waste revenues growth from the prior year periods are due primarily to higher E&E Fees associated with our fuel cost recovery program on higher diesel fuel prices.

Acquisitions.

The acquisitions change components in quarterly and year-to-date solid waste revenues growth from the prior year periods are the result of increased acquisition activity in line with our growth strategy, including the timing and acquisition of two businesses in the nine months ended September 30, 2022 and five businesses in the fiscal year ended December 31, 2021.

Western Region

A summary of the period-to-period changes in solid waste revenues (dollars in millions and as percentage growth of solid waste revenues) follows:

	Period-to-Period Change for the Three Months Ended September 30, 2022 vs. 2021		Period-to-Period Change for the Nine Months Ended September 30, 2022 vs. 2021	
	Amount	% Growth	Amount	% Growth
Price	$ 6.3	6.1 %	$ 16.9	5.9 %
Volume	0.8	0.7 %	1.2	0.4 %
Surcharges and other fees	6.4	6.2 %	12.2	4.2 %
Commodity price and volume	0.4	0.4 %	2.7	0.9 %
Acquisitions	4.5	4.4 %	11.5	4.0 %
Solid waste revenues	$ 18.4	17.8 %	$ 44.5	15.4 %

Price.

The price change component in quarterly solid waste revenues growth from the prior year period is the result of the following:

- $4.7 million from favorable collection pricing; and
- $1.6 million from favorable disposal pricing related to landfills, transfer stations and, to a lesser extent, transportation services.

The price change component in year-to-date solid waste revenues growth from the prior year period is the result of the following:

- $13.0 million from favorable collection pricing; and
- $3.9 million from favorable disposal pricing related to landfills, transfer stations and, to a lesser extent, transportation services.

Volume.

The volume change component in quarterly solid waste revenues growth from the prior year period is the result of the following:

- $1.6 million from higher disposal volumes related to landfills and, to a lesser extent, transfer stations and transportation services; partially offset by
- $(0.8) million from lower collection volumes associated with higher customer churn due to higher pricing, implementation of the E&E Fee on additional customers and customer deselection.

The volume change component in year-to-date solid waste revenues growth from the prior year period is the result of the following:

- $3.6 million from higher disposal volumes related to landfills, transportation, and transfer stations; partially offset by
- $(2.4) million from lower collection volumes associated with higher customer churn due to higher pricing, implementation of the E&E Fee on additional customers and customer deselection.

Surcharges and other fees.

The surcharges and other fees change components in quarterly and year-to-date solid waste revenues growth from the prior year periods are due primarily to higher E&E Fees associated with our fuel cost recovery program on higher diesel fuel prices.

Commodity price and volume.

The commodity price and volume change components in quarterly and year-to-date solid waste revenues growth from the prior year periods are due primarily to favorable landfill gas-to-energy pricing.

Acquisitions.

The acquisitions change components in quarterly and year-to-date solid waste revenues growth from the prior year periods are the result of increased acquisition activity in line with our growth strategy, including the timing and acquisition of eight businesses in the nine months ended September 30, 2022 and five businesses in the fiscal year ended December 31, 2021.

Operating Income

A summary of operating income (loss) by segment (in millions) follows:

	Three Months Ended September 30, 2022	Three Months Ended September 30, 2021	$ Change	Nine Months Ended September 30, 2022	Nine Months Ended September 30, 2021	$ Change
Eastern	$ 10.1	$ 5.4	$ 4.7	$ 14.0	$ 11.4	$ 2.6
Western	22.4	15.8	6.6	51.6	38.5	13.1
Resource Solutions	4.5	6.7	(2.2)	14.5	12.8	1.7
Corporate entities	(0.7)	(0.5)	(0.2)	(1.9)	(1.4)	(0.5)
Operating income	$ 36.3	$ 27.4	$ 8.9	$ 78.2	$ 61.3	$ 16.9

Eastern Region

Operating income increased $4.7 million quarterly and $2.6 million year-to-date from the prior year periods. Excluding the impact of the Southbridge Landfill closure charge and the expense from acquisition activities, our operating performance in the three and nine months ended September 30, 2022 was driven by revenue growth, inclusive of inter-company revenues, more than offsetting the following cost changes.

