
**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 March 31, 2019
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
(State or other jurisdiction of
incorporation or organization)

03-0338873
(I.R.S. Employer
Identification No.)

25 Greens Hill Lane, Rutland, Vermont
(Address of principal executive offices)

05701
(Zip Code)

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

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	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 April 15, 2019:

Class A common stock, \$0.01 par value per share:	46,252,010
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)

	March 31, 2019	December 31, 2018
	(Unaudited)	
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 19,936	\$ 4,007
Accounts receivable - trade, net of allowance for doubtful accounts of \$921 and \$931, respectively	72,243	74,937
Refundable income taxes	2,464	2,254
Prepaid expenses	6,730	7,345
Inventory	6,793	6,542
Other current assets	987	2,008
Total current assets	109,153	97,093
Property, plant and equipment, net of accumulated depreciation and amortization of \$802,527 and \$878,701, respectively	379,372	404,577
Right-of-use asset - operating leases	106,932	—
Goodwill	162,734	162,734
Intangible assets, net	33,366	34,767
Restricted assets	1,345	1,248
Cost method investments	11,264	11,264
Deferred income taxes	9,472	9,594
Other non-current assets	14,675	11,133
Total assets	\$ 828,313	\$ 732,410

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)

	March 31, 2019	December 31, 2018
	(Unaudited)	
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
CURRENT LIABILITIES:		
Current maturities of long-term debt and finance leases	\$ 2,694	\$ 2,298
Accounts payable	49,385	57,289
Accrued payroll and related expenses	5,246	10,969
Accrued interest	2,582	2,415
Contract liabilities	2,315	3,074
Current accrued capping, closure and post-closure costs	11,360	11,633
Current lease liability - operating leases	9,968	—
Other accrued liabilities	23,531	23,819
Total current liabilities	107,081	111,497
Long-term debt and finance leases, less current portion	474,733	542,001
Accrued capping, closure and post-closure costs, less current portion	62,309	61,442
Lease liability - operating leases, less current portion	67,656	—
Deferred income taxes	2,585	2,519
Other long-term liabilities	30,915	30,783
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY (DEFICIT):		
Casella Waste Systems, Inc. stockholders' equity (deficit)		
Class A common stock, \$0.01 par value per share; 100,000,000 shares authorized; 46,252,000 and 41,944,000 shares issued and outstanding, respectively	463	419
Class B common stock, \$0.01 par value per share; 1,000,000 shares authorized; 988,000 shares issued and outstanding; 10 votes per share	10	10
Additional paid-in capital	475,809	373,716
Accumulated deficit	(390,383)	(388,669)
Accumulated other comprehensive loss	(2,865)	(1,308)
Total stockholders' equity (deficit)	83,034	(15,832)
Total liabilities and stockholders' equity (deficit)	\$ 828,313	\$ 732,410

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

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

	Three Months Ended March 31,	
	2019	2018
Revenues	\$ 163,664	\$ 147,455
Operating expenses:		
Cost of operations	117,759	105,610
General and administration	22,742	21,027
Depreciation and amortization	17,489	15,983
Expense from acquisition activities and other items	677	—
Southbridge Landfill closure charge, net	555	1,586
Contract settlement charge	—	2,100
Development project charge	—	311
	<u>159,222</u>	<u>146,617</u>
Operating income	<u>4,442</u>	<u>838</u>
Other expense (income):		
Interest income	(117)	(29)
Interest expense	6,460	6,454
Other income	(216)	(89)
Other expense, net	<u>6,127</u>	<u>6,336</u>
Loss before income taxes	<u>(1,685)</u>	<u>(5,498)</u>
Provision (benefit) for income taxes	29	(1,588)
Net loss	<u>\$ (1,714)</u>	<u>\$ (3,910)</u>
Basic and diluted earnings per share attributable to common stockholders:		
Weighted average common shares outstanding	<u>45,913</u>	<u>42,370</u>
Basic and diluted earnings per common share	<u>\$ (0.04)</u>	<u>\$ (0.09)</u>

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

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

	Three Months Ended March 31,	
	2019	2018
Net loss	\$ (1,714)	\$ (3,910)
Other comprehensive income (loss), before tax:		
Hedging activity:		
Interest rate swap settlements	(28)	(61)
Interest rate swap amounts reclassified into interest expense	25	53
Unrealized (loss) gain resulting from changes in fair value of derivative instruments	(1,554)	785
Other comprehensive (loss) income, before tax	(1,557)	777
Income tax provision related to items of other comprehensive (loss) income	—	209
Other comprehensive (loss) income, net of tax	(1,557)	568
Comprehensive loss	\$ (3,271)	\$ (3,342)

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

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF
STOCKHOLDERS' EQUITY (DEFICIT)
(Unaudited)
(in thousands)

	Total	Class A Common Stock		Class B Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss
		Shares	Amount	Shares	Amount			
Balance, December 31, 2018	\$ (15,832)	41,944	\$ 419	988	\$ 10	\$ 373,716	\$ (388,669)	\$ (1,308)
Issuance of Class A common stock - equity offering	100,446	3,565	36	—	—	100,410	—	—
Issuance of Class A common stock - acquisition	—	67	1	—	—	(1)	—	—
Issuances of Class A common stock	260	676	7	—	—	253	—	—
Stock-based compensation	1,431	—	—	—	—	1,431	—	—
Comprehensive loss:								
Net loss	(1,714)	—	—	—	—	—	(1,714)	—
Other comprehensive loss:								
Hedging activity	(1,557)	—	—	—	—	—	—	(1,557)
Balance, March 31, 2019	\$ 83,034	46,252	\$ 463	988	\$ 10	\$ 475,809	\$ (390,383)	\$ (2,865)

	Total	Class A Common Stock		Class B Common Stock		Additional Paid-In Capital	Accumulated Deficit	Accumulated Other Comprehensive Income
		Shares	Amount	Shares	Amount			
Balance, December 31, 2017	\$ (37,862)	41,298	\$ 413	988	\$ 10	\$ 356,638	\$ (395,107)	\$ 184
Cumulative effect of new accounting principle	—	—	—	—	—	—	18	(18)
Issuances of Class A common stock	310	402	4	—	—	306	—	—
Stock-based compensation	2,077	—	—	—	—	2,077	—	—
Comprehensive loss:								
Net loss	(3,910)	—	—	—	—	—	(3,910)	—
Other comprehensive income:								
Hedging activity	568	—	—	—	—	—	—	568
Balance, March 31, 2018	\$ (38,817)	41,700	\$ 417	988	\$ 10	\$ 359,021	\$ (398,999)	\$ 734

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

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

	Three Months Ended March 31,	
	2019	2018
Cash Flows from Operating Activities:		
Net loss	\$ (1,714)	\$ (3,910)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	17,489	15,983
Depletion of landfill operating lease obligations	1,648	2,392
Interest accretion on landfill and environmental remediation liabilities	1,804	1,422
Amortization of debt issuance costs and discount on long-term debt	575	689
Stock-based compensation	1,431	2,077
Gain on sale of property and equipment	(57)	(283)
Southbridge Landfill non-cash closure charge	—	1,403
Development project charge	—	311
Non-cash expense from acquisition activities and other items	14	—
Right-of-use asset - operating lease expense	2,579	—
Deferred income taxes	188	(1,187)
Changes in assets and liabilities, net of effects of acquisitions and divestitures:		
Accounts receivable	2,694	1,242
Accounts payable	(7,904)	1,405
Prepaid expenses, inventories and other assets	(3,430)	(504)
Accrued expenses, contract liabilities and other liabilities	(10,540)	(8,246)
Net cash provided by operating activities	4,777	12,794
Cash Flows from Investing Activities:		
Acquisitions, net of cash acquired	(1,222)	(18,958)
Additions to property, plant and equipment	(18,243)	(8,918)
Payments on landfill operating lease contracts	—	(509)
Proceeds from sale of property and equipment	57	342
Net cash used in investing activities	(19,408)	(28,043)
Cash Flows from Financing Activities:		
Proceeds from long-term borrowings	10,600	66,700
Principal payments on long-term debt	(80,746)	(51,364)
Proceeds from the exercise of share based awards	260	310
Proceeds from the issuance of Class A Common Stock	100,446	—
Net cash provided by financing activities	30,560	15,646
Net increase in cash and cash equivalents	15,929	397
Cash and cash equivalents, beginning of period	4,007	1,995
Cash and cash equivalents, end of period	\$ 19,936	\$ 2,392
Supplemental Disclosure of Cash Flow Information:		
Cash paid during the period for:		
Interest	\$ 5,718	\$ 5,547
Income taxes, net of refunds	\$ 51	\$ 36
Supplemental Disclosure of Non-Cash Investing and Financing Activities:		
Non-current assets obtained through long-term obligations	\$ 2,473	\$ 1,444

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

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)
(in thousands, except for per share data)

1. BASIS OF PRESENTATION

Casella Waste Systems, Inc. (“Parent”), and its consolidated subsidiaries (collectively, “we”, “us” or “our”), is a regional, vertically integrated solid waste services company that provides collection, transfer, disposal, landfill, landfill gas-to-energy, recycling and organics services in the northeastern United States. We market recyclable metals, aluminum, plastics, paper, and corrugated cardboard, which have been processed at our recycling facilities, as well as recyclables purchased from third-parties. 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, and our larger-scale recycling and commodity brokerage operations through our Recycling segment. Organics services, ancillary operations, along with major account and industrial services are included in our Other 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 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2018, which was filed with the SEC on February 22, 2019.

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 months ended March 31, 2019 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 the fiscal year ended December 31, 2018.

Subsequent Events

We have evaluated subsequent events or transactions that have occurred after the consolidated balance sheet date of March 31, 2019 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 we adopted and deemed to have a possible material effect on our consolidated financial statements based on current account balances and activity follows:

Standard	Description	Effect on the Financial Statements or Other Significant Matters
<i>Accounting standards that are adopted effective January 1, 2019</i>		
ASU 2016-02, as amended through March 2019: Leases (<i>Topic 842</i>)	Requires that a lessee recognize at the commencement date: a lease liability, which is the obligation of the lessee to make lease payments arising from a lease, measured on a discounted basis; and a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term.	We adopted the guidance using the prospective optional transition method effective January 1, 2019, which allowed us to elect not to restate comparative periods and, if applicable, to recognize the effects of applying this guidance as a cumulative-effect adjustment to retained earnings as of January 1, 2019. We did not recognize a cumulative effect adjustment to retained earnings upon implementation. Upon adopting this guidance, we recognized a right-of-use asset and lease liability for leases classified as operating leases with a term in excess of 12 months in our consolidated balance sheet. We also prospectively reclassified landfill operating lease payments, along with related accumulated depreciation, that were previously capitalized as property, plant and equipment to right-of-use asset - operating leases. Accordingly, the related cash outlays, which were historically considered cash flows from investing activities, were prospectively reclassified as cash flows from operating activities in accordance with <i>Topic 842</i> . With the assistance of third-party resources, we designed internal controls over the adoption of this guidance and implemented a third-party enterprise lease management software solution. In conjunction with the implementation, we modified our lease policy and internal business processes to effectively manage and account for leases, and to support recognition and disclosure requirements under the new standard. The adoption of this guidance did not have a material impact on the accounting for our finance leases. This guidance required additional disclosure over leases in order to comply with the new lease standard. See Note 4, <i>Leases</i> for additional disclosure.

