

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2021
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)
25 Greens Hill Lane, Rutland, VT
(Address of principal executive offices)

03-0338873
(I.R.S. Employer
Identification No.)
05701
(Zip Code)

Registrant's telephone number, including area code: (802) 775-0325
Securities registered pursuant to Section 12(b) of the Act:

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

Securities registered pursuant to Section 12(g) of the Act:
None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by checkmark 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 Act.

Indicate by check mark whether the registrant has filed a report and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

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

The aggregate market value of the common equity held by non-affiliates of the registrant, based on the last reported sale price of the registrant's Class A common stock on the Nasdaq Stock Market at the close of business on June 30, 2021 was approximately \$3.1 billion. The registrant does not have any non-voting common stock outstanding.

There were 50,423,232 shares of Class A common stock, \$0.01 par value per share, of the registrant outstanding at January 31, 2022. There were 988,200 shares of Class B common stock, \$0.01 par value per share, of the registrant outstanding at January 31, 2022.

Documents Incorporated by Reference

Part III of this Annual Report on Form 10-K incorporates by reference information from the definitive Proxy Statement for the registrant's 2022 Annual Meeting of Stockholders or a Form 10-K/A to be filed with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year ended December 31, 2021.

**CASELLA WASTE SYSTEMS, INC.
ANNUAL REPORT ON FORM 10-K
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PART I

Unless the context requires otherwise, all references in this Annual Report on Form 10-K to “Casella Waste Systems, Inc.,” “Casella,” the “Company,” “we,” “us” or “our” refer to Casella Waste Systems, Inc. and its consolidated subsidiaries.

Forward-Looking Statements

This Annual Report on Form 10-K contains or incorporates a number of forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Exchange Act of 1934, as amended, including statements regarding:

- the projected development of additional disposal capacity or expectations regarding permits for existing capacity;
- the outcome of any legal or regulatory matter;
- the expected and potential direct or indirect impacts of the novel coronavirus (“COVID-19”) pandemic on our business;
- expected liquidity and financing plans;
- expected future revenues, operations, expenditures and cash needs;
- fluctuations in the commodity pricing of our recyclables, increases in landfill tipping fees and fuel costs and general economic and weather conditions;
- projected future obligations related to final capping, closure and post-closure costs of our existing landfills and any disposal facilities which we may own or operate in the future;
- our ability to use our net operating losses and tax positions;
- our ability to service our debt obligations;
- the recoverability or impairment of any of our assets or goodwill;
- estimates of the potential markets for our products and services, including the anticipated drivers for future growth;
- sales and marketing plans or price and volume assumptions;
- potential business combinations or divestitures; and
- projected improvements to our infrastructure and the impact of such improvements on our business and operations.

In addition, any statements contained in or incorporated by reference into this report that are not statements of historical fact should be considered forward-looking statements. You can identify these forward-looking statements by the use of the words “believes”, “expects”, “anticipates”, “plans”, “may”, “will”, “would”, “intends”, “estimates” and other similar expressions, whether in the negative or affirmative. These forward-looking statements are based on current expectations, estimates, forecasts and projections about the industry and markets in which we operate, as well as management’s beliefs and assumptions, and should be read in conjunction with our consolidated financial statements and notes thereto. We cannot guarantee that we actually will achieve the plans, intentions or expectations disclosed in the forward-looking statements made. 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*” of this Annual Report on Form 10-K. 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.

ITEM 1. BUSINESS

Overview

Casella Waste Systems, Inc. is a regional, vertically integrated solid waste services company. We provide resource management expertise and services to residential, commercial, municipal, institutional and industrial customers, primarily in the areas of solid waste collection and disposal, transfer, recycling and organics services. We provide integrated solid waste services in seven states: Vermont, New Hampshire, New York, Massachusetts, Connecticut, Maine and Pennsylvania, with our headquarters located in Rutland, Vermont.

We manage our solid waste operations on a geographic basis through two regional operating segments, the Eastern and Western regions, each of which provides a full range of solid waste services. We manage our resource-renewal operations through the Resource Solutions operating segment. Effective January 1, 2021, we realigned the Resource Solutions operating segment from our historical lines-of-service of recycling, organics and customer solutions into two lines-of-service: processing and non-processing. We realigned the Resource Solutions operating segment to leverage our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver a comprehensive solution for our larger commercial, municipal, institutional, and industrial customers with more diverse waste and recycling needs. Processing services consist of the receipt of recycled, sludge or other organic materials at one of our materials recovery, processing or disposal facilities, where it is then sorted, mixed and/or processed, and then disposed of or sold. Non-processing services consist of brokerage services, overall resource management services, which provide a wide range of environmental services and zero waste solutions to large and complex organizations, and traditional collection, disposal and recycling services provided to large account multi-site customers.

For more information about our reportable operating segments, please see "Operational Overview." For financial information concerning our reportable operating segments, refer to "Item7. Management's Discussion and Analysis of Results of Operations and Financial Condition" and "Item8. Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

The global outbreak of the COVID-19 pandemic has caused economic disruption across our geographic footprint since it was first identified in the United States in early 2020, and has adversely affected our business, although at a diminishing rate, over the last two fiscal years. For more information about the COVID-19 pandemic and its effect on our business and associated costs see "Item1A. Risk Factors" and "Item7. Management's Discussion and Analysis of Results of Operations and Financial Condition" of this Annual Report on Form 10-K.