Cost of operations

Cost of operations increased $14.6 million quarterly and $59.3 million year-to-date from the prior year periods due to the following:

- Direct costs increased in aggregate dollars due primarily to higher hauling and third-party transportation and disposal costs on (i) higher solid waste volumes driven by acquisition activity and, to a lesser extent, organic business growth, (ii) higher fuel surcharges from third party haulers due to higher diesel fuel prices and (iii) higher third-party disposal rates due to inflationary pressures;
- Direct labor costs increased in aggregate dollars due primarily to (i) acquisition-related and, to a lesser extent, organic business growth, (ii) wage inflation and (iii) higher workers compensation costs on claims activity associated with an increased headcount;

- Fuel costs increased in aggregate dollars due primarily to higher fuel prices and higher volumes driven by acquisition activity and, to a lesser extent, organic business growth. See Item 3. *"Quantitative and Qualitative Disclosures about Market Risk*" included in this Quarterly Report on Form 10-Q for additional information regarding our fuel costs;
- Maintenance and repair costs increased in aggregate dollars due primarily to higher fleet and container maintenance costs associated with inflationary pressures and acquisition activity;
- Other operational costs increased in aggregate dollars due primarily to higher facility costs driven by acquisition activity and inflationary pressures; and
- Direct operational costs remained flat quarterly and increased year-to-date in aggregate dollars due to increased vehicle insurance costs and inflationary pressures.

General and administration

General and administration expense increased $1.5 million quarterly and $5.8 million year-to-date from the prior year periods due primarily to (i) acquisition-related growth, (ii) wage inflation, (iii) higher accrued incentive compensation on improved performance (iv) and an increase in general overhead costs associated with business growth and inflationary pressures; partially offset by lower equity compensation costs.

Depreciation and amortization

Depreciation and amortization expense increased $2.5 million quarterly and $11.6 million year-to-date from the prior year periods due primarily to acquisition activity, increased investment in our fleet, and higher landfill amortization expense due to higher quarterly landfill volumes and the volume mix at our landfills.

Western Region

Operating income increased $6.6 million quarterly and $13.1 million year-to-date from the prior year periods. Excluding the impact of the environmental remediation charge and expense from acquisition activities, our improved operating performance in the three and nine months ended September 30, 2022 was driven by revenue growth, inclusive of inter-company revenues, more than offsetting the following cost changes.

Cost of operations

Cost of operations increased $15.1 million quarterly and $41.1 million year-to-date from the prior year periods due to the following:

- Direct costs increased in aggregate dollars due primarily to higher hauling and third-party transportation and disposal costs on (i) higher solid waste volumes driven by acquisition activity, partially offset by lower collection volumes, (ii) higher fuel surcharges from third party haulers due to higher diesel fuel prices and (iii) higher third-party disposal rates due to inflationary pressures;
- Fuel costs increased in aggregate dollars due to higher fuel prices and higher volumes driven by acquisition activity. See Item 3. *"Quantitative and Qualitative Disclosures about Market Risk*" included in this Quarterly Report on Form 10-Q for additional information regarding our fuel costs;
- Direct labor costs increased in aggregate dollars due primarily to (i) wage inflation, (ii) increased overtime on higher solid waste volumes associated with acquisition activity and (iii) higher workers compensation costs on claim activity associated with an increased headcount year-to-date;
- Maintenance and repair costs increased in aggregate dollars due primarily to higher fleet maintenance costs associated with acquisition activity and inflationary pressures;
- Direct operational costs increased in aggregate dollars due to (i) higher landfill operating costs from severe winter weather earlier in the year and construction delays compounded with higher quarterly landfill volumes, (ii) higher vehicle insurance costs and (iii) inflationary pressures; partially offset by lower host community and royalty fees; and
- Other operational costs increased in aggregate dollars due primarily to higher facility costs driven by acquisition activity and inflationary pressures.

General and administration

General and administration expense decreased $(0.1) million quarterly and increased $0.6 million year-to-date from the prior year periods, with the year-to-date increase due primarily to (i) acquisition-related growth, (ii) wage inflation, (iii) higher accrued incentive compensation on improved performance and (iv) an increase in general overhead costs associated with business growth and inflationary pressures; partially offset by lower equity compensation costs.

Depreciation and amortization

Depreciation and amortization expense increased $1.1 million quarterly and $2.6 million year-to-date from the prior year periods due primarily to acquisition activity and increased investments in our fleet.

Resource Solutions

Operating income decreased $(2.2) million quarterly and increased $1.7 million year-to-date from the prior year periods. Excluding the impact of the expense from acquisition activities, our operating performance in the three and nine months ended September 30, 2022 was driven by revenue growth, inclusive of inter-company revenues, and the following cost changes.