A table providing a brief description of recent ASUs to the ASC issued by the FASB that are pending adoption and deemed to have a possible material effect on our consolidated financial statements based on current account balances and activity follows:

Standard	Description	Effect on the Financial Statements or Other Significant Matters
<i>Accounting standards issued that are pending adoption</i>		
ASU 2017-04: Intangibles - Goodwill and Other (<i>Topic 350</i>)	Requires that when an entity is performing its annual, or interim, goodwill impairment test, it should compare the fair value of the reporting unit with its carrying amount when calculating its impairment charge, noting that the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. Additionally, if applicable, an entity should consider income tax effects from any tax deductible goodwill on the carrying amount of the reporting unit when calculating its impairment charge.	As of December 31, 2018, we did not record a goodwill impairment charge related to our annual goodwill impairment test because at that time the fair value of each reporting unit exceeded its respective carrying value. Upon adoption, if the carrying value of any of these reporting units exceeds the fair value when we perform a goodwill impairment test, we would record an impairment charge equal to the amount by which the carrying value exceeds its fair value. This guidance is effective January 1, 2020 with early adoption permitted for interim or annual goodwill impairment tests performed after January 1, 2017.

3. REVENUE RECOGNITION

A table of revenues disaggregated by service line and timing of revenue recognition by operating segment for each of the three months ended March 31, 2019 and 2018 follows:

Three Months Ended March 31, 2019

	Eastern	Western	Recycling	Other	Total Revenues
Collection	\$ 33,965	\$ 49,597	\$ —	\$ —	\$ 83,562
Landfill	3,717	15,468	—	—	19,185

Transfer	8,986	5,275	—	—	14,261
Customer solutions	—	—	—	18,154	18,154
Recycling	—	441	10,766	—	11,207
Organics	—	—	—	13,596	13,596
Transportation	—	2,046	—	517	2,563
Landfill gas-to-energy	329	807	—	—	1,136
Total revenues	\$ 46,997	\$ 73,634	\$ 10,766	\$ 32,267	\$ 163,664

Transferred at a point-in-time	\$ 36	\$ 309	\$ 6,124	\$ 267	\$ 6,736
Transferred over time	46,961	73,325	4,642	32,000	156,928
Total revenues	\$ 46,997	\$ 73,634	\$ 10,766	\$ 32,267	\$ 163,664

Three Months Ended March 31, 2018

	Eastern	Western	Recycling	Other	Total Revenues
Collection	\$ 30,523	\$ 36,484	\$ —	\$ —	\$ 67,007
Landfill	5,960	14,540	—	—	20,500
Transfer	7,560	5,606	—	—	13,166
Customer solutions	—	—	—	15,170	15,170
Recycling	—	948	10,157	—	11,105
Organics	—	—	—	12,200	12,200
Transportation	—	5,824	—	684	6,508
Landfill gas-to-energy	462	1,337	—	—	1,799
Total revenues	\$ 44,505	\$ 64,739	\$ 10,157	\$ 28,054	\$ 147,455

Transferred at a point-in-time	\$ 191	\$ 368	\$ 7,257	\$ 357	\$ 8,173
Transferred over time	44,314	64,371	2,900	27,697	139,282
Total revenues	\$ 44,505	\$ 64,739	\$ 10,157	\$ 28,054	\$ 147,455

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 \$1,338 and \$1,468 in the three months ended March 31, 2019 and March 31, 2018, 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. These payments were previously recorded as a cost of operations. We did not record any revenues in the three months ended March 31, 2019 and March 31, 2018, respectively, from performance obligations satisfied in previous periods.

Contract receivables, which are included in Accounts receivable - trade, 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 - trade, net includes gross receivables from contracts of \$70,722 and \$73,500 as of March 31, 2019 and December 31, 2018, 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 \$2,315 and \$3,074 as of March 31, 2019 and December 31, 2018, 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, 2018 and December 31, 2017 were recognized as revenue during the three months ended March 31, 2019 and March 31, 2018, respectively, when the services were performed.

4. LEASES

We lease vehicles, equipment, property and other non-core equipment in the ordinary course of our business. Leases are classified as either operating leases or finance leases, as appropriate. Our leases have varying terms and may include renewal or purchase options, escalation clauses, restrictions, lease concessions, capital project funding, penalties or other obligations that we considered historically in determining minimum rental payments. We recognize lease expense for operating leases on a straight-line basis over the lease term. We recognize depreciation expense for finance leases over either the useful life of the asset or the lease term based on the terms of the lease agreement.

We are also party to landfill operation and management agreements. These agreements are long-term landfill operating contracts with government bodies whereby we receive tipping revenue, pay normal operating expenses and assume future final capping, closure and post-closure obligations. The government body retains ownership of the landfill. There is no bargain purchase option and title to the property does not pass to us at the end of the lease term. We allocate the consideration paid to the landfill airspace rights and underlying land lease based on the relative fair values. In addition to up-front or one-time payments, the landfill operating agreements may require us to make future minimum rental payments, including success/expansion fees, other direct costs and final capping, closure and post-closure costs. The value of all future minimum rental payments is amortized and charged to cost of operations over the life of the contract. We amortize the consideration allocated to airspace rights as airspace is utilized on a units-of-consumption basis and such amortization is charged to cost of operations as airspace is consumed (e.g., as tons are placed into the landfill). The underlying value of any land lease is amortized to cost of operations on a straight-line basis over the estimated life of the operating agreement.

As a part of the implementation of *Topic 842*, we have elected to adopt the practical expedient package and to not elect the hindsight practical expedient in determining lease term. The practical expedient package allowed us to: 1) not reassess lease classification for existing leases; 2) not reassess whether a contract contains a lease for existing contracts; and 3) not reassess initial direct costs for existing leases. Accordingly, we retained the operating lease and finance lease classifications in all periods presented and did not alter *Topic 840* accounting over operating leases in place at transition allowing us to use historical minimum rental payments when determining the right-of-use asset and lease liability for existing operating leases. Upon adopting this guidance, we recognized a right-of-use asset and a lease liability for core leases classified as operating leases with a term in excess of 12 months in our consolidated balance sheet. For other non-core operating leases, which is comprised of small-dollar-value items such as office equipment, we continued to expense these costs in the period incurred rather than capitalizing such expenditures on our consolidated balance sheet. Accounting for finance leases was not impacted by the adoption of this guidance.

Under *Topic 842*, lease payments include: fixed payments, including in-substance fixed payments, less any lease incentives paid or payable to the lessee; variable lease payments that depend on an index or a rate; exercise price of a purchase option reasonably certain to be exercised; penalties for terminating a lease; and amounts where it is probable that we will owe under a residual value guarantee. Refundable deposits are not considered to be a fixed payment. Variable lease costs that are not based on an index or a rate are recorded to expenses in the period incurred. Lease term is determined at lease commencement, and includes any noncancellable period for which we have the right to use the underlying asset together with any periods covered by an option to extend or terminate the lease if we are reasonably certain to exercise the option to extend or not to exercise the option to terminate. The initial determination of a lease liability is calculated as the net present value of the lease payments not yet paid. The discount rate used to determine present value is the rate implicit in the lease, if present, or, if not present, our incremental borrowing rate, which is a rate that reflects interest that we would have to pay to borrow funds on a collateralized basis over a similar term to the lease and in a similar economic environment. For shorter term leases, such as vehicle and equipment leases, we calculate our incremental borrowing rate using the interest rate from our existing secured line of credit, adjusted based on term. For longer term leases, such as our landfill operating leases, we calculate our incremental borrowing rate based on an industry yield curve with a similar credit rating, adjusted by a company specific spread as determined by a third-party.

A schedule of lease costs and other lease information follows:

	Three Months Ended March 31, 2019
Lease cost:	
Finance lease cost:	
Amortization of right-of-use assets	\$ 409
Interest expense	156
Operating lease cost:	
Fixed lease cost	4,227
Short-term lease cost	658
Variable lease cost	7
Total lease cost	<u>\$ 5,457</u>
Other information:	
Cash paid for amounts included in the measurement of lease liabilities:	
Financing cash flows for finance leases	\$ 471
Operating cash flows for operating leases	\$ 2,043
Right-of-use assets obtained in exchange for new finance lease liabilities	\$ 2,473
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 415
Weighted-average remaining lease term - finance leases (years)	7.0
Weighted-average remaining lease term - operating leases (years)	11.3
Weighted-average discount rate - finance leases	5.3%
Weighted-average discount rate - operating leases	6.5%

Estimated minimum future lease obligations are as follows:

	Operating Leases	Finance Leases
Fiscal year ending December 31, 2019	\$ 12,160	\$ 2,257
Fiscal year ending December 31, 2020	12,845	3,171
Fiscal year ending December 31, 2021	10,394	2,634
Fiscal year ending December 31, 2022	8,236	2,039
Fiscal year ending December 31, 2023	6,488	1,871
Thereafter	65,269	4,816
Total lease payments	115,392	16,788
Less: interest expense	(37,768)	(3,284)
Lease liability balance	<u>\$ 77,624</u>	<u>\$ 13,504</u>

5. INTANGIBLE ASSETS

A summary of intangible assets by intangible asset type follows:

	Covenants Not-to-Compete	Client Lists	Total
Balance, March 31, 2019			
Intangible assets	\$ 21,750	\$ 44,363	\$ 66,113
Less accumulated amortization	(17,820)	(14,927)	(32,747)
	<u>\$ 3,930</u>	<u>\$ 29,436</u>	<u>\$ 33,366</u>
	Covenants Not-to-Compete	Client Lists	Total
Balance, December 31, 2018			
Intangible assets	\$ 21,750	\$ 44,363	\$ 66,113
Less accumulated amortization	(17,584)	(13,762)	(31,346)
	<u>\$ 4,166</u>	<u>\$ 30,601</u>	<u>\$ 34,767</u>

Intangible amortization expense was \$1,401 during the three months ended March 31, 2019 as compared to \$568 during the three months ended March 31, 2018.

A summary of intangible amortization expense estimated for the five fiscal years following the fiscal year ended December 31, 2018 and thereafter follows:

Estimated Future Amortization Expense as of March 31, 2019

Fiscal year ending December 31, 2019	\$ 4,200
Fiscal year ending December 31, 2020	\$ 4,997
Fiscal year ending December 31, 2021	\$ 4,094
Fiscal year ending December 31, 2022	\$ 3,534
Fiscal year ending December 31, 2023	\$ 3,231
Thereafter	\$ 13,310

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:

	Three Months Ended March 31,	
	2019	2018
Beginning balance	\$ 73,075	\$ 62,290
Obligations incurred	543	798
Revision in estimates (1)	—	1,492
Accretion expense	1,607	1,383
Obligations settled (2)	(1,556)	(297)
Ending balance	<u>\$ 73,669</u>	<u>\$ 65,666</u>

(1) Relates to changes in estimates and assumptions associated with anticipated costs of future final capping, closure and post-closure activities at the Town of Southbridge, Massachusetts landfill. See Note 8, *Commitments and Contingencies* and Note 11, *Other Items and Charges* for additional disclosure regarding the matter.