Our website is www.casella.com. We make available, free of charge through our website, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, Proxy Statements on Schedule 14A, and any amendments to those materials filed pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended. We make these reports available through our website as soon as reasonably practicable after we electronically file such materials with or furnish them to the Securities and Exchange Commission ("SEC"). The information found on our website is not part of this or any other report we file with or furnish to the SEC.

Growth Strategy

Our goal is to build a sustainable and profitable company by providing exemplary service to our customers, while operating safe and environmentally sound facilities. Over the last decade, we have worked with many of our key customers to improve their environmental footprint and to meet sustainability goals by increasing their recycling rates, diverting organic materials out of the waste stream into beneficial use processes, and partnering to develop resource solutions within their organizations. Since we first began operating in Vermont in 1975, our business strategy has been firmly tied to creating a sustainable resource management model and we continue to be rooted in these same tenets today.

We continue to invest in resources (team, technology, facilities, and capital) to further develop this important long-term strategy that we believe will continue to differentiate our service offerings to our customers, make us an employer of choice for our people, and improve our economic returns. We strive to create long-term value for all of our stakeholders, including customers, employees, communities and shareholders.

Our primary objective is to maximize long-term shareholder value through a combination of financial performance and strategic asset positioning. Annually, we complete a comprehensive strategic planning process to assess and refine our strategic objectives in the context of our asset mix and the current market environment. This process helps the management team allocate resources to a range of business opportunities with the goal to maximize long-term financial returns and competitive positioning.

In early August 2017, we announced an updated long-term strategic plan through our fiscal year ending December 31, 2021 (the "2021 Plan"). The 2021 Plan was focused on enhancing shareholder returns by improving cash flows and reducing debt leverage by advancing efforts in five key areas: (1) increasing landfill returns; (2) driving additional profitability in collection operations; (3) creating incremental value through Resource Solutions; (4) using technology to drive profitable growth and efficiencies; and (5) allocating capital to balance delevering with smart growth.

We have executed well against these strategies and we are introducing an updated strategic plan through our fiscal year ending December 31, 2024 (the "2024 Plan"). The key strategies of the 2024 Plan, set forth below, are similar in comparison to our 2021 Plan and reflect our continued focus on creating shareholder value through execution against our core competencies and disciplined growth strategy. In addition, we have launched a new fifth strategy focused on strengthening foundational pillars that will better position us for continued successful growth.

1. Increasing landfill returns;

2. Driving additional profitability in collection operations;
3. Creating incremental value through Resource Solutions;
4. Allocating capital to return driven growth; and
5. Strengthening four key foundational pillars:
 - People: Developing a safe, engaged, ready workforce to support growth.
 - Technology: Driving profitable growth and efficiencies through technology.
 - Sustainable Growth: Driving profitable growth through an integrated resource solutions approach.
 - Facilities: Developing necessary long-term infrastructure through facilities planning.

Increasing Landfill Returns

Disposal capacity continues to tighten in the Northeast market as permanent site closures are reducing capacity and stronger economic and construction activity are driving higher volumes. Given this supply-demand imbalance and the positioning of our assets, we were able to advance landfill pricing by 3.9% for the fiscal year ended December 31, 2021 ("fiscal year 2021"), as compared to the fiscal year ended December 31, 2020 ("fiscal year 2020").

We believe that this positive pricing backdrop will continue as additional site closures are expected over the next several years, and as we reset multi-year contracts we expect to advance pricing in excess of the Consumer Price Index on a larger percentage of our inbound waste streams. In addition, we continue to focus our acquisition efforts on businesses and markets that are expected to increase vertical integration to our landfills in order to drive higher cash flows and to lower market risk.

On the landfill development side, we continue to advance key permitting activities across our landfills to increase annual capacity limits at select sites and expand total permitted capacity across our footprint. Since early 2016, we have been successful in advancing permit increases at our Subtitle D landfills located in Angelica, New York ("Hyland Landfill"), Seneca, New York ("Ontario County Landfill"), Chemung, New York ("Chemung County Landfill"), West Old Town, Maine ("Juniper Ridge Landfill"), Schuyler Falls, New York ("Clinton County Landfill"), Coventry, Vermont ("Waste USA Landfill"), Campbell, New York ("Hakes Landfill") and Bethlehem, New Hampshire ("NCES Landfill"). Cumulatively, these efforts have added approximately 0.5 million tons per year of permitted capacity and approximately 50.9 million cubic yards of permitted airspace.

We also continue to focus on improving our landfill operations through various initiatives related to safety, compliance, operating practices, and capital efficiency programs.

Driving Additional Profitability in Collection Operations

Collection pricing was up 4.3% for fiscal year 2021, as compared to fiscal year 2020, with sustained execution against our strategic pricing programs. On the operating side, we continue to advance several key areas, including route optimization, fleet standardization and automation, and maintenance programs to further reduce our operating costs in the collection line-of-business. We are in the seventh year of our comprehensive fleet plan, which is designed to optimize our fleet and target truck replacements to maximize returns, reduce our operating expenses through lower maintenance costs, improve our service levels through reduced down times, and conduct additional automation and optimization of trucks and service types. We also remain focused on acquisition integration as we work diligently to onboard new customers and employees, while enhancing service accuracy, increasing operating efficiencies, and optimizing the internalization of solid waste and recycling volumes into our facilities.