Cost of operations

Cost of operations increased $17.7 million quarterly and $48.3 million year-to-date from the prior year periods due to the following:

- Direct costs increased in aggregate dollars due primarily to (i) higher hauling and third-party transportation costs on higher non-processing volumes (ii) higher fuel surcharges from third party haulers due to higher diesel fuel prices, (iii) inflationary pressures, and (iv) higher purchased material costs on acquisition activity and higher average commodity prices year-to-date;
- Direct labor costs increased in aggregate dollars due primarily to (i) acquisition activity and organic non-processing business growth, (ii) wage inflation and (iii) higher workers compensation costs on claim activity associated with an increased headcount;
- Other operational costs increased in aggregate dollars due primarily to higher facility costs driven by acquisition activity and inflationary pressures;
- Maintenance and repair costs increased in aggregate dollars due primarily to higher fleet maintenance costs associated with inflationary pressures, acquisition activity, and organic non-processing business growth;
- Direct operational costs increased in aggregate dollars due primarily to acquisition-related growth and inflationary pressures; and
- Fuel costs increased in aggregate dollars due to higher fuel prices and higher volumes driven by acquisition activity. See Item 3. *"Quantitative and Qualitative Disclosures about Market Risk*" included in this Quarterly Report on Form 10-Q for additional information regarding our fuel costs.

General and administration

General and administration expense increased $1.8 million quarterly and $3.6 million year-to-date from the prior year periods due to increased overhead costs associated with (i) acquisition activity and organic non-processing business growth, (ii) wage inflation, (iii) higher accrued incentive compensation on improved performance and (iv) an increase in general overhead costs associated with business growth and inflationary pressures; partially offset by lower equity compensation costs.

Depreciation and amortization

Depreciation and amortization expense increased $1.2 million quarterly and $4.0 million year-to-date from the prior year periods due to acquisition activity.

Liquidity and Capital Resources

We continually monitor our actual and forecasted cash flows, our liquidity, and our capital requirements in order to properly manage our liquidity needs as we move forward based on the capital intensive nature of our business and our growth acquisition strategy. We have $271.8 million of undrawn capacity from our $300.0 million revolving credit facility ("Revolving Credit Facility") as of September 30, 2022 to help meet our short-term and long-term liquidity needs. We expect existing cash and cash equivalents combined with cash flows from operations and financing activities to continue to be sufficient to fund our operating activities and cash commitments for investing and financing activities for at least the next 12 months and thereafter for the foreseeable future. Our known current- and long-term uses of cash include, among other possible demands: (1) capital expenditures and leases, (2) acquisitions, (3) repayments to service debt and other long-term obligations and (4) payments for final capping, closure and post-closure asset retirement obligations and environmental remediation liabilities.

A summary of the major indicators of our financial condition and liquidity (in millions) follows:

	September 30, 2022	December 31, 2021	$ Change
Cash and cash equivalents	$ 47.9	$ 33.8	$ 14.1
Current assets, excluding cash and cash equivalents	$ 143.5	$ 112.7	$ 30.8
Restricted assets	$ 1.7	$ 2.1	$ (0.4)
Total current liabilities:			
Current liabilities, excluding current maturities of debt	$ 154.5	$ 142.3	$ 12.2
Current maturities of debt	8.3	9.9	(1.6)
Total current liabilities	$ 162.8	$ 152.2	$ 10.6
Debt, less current portion	$ 588.4	$ 552.7	$ 35.7

Current assets, excluding cash and cash equivalents, increased $30.8 million and current liabilities increased $10.6 million in the nine months ended September 30, 2022, driven primarily by business and revenue growth resulting in a $20.2 million increase in working capital, excluding cash and cash equivalents, from $(39.5) million as of December 31, 2021 to $(19.3) million as of September 30, 2022. We strive to maintain a negative working capital cycle driven by shorter days sales outstanding as compared to days payable outstanding in an effort to collect money at a faster rate than paying bills to facilitate business growth.

Summary of Cash Flow Activity

Cash and cash equivalents increased $14.1 million in the nine months ended September 30, 2022. A summary of cash flows (in millions) follows:

	Nine Months Ended September 30,		$ Change
	2022	2021	
Net cash provided by operating activities	$ 152.4	$ 134.1	$ 18.3
Net cash used in investing activities	$ (161.1)	$ (234.1)	$ 73.0
Net cash provided by (used in) financing activities	$ 22.8	$ (7.9)	$ 30.7

Cash flows from operating activities.

A summary of operating cash flows (in millions) follows:

	Nine Months Ended September 30,	
	2022	2021
Net income	$ 44.7	$ 32.0
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	93.1	74.5
Interest accretion on landfill and environmental remediation liabilities	6.0	5.9
Amortization of debt issuance costs	1.4	1.7
Stock-based compensation	5.6	8.7
Operating lease right-of-use assets expense	10.4	10.0
Gain on sale of property and equipment	(0.6)	—
Non-cash expense from acquisition activities	0.3	0.5
Deferred income taxes	13.8	13.0
	174.7	146.3
Changes in assets and liabilities, net	(22.3)	(12.2)
Net cash provided by operating activities	$ 152.4	$ 134.1

A summary of the most significant items affecting the change in our operating cash flows follows:

Net cash provided by operating activities increased $18.3 million in the nine months ended September 30, 2022 as compared to the nine months ended September 30, 2021. This was the result of improved operational performance, partially offset by an increase in the unfavorable cash flow impact associated with the changes in our assets and liabilities, net of effects of acquisitions and divestitures. For discussion of our improved operational performance in the nine months ended September 30, 2022 as compared to the nine months ended September 30, 2021, see "*Results of Operations"* above. The increase in the unfavorable cash flow impact associated with the changes in our assets and liabilities, net of effects of acquisitions and divestitures, which are affected by both cost changes and the timing of payments, in the nine months ended September 30, 2022 as compared to the nine months ended September 30, 2021 was due primarily to the following:

- a $(12.4) million unfavorable impact to operating cash flows associated with the change in accounts payable;
- a $(3.3) million unfavorable impact to operating cash flows associated with the change in accrued expenses and other liabilities; and
- a $(3.3) million unfavorable impact to operating cash flows associated with the change in accounts receivable associated primarily with increased revenues growth; partially offset by
- a $8.6 million favorable impact to operating cash flows associated with the change in prepaid expenses, inventories and other assets.

Cash flows from investing activities.

A summary of investing cash flows (in millions) follows:

	Nine Months Ended September 30,	
	2022	**2021**
Acquisitions, net of cash acquired	$ (74.0)	$ (153.1)
Additions to property, plant and equipment	(87.7)	(81.6)
Proceeds from sale of property and equipment	0.6	0.6
Net cash used in investing activities	$ (161.1)	$ (234.1)

A summary of the most significant items affecting the change in our investing cash flows follows:

Acquisitions, net of cash acquired. In the nine months ended September 30, 2022, we acquired twelve businesses for total consideration of $78.1 million, including $72.7 million in cash, and paid $1.3 million in holdback payments on businesses previously acquired, as compared to the nine months ended September 30, 2021 during which we acquired eight businesses for total consideration of $155.2 million, including $150.4 million in cash, and paid $2.7 million in holdback payments on businesses previously acquired.

Capital expenditures. Capital expenditures increased $(6.1) million in the nine months ended September 30, 2022 as compared to the nine months ended September 30, 2021 due primarily to higher capital spend associated with landfill development, investments in newly acquired operations to drive synergies, the retrofitting of a single-stream material recovery facility and inflationary pressures, partially offset by the completion of construction and development of phase VI at our Subtitle D landfill in Coventry, Vermont in the fiscal year ended December 31, 2021.

Cash flows from financing activities.

A summary of financing cash flows (in millions) follows:

	Nine Months Ended September 30,	
	2022	**2021**
Proceeds from long-term borrowings	$ 82.2	$ 0.5
Principal payments on debt	(57.4)	(8.6)
Payments of debt issuance costs	(1.2)	—
Payments of contingent consideration	(1.0)	—
Proceeds from the exercise of share based awards	0.2	0.2
Net cash provided by (used in) financing activities	$ 22.8	$ (7.9)

A summary of the most significant items affecting the change in our financing cash flows follows:

Debt activity. Net cash associated with debt activity increased $32.9 million. The increase in financing cash flows in the nine months ended September 30, 2022 is due primarily to the issuance of $35.0 million aggregate principal amount of Vermont Bonds 2022A-1 in June 2022.

Payment of debt issuance costs. We paid $1.2 million of debt issuance costs in the nine months ended September 30, 2022 related to the issuance of Vermont Bonds 2022A-1.

Payment of contingent consideration. We paid $1.0 million of contingent consideration associated with an acquisition based on the completion of a permit expansion application.

Outstanding Long-Term Debt

Credit Facility

As of September 30, 2022, we had outstanding $350.0 million aggregate principal amount of borrowings under our term loan A facility ("Term Loan Facility") and no borrowings under our $300.0 million Revolving Credit Facility, with a $75.0 million sublimit for letters of credit. The Term Loan Facility and the Revolving Credit Facility (collectively, the "Credit Facility") has a 5-year term that matures in December 2026 and bears interest at a rate of London Inter-Bank Offered Rate ("LIBOR") plus 1.375% per annum, which will be reduced to a rate of LIBOR plus as low as 1.125% upon us reaching a consolidated net leverage ratio of less than 2.25x. The Credit Facility contains customary benchmark replacement provisions pursuant to which, upon certain triggering events, the LIBOR benchmark used to calculate the LIBOR rate will be replaced with a secured overnight financing rate, as adjusted, on the terms and conditions in the amended and restated credit agreement ("Credit Agreement"). The Credit Facility is guaranteed jointly and severally, fully and unconditionally by all of our significant wholly-owned subsidiaries and secured by substantially all of our assets. As of September 30, 2022, further advances were available under the Revolving Credit Facility in the amount of $271.8 million. The available amount is net of outstanding irrevocable letters of credit totaling $28.2 million, and as of September 30, 2022 no amount had been drawn. We have the right to request, at our discretion, an increase in the amount of loans under the Credit Facility by an aggregate amount of $125.0 million, subject to the terms and conditions set forth in the Credit Agreement.