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

7. LONG-TERM DEBT

A summary of long-term debt and finance leases by debt instrument follows:

	March 31, 2019	December 31, 2018
Senior Secured Credit Facility:		
Revolving line of credit facility ("Revolving Credit Facility") due May 2023; bearing interest at LIBOR plus 2.00%	\$ —	\$ 69,600
Term loan A facility ("Term Loan Facility") due May 2023; bearing interest at LIBOR plus 2.00%	350,000	350,000
Tax-Exempt Bonds:		
New York State Environmental Facilities Corporation Solid Waste Disposal Revenue Bonds Series 2014 ("New York Bonds 2014") due December 2044 - fixed rate interest period through 2019; bearing interest at 3.75%	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
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") due April 2036 - fixed rate interest period through 2028; bearing interest at 4.625%	16,000	16,000
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 2019; bearing interest at 4.00%	11,000	11,000
Other:		
Finance leases maturing through December 2107; bearing interest at a weighted average of 5.3%	13,504	11,248
Notes payable maturing through June 2027; bearing interest at a weighted average of 2.90%	2,298	2,401
Principal amount of long-term debt and finance leases	487,802	555,249
Less—unamortized discount and debt issuance costs (1)	10,375	10,950
Long-term debt and finance leases less unamortized discount and debt issuance costs	477,427	544,299
Less—current maturities of long-term debt and finance leases	2,694	2,298
	<u>\$ 474,733</u>	<u>\$ 542,001</u>

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

	March 31, 2019	December 31, 2018
Revolving Credit Facility and Term Loan Facility (collectively, the "Credit Facility")	\$ 6,708	\$ 7,118
New York Bonds 2014	801	847
New York Bonds 2014R-2	435	450
FAME Bonds 2005R-3	496	517
FAME Bonds 2015R-1	604	622
FAME Bonds 2015R-2	474	493
Vermont Bonds	581	595
New Hampshire Bonds	276	308
	<u>\$ 10,375</u>	<u>\$ 10,950</u>

Credit Facility

As of March 31, 2019, we are party to a credit agreement ("Credit Agreement"), which provides for a \$350,000 Term Loan Facility and a \$200,000 Revolving Credit Facility. 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 May 2023 and bears interest at a rate of LIBOR plus 2.00% per annum, which will be reduced to a rate of LIBOR plus, as low as, 1.25% upon us reaching a consolidated net leverage ratio of less than 2.25x. 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 March 31, 2019, further advances were available under the Credit Facility in the amount of \$175,379. The available amount is net of outstanding irrevocable letters of credit totaling \$24,621, at which date no amount had been drawn.

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. As of March 31, 2019, we were in compliance with the covenants contained in the Credit Agreement. 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. 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.

Cash Flow Hedges

As of March 31, 2019, we had in place nine interest rate derivative agreements to hedge interest rate risk associated with the variable rate portion of our long-term debt. The hedging relationships between these interest rate derivative agreements and the variable rate interest payments related to the Term Loan Facility were originally considered highly effective based on quantitative assessments using regression analysis and, subsequently, based on a qualitative assessment performed as of March 31, 2019. Therefore, we have designated these derivative instruments as effective cash flow hedges.

The total notional amount of all of our interest rate derivative agreements is \$190,000 and according to the terms of the agreements, we receive interest based on the 1-month LIBOR index and pay interest at a weighted average rate of approximately 2.54%. The agreements mature between February 2021 and May 2023.

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

	Balance Sheet Location	Fair Value	
		March 31, 2019	December 31, 2018
Interest rate swaps	Other current assets	\$ 260	\$ 338
Interest rate swaps	Other non-current assets	152	482
		<u>\$ 412</u>	<u>\$ 820</u>
Interest rate swaps	Other accrued liabilities	\$ 579	\$ 387
Interest rate swaps	Other long-term liabilities	2,433	1,555
		<u>\$ 3,012</u>	<u>\$ 1,942</u>
Interest rate swaps	Accumulated other comprehensive loss	\$ (2,753)	\$ (1,196)
Interest rate swaps - tax provision	Accumulated other comprehensive loss	(112)	(112)
		<u>\$ (2,865)</u>	<u>\$ (1,308)</u>

A summary of the amount of loss on cash flow hedging relationships related to interest rate swaps reclassified from accumulated other comprehensive income into earnings follows:

	Statement of Operations Location	Three Months Ended March 31,	
		2019	2018
		(Expense) Income	
Interest expense		\$ (25)	\$ (53)

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.

In accordance with FASB ASC 450 - Contingencies, we accrue for legal proceedings, inclusive of legal costs, when losses become probable and reasonably estimable. 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.

Environmental Remediation Liability (including related litigation)

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. The following matters represent our material outstanding claims.

Southbridge Recycling & Disposal Park, Inc.

In October 2015, our Southbridge Recycling and Disposal Park, Inc. ("SRD") subsidiary reported to the Massachusetts Department of Environmental Protection ("MADEP") results of analysis of samples collected pursuant to our existing permit from private drinking water wells located near the Town of Southbridge, Massachusetts ("Town") Landfill ("Southbridge Landfill"), which is operated by SRD. Those results indicated the presence of contaminants above the levels triggering notice and response obligations under MADEP regulations. In response to those results, we are carrying out an Immediate Response Action pursuant to Massachusetts General Law Chapter 21E (the "Charlton 21E Obligations") pursuant to state law. Further, we have implemented a plan to analyze and better understand the groundwater near the Southbridge Landfill and we are investigating with the objective of identifying the source or sources of the elevated levels of contamination measured in the well samples. If it is determined that some or all of the contamination originated at the Southbridge Landfill, we will work with the Town (the Southbridge Landfill owner and the former operator of an unlined portion of the Southbridge Landfill, which was used prior to our operation of a double-lined portion of the Southbridge Landfill commencing in 2004) to evaluate and allocate the liabilities related to the Charlton 21E Obligations. In July 2016, we sent correspondence to the Town pursuant to Chapter 21E of Massachusetts General Laws demanding that the Town reimburse us for the environmental response costs we had spent and that the Town be responsible for all such costs in the future, as well as any other costs or liabilities resulting from the release of contaminants from the unlined portion of the Southbridge Landfill. The Town responded in September 2016, denying that the Southbridge Landfill is the source of such contamination, and claiming that if it is, that we may owe an indemnity to the Town pursuant to the Operating Agreement between us and the Town dated May 29, 2007, as amended. We entered into a Tolling Agreement with the Town to delay any further administrative or legal actions until our work with MADEP more specifically defines the parties' responsibilities for the Charlton 21E Obligations, if any. Please see below for further discussion of our relationship with the Town regarding the Charlton 21E Obligations.

In February 2016, we and the Town received a Notice of Intent to Sue under the Resource Conservation and Recovery Act ("RCRA") from a law firm purporting to represent residents proximate to the Southbridge Landfill ("Residents"), indicating its intent to file suit against us on behalf of the Residents alleging the groundwater contamination originated from the Southbridge Landfill. In February 2017, we received an additional Notice of Intent to Sue from the National Environmental Law Center under the Federal Clean Water Act ("CWA") and RCRA (collectively the "Acts") on behalf of Environment America, Inc., d/b/a Environment Massachusetts, and Toxics Action Center, Inc., which have referred to themselves as the Citizen Groups. The Citizen Groups alleged that we had violated the Acts, and that they intended to seek appropriate relief in federal court for those alleged violations. On or about June 9, 2017, a lawsuit was filed against us, SRD and the Town in the United States District Court for the District of Massachusetts (the "Massachusetts Court") by the Citizen Groups and the Residents alleging violations of the Acts (the "Litigation"), and demanding a variety of remedies under the Acts, including fines, remediation, mitigation and costs of litigation, and remedies for violations of Massachusetts civil law related to personal and property damages, including remediation, diminution of property values, compensation for lost use and enjoyment of properties, enjoinder of further operation of the Southbridge Landfill, and costs of litigation, plus interest on any damage award, on behalf of the Residents. We believe the Litigation to be factually inaccurate, and without legal merit, and we and SRD intend to vigorously defend the Litigation. Nevertheless, we believe it is reasonably possible that a loss will occur as a result of the Litigation although an estimate of loss cannot be reasonably provided at this time. We also continue to believe the Town should be responsible for costs or liabilities associated with the Litigation relative to alleged contamination originating from the unlined portion of the Southbridge Landfill, although there can be no assurance that we will not be required to incur some or all of such costs and liabilities.

In December 2017, we filed a Motion to Dismiss the Litigation, and on October 1, 2018, the Massachusetts Court granted our Motion to Dismiss, and accordingly, dismissed the Citizen Groups claims under the Acts. The Massachusetts Court has retained jurisdiction of the Residents claims. The Citizen Groups intend to appeal the Massachusetts Court's decision to grant our Motion to Dismiss. The Residents moved for a stay of their case until the Citizen Groups appealed. We opposed the stay and in March 2019, the Massachusetts Court denied the Residents motion for a stay.

We entered into an Administrative Consent Order on April 26, 2017 (the “ACO”), with MADEP, the Town, and the Town of Charlton, committing us to equally share the costs with MADEP, of up to \$10,000 (\$5,000 each) for the Town to install a municipal waterline in the Town of Charlton (“Waterline”). Upon satisfactory completion of that Waterline, and other matters covered by the ACO, we and the Town will be released by MADEP from any future responsibilities for the Charlton 21E Obligations. We also entered into an agreement with the Town on April 28, 2017 entitled the “21E Settlement and Water System Construction Funding Agreement” (the “Waterline Agreement”), wherein we and the Town released each other from claims arising from the Charlton 21E Obligations. Pursuant to the Waterline Agreement, the Town will issue a twenty (20) year bond for our portion of the Waterline costs (up to \$5,000). We have agreed to reimburse the Town for periodic payments under such bond. Construction of the waterline is expected to be completed in 2019.

We have recorded an environmental remediation liability associated with the future installation of the Waterline in other accrued liabilities and other long-term liabilities. 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 of 2.6%. Our expenditures could be significantly higher if costs exceed estimates. The changes to the environmental remediation liability associated with the Southbridge Landfill are as follows:

	Three Months Ended March 31,	
	2019	2018
Beginning balance	\$ 5,173	\$ 5,936
Accretion expense	34	39
Obligations settled (1)	(141)	(237)
Ending balance	<u>\$ 5,066</u>	<u>\$ 5,738</u>

(1) Includes amounts that are being processed through accounts payable as a part of our disbursements cycle.

The costs and liabilities we may be required to incur in connection with the foregoing Southbridge Landfill matters could be material to our results of operations, our cash flows and our financial condition.

Potsdam Environmental Remediation Liability

On December 20, 2000, the State of New York Department of Environmental Conservation (“DEC”) issued an Order on Consent (“Order”) which named Waste-Stream, Inc. (“WSI”), our subsidiary, General Motors Corporation (“GM”) and Niagara Mohawk Power Corporation (“NiMo”) as Respondents. The Order required that the Respondents undertake certain work on a 25-acre scrap yard and solid waste transfer station owned by WSI in Potsdam, New York, including the preparation of a Remedial Investigation and Feasibility Study (“Study”). A draft of the Study was submitted to the DEC in January 2009 (followed by a final report in May 2009). The Study estimated that the undiscounted costs associated with implementing the preferred remedies would be approximately \$10,219. On February 28, 2011, the DEC issued a Proposed Remedial Action Plan for the site and accepted public comments on the proposed remedy through March 29, 2011. We submitted comments to the DEC on this matter. In April 2011, the DEC issued the final Record of Decision (“ROD”) for the site. The ROD was subsequently rescinded by the DEC for failure to respond to all submitted comments. The preliminary ROD, however, estimated that the present cost associated with implementing the preferred remedies would be approximately \$12,130. The DEC issued the final ROD in June 2011 with proposed remedies consistent with its earlier ROD. An Order on Consent and Administrative Settlement naming WSI and NiMo as Respondents was executed by the Respondents and DEC with an effective date of October 25, 2013. On January 29, 2016, a Cost-Sharing Agreement was executed between WSI, NiMo, Alcoa Inc. (“Alcoa”) and Reynolds Metal Company (“Reynolds”) whereby Alcoa and Reynolds elected to voluntarily participate in the onsite remediation activities at a combined 15% participant share. A contractor has been awarded the work and significant expenditures relating to onsite remediation will be incurred in the fiscal year ending December 31, 2019. WSI is jointly and severally liable with NiMo, Alcoa and Reynolds for the total cost to remediate.