The combination of these operating advancements and pricing programs are driving improved results in our collection line-of-business, with our cost of operations as a percentage of revenues down approximately 670 basis points from the twelve months ended December 31, 2014 to fiscal year 2021.

Creating Incremental Value Through Resource Solutions

In fiscal year 2020, we combined our resource-oriented business units (customer solutions, recycling and organics) under a newly formed operating segment called Resource Solutions. By combining our resource and sustainability-oriented businesses into the Resource Solutions operating segment, we now have a dedicated team and business strategy focused on driving value-added resource solutions to our customers. These solutions range from professional services to large industrial, institutional or multi-site retail customers, to our organics business, which is a leader in organics processing and disposal in the Northeast, and to our large scale, technology-driven recycling business.

In fiscal year 2021, we took another step in further integrating these teams and operations to drive increased synergies by realigning and creating processing and non-processing business units within Resource Solutions. This was done to leverage our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver

a comprehensive solution for our larger commercial, municipal, institutional, and industrial customers with more diverse waste and recycling needs. Our processing operations consist of our recycling and biosolids facilities where we receive inbound materials, process the volume, and sell the resulting products into end markets. Over the last six years, we have worked to reshape our recycling business model to drive higher returns in all market cycles and reduce exposure to recycling commodity price volatility. We have accomplished this goal by: (1) restructuring most third-party processing contracts to limit downside risk by charging processing fees; (2) implementing our sustainability recycling adjustment Fee (“SRA Fee”) for our collection customers (the SRA Fee floats inversely to changes in recycling commodity prices); (3) making key investments in recycling processing infrastructure to reduce operating costs and improve the quality of the end commodities; and (4) developing strong partnerships with industrial consumers of recycled materials to ensure that the materials our customers recycle make their way into new products and beneficial uses. Our risk mitigation programs offset most recycling commodity price decline and also allow us to return value to our customers with higher recycling commodity prices through lower tipping fees and a lower SRA fee. We expect these programs to continue to reduce our commodity risk exposure.

Our non-processing operations consist of brokerage and resource management services provided to large customers with broad sustainability needs. Our professional services business continues to make progress pivoting from the legacy waste and recycling brokerage model to an advisory services organization focused on helping large industrial and institutional customers meet their resource management and sustainability goals.

Allocating Capital to Return-Driven Growth

Over the last eight years we made significant progress in simplifying our business structure, improving cash flows and reducing risk exposure by: (1) divesting, or in certain cases, closing underperforming operations that did not enhance or complement our core operations; (2) refinancing debt to lower interest costs and improve financial flexibility; and (3) adhering to strict capital discipline and debt repayment. As a result of these actions, we have significantly reduced our consolidated net leverage ratio by 56 % over the last seven years to 2.35x as of December 31, 2021. See Item 7, “*Management's Discussion and Analysis of Financial Condition and Results of Operations*” of this Annual Report on Form 10-K for more disclosure about our consolidated net leverage ratio.

Given our progress in each area and as part of the 2021 Plan, we shifted our capital strategy to use our capital in a manner that balances continued delevering with smart acquisition and development growth. As part of this strategy, we set a goal through fiscal year 2021 of adding \$20 million to \$40 million per year of annualized revenues through acquisition or development activity.

We have made significant progress ramping up our strategic growth initiative, as we have acquired 39 solid waste collection, transfer and recycling businesses during the fiscal year ended December 31, 2018 (“fiscal year 2018”), the fiscal year ended December 31, 2019 (“fiscal year 2019”), fiscal year 2020, and fiscal year 2021, with approximately \$240 million of total annualized revenues. We expect revenue growth of approximately \$52 million in the fiscal year ending December 31, 2022 from the full year of revenue from acquisitions completed in fiscal year 2021, but which contributed to our revenues for only part of the year in fiscal year 2021.

We believe the strength of our balance sheet coupled with a robust acquisition pipeline positions us well for continued execution against our growth strategy. As such, as part of the 2024 Plan, we have established a target of adding greater than \$30 million per year of annualized revenues through acquisition or development.

It is our view that acquisition or development activity should be opportunistic, and we plan to strictly adhere to our disciplined capital return hurdles and rigorous review process. We are focused on acquiring well-run businesses in strategic markets across our footprint and in adjacent markets that will drive additional internalization to our facilities, operating synergies, and opportunities to grow profitably into new market areas. We are also focused on more effectively optimizing waste placement around the Northeast as the ever-tightening disposal market is creating additional opportunities to source new volumes at higher prices.

Strengthening Foundational Pillars

Execution against the 2024 Plan is supported by strengthening our foundational pillars: people, technology, sustainable growth, and facilities. We believe that it is important to continue to invest in and strengthen the foundational pillars to support growth and further differentiate our business strategy.

People. We continue to invest in our people through leadership development, career paths program, technical training for key roles such as drivers and mechanics, and incentive compensation structures that seek to align our employees’ incentives with our long-term goal to improve cash flows and returns on invested capital. We have grown our workforce to approximately 2,900 employees and we believe that continuing to invest in our team and culture and creating a safe, engaged, and ready workforce is key to our continued success.