The Credit Agreement requires us to maintain a minimum interest coverage ratio and a maximum consolidated net leverage ratio, to be measured at the end of each fiscal quarter. In addition to these financial covenants, the Credit Agreement also contains a number of important customary affirmative and negative covenants which restrict, among other things, our ability to sell assets, incur additional debt, create liens, make investments, and pay dividends. As of September 30, 2022, we were in compliance with the covenants contained in the Credit Agreement. We do not believe that these restrictions impact our ability to meet future liquidity needs. An event of default under any of our debt agreements could permit some of our lenders, including the lenders under the Credit Facility, to declare all amounts borrowed from them to be immediately due and payable, together with accrued and unpaid interest, or, in the case of the Credit Facility, terminate the commitment to make further credit extensions thereunder, which could, in turn, trigger cross-defaults under other debt obligations. If we were unable to repay debt to our lenders or were otherwise in default under any provision governing our outstanding debt obligations, our secured lenders could proceed against us and against the collateral securing that debt.

Based on the seasonality of our business, operating results in the late fall, winter and early spring months are generally lower than the remainder of our fiscal year. Given the cash flow impact that this seasonality, the capital intensive nature of our business and the timing of debt payments has on our business, we typically incur higher debt borrowings in order to meet our liquidity needs during these times. Consequently, our availability and performance against our financial covenants may tighten during these times as well.

Tax-Exempt Financings and Other Debt

As of September 30, 2022, we had outstanding $197.0 million aggregate principal amount of tax exempt bonds, including the issuance of $35.0 million aggregate principal amount of Vermont Bonds 2022A-1, $49.1 million aggregate principal amount of finance leases and $0.7 million aggregate principal amount of notes payable. See Note 7, *Debt* to our consolidated financial statements included in Part I. Item. 1 of this Quarterly Report on Form 10-Q for further disclosure over debt.

Inflation

Inflationary increases in costs, including current inflationary pressures associated primarily with fuel, labor and certain other cost categories and capital items, have materially affected, and may continue to materially affect, our operating margins and cash flows. While rapid inflation negatively impacted operating results and margins during the three and nine months ended September 30, 2022, we believe that our flexible pricing structures and cost recovery fees are allowing us to recover and will continue to allow us to recover certain inflationary costs from our customer base. Consistent with industry practice, most of our contracts and service agreements provide for a pass-through of certain costs to our customers, including increases in landfill tipping fees and in most cases fuel costs, intended to mitigate the impact of inflation on our operating results. We have also implemented a number of operating efficiency programs that seek to improve productivity and reduce our service costs, and our fuel cost recovery program, which is the energy component of our E&E Fee, is designed to recover escalating fuel price fluctuations above a periodically reset floor. Despite these programs, competitive factors may require us to absorb at least a portion of these cost increases. See Item 3. *"Quantitative and Qualitative Disclosures about Market Risk*" included in this Quarterly Report on Form 10-Q for additional information regarding our fuel cost recovery program. Additionally, management's estimates associated with inflation have had, and will continue to have, an impact on our accounting for landfill and environmental remediation liabilities.

Regional Economic Conditions

Our business is primarily located in the northeastern United States. Therefore, our business, financial condition and results of operations are susceptible to downturns in the general economy in this geographic region and other factors affecting the region, such as state regulations and severe weather conditions. We are unable to forecast or determine the timing and/or the future impact of a sustained economic slowdown.

Seasonality and Severe Weather

Our transfer and disposal revenues historically have been higher in the late spring, summer and early fall months. This seasonality reflects lower volumes of waste in the late fall, winter and early spring months because the volume of waste relating to C&D activities decreases substantially during the winter months in the northeastern United States.

Because certain of our operating and fixed costs remain constant throughout the fiscal year, operating income is therefore impacted by a similar seasonality. Our operations can be adversely affected by periods of inclement or severe weather, which could increase our operating costs associated with the collection and disposal of waste, delay the collection and disposal of waste, reduce the volume of waste delivered to our disposal sites, increase the volume of waste collected under our existing contracts (without corresponding compensation), decrease the throughput and operating efficiency of our materials recycling facilities, or delay construction or expansion of our landfill sites and other facilities. Our operations can also be favorably affected by severe weather, which could increase the volume of waste in situations where we are able to charge for our additional services provided.

Our processing line-of-business in the Resource Solutions operating segment typically experiences increased volumes of fiber in November and December due to increased retail activity during the holiday season.