We have recorded an environmental remediation liability associated with the Potsdam site based on incurred costs to date and estimated costs to complete the remediation in other accrued liabilities and other long-term liabilities. Our expenditures could be significantly higher if costs exceed estimates. 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 of 1.5%.

A summary of the changes to the environmental remediation liability associated with the Potsdam environmental remediation liability follows:

	Three Months Ended March 31,	
	2019	2018
Beginning balance	\$ 5,614	\$ 5,758
Obligations settled	—	(6)
Ending balance	\$ 5,614	\$ 5,752

North Country Environmental Services

On or about March 8, 2018, the Citizen Groups described above delivered correspondence to our subsidiary, North Country Environmental Services, Inc. ("NCES") and us, providing notice of the Citizen Groups' intent to sue NCES and us for violations of the CWA in conjunction with NCES's operation of its landfill in Bethlehem, New Hampshire. On May 14, 2018, the Citizen Groups filed a lawsuit against NCES and us in the United States District Court for the District of New Hampshire (the "New Hampshire Court") alleging violations of the CWA, arguing that ground water discharging into the Ammonoosuc River is a "point source" under the CWA (the "New Hampshire Litigation"). The New Hampshire Litigation seeks remediation and fines under the CWA. On June 15, 2018, we and NCES filed a Motion to Dismiss the New Hampshire Litigation. On July 13, 2018, the Citizen Groups filed objections to our Motion to Dismiss. On July 27, 2018, we filed a reply in support of our Motion to Dismiss. On September 25, 2018, the New Hampshire Court denied our Motion to Dismiss. In March of 2019, we filed a motion in the New Hampshire litigation asking for a stay of this litigation until certain appeals from discordant federal circuits were heard by the Supreme Court of the United States ("SCOTUS"). SCOTUS has granted certiorari to hear such cases. Our motion for a stay is pending in the New Hampshire Litigation. We intend to continue to vigorously defend against the New Hampshire Litigation, which we believe is without merit.

9. STOCKHOLDERS' EQUITY

Recent Developments

In the three months ended March 31, 2019, we completed a public offering of 3,565 shares of our Class A common stock at a public offering price of \$29.50 per share. The offering resulted in net proceeds to us of \$100,446, after deducting underwriting discounts and commissions and offering expenses. The net proceeds from the offering were and are to be used for general corporate purposes, including potential acquisitions or development of new operations or assets with the goal of complementing or expanding our business, working capital and capital expenditures.

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 March 31, 2019, there were 1,553 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 four 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 (1)	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding, December 31, 2018	669	\$ 6.37		
Granted	—	\$ —		
Exercised	(65)	\$ 4.00		
Forfeited	—	\$ —		
Outstanding, March 31, 2019	604	\$ 6.62	5.5	\$ 17,463
Exercisable, March 31, 2019	604	\$ 6.62	5.5	\$ 17,463

Stock-based compensation expense for stock options was \$0 during the three months ended March 31, 2019 as compared to \$124 during the three months ended March 31, 2018.

During the three months ended March 31, 2019, the aggregate intrinsic value of stock options exercised was \$2,017.

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 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 typically vest in full on the first anniversary of the grant date. Restricted stock units granted to employees vest incrementally over an identified service period 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, restricted stock unit and performance stock unit activity follows:

	Restricted Stock, 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, 2018	686	\$ 15.56		
Granted	66	\$ 34.49		
Class A Common Stock Vested	(194)	\$ 10.75		
Forfeited	(4)	\$ 15.21		
Outstanding, March 31, 2019	554	\$ 19.54	1.4	\$ 8,873
Unvested, March 31, 2019	819	\$ 18.71	1.3	\$ 13,796

(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 265 shares of Class A common stock currently included in unvested.

Stock-based compensation expense related to restricted stock, restricted stock units and performance stock units was \$1,390 during the three months ended March 31, 2019 as compared to \$1,930 during the three months ended March 31, 2018.

During the three months ended March 31, 2019, the total fair value of other stock awards vested was \$6,890.

As of March 31, 2019, total unrecognized stock-based compensation expense related to outstanding restricted stock and restricted stock units was \$4,607, which will be recognized over a weighted average period of 1.8 years. As of March 31, 2019, maximum unrecognized stock-based compensation expense related to outstanding performance stock units, assuming the attainment of maximum performance targets, was \$3,786 to be recognized over a weighted average period of 1.1 years.

We also recorded \$41 of stock-based compensation expense related to our Amended and Restated 1997 Employee Stock Purchase Plan during the three months ended March 31, 2019 as compared to \$23 during the three months ended March 31, 2018.

Accumulated Other Comprehensive Loss

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

	<u>Interest Rate Swaps</u>
Balance, December 31, 2018	\$ (1,308)
Other comprehensive loss before reclassifications	(1,582)
Amounts reclassified from accumulated other comprehensive loss	25
Income tax expense related to items of other comprehensive loss	—
Net current-period other comprehensive loss	(1,557)
Balance, March 31, 2019	<u>\$ (2,865)</u>

A summary of reclassifications out of accumulated other comprehensive loss, net of tax follows:

Details About Accumulated Other Comprehensive Loss Components	Three Months Ended March 31,		Affected Line Item in the Consolidated Statements of Operations
	2019	2018	
	Amounts Reclassified Out of Accumulated Other Comprehensive Loss		
Interest rate swaps	\$ 25	\$ 53	Interest expense
	25	53	Loss before income taxes
	—	209	Provision (benefit) for income taxes
	<u>\$ 25</u>	<u>\$ (156)</u>	Net loss

10. EARNINGS PER SHARE

Basic earnings per share is computed by dividing the net loss 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, including market-based performance stock options based on the expected achievement of performance targets, 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 March 31,	
	2019	2018
Numerator:		
Net loss	\$ (1,714)	\$ (3,910)
Denominators:		
Number of shares outstanding, end of period:		
Class A common stock	46,252	41,700
Class B common stock	988	988
Shares to be issued - acquisition	36	—
Unvested restricted stock	(9)	(38)
Effect of weighted average shares outstanding	(1,354)	(280)
Basic and diluted weighted average common shares outstanding	45,913	42,370
Anti-dilutive potentially issuable shares	1,422	2,105

11. OTHER ITEMS AND CHARGES

Expense from Acquisition Activities and Other Items

In the three months ended March 31, 2019, we recorded charges of \$677 associated with acquisition activities.

Contract Settlement Charge

In the three months ended March 31, 2018, we recorded contract settlement charges of \$2,100 associated with the termination and discounted buy-out of a commodities marketing and brokerage agreement.

Southbridge Landfill Closure Charge, Net

In June 2017, we initiated the plan to cease operations of the Southbridge Landfill as disclosed in Note 8, *Commitments and Contingencies*. Accordingly, in the three months ended March 31, 2019 and 2018, we recorded charges associated with the closure of the Southbridge Landfill as follows:

	Three Months Ended March 31,	
	2019	2018
Charlton settlement charge (1)	\$ —	\$ 1,216
Legal and other costs (2)	555	370
Southbridge Landfill closure charge, net	\$ 555	\$ 1,586

- (1) We established a reserve associated with settlement of the Town of Charlton's claim against us. See Note 8, *Commitments and Contingencies* for additional disclosure.
- (2) We incurred legal costs as well as other costs associated with various matters as part of the Southbridge Landfill closure. See Note 8, *Commitments and Contingencies* for additional disclosure.

Development Project Charge

In the three months ended March 31, 2018, we recorded a development project charge of \$311 associated with previously deferred costs that were written off as a result of the negative vote in a public referendum relating to the NCES landfill.

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-trade, 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 swaps, trade payables and long-term debt. The carrying values of cash and cash equivalents, accounts receivable - trade 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 swaps 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.

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 March 31, 2019 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	\$ 1,345	\$ —	\$ —
Interest rate swaps	—	412	—
	<u>\$ 1,345</u>	<u>\$ 412</u>	<u>\$ —</u>
Liabilities:			
Interest rate swaps	\$ —	\$ 3,012	\$ —
	<u>\$ —</u>	<u>\$ 3,012</u>	<u>\$ —</u>
	Fair Value Measurement at December 31, 2018 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	\$ 1,248	\$ —	\$ —
Interest rate swaps	—	820	—
	<u>\$ 1,248</u>	<u>\$ 820</u>	<u>\$ —</u>
Liabilities:			
Interest rate swaps	\$ —	\$ 1,942	\$ —
	<u>\$ —</u>	<u>\$ 1,942</u>	<u>\$ —</u>

Fair Value of Debt

As of March 31, 2019, the fair value of our fixed rate debt, including our FAME Bonds 2005R-3, FAME Bonds 2015R-1, FAME Bonds 2015R-2, Vermont Bonds, New York Bonds 2014, New York Bonds 2014R-2 and New Hampshire Bonds was approximately \$124,806 and the carrying value was \$122,000. The fair value of the FAME Bonds 2005R-3, the FAME Bonds 2015R-1, the FAME Bonds 2015R-2, the Vermont Bonds, the New York Bonds 2014, the New York Bonds 2014R-2 and the New Hampshire 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 March 31, 2019, the carrying value of our Term Loan Facility was \$350,000 and the carrying value of our Revolving Credit Facility was \$0. 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 FAME Bonds 2005R-3, FAME Bonds 2015R-1, FAME Bonds 2015R-2, Vermont Bonds, New York Bonds 2014, New York Bonds 2014R-2 and New Hampshire 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 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 Western and Eastern regions. Revenues associated with our solid waste operations are derived mainly from solid waste collection and disposal, landfill, landfill gas-to-energy, transfer and recycling services in the northeastern United States. Our revenues in the Recycling segment are derived from municipalities and customers in the form of processing fees, tipping fees and commodity sales. Organics services, ancillary operations, along with major account and industrial services are included in our Other segment.

Three Months Ended March 31, 2019

Segment	Outside revenues	Inter-company revenue	Depreciation and amortization	Operating income (loss)	Total assets
Eastern	\$ 46,997	\$ 10,771	\$ 5,260	\$ (626)	\$ 195,851
Western	73,634	20,101	10,239	5,356	493,775
Recycling	10,766	1,971	969	(941)	54,829
Other	32,267	533	1,021	653	83,858
Eliminations	—	(33,376)	—	—	—
	<u>\$ 163,664</u>	<u>\$ —</u>	<u>\$ 17,489</u>	<u>\$ 4,442</u>	<u>\$ 828,313</u>

Three Months Ended March 31, 2018

Segment	Outside revenues	Inter-company revenue	Depreciation and amortization	Operating income (loss)	Total assets
Eastern	\$ 44,505	\$ 11,306	\$ 5,979	\$ (1,812)	\$ 174,860
Western	64,739	18,631	8,032	7,194	342,285
Recycling	10,157	1,185	1,054	(5,167)	47,065
Other	28,054	317	918	623	67,165
Eliminations	—	(31,439)	—	—	—
	<u>\$ 147,455</u>	<u>\$ —</u>	<u>\$ 15,983</u>	<u>\$ 838</u>	<u>\$ 631,375</u>

A summary of our revenues attributable to services provided follows:

	Three Months Ended March 31,	
	2019	2018
Collection	\$ 83,080	\$ 66,475
Disposal	36,054	40,234
Power generation	1,136	1,799
Processing	878	1,420
Solid waste operations	121,148	109,928
Organics	13,596	12,200
Customer solutions	18,154	15,170
Recycling	10,766	10,157
Total revenues	\$ 163,664	\$ 147,455

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, 2018 filed with the Securities and Exchange Commission ("SEC") on February 22, 2019.