Technology. In the fiscal year ended December 31, 2017, we launched a multi-year plan focused on driving operating and back-office cost efficiencies, customer value, and strategic growth. Through fiscal year 2021, we have successfully implemented: a new Customer Resource Management system to help manage and drive higher sales force effectiveness, a new Case Management system to ensure strong integration between our sales force, customer care group and operating teams, and a cloud-based Enterprise Resource Planning system as the financial backbone to our business. We have also improved our procurement process and spend category management with the implementation of a new procurement system.

The 2024 Plan provides for a continuation of a measured approach with capital investment in select technologies that have long-term strategic fit, including our service management initiative to improve customer facing technology, operational efficiencies, and various back-office functions. This initiative also includes the implementation of route optimization software and a new on-board computing platform to drive efficiencies, safety, and improve billings. We have also increased our access to actionable real-time data through continued improvements to our business intelligence software.

Sustainable Growth. Execution against the key strategies within the 2024 Plan will be supported by our sustainable growth initiatives. We are focused on driving further value through profitable new customer growth and the expansion of services with existing customers. We have integrated our sales, marketing, engagement, customer care, communications, and sustainability functions in an effort to improve customer profitability, key customer retention, and new market growth opportunities through a differentiated sustainable service platform.

We have increased our sales training, and we have developed centralized processes and consistent sales metrics that helped improve our accountability and alignment across our organization. Our sustainable growth initiatives shape how we interact with our customers and with the communities we serve.

Facilities. We believe prioritizing and allocating capital to meet our long-term facility needs will help to improve employee safety, operating efficiencies, acquisition integration, and employee engagement. Our multi-year facility strategy helps to guide decisions related to facility expansions, consolidations, and relocations as well as key property or facility acquisitions. We are also focused on developing facility standards that will create a more welcoming and accommodating experience for our employees, customers, vendors, and site visitors. These attributes coupled with improved functional design aim to increase the attraction and retention of key roles across our organization.

Human Capital

Our mission is to create value by renewing and sustaining our resources and environment. We believe that one of the most important factors in achieving our mission is to hire, develop, and retain employees who will be able to make good decisions for our business, customers and communities by adhering to our *core values* of service, trust, responsibility, integrity, continuous improvement and teamwork. Our team consists of drivers, vehicle technicians, equipment operators, recycling facility sorters, engineers, accountants, customer care specialists, and many other key roles.

As of January 31, 2022, we employed approximately 2,900 employees, including approximately 550 managerial, sales, clerical, information systems or other administrative employees and approximately 2,350 employees involved in collection, transfer, disposal, recycling, organics or other operations. Approximately 160 of our employees are covered by collective bargaining agreements.

Health, Safety and Wellness

A top priority across all of our operations is to protect the health and safety of our team and the communities that we serve. At the heart of our safety program are our safety and operations teams, who are dedicated to ensuring that every employee has a safe operating environment and the necessary training and personal protective equipment (“PPE”) to safely conduct their role. The success of our safety programs and the performance of our health and safety and operations teams is measured by our total recordable incident rate, a measure of accidents and injuries compared to hours worked. Our extensive focus on new hire and ongoing training programs also helps us to manage and reduce operational risks for our front-line employees.

To achieve our goal of keeping our employees safe during the COVID-19 pandemic, we have maintained careful adherence to Center for Disease Control and Prevention and state level guidance, including appropriate social distancing, increased cleaning of facilities, and updated PPE and safe practices. We provided hourly employees with four hours of pay for each vaccine received by the employee, including booster shots. We have created an internal website with COVID-19 resources for our managers, and a series of podcasts for our employees to listen to concerning the pandemic.

We are also focused on facility upgrades, enhancements, and standards that result in safety and operational improvements, while furthering employee engagement. We understand the importance of providing a safe and attractive environment for our employees to work.

Compensation and Benefit Programs

We strive to provide the necessary resources to support the physical and mental health of our employees and the overall well-being of their families and the communities that we serve. We achieve this through our benefit programs, caring attitude towards our employees, deep engagement in our communities, and adherence to our core values. We are committed to offering high quality benefits at affordable rates, competitive compensation based on role, experience and performance, and a career paths program to encourage our people to advance throughout their employment with us. We conduct market-based surveys to ensure that our employees continue to be paid competitively, and we perform annual reviews to provide feedback and support the growth and development of our team.

We offer our employees access to enhanced benefits such as a concierge surgery service, telemedicine options, access to a certified clinical pharmacist to support employees in managing their medications and healthcare budget, and online psychology appointments. We understand the importance of work-life balance for our team and offer eight weeks maternity leave as well as maintain a robust employee assistance program designed to provide support and guidance related to personal life challenges and events. Further, our Employee Life Navigator program is focused on employee retention, career development, and financial stability for at risk employees. Through comprehensive compensation and benefits, ongoing employee development, tuition reimbursement and a focus on health, safety and employee well-being, we wish to help our employees in all aspects of their lives so they can realize their value and do their best work.

Diversity, Equity and Inclusion

Our commitment to workplace diversity and equity and to fostering a culture of inclusion is rooted in our *core values* of service, trust, responsibility, integrity, continuous improvement and teamwork. Our vision is to draw on our *core values* to achieve diversity throughout our workforce, including our leadership, through the following initiatives:

- directing recruiting efforts to new talent pools, promoting diversity in our training and development programs, and encouraging diversity within our process for advancing our next cohort of leaders;
- launching a cultural awareness and competency training program for managers that emphasizes diversity, equity, and inclusion;
- incorporating diversity, equity, and inclusion practices as part of our ongoing efforts to upgrade our procurement system and practices; and
- establishing an internal diversity, equity, and inclusion team that will include broad representation from our workforce and will be led by a member of our executive management team.