Critical Accounting Estimates and Assumptions

Our financial statements have been prepared in accordance with generally accepted accounting principles in the United States and necessarily include certain estimates and judgments made by management. On an on-going basis, management evaluates its estimates and judgments which are based on historical experience and on various other factors that are believed to be reasonable under the circumstances. The results of their evaluation form the basis for making judgments about the carrying values of assets and liabilities. Actual results may differ from these estimates under different assumptions and circumstances. Our critical accounting estimates are more fully discussed in Item 7. "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

New Accounting Pronouncements

For a description of the new accounting standards that may affect us, see Note 2, *Accounting Changes* to our consolidated financial statements included under Part I. Item 1. of this Quarterly Report on Form 10-Q.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In the normal course of business we are exposed to market risks, including changes in diesel fuel prices, interest rates and certain commodity prices. We have a variety of strategies to mitigate these market risks, including those discussed below.

Fuel Price Risk

The price and supply of fuel are unpredictable and fluctuate based on events beyond our control, including among others, geopolitical developments, supply and demand for oil and gas, actions by the Organization of the Petroleum Exporting Countries and other oil and gas producers, war and unrest in oil producing countries and regional production patterns. Because fuel is needed to run our fleet of trucks and other aspects of our operations, price escalations for fuel increase our operating expenses. We have a fuel cost recovery program, which is the energy component of our energy and environmental fee ("E&E Fee") that is designed to offset some or all of the impact of diesel fuel price increases above a periodically reset floor and contemplates a minimum customer participation level to cover changes in our fuel costs. The energy component of the E&E Fee floats on a monthly basis based upon changes in a published diesel fuel price index and is tied to a price escalation index with a lookback provision, which results in a timing lag in our ability to match the changes in the fuel cost component of the fee to diesel fuel price fluctuations during periods of rapid price changes. In certain circumstances, a substantial rise or drop in fuel costs could materially affect our revenue and costs of operations. In addition, we are susceptible to increases in fuel surcharges from our vendors.

Based on our consumption levels in the last twelve months ended September 30, 2022, after considering physically settled fuel contracts we believe a $0.50 cent per gallon change in the price of diesel fuel would change our direct fuel costs by approximately $4.8 million per year. Offsetting these changes in direct fuel expense would be changes in the energy component of the E&E Fees charged to our customers. Based on participation rates as of September 30, 2022, we believe a $0.50 cent per gallon change in the price of diesel fuel would change the energy component of the E&E Fee by approximately $4.8 million per year.

Commodity Price Risk

We market a variety of materials, including fibers such as old corrugated cardboard and old newsprint, plastics, glass, ferrous and aluminum metals. We may use a number of strategies to mitigate impacts from these recycled material commodity price fluctuations including: (1) charging collection customers a floating sustainability recycling adjustment fee to reduce recycling commodity risks; (2) providing in-bound material recovery facilities (“MRF”) customers with a revenue share or indexed materials purchases in higher commodity price markets, or charging these same customers a processing cost or tipping fee per ton in lower commodity price markets; (3) selling recycled commodities to out-bound MRF customers through floor price or fixed price agreements; or (4) entering into fixed price contracts or hedges that mitigate the variability in cash flows generated from the sales of recycled paper at floating prices. Although we have introduced these risk mitigation programs to help offset volatility in commodity prices and to offset higher labor or capital costs to meet more stringent contamination standards, we cannot provide assurance that we can use these programs with our customers in all circumstances or that they will mitigate these risks in an evolving recycling environment. We do not use financial instruments for trading purposes and are not a party to any leveraged derivatives. As of September 30, 2022, we were not party to any commodity hedging agreements.

Should recycled material commodity prices change by $10 per ton, we estimate that our annual operating income margin would change by approximately $0.8 million annually, or $0.2 million quarterly. Our sensitivity to changes in commodity prices is complex because each customer contract is unique relative to revenue sharing, tipping or processing fees and other arrangements. The above operating income impact may not be indicative of future operating results and actual results may vary materially.

Interest Rate Risk

Our strategy to reduce exposure to interest rate risk involves entering into interest rate derivative agreements to hedge against adverse movements in interest rates related to the variable rate portion of our long-term debt. We have designated these derivative instruments as highly effective cash flow hedges, and therefore the change in fair value is recorded in our stockholders’ equity as a component of accumulated other comprehensive income (loss) and included in interest expense at the same time as interest expense is affected by the hedged transactions. Differences paid or received over the life of the agreements are recorded as additions to or reductions of interest expense on the underlying debt and included in cash flows from operating activities.

As of September 30, 2022, our active interest rate derivative agreements had total notional amounts of $190.0 million. According to the terms of the agreements, we receive interest based on the 1-month London Inter-Bank Offered Rate ("LIBOR") index, in some instances restricted by a 0.0% floor, and pay interest at a weighted average rate of approximately 2.20% as of September 30, 2022. The agreements mature between May 2023 and June 2027. Additionally, as of September 30, 2022, we have a forward starting interest rate derivative agreement with a total notional amount of $20.0 million that matures in May 2028. We will receive interest based on the 1-month LIBOR index, restricted by a 0.0% floor, and will pay interest at a rate of 1.29%.