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:

- 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 projected development of additional disposal capacity or expectations regarding permits for existing capacity;
- 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;
- the outcome of any legal or regulatory matter;
- 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, 2018 and, if applicable, 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

Founded in 1975 with a single truck, 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 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 six states: Vermont, New Hampshire, New York, Massachusetts, 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, and our larger-scale recycling and commodity brokerage operations through our Recycling segment. Organics services, ancillary operations, along with major account and industrial services are included in our Other segment.

As of April 15, 2019, we owned and/or operated 37 solid waste collection operations, 49 transfer stations, 18 recycling facilities, eight Subtitle D landfills, four 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, landfill, landfill gas-to-energy, transfer and recycling 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 households. 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. Revenues from our Recycling segment consist of revenues derived from municipalities and customers in the form of processing fees, tipping fees and commodity sales. Revenues from organics services, ancillary operations, and major account and industrial services are included in our Other segment. Our revenues are shown net of inter-company eliminations.

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

	Three Months Ended March 31,				\$ Change
	2019		2018		
Collection	\$ 83.1	50.8%	\$ 66.5	45.1%	\$ 16.6
Disposal	36.1	22.0%	40.2	27.3%	(4.1)
Power	1.1	0.7%	1.8	1.2%	(0.7)
Processing	0.8	0.5%	1.4	1.0%	(0.6)
Solid waste	121.1	74.0%	109.9	74.6%	11.2
Organics	13.6	8.3%	12.2	8.2%	1.4
Customer solutions	18.2	11.1%	15.2	10.3%	3.0
Recycling	10.8	6.6%	10.2	6.9%	0.6
Total revenues	\$ 163.7	100.0%	\$ 147.5	100.0%	\$ 16.2

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

	Period-to-Period Change for the Three Months Ended March 31, 2019 vs. 2018	
	Amount	% of Growth
Price	\$ 5.5	5.0 %
Volume	(4.4)	(4.0)%
Surcharges and other fees	1.6	1.5 %
Commodity price and volume	(1.2)	(1.1)%
Acquisitions	11.9	10.8 %
Closed operations	(2.2)	(2.0)%
Solid waste revenues	\$ 11.2	10.2 %

Solid waste revenues

Price.

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

- \$4.0 million from favorable collection pricing; and
- \$1.5 million from favorable disposal pricing associated primarily with our landfills and transfer stations.

Volume.

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

- \$(4.1) million from lower disposal volumes (of which \$(3.9) million relates to lower transportation volumes primarily associated with a large contaminated soils project that occurred in the prior year and \$(0.2) million relates to lower landfill volumes); and
- \$(0.3) million from lower collection volumes.

Surcharges and other fees.

The surcharges and other fees change component in quarterly solid waste revenues growth is the result of the following:

- \$1.6 million associated primarily with the Energy component of the Energy and Environmental fee and the portion of the Sustainability Recycling Adjustment fee, respectively, that has anniversaried. The Energy component of the fee floats on a monthly basis based on diesel fuel prices, which increased slightly from the prior year. The Sustainability Recycling Adjustment fee floats on a monthly basis based on recycled commodity prices.

Commodity price and volume.

The commodity price and volume change component in quarterly solid waste revenues growth is the result of the following:

- \$(0.4) million from unfavorable energy pricing and, to a lesser extent, unfavorable commodity pricing; and
- \$(0.8) million from lower commodity volumes due to lower commodity processing volumes and landfill gas-to-energy volumes.

Acquisitions.

The acquisitions change component in quarterly solid waste revenues growth is associated with the acquisition of six solid waste collection businesses and one transfer business in our Western region and one business comprised of solid waste collection and transfer operations in our Eastern region throughout the prior year.

Closed operations.

The closed landfill change component in quarterly solid waste revenues growth from prior year is the result of the closure of the landfill located in Southbridge, Massachusetts ("Southbridge Landfill") in our Eastern region in the quarter ended December 31, 2018.

Organics revenues

Quarterly organics revenues increased \$1.4 million as a result of higher volumes associated with two large transportation and disposal contracts.

Customer Solutions revenues

Quarterly customer solutions revenues increased \$3.0 million as the result of higher volumes mainly due to multi-site retail and industrial services organic growth.

Recycling revenues

Quarterly recycling revenues increased as a result of the following:

- \$2.0 million from higher tipping fees; and
- \$0.5 million from higher commodity volumes; partially offset by
- \$(1.9) million from unfavorable commodity pricing in the marketplace.

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 March 31,				\$ Change
	2019		2018		
Cost of operations	\$ 117.8	72.0%	\$ 105.6	71.6%	\$ 12.2
General and administration	\$ 22.7	13.9%	\$ 21.0	14.3%	\$ 1.7
Depreciation and amortization	\$ 17.5	10.7%	\$ 16.0	10.8%	\$ 1.5

Cost of Operations

Cost of operations includes labor costs, tipping fees paid to third-party disposal facilities, fuel costs, maintenance and repair costs of vehicles and equipment, workers' compensation and vehicle insurance costs, third-party transportation costs, district and state taxes, host community fees, and royalties. Cost of operations also includes accretion expense related to final capping, closure and post-closure obligations, leachate treatment and disposal costs, and depletion of landfill operating lease obligations.

The period-to-period change in cost of operations can be primarily attributed to the following:

Third-party direct costs increased \$5.5 million year-over-year due to the following:

- higher disposal costs associated with: additional volumes associated with acquisition activity; increased disposal pricing in the northeastern United States; and an increased reliance on third-party disposal sites in our Organics line-of-business; and
- higher hauling and third-party transportation costs associated with: higher collection volumes related to acquisition activity in the Western region and, to a lesser extent, the Eastern region; higher transportation rates; higher brokerage

volumes in our Customer Solutions line-of-business with high pass through direct costs; partially offset by lower hauling and third-party transportation costs associated with lower transportation volumes associated with a large contaminated soils project in the Western region completed in the prior year.

Labor and related benefit costs increased \$4.0 million year-over-year due to higher labor costs related primarily to acquisition activity in the Western region and, to a lesser extent, the Eastern region.

Direct operational costs decreased \$(0.8) million year-over-year due primarily to lower landfill operating costs and landfill operating lease amortization due to the closure of the Southbridge Landfill in the Eastern region and lower liability and auto insurance costs based on the change in claims activity.

Fuel costs increased \$0.6 million year-over-year due to higher volumes associated with acquisition activity and a slight increase in diesel fuel prices.

Maintenance and repair costs increased \$2.8 million year-over-year due primarily to higher fleet and facility maintenance costs associated with acquisition activity and related business growth.

General and Administration

General and administration expense includes management, clerical and administrative compensation, bad debt expense, as well as overhead costs, professional service fees and costs associated with marketing, sales force and community relations efforts.

The period-to-period change in general and administration expense can be primarily attributed to higher labor and related benefit costs associated with acquisition activity, partially offset by lower equity compensation costs.

Depreciation and Amortization

Depreciation and amortization expense includes: (i) depreciation of property and equipment (including assets recorded for capital 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; (iii) 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 (iv) 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 March 31,				\$ Change
	2019		2018		
Depreciation	\$ 10.3	6.3%	\$ 8.3	5.7%	\$ 2.0
Landfill amortization	5.8	3.6%	7.1	4.8%	(1.3)
Other amortization	1.4	0.9%	0.6	0.4%	0.8
	<u>\$ 17.5</u>	<u>10.8%</u>	<u>\$ 16.0</u>	<u>10.9%</u>	<u>\$ 1.5</u>

The period-to-period change in depreciation and amortization expense can be primarily attributed to acquisition activity, partially offset by lower landfill amortization expense associated with lower landfill volumes in our Eastern Region due to the closure of the Southbridge Landfill and lower landfill volumes at certain landfills in our Western region, combined with fluctuations in our landfill amortization rates as a result of changes in cost estimates and other assumptions associated with our landfills.

Expense from Acquisition Activities and Other Items

In the three months ended March 31, 2019, we recorded charges of \$0.7 million associated with acquisition activities.

Contract Settlement Charge

In the three months ended March 31, 2018, we recorded contract settlement charges of \$2.1 million associated with the termination and discounted buy-out of a commodities marketing and brokerage agreement.

Southbridge Landfill Closure Charge, Net

In June 2017, we initiated the plan to cease operations of the Southbridge Landfill as disclosed in Note 8, *Commitments and Contingencies* to our consolidated financial statements included under Part 1, Item 1 of this Quarterly Report on Form 10-Q. Accordingly, in the three months ended March 31, 2019 and 2018, we recorded charges associated with the closure of the Southbridge Landfill as follows (in millions):

	Three Months Ended March 31,	
	2019	2018
Charlton settlement charge (1)	\$ —	\$ 1.2
Legal and other costs (2)	0.6	0.4
Southbridge Landfill closure charge, net	<u>\$ 0.6</u>	<u>\$ 1.6</u>

- (1) We established a reserve associated with settlement of the Town of Charlton's claim against us. See Note 8, *Commitments and Contingencies* to our consolidated financial statements included under Part I, Item 1 of this Quarterly Report on Form 10-Q for additional disclosure.
- (2) We incurred legal costs as well as other costs associated with various matters as part of the Southbridge Landfill closure. See Note 8, *Commitments and Contingencies* to our consolidated financial statements included under Part I, Item 1 of this Quarterly Report on Form 10-Q for additional disclosure.

Development Project Charge

In the three months ended March 31, 2018, we recorded a development project charge of \$0.3 million associated with previously deferred costs that were written off as a result of the negative vote in a public referendum relating to the North Country Environmental Services landfill ("NCES Landfill") in the Eastern region.

Other Expenses

Provision (Benefit) for Income Taxes

Our provision (benefit) for income taxes declined \$1.6 million during the three months ended March 31, 2019, as compared to the same period in the prior year. The benefit for income taxes for the three months ended March 31, 2018 included a (\$1.6) million deferred tax benefit due to a reduction of the valuation allowance. The valuation allowance decreased based upon the recognition of additional reversing temporary differences related to the \$1.6 million deferred tax liability recorded through goodwill on the acquisition of Complete Disposal Company, Inc. and its subsidiary United Material Management of Holyoke, Inc. The \$1.6 million deferred tax liability related to the acquisition was based on the estimated impact of temporary differences between the amounts of assets and liabilities recognized for financial reporting purposes and the related tax basis.

On December 22, 2017, the Tax Cuts and Jobs Act (the "Act") was enacted. The Act, which is also commonly referred to as "US tax reform," significantly changed US corporate income tax laws by, among other things, reducing the US corporate income tax rate from 35% to 21% starting in 2018. Under the Act, the alternative minimum tax was repealed and minimum tax credit carryforwards become refundable beginning in 2018 and will be fully refunded, if not otherwise used to offset tax liabilities, in tax year 2021. Further, our \$110.6 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 2019 and future tax years. Federal net operating losses generated after 2017, including \$3.2 million generated in 2018, will be carried forward indefinitely, but generally may only offset up to 80% of taxable income earned in a tax year.

The provision (benefit) for income taxes for the three months ended March 31, 2019 and 2018 incorporates the changes under the Act, including use of the 21% US corporate income tax rate and applying the new federal net operating loss carryforward rules. We had \$3.8 million minimum tax credit carryforwards of which we anticipate \$1.0 million and \$1.9 million to be refundable for 2019 and 2018, respectively. Current income tax benefits of \$0.2 million, offset by a \$0.2 million deferred tax provision in the three months ended March 31, 2019, were recognized for a portion of the minimum tax credit carryforward refundable for 2019.