Employee Engagement, Training and Development

We are committed to building people and cultivating engagement by investing in our career path program in order to provide a clear and measurable development pathway for career growth.

- *Apprenticeships:* We have developed an apprenticeship program for drivers and technicians, where we recruit new employees from diverse backgrounds and help them build the skills they need to thrive in our organization.
- *CDL Training:* We have developed a commercial driver's license ("CDL") training school and have partnered with several additional training schools across our operating footprint to help develop skilled drivers for our team. In fiscal year 2021, we supported 51 drivers in securing their CDL, which unlocked new opportunities for them within our company.
- *Operations Trainee Program:* Our operations trainee program develops individuals into frontline management roles. Through on-the-job training, participants learn the technical and leadership skills required to lead our operations. This program has become a strong pipeline for our operating managers across our company. We continue to expand our management development programs across the organization.
- *Diesel Mechanic Training:* Our continued collaboration with technical schools has produced several diesel technicians throughout our organization. We continue to enhance our training infrastructure and resources to attract, develop, and retain skilled diesel mechanics.

We have also increased our focus on core values training given the level of growth we have experienced through acquisitions. This training highlights our commitment to integrating new employees and ensuring that there is continuity in our message about culture within our organization.

Operational Overview

We manage our solid waste operations, which are vertically integrated and 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. Within each geographic region, we organize our solid waste services around smaller areas that we refer to as “wastesheds.” A wasteshed is an area that comprises the complete cycle of activities in the solid waste services process, from collection to transfer operations and recycling to disposal in landfills, some of which may be owned and/or operated by third parties. We typically operate several divisions within each wasteshed, each of which provides a particular service, such as collection, recycling, disposal or transfer. Each division operates interdependently with the other divisions within the wasteshed. Each wasteshed generally operates autonomously from adjoining wastesheds.

Our Eastern region consists of wastesheds located in Maine, northern, central and southeastern New Hampshire, central and eastern Massachusetts, and northeastern Connecticut. We began entering into these wastesheds beginning in 1996 and have expanded primarily through acquisitions and organic growth since. Our Western region includes wastesheds located in Vermont, southwestern New Hampshire, eastern, western and upstate New York, northwestern Massachusetts, and in Pennsylvania around our Subtitle D landfill located in Mount Jewett, Pennsylvania (“McKean Landfill”). We began entering into these wastesheds in 1997 and have expanded primarily through tuck-in acquisitions and organic growth. Our Western region collection operations include leadership or near leadership positions in Rochester, New York and Burlington, Vermont and nearly every secondary market outside of the larger metropolitan markets. We remain focused on increasing our vertical integration in our Western region through extension of our reach into new markets and managing new materials.

Effective January 1, 2021, we realigned the Resource Solutions operating segment, which includes our larger-scale recycling and commodity brokerage operations along with our organics services and large scale commercial and industrial services, from our historical lines-of-service of recycling, organics and customer solutions into two lines-of-service: processing and non-processing. We realigned the Resource Solutions operating segment to leverage our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver a comprehensive solution for our larger commercial, municipal, institutional, and industrial customers that have more diverse waste and recycling needs.

The following table provides information about each reportable segment (as of January 31, 2022 except revenue information, which is for fiscal year 2021):

	Eastern Region	Western Region	Resource Solutions
Revenues (in millions)	\$264.6	\$389.5	\$235.1
Number of Properties:			
Solid waste collection facilities	20	30	—
Transfer stations	29	36	—
Recycling and processing facilities	3	6	14
Subtitle D landfills	2	6	—
Construction and demolition (“C&D”) landfills	—	1	—

For financial information concerning our reportable segments, refer to “Item 7. *Management’s Discussion and Analysis of Results of Operations and Financial Condition*” and “Item 8. *Financial Statements and Supplementary Data*” of this Annual Report on Form 10-K.

Solid Waste Operations

Solid waste operations within our Eastern and Western regions comprise a full range of non-hazardous solid waste services, including collections, transfer stations, and disposal facilities. 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, renewable energy credits, and energy capacity payments at certain of our landfill facilities.

Collections. A majority of our commercial and industrial collection services are performed under one-to-five year service agreements, with prices and fees determined by such factors as: collection frequency; type of equipment and containers furnished; type, volume and weight of solid waste collected; distance to the disposal or processing facility; and cost of disposal or processing. Our residential collection and disposal services are performed either on a subscription basis (with no underlying contract) with individuals, or through contracts with municipalities, homeowner associations, apartment building owners or mobile home park operators.

Transfer Stations. Our transfer stations receive, compact and transfer solid waste, collected primarily by our various residential and commercial collection operations, for transport to disposal facilities by larger vehicles. We believe that transfer stations benefit us by: (1) increasing the size of the wastesheds which have access to our landfills; (2) reducing costs by improving utilization of collection personnel and equipment; and (3) helping us build relationships with municipalities and other customers by providing a local physical presence and enhanced local service capabilities.