As of September 30, 2022, we had $246.8 million of fixed rate debt in addition to the $190.0 million fixed through our interest rate derivative agreements. We had interest rate risk relating to approximately $160.0 million of long-term debt as of September 30, 2022. The weighted average interest rate on the variable rate portion of long-term debt was approximately 4.2% at September 30, 2022. Should the average interest rate on the variable rate portion of long-term debt change by 100 basis points, we estimate that our annual interest expense would change by up to approximately $1.6 million.

ITEM 4. CONTROLS AND PROCEDURES

Evaluation of disclosure controls and procedures. Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2022. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended ("Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of September 30, 2022, our chief executive officer and chief financial officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in internal controls over financial reporting. No change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) occurred during the three months ended September 30, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II.

ITEM 1. LEGAL PROCEEDINGS

General Legal Proceedings

The information required by this Item is provided in Note 8, *Commitments and Contingencies* to our consolidated financial statements included in Part I. Item 1. of this Quarterly Report on Form 10-Q.

Legal Proceedings over Certain Environmental Matters Involving Governmental Authorities with Possible Sanctions of $1,000,000 or More

Item 103 of the Securities and Exchange Commission's Regulation S-K requires disclosure of certain environmental matters when a governmental authority is a party to the proceedings and the proceedings involve potential monetary sanctions unless we reasonably believe the monetary sanctions will not equal or exceed a specified threshold which we determine is reasonably designed to result in disclosure of any such proceeding that is material to our business or financial condition. Pursuant to Item 103, we have determined such disclosure threshold to be $1,000,000. We have no matters to disclose in accordance with that requirement.

ITEM 1A. RISK FACTORS

Our business is subject to a number of risks, including those identified in Item 1A. "*Risk Factors*" of our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, and the updated risk factor set forth below, that could have a material effect on our business, results of operations, financial condition and/or liquidity and that could cause our operating results to vary significantly from period to period. We may disclose additional changes to our risk factors or disclose additional factors from time to time in our future filings with the Securities and Exchange Commission.

The waste industry is subject to extensive government regulations, including environmental laws and regulations, and we incur substantial costs to comply with such laws and regulations. Failure to comply with environmental or other laws and regulations, as well as enforcement actions and litigation arising from an actual or perceived breach of such laws and regulations, could subject us to fines, penalties, and judgments, and impose limits on our ability to operate and expand.

We are subject to potential liability and restrictions under environmental laws and regulations, including potential liability and restrictions arising from or relating to the transportation, handling, recycling, generation, treatment, storage and disposal of wastes, the presence, release, discharge or emission of pollutants, and the investigation, remediation and monitoring of impacts to soil, surface water, groundwater and other environmental media including natural resources, as a result of the actual or alleged presence, release, discharge or emission of hazardous substances, pollutants or contaminants on, at, under or migrating from our properties, or in connection with our operations. The waste management industry has been and will continue to be subject to regulation, including permitting and related financial assurance requirements, as well as attempts to further regulate the industry, including efforts to regulate and limit the emission of greenhouse gases to ameliorate the effect of climate change. Our solid waste operations are subject to a wide range of federal, state and, in some cases, local environmental, odor and noise and land use restrictions. If we are not able to comply with the requirements that apply to a particular facility or if we operate in violation of the terms and conditions of, or without the necessary approvals or permits, we could be subject to administrative or civil, and possibly criminal, fines and penalties, and we may be required to spend substantial capital to bring an operation into compliance, to temporarily or permanently discontinue activities, and/or take corrective actions, possibly including removal of landfilled materials. Those costs or actions could be significant to us and affect our results of operations, cash flows, and available capital. Environmental and land use laws and regulations also affect our ability to expand and, in the case of our solid waste operations, may dictate those geographic areas from which we must, or, from which we may not, accept solid waste. Those laws and regulations may limit the overall size and daily solid waste volume that may be accepted by a solid waste operation. If we are not able to expand or otherwise operate one or more of our facilities because of limits imposed under such laws, we may be required to increase our utilization of disposal facilities owned by third-parties, which could reduce our revenues and/or operating margins. The foregoing includes recent changes in solid waste laws of the State of Maine, which we do not anticipate will have a material effect on our business, results of operations, financial condition and/or liquidity, but which may negatively impact our operating results in the form of lower revenues or increased costs and/or liabilities.