Segment Reporting

Revenues

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

	Three Months Ended March 31,		\$ Change
	2019	2018	
Eastern	\$ 47.0	\$ 44.5	\$ 2.5
Western	73.6	64.7	8.9
Recycling	10.8	10.2	0.6
Other	32.3	28.1	4.2
Total revenues	\$ 163.7	\$ 147.5	\$ 16.2

Eastern Region

A summary of the period-to-period change in solid waste revenues (dollars in millions) follows:

	Period-to-Period Change for the Three Months Ended March 31, 2019 vs. 2018	
	Amount	% of Growth
Price	\$ 2.7	6.0 %
Volume	—	— %
Surcharges and other fees	0.7	1.6 %
Commodity price and volume	(0.2)	(0.3)%
Acquisitions	1.3	2.9 %
Closed landfill	(2.0)	(4.6)%
Solid waste revenues	\$ 2.5	5.6 %

Price.

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

- \$2.1 million from favorable collection pricing; and
- \$0.6 million from favorable disposal pricing related to transfer stations and landfills.

Volume.

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

- \$0.3 million from higher disposal volumes related to transfer stations, partially mitigated by lower volumes related to landfills; offset by
- \$(0.3) million from lower collection volumes.

Surcharges and other fees.

The surcharge and other fees change component in quarterly solid waste revenues growth of \$0.7 million is associated primarily with the Energy component of the Energy and Environmental fee and the portion of the Sustainability Recycling Adjustment fee, respectively, that has anniversaried. The Energy component of the fee floats on a monthly basis based on diesel fuel prices, which increased slightly from the prior year. The Sustainability Recycling Adjustment fee floats on a monthly basis based on recycled commodity prices.

Commodity price and volume.

The commodity price and volume change component in quarterly solid waste revenues growth is the result of \$(0.2) million from landfill gas-to-energy volumes.

Acquisitions.

The acquisitions change component in quarterly solid waste revenues growth is primarily the result of the acquisition of a solid waste collection and transfer business in the quarter ended December 31, 2018.

Closed landfill.

The closed landfill change component in quarterly solid waste revenues growth from prior year is the result of the closure of the Southbridge Landfill in the quarter ended December 31, 2018.

Western Region

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

	Period-to-Period Change for the Three Months Ended March 31, 2019 vs. 2018	
	Amount	% of Growth
Price	\$ 2.8	4.3 %
Volume	(4.2)	(6.6)%
Surcharges and other fees	0.9	1.4 %
Commodity price and volume	(1.1)	(1.6)%
Acquisitions	10.6	16.4 %
Closed operations	(0.1)	(0.2)%
Solid waste revenues	\$ 8.9	13.7 %

Price.

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

- \$1.9 million from favorable collection pricing; and
- \$0.9 million from favorable disposal pricing related to landfills and transfer stations.

Volume.

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

- \$(4.2) million from lower disposal volumes of which \$(3.5) million relates to lower transportation volumes associated with a large contaminated soils project that occurred in the prior year.

Surcharges and other fees.

The surcharge and other fees change component in quarterly solid waste revenues growth of \$0.9 million associated primarily with the Energy component of the Energy and Environmental fee and the portion of the Sustainability Recycling Adjustment fee, respectively, that has anniversaried. The Energy component of the fee floats on a monthly basis based on diesel fuel prices, which increased slightly from the prior year. The Sustainability Recycling Adjustment fee floats on a monthly basis based on recycled commodity prices.

Commodity price and volume.

The commodity price and volume change component in quarterly solid waste revenues growth of \$(1.1) million is the result of unfavorable energy pricing and, to a lesser extent, unfavorable commodity pricing, and lower commodity processing volumes.

Acquisitions.

The acquisitions change component in quarterly solid waste revenues growth is primarily the result of the acquisition of six solid waste collection businesses and one transfer business throughout the prior year.

Operating Income (Loss)

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

	Three Months Ended March 31,		\$ Change
	2019	2018	
Eastern	\$ (0.6)	\$ (1.8)	\$ 1.2
Western	5.4	7.2	(1.8)
Recycling	(0.9)	(5.2)	4.3
Other	0.5	0.6	(0.1)
Operating income	\$ 4.4	\$ 0.8	\$ 3.6

Eastern Region

Operating results improved \$1.2 million year-over-year. Excluding the impact of the Southbridge Landfill closure charge, net, the development project charge and the expense from acquisition activities and other items, our operating performance in the three months ended March 31, 2019 improved year-over-year as the result of revenue growth and the following cost changes:

Cost of operations: Cost of operations increased \$2.3 million year-over-year due to the following:

- higher hauling and third-party transportation costs associated with higher collection volumes related to acquisition activity and higher transportation rates;
- higher disposal costs associated with acquisition activity and increased disposal pricing in the northeastern United States;
- higher labor costs associated with acquisition activity;
- higher fuel costs associated with higher volumes on acquisition activity and a slight increase in diesel fuel prices; and
- higher maintenance and repair costs associated with higher fleet and facility maintenance costs due to acquisition activity and related business growth; partially offset by
- lower direct operational costs associated with lower landfill operating costs and landfill operating lease amortization due to the closure of the Southbridge Landfill; and
- lower liability and auto insurance costs based on the change in claims activity.

Depreciation and amortization: Depreciation and amortization expense decreased \$(0.7) million year-over-year primarily due to acquisition activity more than offset by lower landfill amortization expense associated with the closure of the Southbridge Landfill.

Western Region

Operating income decreased \$(1.8) million year-over-year. Excluding the impact of the expense from acquisition activities and other items, our operating performance in the three months ended March 31, 2019 declined as revenue growth was more than offset by the following cost changes:

Cost of operations: Cost of operations increased \$7.7 million year-over-year due to the following:

- higher disposal costs associated with additional volumes related to acquisition activity and increased disposal pricing in the northeastern United States;
- higher hauling and third-party transportation costs associated with higher collection volumes related to acquisition activity and higher transportation rates, partially offset by lower hauling and third-party transportation costs from lower transportation volumes associated with a large contaminated soils project that occurred in prior year;

- higher labor costs related to acquisition activity;
- higher fuel costs due to higher volumes associated with acquisition activity and a slight increase in diesel fuel prices; and
- higher fleet and facility maintenance costs due to acquisition activity and related business growth; partially offset by
- lower auto insurance costs based on the change in claims activity; and
- lower landfill operating lease amortization on lower landfill volumes.

General and administration: General and administration expense increased \$1.9 million year-over-year due to higher labor and related benefit costs associated with acquisition activity, partially offset by lower shared overhead costs associated with lower equity compensation expense.

Depreciation and amortization: Depreciation and amortization expense increased \$2.2 million year-over-year due to acquisition activity, partially offset by lower landfill amortization expense attributed to lower landfill volumes at certain landfills, combined with fluctuations in our landfill amortization rates as a result of changes in cost estimates and other assumptions associated with our landfills.

Recycling

Operating results increased \$4.3 million year-over-year. Excluding the impact of the contract settlement charge, our operating performance in the three months ended March 31, 2019 improved due primarily to revenue growth on higher commodity volumes and tipping fees, combined with lower operating costs, including lower purchased material costs on reduced commodity pricing in the marketplace.

Other

Operating income decreased \$(0.1) million year-over-year based on the following:

- the impact of intercompany profits in our Organics line-of-business now passing through to landfill disposal sites, combined with declining margins as higher revenues, which were driven by two large transportation and disposal contracts, also resulted in higher third-party transportation and disposal costs as much of these new volumes were directed to third-party sites; partially offset by
- improved operating performance of our Customer Solutions line-of-business, as revenue growth associated with increased volumes outpaced higher cost of operations associated with the corresponding increase in purchased material, hauling and transportation costs.

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 cash needs based on the capital intensive nature of our business. Our capital requirements include fixed asset purchases (including capital expenditures for vehicles), debt servicing, landfill development and cell construction, landfill site and cell closure, as well as acquisitions. We generally meet our liquidity needs from operating cash flows and borrowings from our \$200.0 million revolving line of credit facility ("Revolving Credit Facility").

A summary of cash and cash equivalents, restricted assets and long-term debt balances, excluding any unamortized debt discount and debt issuance costs (in millions), follows:

	March 31, 2019	December 31, 2018
Cash and cash equivalents	\$ 19.9	\$ 4.0
Restricted assets:		
Restricted investment securities - landfill closure	\$ 1.3	\$ 1.2
Long-term debt:		
Current portion	\$ 2.7	\$ 2.3
Long-term portion	485.1	552.9
Total long-term debt	\$ 487.8	\$ 555.2

Summary of Cash Flow Activity

A summary of cash flows (in millions) follows:

	Three Months Ended March 31,		\$ Change
	2019	2018	
Net cash provided by operating activities	\$ 4.8	\$ 12.8	\$ (8.0)
Net cash used in investing activities	\$ (19.4)	\$ (28.0)	\$ 8.6
Net cash provided by financing activities	\$ 30.6	\$ 15.6	\$ 15.0

Cash flows from operating activities.

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

	Three Months Ended March 31,	
	2019	2018
Net loss	\$ (1.7)	\$ (3.9)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	17.5	16.0
Depletion of landfill operating lease obligations	1.7	2.4
Interest accretion on landfill and environmental remediation liabilities	1.8	1.4
Amortization of debt issuance costs and discount on long-term debt	0.6	0.7
Stock-based compensation	1.4	2.1
Gain on sale of property and equipment	(0.1)	(0.3)
Southbridge Landfill non-cash closure charge	—	1.4
Development project charge	—	0.3
Right-of-use asset - operating lease expense	2.6	—
Deferred income taxes	0.2	(1.2)
	24.0	18.9
Changes in assets and liabilities, net	(19.2)	(6.1)
Net cash provided by operating activities	\$ 4.8	\$ 12.8

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

Improved operational performance in the three months ended March 31, 2019 as compared to the three months ended March 31, 2018 was due to the following:

- increased revenues of \$16.2 million associated with higher collection and transfer station revenues on higher pricing and acquisition activity and higher revenues on volumes in our Customer Solutions, Organics and Recycling lines-of-business; partially mitigated by lower disposal revenues on lower volumes and lower recycling commodity pricing; partially offset by
- higher cost of operations of \$12.2 million driven by business growth resulting in higher third-party direct costs, higher labor costs, higher direct operational costs, higher fuel costs and higher fleet maintenance and facility costs; and
- higher general and administration expense of \$1.7 million attributed to higher labor and related benefit costs associated with acquisition activity.

The 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 three months ended March 31, 2019 as compared to the three months ended March 31, 2018 was the result of the following:

- an increase in cash outflows associated with accounts payable;
- an increase in cash outflows associated with accrued expenses and other liabilities including payroll and related expenses; and

- an increase in cash outflows associated with prepaid expenses, inventories and other assets; partially offset by
- an increase in cash inflows associated with accounts receivable.

Cash flows from investing activities.

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

	Three Months Ended March 31,	
	2019	2018
Acquisitions, net of cash acquired	\$ (1.2)	\$ (19.0)
Additions to property, plant and equipment	(18.2)	(8.9)
Payments on landfill operating lease contracts	—	(0.5)
Proceeds from sale of property and equipment	—	0.4
Net cash used in investing activities	<u>\$ (19.4)</u>	<u>\$ (28.0)</u>

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

Acquisitions, net of cash acquired.

In the three months ended March 31, 2019, we paid \$1.2 million in holdback payments on businesses acquired in the fiscal year ended December 31, 2018. In the three months ended March 31, 2018, we acquired Complete Disposal Company, Inc. and its subsidiary United Material Management of Holyoke, Inc. and a tuck-in collection operation for total consideration of \$19.3 million, including \$18.8 million in cash, and paid \$0.2 million in holdback payments on businesses previously acquired.

Capital expenditures. Capital expenditures were \$9.3 million higher in the three months ended March 31, 2019 as compared to the three months ended March 31, 2018 primarily due to capital expenditures associated with timing differences, business growth and acquisition activities.

Cash flows from financing activities.