Landfills. We operate eight solid waste Subtitle D landfills and one landfill permitted to accept C&D materials. Revenues are received from municipalities and other customers in the form of tipping fees. The estimated capacity at our landfills is subject to change based on engineering factors, requirements of regulatory authorities, our ability to continue to operate our landfills in compliance with applicable regulations and our ability to successfully renew operating permits and obtain expansion permits at our sites.

The following table (in thousands) reflects the aggregate landfill capacity and airspace changes, in tons, for landfills we operated during fiscal years 2021, 2020 and 2019:

	Fiscal Year 2021			Fiscal Year 2020			Fiscal Year 2019		
	Estimated Remaining Permitted Capacity (1)	Estimated Additional Permittable Capacity (1)(2)	Estimated Total Capacity	Estimated Remaining Permitted Capacity (1)	Estimated Additional Permittable Capacity (1)(2)	Estimated Total Capacity	Estimated Remaining Permitted Capacity (1)	Estimated Additional Permittable Capacity (1)(2)	Estimated Total Capacity
Balance, beginning of year	42,681	31,239	73,920	44,434	34,139	78,573	35,810	47,053	82,863
New expansions pursued (3)	19,607	16,200	35,807	—	—	—	—	648	648
Permits granted (4)	—	—	—	993	(993)	—	12,675	(12,675)	—
Airspace consumed	(3,675)	—	(3,675)	(3,594)	—	(3,594)	(4,048)	—	(4,048)
Changes in engineering estimates (5)	92	(188)	(96)	848	(1,907)	(1,059)	(3)	(887)	(890)
Balance, end of year	58,705	47,251	105,956	42,681	31,239	73,920	44,434	34,139	78,573

- (1) We convert estimated remaining permitted capacity and estimated additional permittable capacity from cubic yards to tons generally by assuming a compaction factor derived from historical average compaction factors, with modification for future anticipated changes. In addition to a total capacity limit, certain permits place a daily and/or annual limit on capacity.
- (2) Represents capacity which we have determined to be “permissible” in accordance with the following criteria: (i) we control the land on which the expansion is sought; (ii) all technical siting criteria have been met or a variance has been obtained or is reasonably expected to be obtained; (iii) we have not identified any legal or political impediments which we believe will not be resolved in our favor; (iv) we are actively working on obtaining any necessary permits and we expect that all required permits will be received; and (v) senior management has approved the project based on a review of the engineering design and determination that the financial return profile meets our investment criteria.
- (3) The increase in capacity associated with new expansions pursued in fiscal year 2021 relates to the determination of additional permitted airspace at the McKean Landfill and the determination of additional permittable airspace at the Hyland Landfill, both in our Western region, and, in fiscal year 2019, relates to the determination of additional permittable airspace at the NCES Landfill in our Eastern region.
- (4) The increase in remaining permitted airspace capacity in fiscal year 2020 was the result of a permit received at the NCES Landfill in our Eastern region and, in fiscal year 2019, was the result of permits received at the Waste USA Landfill and at the Hakes Landfill in our Western region.
- (5) The variation in changes in airspace capacity associated with engineering estimates are primarily the result of changes in compaction at our landfills and estimated airspace changes associated with design changes at certain of our landfills.

Our Eastern region consists of the following landfills:

NCES Landfill. NCES Landfill is a Subtitle D landfill located in Bethlehem, New Hampshire that we purchased in 1994. NCES Landfill currently consists of approximately 52 acres of permitted or permittable landfill area, and is permitted to accept municipal solid waste, C&D material and certain pre-approved special wastes. In October 2020, we received approval for a permit modification for an additional 1.24 million cubic yards of capacity at the NCES Landfill. The permit modification included an annual permit limit of 0.23 million cubic yards per year. We are party to an agreement for the construction of a landfill renewable natural gas ("RNG") facility, which will be constructed, owned and operated by a third-party.

Juniper Ridge Landfill. Juniper Ridge Landfill is a Subtitle D landfill located in West Old Town, Maine. In 2004, we completed transactions with the State of Maine and Georgia-Pacific Corporation ("Georgia Pacific"), pursuant to which the State of Maine took ownership of Juniper Ridge Landfill, formerly owned by Georgia Pacific, and we became the operator under a 30-year operating and services agreement between us and the State of Maine. Juniper Ridge Landfill currently consists of approximately 179 acres of permitted or permittable landfill area, which is sufficient to permit the additional airspace required for the term of the 30-year operating and services agreement, and is permitted to accept the following waste originating from the State of Maine: C&D material, ash from municipal solid waste incinerators and fossil fuel boilers, front end processed residuals and bypass municipal solid waste from waste-to-energy facilities and certain pre-approved special waste. Outside of the limitations on municipal solid waste, there are no annual tonnage limitations at Juniper Ridge Landfill. We are party to an agreement for the construction of a landfill RNG facility plant at the Juniper Ridge Landfill, which will be constructed, owned and operated by a third-party.

Our Western region consists of the following landfills:

Waste USA Landfill. Waste USA Landfill is a Subtitle D landfill located in Coventry, Vermont that we purchased in 1995, and is the only operating permitted Subtitle D landfill in the State of Vermont. Waste USA Landfill consists of approximately 144 acres of permitted or permittable landfill area and is permitted to accept up to 0.6 million tons of municipal solid waste, C&D material and certain pre-approved special waste annually. The Waste USA Landfill site houses a landfill gas-to-energy plant, which is owned and operated by a third-party, that has the capacity to generate 8.0 MW of energy.