We have historically grown through acquisitions, expect to make additional acquisitions in the future, and we have tried and will continue to try to evaluate and limit environmental risks and liabilities presented by businesses to be acquired prior to the acquisition. It is possible that some liabilities may prove to be more difficult or costly to address than we anticipate. It is also possible that government officials responsible for enforcing environmental laws and regulations may believe an issue is more serious than we expect, or that we will fail to identify or fully appreciate an existing liability before we become responsible for addressing it. Some of the legal sanctions to which we could become subject could cause the suspension or revocation of a permit, prevent us from, or delay us in, obtaining or renewing permits to operate or expand our facilities, or harm our reputation.

In addition to the costs of complying with environmental laws and regulations, we incur costs in connection with environmental proceedings and litigation brought against us by government agencies and private parties. We are, and may be in the future, a defendant in lawsuits brought by parties alleging environmental damage, including natural resource damage, personal injury, and/or property damage or impairment, or seeking to impose civil penalties, injunctive relief or overturn or prevent the issuance of an operating permit or authorization, all of which may result in us incurring significant liabilities.

The conduct of our businesses is also subject to various other laws and regulations administered by federal, state and local governmental agencies, including tax laws, employment laws and competition laws, among others. New laws, regulations or governmental policy and their related interpretations, or changes in any of the foregoing, including taxes or other limitations on our services, may alter the environment in which we do business.

In certain jurisdictions, we are subject to compliance with specific obligations under competition laws due to our competitive position in those jurisdictions. Failure to comply with these requirements or other laws or regulations could subject us to enforcement actions or financial penalties which could have a material adverse effect on our business.

ITEM 6. EXHIBITS

Exhibit No.	Description
10.1	Amendment to Amended and Restated Employment Agreement between Casella Waste Systems, Inc. and Edwin D. Johnson dated as of July 21, 2022. (incorporated herein by reference to Exhibit 10.5 to the quarterly report on Form 10-Q of Casella as filed on July 29, 2022 (file no. 000-23211)).
31.1 +	Certification of John W. Casella, Principal Executive Officer, pursuant to Section 302 of the Sarbanes – Oxley Act of 2002.
31.2 +	Certification of Edmond R. Coletta, Principal Financial Officer, pursuant to Section 302 of the Sarbanes – Oxley Act of 2002.
32.1 ++	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002.
32.2 ++	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002.
101.INS	The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.**
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document.**
101.LAB	Inline XBRL Taxonomy Label Linkbase Document.**
101.PRE	Inline XBRL Taxonomy Presentation Linkbase Document.**
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.**
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101.)

**	Submitted Electronically Herewith. Attached as Exhibit 101 to this report are the following formatted in inline XBRL (Extensible Business Reporting Language): (i) Consolidated Balance Sheets as of September 30, 2022 and December 31, 2021, (ii) Consolidated Statements of Operations for the three and nine months ended September 30, 2022 and 2021, (iii) Consolidated Statements of Comprehensive Income for the three and nine months ended September 30, 2022 and 2021, (iv) Consolidated Statements of Stockholders' Equity for the three and nine months ended September 30, 2022 and 2021, (v) Consolidated Statements of Cash Flows for the nine months ended September 30, 2022 and 2021, and (vi) Notes to Consolidated Financial Statements.
+	Filed Herewith
++	Furnished Herewith

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

	Casella Waste Systems, Inc.
Date: October 28, 2022	By: /s/ Kevin Drohan
	Kevin Drohan Vice President and Chief Accounting Officer (Principal Accounting Officer)
Date: October 28, 2022	By: /s/ Edmond R. Coletta
	Edmond R. Coletta President and Chief Financial Officer (Principal Financial Officer)

EXHIBIT 31.1

CERTIFICATION

I, John W. Casella, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Casella Waste Systems, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 28, 2022

By: /s/ John W. Casella
John W. Casella
Chairman and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

CERTIFICATION

I, Edmond R. Coletta, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Casella Waste Systems, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 28, 2022	By: /s/ Edmond R. Coletta
	Edmond R. Coletta
	President and Chief Financial Officer
	(Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Casella Waste Systems, Inc. for the period ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (“Report”), the undersigned, John W. Casella, Chairman and Chief Executive Officer, hereby certifies, pursuant to 18 U.S.C. Section 1350, that, to his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, our financial condition and results of operations.

Date: October 28, 2022	By: /s/ John W. Casella
	Chairman and Chief Executive Officer
	(Principal Executive Officer)

EXHIBIT 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Casella Waste Systems, Inc. for the period ended September 30, 2022 as filed with the Securities and Exchange Commission on the date hereof (“Report”), the undersigned, Edmond R. Coletta, Senior Vice President and Chief Financial Officer, hereby certifies, pursuant to 18 U.S.C. Section 1350, that, to his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, our financial condition and results of operations.

Date: October 28, 2022	By: /s/ Edmond R. Coletta
	President and Chief Financial Officer
	(Principal Financial Officer)