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

	Three Months Ended March 31,	
	2019	2018
Proceeds from long-term borrowings	\$ 10.6	\$ 66.7
Principal payments on long-term debt	(80.7)	(51.4)
Proceeds from the exercise of share based awards	0.3	0.3
Proceeds from the issuance of Class A Common Stock	100.4	—
Net cash provided by financing activities	<u>\$ 30.6</u>	<u>\$ 15.6</u>

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

Debt activity. Debt borrowings decreased by \$(56.1) million and our debt payments increased by \$29.4 million in the three months ended March 31, 2019. The decrease in financing cash flows related to debt activity is associated with the paydown of our Revolving Credit Facility in the three months ended March 31, 2019.

Proceeds from the issuance of Class A Common Stock. In the three months ended March 31, 2019, we completed a public offering of 3.6 million shares of our Class A common stock at a public offering price of \$29.50 per share. The offering resulted in net proceeds to us of \$100.4 million, after deducting underwriting discounts, commissions and offering expenses. The net proceeds from the offering were and are to be used for general corporate purposes, including potential acquisitions or development of new operations or assets with the goal of complementing or expanding our business, working capital and capital expenditures.

Outstanding Long-Term Debt

Credit Facility

As of March 31, 2019, we had outstanding \$350.0 million aggregate principal amount of borrowings under our term loan A facility ("Term Loan Facility") and \$0.0 million aggregate principal amount of borrowings under our \$200.0 million Revolving Credit Facility (collectively, the "Credit Facility"). The Credit Facility has a 5-year term that matures in May 2023 and bears interest at a rate of LIBOR plus 2.00% per annum, which will be reduced to a rate of LIBOR plus, as low as, 1.25% upon us reaching a consolidated net leverage ratio of less than 2.25x. Our 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 March 31, 2019, further advances were available under the Revolving Credit Facility in the amount of \$175.4 million. The available amount is net of outstanding irrevocable letters of credit totaling \$24.6 million, at which date 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 ("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. As of March 31, 2019, we were in compliance with all financial covenants contained in the Credit Agreement as follows:

	Twelve Months Ended March 31, 2019	Covenant Requirement at March 31, 2019
Maximum consolidated net leverage ratio (1)	3.10	4.50
Minimum interest coverage ratio	6.26	3.00

- (1) The maximum consolidated net leverage ratio is calculated as consolidated funded debt, net of unencumbered cash and cash equivalents in excess of \$2.0 million (calculated at \$469.9 million as of March 31, 2019, or \$487.8 million of consolidated funded debt less \$17.9 million of cash and cash equivalents in excess of \$2.0 million as of March 31, 2019), divided by consolidated EBITDA. Consolidated EBITDA is based on operating results for the twelve months preceding the measurement date of March 31, 2019. Consolidated funded debt, net of unencumbered cash and cash equivalents in excess of \$2.0 million, and consolidated EBITDA as defined by the Credit Agreement ("Consolidated EBITDA") are non-GAAP financial measures that should not be considered an alternative to any measure of financial performance calculated and presented in accordance with generally accepted accounting principles in the United States. A reconciliation of net cash provided by operating activities to minimum consolidated EBITDA is as follows (in millions):

	Twelve Months Ended March 31, 2019
Net cash provided by operating activities	\$ 112.8
Changes in assets and liabilities, net of effects of acquisitions and divestitures	18.5
Gain on sale of property and equipment	0.3
Non-cash expense from acquisition activities and other items	(0.8)
Loss on debt extinguishment	(7.4)
Southbridge Landfill non-cash closure charge	(14.8)
Impairment of investment	(1.1)
Southbridge Landfill insurance recovery for investing activities	3.5
Stock based compensation	(10.4)
Interest expense, less amortization of debt issuance costs	24.0
Provision for income taxes, net of deferred income taxes	(1.4)
Adjustments as allowed by the Credit Agreement	28.4
Consolidated EBITDA	\$ 151.6

In addition to the financial covenants described above, 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. We do not believe that these restrictions impact our ability to meet future liquidity needs. As of March 31, 2019, we were in compliance with the covenants contained in the Credit Agreement.

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

New York Bonds. As of March 31, 2019, we had outstanding \$25.0 million aggregate principal amount of Solid Waste Disposal Revenue Bonds Series 2014 ("New York Bonds 2014") and \$15.0 million aggregate principal amount of Solid Waste Disposal Revenue Bonds Series 2014R-2 ("New York Bonds 2014R-2") issued by the New York State Environmental Facilities Corporation under the indenture dated December 1, 2014 (collectively, the "New York Bonds"). The New York Bonds 2014 accrue interest at 3.75% per annum through December 1, 2019, at which time they may be converted from a fixed rate to a variable rate. The New York Bonds 2014R-2 accrue interest at 3.125% per annum through May 31, 2026, at which time they may be converted from a fixed rate to a variable rate. The New York Bonds, which are unsecured and guaranteed jointly and severally, fully and unconditionally by all of our significant wholly-owned subsidiaries, require interest payments on June 1 and December 1 of each year and mature on December 1, 2044. We borrowed the proceeds of the New York Bonds to finance or refinance certain capital projects in the state of New York and to pay certain costs of issuance of the New York Bonds.

Maine Bonds. As of March 31, 2019, we had outstanding \$25.0 million aggregate principal amount of Finance Authority of Maine Solid Waste Disposal Revenue Bonds Series 2015R-3 ("FAME Bonds 2005R-3"), \$15.0 million aggregate principal amount of Finance Authority of Maine Solid Waste Disposal Revenue Bonds Series 2015 ("FAME Bonds 2015R-1"), and \$15.0 million aggregate principal amount of Finance Authority of Maine Solid Waste Disposal Revenue Bonds Series 2015R-2 ("FAME Bonds 2015R-2") (collectively, the "FAME Bonds"). The FAME Bonds 2005R-3 accrue interest at 5.25% per annum, and interest is payable semiannually in arrears on February 1 and August 1 of each year until such bonds mature on January 1, 2025. The FAME Bonds 2015R-1 accrue interest at 5.125% per annum through August 1, 2025, at which time they may be converted from a fixed to a variable rate, and interest is payable semiannually in arrears on February 1 and August 1 of each year until the FAME Bonds 2015R-1 mature on August 1, 2035. The FAME Bonds 2015R-2 accrue interest at 4.375% per annum through July 31, 2025, at which time they may be converted from a fixed to a variable rate, and interest is payable semiannually each year on May 1 and November 1 until the FAME Bonds 2015R-2 mature on August 1, 2035. The FAME Bonds are unsecured and guaranteed jointly and severally, fully and unconditionally by all of our significant wholly-owned subsidiaries. We borrowed the proceeds of the offering of the FAME Bonds to finance or refinance the costs of certain of our solid waste landfill facilities and solid waste collection, organics and transfer, recycling and hauling facilities, and to pay certain costs of the issuance of the FAME Bonds.

Vermont Bonds. As of March 31, 2019, we had outstanding \$16.0 million aggregate principal amount of Vermont Economic Development Authority Solid Waste Disposal Long-Term Revenue Bonds Series 2013 ("Vermont Bonds"). The Vermont Bonds, which are guaranteed jointly and severally, fully and unconditionally by all of our significant wholly-owned subsidiaries, accrue interest at 4.63% per annum through April 2, 2028, after which time there is a mandatory tender. The Vermont Bonds mature on April 1, 2036. We borrowed the proceeds of the Vermont Bonds to finance or refinance certain qualifying property, plant and equipment assets purchased in the state of Vermont.

New Hampshire Bonds. As of March 31, 2019, we had outstanding \$11.0 million aggregate principal amount of unsecured Solid Waste Disposal Revenue Bonds Series 2013 issued by the Business Finance Authority of the State of New Hampshire ("New Hampshire Bonds"). The New Hampshire Bonds, which are guaranteed jointly and severally, fully and unconditionally by all of our significant wholly-owned subsidiaries, accrue interest at 4.00% per annum through October 1, 2019, at which time they may be converted from a fixed rate to a variable rate. During the fixed interest rate period, the New Hampshire Bonds are not to be supported by a letter of credit. Interest is payable in arrears on April 1 and October 1 of each year. The New Hampshire Bonds mature on April 1, 2029. We borrowed the proceeds of the New Hampshire Bonds to finance or refinance certain qualifying property, plant and equipment assets purchased in the state of New Hampshire.

Inflation

Although inflationary increases in costs have affected our historical operating margins, we believe that inflation generally has not had a significant impact on our operating results. Consistent with industry practice, most of our contracts provide for a pass-through of certain costs to our customers, including increases in landfill tipping fees and in some 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 a fuel surcharge, which is designed to recover escalating fuel price fluctuations above an annually reset floor. Based on these implementations, we believe we should be able to sufficiently offset most cost increases resulting from inflation. However, competitive factors may require us to absorb at least a portion of these cost increases. 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; and
- decreased tourism in Vermont, New Hampshire, Maine and eastern New York during the winter months tends to lower the volume of waste generated by commercial and restaurant customers, which is partially offset by increased volume from the ski industry.

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 Recycling segment experiences increased volumes of fiber in November and December due to increased shipping boxes and retail activity during the holiday season.

Critical Accounting Policies and Estimates

The preparation of our financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities, as applicable, at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. 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. Except for the adoption of the new accounting standards discussed in Note 2, *Accounting Changes* to our consolidated financial statements included under Part I, Item 1 of this Quarterly Report on Form 10-Q, there were no material changes in the three months ended March 31, 2019 to the application of critical accounting policies and estimates as described in Item 8 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2018.

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. For a description of the impact of

Accounting Standards Update 2016-02, as amended through March 2019: Leases (*Topic 842*), effective January 1, 2019 see Note 4, *Leases* 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 interest rates and certain commodity prices. We have a variety of strategies to mitigate these market risks, including at times using derivative instruments to hedge some portion of these risks.

Interest Rate Volatility

Our strategy to hedge against fluctuations in variable interest rates involves entering into interest rate derivative agreements to hedge against adverse movements in interest rates. As of March 31, 2019, we are party to nine interest rate derivative agreements to hedge interest rate risk associated with the variable rate portion of our long-term debt. The total notional amount of these hedging instruments is \$190.0 million and we receive interest based on the 1-month LIBOR index, restricted by a 1.00% floor in certain instances, and pay interest at a weighted average fixed rate of approximately 2.54%. The agreements mature between February 2021 and May 2023. We have designated these derivative instruments as highly effective cash flow hedges, and therefore the change in fair value is recorded in our stockholders' deficit as a component of accumulated other comprehensive 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.

We have \$137.8 million of fixed rate debt as of March 31, 2019 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 at March 31, 2019. The weighted average interest rate on the variable rate portion of long-term debt was approximately 4.5% at March 31, 2019. Should the average interest rate on the variable rate portion of long-term debt change by 100 basis points, we estimate that our quarterly interest expense would change by up to approximately \$0.4 million. The remainder of our long-term debt is at fixed rates and not subject to interest rate risk.

Commodity Price Volatility

Should commodity prices change by \$10 per ton, we estimate that our annual operating income margin would change by approximately \$0.7 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.

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 March 31, 2019. 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 SEC'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 March 31, 2019, 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 March 31, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II.

ITEM 1. LEGAL PROCEEDINGS

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.

Environmental Remediation Liability (including related litigation)

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. The following matters represent our material outstanding claims.

Southbridge Recycling & Disposal Park, Inc.