Clinton County Landfill. Clinton County Landfill, which currently consists of approximately 197 acres of permitted or permittable landfill area, portions of which are leased from Clinton County, and other portions owned by us, is permitted to accept up to approximately 0.25 million tons of municipal solid waste, C&D material and certain pre-approved special waste annually. The Clinton County Landfill site houses a landfill gas-to-energy facility, which is owned by us and operated by a third party, that has the capacity to generate 6.4 MW of energy.

Hyland Landfill. Hyland Landfill is a Subtitle D landfill located in Angelica, New York that we own, and that began accepting waste in 1998. Hyland Landfill currently consists of approximately 180 acres of permitted or permittable landfill area and is permitted to accept up to 0.5 million tons of municipal solid waste, C&D material and certain pre-approved special waste annually. The Hyland Landfill site houses a landfill gas-to-energy facility, which is owned by us and operated by a third-party, that has the capacity to generate 4.8 MW of energy.

Ontario County Landfill. Ontario County Landfill is a Subtitle D landfill located in Seneca, New York. In 2003, we entered into a 25-year operation, management and lease agreement for the Ontario County Landfill with the Ontario County Board of Supervisors. Ontario County Landfill currently consists of approximately 171 acres of permitted or permittable landfill area and is permitted to accept up to 0.9 million tons of municipal solid waste, C&D material and certain pre-approved special waste annually and is strategically situated to accept long haul volume from both the eastern and downstate New York markets. In January 2016, we received an expansion permit at the Ontario County Landfill, which is sufficient to permit the additional airspace required for the remaining term of the 25-year operation, management and lease agreement. The Ontario County Landfill site houses a Zero-Sort material recovery facility ("MRF"), which is operated by us, and a landfill gas-to-energy facility, which is owned and operated by a third-party, that has the capacity to generate 11.2 MW of energy.

Hakes Landfill. Hakes Landfill is a C&D landfill located in Campbell, New York that we purchased in 1998. Hakes Landfill currently consists of approximately 78 acres of permitted landfill area and is permitted to accept up to 0.5 million tons of C&D material annually.

Chemung County Landfill. Chemung County Landfill is a Subtitle D landfill located in Chemung, New York. In 2005, we entered into a 25-year operation, management and lease agreement for Chemung County Landfill and certain other facilities with Chemung County. Chemung County Landfill currently consists of approximately 113 acres of permitted or permittable landfill area strategically situated to accept long haul volume from both eastern and downstate New York markets and is permitted to accept up to 0.4 million tons of municipal solid waste and certain pre-approved special waste annually and 20.5 thousand tons of C&D material annually. In the fiscal year ended December 31, 2016, we received an expansion permit at Chemung County Landfill, which is sufficient to permit the additional airspace required for the remaining term of the 25-year operation, management and lease agreement. In fiscal year 2019, we exercised an option to extend the remaining term of the operation, management and lease agreement for up to five years through 2035.

McKean Landfill. McKean Landfill is a Subtitle D landfill located in Mount Jewett, Pennsylvania that we purchased in 2011. McKean Landfill currently consists of approximately 256 acres of permitted or permittable landfill area and is permitted to accept up to approximately 1.5 million tons of municipal solid waste, C&D material and certain pre-approved special waste annually. We are in the process of pursuing the development of rail infrastructure to expand the market reach for the landfill to rail capable transfer facilities.

Our closed landfills consist of the following landfills:

In fiscal year 2017, we initiated a plan to cease operations of the Town of Southbridge, Massachusetts landfill (“Southbridge Landfill”) and decided to not proceed with expansion efforts and to close Southbridge Landfill once the remaining capacity had been exhausted, which occurred in fiscal year 2018. Closure operations, which began in November 2018 when Southbridge Landfill reached its final capacity, are ongoing.

In addition to Southbridge Landfill, we own and/or manage five unlined landfills and three lined landfills that are not currently in operation. We are closing, in the case of Southbridge Landfill, or have closed and capped all of these landfills according to applicable environmental regulatory standards.

Resource Solutions

Our Resource Solutions operating segment was formed to leverage our core competencies in materials processing, industrial recycling, organics and resource management service offerings in order to generate additional value from the waste stream for larger commercial, municipal, institutional and industrial customers with more diverse needs. Resource solutions services are comprised of processing and non-processing services. We also work to develop and/or partner with firms that have developed innovative approaches to deriving incremental value from the organic portion of the waste stream.

Processing. Processing services consist of the receipt of recycled, sludge or other organic materials at one of our materials recovery, processing or disposal facilities, where it is then sorted, mixed and/or processed, and then disposed of or sold. Revenues from processing services are derived from municipalities and customers in the form of processing fees, tipping fees, and commodity sales, primarily comprised of newspaper, corrugated containers, plastics, ferrous and aluminum, and organic materials such as our earthlife® soils products including fertilizers, composts and mulches.