In October 2015, our Southbridge Recycling and Disposal Park, Inc. ("SRD") subsidiary reported to the Massachusetts Department of Environmental Protection ("MADEP") results of analysis of samples collected pursuant to our existing permit from private drinking water wells located near the Town of Southbridge, Massachusetts ("Town") Landfill ("Southbridge Landfill"), which is operated by SRD. Those results indicated the presence of contaminants above the levels triggering notice and response obligations under MADEP regulations. In response to those results, we are carrying out an Immediate Response Action pursuant to Massachusetts General Law Chapter 21E (the "Charlton 21E Obligations") pursuant to state law. Further, we have implemented a plan to analyze and better understand the groundwater near the Southbridge Landfill and we are investigating with the objective of identifying the source or sources of the elevated levels of contamination measured in the well samples. If it is determined that some or all of the contamination originated at the Southbridge Landfill, we will work with the Town (the Southbridge Landfill owner and the former operator of an unlined portion of the Southbridge Landfill, which was used prior to our operation of a double-lined portion of the Southbridge Landfill commencing in 2004) to evaluate and allocate the liabilities related to the Charlton 21E Obligations. In July 2016, we sent correspondence to the Town pursuant to Chapter 21E of Massachusetts General Laws demanding that the Town reimburse us for the environmental response costs we had spent and that the Town be responsible for all such costs in the future, as well as any other costs or liabilities resulting from the release of contaminants from the unlined portion of the Southbridge Landfill. The Town responded in September 2016, denying that the Southbridge Landfill is the source of such contamination, and claiming that if it is, that we may owe an indemnity to the Town pursuant to the Operating Agreement between us and the Town dated May 29, 2007, as amended. We entered into a Tolling Agreement with the Town to delay any further administrative or legal actions until our work with MADEP more specifically defines the parties' responsibilities for the Charlton 21E Obligations, if any. Please see below for further discussion of our relationship with the Town regarding the Charlton 21E Obligations.

In February 2016, we and the Town received a Notice of Intent to Sue under the Resource Conservation and Recovery Act ("RCRA") from a law firm purporting to represent residents proximate to the Southbridge Landfill ("Residents"), indicating its intent to file suit against us on behalf of the Residents alleging the groundwater contamination originated from the Southbridge Landfill. In February 2017, we received an additional Notice of Intent to Sue from the National Environmental Law Center under the Federal Clean Water Act ("CWA") and RCRA (collectively the "Acts") on behalf of Environment America, Inc., d/b/a Environment Massachusetts, and Toxics Action Center, Inc., which have referred to themselves as the Citizen Groups. The Citizen Groups alleged that we had violated the Acts, and that they intended to seek appropriate relief in federal court for those alleged violations. On or about June 9, 2017, a lawsuit was filed against us, SRD and the Town in the United States District Court for the District of Massachusetts (the "Massachusetts Court") by the Citizen Groups and the Residents alleging violations of the Acts (the "Litigation"), and demanding a variety of remedies under the Acts, including fines, remediation, mitigation and costs of litigation, and remedies for violations of Massachusetts civil law related to personal and property damages, including remediation, diminution of property values, compensation for lost use and enjoyment of properties, enjoinder of further

operation of the Southbridge Landfill, and costs of litigation, plus interest on any damage award, on behalf of the Residents. We believe the Litigation to be factually inaccurate, and without legal merit, and we and SRD intend to vigorously defend the Litigation. Nevertheless, we believe it is reasonably possible that a loss will occur as a result of the Litigation although an estimate of loss cannot be reasonably provided at this time. We also continue to believe the Town should be responsible for costs or liabilities associated with the Litigation relative to alleged contamination originating from the unlined portion of the Southbridge Landfill, although there can be no assurance that we will not be required to incur some or all of such costs and liabilities.

In December 2017, we filed a Motion to Dismiss the Litigation, and on October 1, 2018, the Massachusetts Court granted our Motion to Dismiss, and accordingly, dismissed the Citizen Groups claims under the Acts. The Massachusetts Court has retained jurisdiction of the Residents claims. The Citizen Groups intend to appeal the Massachusetts Court's decision to grant our Motion to Dismiss. The Residents moved for a stay of their case until the Citizen Groups appealed. We opposed the stay and in March 2019, the Massachusetts Court denied the Residents motion for a stay.

We entered into an Administrative Consent Order on April 26, 2017 (the "ACO"), with MADEP, the Town, and the Town of Charlton, committing us to equally share the costs with MADEP, of up to \$10,000 (\$5,000 each) for the Town to install a municipal waterline in the Town of Charlton ("Waterline"). Upon satisfactory completion of that Waterline, and other matters covered by the ACO, we and the Town will be released by MADEP from any future responsibilities for the Charlton 21E Obligations. We also entered into an agreement with the Town on April 28, 2017 entitled the "21E Settlement and Water System Construction Funding Agreement" (the "Waterline Agreement"), wherein we and the Town released each other from claims arising from the Charlton 21E Obligations. Pursuant to the Waterline Agreement, the Town will issue a twenty (20) year bond for our portion of the Waterline costs (up to \$5,000). We have agreed to reimburse the Town for periodic payments under such bond. Construction of the waterline is expected to be completed in 2019.

We have recorded an environmental remediation liability associated with the future installation of the Waterline in other accrued liabilities and other long-term liabilities. 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 of 2.6%. Our expenditures could be significantly higher if costs exceed estimates. The changes to the environmental remediation liability associated with the Southbridge Landfill are as follows (in millions):

	Three Months Ended March 31,	
	2019	2018
Beginning balance	\$ 5.2	\$ 5.9
Obligations settled (1)	(0.1)	(0.2)
Ending balance	\$ 5.1	\$ 5.7

(1) Includes amounts that are being processed through accounts payable as a part of our disbursements cycle.

The costs and liabilities we may be required to incur in connection with the foregoing Southbridge Landfill matters could be material to our results of operations, our cash flows and our financial condition.

Potsdam Environmental Remediation Liability

On December 20, 2000, the State of New York Department of Environmental Conservation (“DEC”) issued an Order on Consent (“Order”) which named Waste-Stream, Inc. (“WSI”), our subsidiary, General Motors Corporation (“GM”) and Niagara Mohawk Power Corporation (“NiMo”) as Respondents. The Order required that the Respondents undertake certain work on a 25-acre scrap yard and solid waste transfer station owned by WSI in Potsdam, New York, including the preparation of a Remedial Investigation and Feasibility Study (“Study”). A draft of the Study was submitted to the DEC in January 2009 (followed by a final report in May 2009). The Study estimated that the undiscounted costs associated with implementing the preferred remedies would be approximately \$10,219. On February 28, 2011, the DEC issued a Proposed Remedial Action Plan for the site and accepted public comments on the proposed remedy through March 29, 2011. We submitted comments to the DEC on this matter. In April 2011, the DEC issued the final Record of Decision (“ROD”) for the site. The ROD was subsequently rescinded by the DEC for failure to respond to all submitted comments. The preliminary ROD, however, estimated that the present cost associated with implementing the preferred remedies would be approximately \$12,130. The DEC issued the final ROD in June 2011 with proposed remedies consistent with its earlier ROD. An Order on Consent and Administrative Settlement naming WSI and NiMo as Respondents was executed by the Respondents and DEC with an effective date of October 25, 2013. On January 29, 2016, a Cost-Sharing Agreement was executed between WSI, NiMo, Alcoa Inc. (“Alcoa”) and Reynolds Metal Company (“Reynolds”) whereby Alcoa and Reynolds elected to voluntarily participate in the onsite remediation activities at a combined 15% participant share. A contractor has been awarded the work and significant expenditures relating to onsite remediation will be incurred in the fiscal year ending December 31, 2019. WSI is jointly and severally liable with NiMo, Alcoa and Reynolds for the total cost to remediate.

We have recorded an environmental remediation liability associated with the Potsdam site based on incurred costs to date and estimated costs to complete the remediation in other accrued liabilities and other long-term liabilities. Our expenditures could be significantly higher if costs exceed estimates. 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 1.5%.

A summary of the changes to the environmental remediation liability associated with the Potsdam environmental remediation liability follows (in millions):

	Three Months Ended March 31,	
	2019	2018
Beginning balance	\$ 5.6	\$ 5.8
Obligations settled	—	—
Ending balance	\$ 5.6	\$ 5.8

North Country Environmental Services

On or about March 8, 2018, the Citizen Groups described above delivered correspondence to our subsidiary, North Country Environmental Services, Inc. (“NCES”) and us, providing notice of the Citizen Groups' intent to sue NCES and us for violations of the CWA in conjunction with NCES's operation of its landfill in Bethlehem, New Hampshire. On May 14, 2018, the Citizen Groups filed a lawsuit against NCES and us in the United States District Court for the District of New Hampshire (the “New Hampshire Court”) alleging violations of the CWA, arguing that ground water discharging into the Ammonoosuc River is a “point source” under the CWA (the “New Hampshire Litigation”). The New Hampshire Litigation seeks remediation and fines under the CWA. On June 15, 2018, we and NCES filed a Motion to Dismiss the New Hampshire Litigation. On July 13, 2018, the Citizen Groups filed objections to our Motion to Dismiss. On July 27, 2018, we filed a reply in support of our Motion to Dismiss. On September 25, 2018, the New Hampshire Court denied our Motion to Dismiss. In March of 2019, we filed a motion in the New Hampshire litigation asking for a stay of this Litigation until certain appeals from discordant federal circuits were heard by the Supreme Court of the United States (“SCOTUS”). SCOTUS has granted certiorari to hear such cases. Our motion for a stay is pending in the New Hampshire Litigation. We intend to continue to vigorously defend against the New Hampshire Litigation, which we believe is without merit.

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, 2018, 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. As of March 31, 2019, there have been no material changes to the risk factors disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2018. 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.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

On March 6, 2019, we issued 66,881 shares of our common stock to Youngblood Disposal Enterprises of Western New York, LLC (“Youngblood”) in connection with our acquisition of the assets of Youngblood and its wholly owned subsidiaries. Such shares were issued in reliance upon the exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended.

ITEM 6. EXHIBITS

Exhibit No.	Description
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	XBRL Instance Document.**
101.SCH	XBRL Taxonomy Extension Schema Document.**
101.CAL	XBRL Taxonomy Calculation Linkbase Document.**
101.LAB	XBRL Taxonomy Label Linkbase Document.**
101.PRE	XBRL Taxonomy Presentation Linkbase Document.**
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.**
**	Submitted Electronically Herewith. Attached as Exhibit 101 to this report are the following formatted in XBRL (Extensible Business Reporting Language): (i) Consolidated Balance Sheets as of March 31, 2019 and December 31, 2018, (ii) Consolidated Statements of Operations for the three months ended March 31, 2019 and 2018, (iii) Consolidated Statements of Comprehensive Loss for the three months ended March 31, 2019 and 2018, (iv) Consolidated Statement of Stockholders’ Deficit for the three months ended March 31, 2019 and 2018, (v) Consolidated Statements of Cash Flows for the three months ended March 31, 2019 and 2018, 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: May 1, 2019

By: /s/ Christopher B. Heald

Christopher B. Heald
Vice President and Chief Accounting Officer
(Principal Accounting Officer)

Date: May 1, 2019

By: /s/ Edmond R. Coletta

Edmond R. Coletta
Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

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 quarterly 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 quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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: May 1, 2019

By: /s/ John W. Casella

Chairman and Chief Executive Officer
(Principal Executive Officer)

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 quarterly 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 quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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: May 1, 2019

By: /s/ Edmond R. Coletta

Senior Vice President and Chief Financial Officer
(Principal Financial Officer)

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 March 31, 2019 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: May 1, 2019

By: /s/ John W. Casella

Chairman and Chief Executive Officer

(Principal Executive Officer)

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 March 31, 2019 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: May 1, 2019

By: /s/ Edmond R. Coletta

Senior Vice President and Chief Financial Officer

(Principal Financial Officer)