We are one of the largest processors and marketers of recycled materials in the northeastern United States with facilities located in Vermont, New York, Maine, Connecticut, and Massachusetts, including our seven large-scale, high volume MRFs, one of which is located in New York, two of which are located in Vermont, two of which are located in Massachusetts, one of which is located in Connecticut, and one of which is located in Maine. Three of the seven MRFs are leased, three are owned, and one is operated by us under a contract with a municipal third-party. Our MRFs receive, sort, bale and sell recyclable materials originating from the municipal solid waste stream, including newsprint, cardboard, office paper, glass, plastic, steel or aluminum containers and bottles. We also operate smaller MRFs, which generally process recyclables collected from our various residential and commercial collection operations.

A substantial portion of the recyclable materials provided is delivered pursuant to multiple significant long-term anchor contracts. The terms of the recycling contracts vary, but all of the contracts provide that the municipality or a third-party delivers the recycled materials to our facility. These contracts may include a minimum volume guarantee by the municipality. We also have service agreements with individual towns and cities and commercial customers, including small solid waste companies and major competitors, which do not have processing capacity within a specific geographic region. Under the recycling contracts, we charge the municipality a fee for each ton of material delivered to us. Some contracts contain revenue sharing arrangements under which the municipality receives a specified percentage of our revenues from the sale of the recovered materials if certain economic thresholds are met. In fiscal year 2021, we processed and/or marketed over 0.6 million tons of recyclable materials, including tons marketed through our non-processing commodity brokerage division and our baling facilities located throughout our footprint, including just under 0.5 million tons per year of recycled materials delivered by municipalities and commercial customers under long-term anchor contracts.

The pricing for recyclable materials can fluctuate based upon market conditions. We have actively worked to reduce our risk exposure to commodity pricing volatility over the last five years through our efforts to shift customers to a processing fee model and other risk management programs. We effectively manage commodity pricing volatility through our long-term revenue sharing (or processing fee) contracts with customers. Under such contracts, we obtain a guaranteed minimum price for recyclable materials through the receipt of a tipping or processing fee when commodity prices fall below agreed upon thresholds. Conversely, when prices for recyclable materials rise above agreed upon thresholds, we provide the counterparty with a portion of the related revenues above such threshold. Also, we mitigate the impact from commodity price fluctuations through the use of a floating SRA Fee charged to collection customers to reduce recycling commodity risk. Further, we work to manage commodity pricing risk through commodity sales contracts with large domestic companies that use the recyclable materials in their manufacturing process, such as paper, packaging and consumer goods companies.

At times, we also hedge against fluctuations in the commodity prices of recycled paper and corrugated containers in order to mitigate the variability in cash flows and earnings generated from the sales of recycled materials at floating prices. As of December 31, 2021, no such commodity hedges were in place. The global recycling market has experienced negative commodity pricing pressure resulting from China's National Sword program in fiscal year 2017. Markets continued to decline through fiscal year 2019 and early fiscal year 2020, leveling off at historical lows compared to prior years. Throughout the remainder of fiscal year 2020 markets moderately rebounded and in fiscal year 2021 commodity markets continued to increase through September 2021 until commodity markets began to level off and slightly decline in the quarter ended December 31, 2021.

See also Part II, Item 7A, "Quantitative and Qualitative Disclosure About Market Risk" of this Annual Report on Form 10-K for further discussion over commodity price volatility.

Non-processing. Non-processing services consist of brokerage services and overall resource management services, which provide a wide range of environmental services and zero waste solutions to large and complex organizations, as well as traditional collection, disposal and recycling services provided to large account multi-site customers. In brokerage arrangements, we act as an agent that facilitates the sale of recyclable and organic materials between an inbound customer and an outbound customer. Revenues from the brokerage of recycled materials are recognized on a net basis at the time of shipment. In general, these fees are variable in nature. In overall resource management services, we work with larger scale commercial or industrial organizations (including multi-location customers, colleges and universities, municipalities, and industrial customers) to develop customized solid waste and recycling solutions. The focus of this business is to help these large-scale organizations achieve their economic and environmental objectives related to waste and residual management. We strive to differentiate our services from our competitors by providing customized and comprehensive resource solutions, which enables us to win new business, including traditional solid waste collection and disposal customers.

Competition

The solid waste services industry is highly competitive and requires substantial labor and capital resources. Our business strategy generally focuses on operating in secondary or tertiary markets where we have a leading market share. However, in the larger urban markets where we operate, we typically compete against one or more of the large national solid waste companies, including Waste Management, Inc., Republic Services, Inc. and Waste Connections, Inc., any of which may be able to achieve greater economies of scale than we can. We also compete with a number of regional and local companies that offer competitive prices and quality service. We compete primarily on the basis of the quality, breadth and price of our services. This includes the realignment of our Resource Solutions operating segment to leverage our core competencies in materials processing, industrial recycling, organics, and resource management service offerings to deliver a comprehensive solution for our larger commercial, institutional and industrial customers that have more diverse waste and recycling needs. In addition, we compete with operators of alternative disposal facilities, including incinerators; with certain municipalities, counties and districts that operate their own solid waste collection and disposal facilities; and with rail-serviced transfer stations that use rail transport to move waste to disposal sites outside of northeastern markets. Public sector facilities may have certain advantages over us due to the availability of user fees, charges or tax revenues.

From time to time, competitors may reduce the price of their services in an effort to expand market share or to win a competitively bid municipal contract. These practices may also lead to reduced pricing for our services or the loss of business. In addition, competition exists within the industry for potential acquisition candidates.

Marketing and Sales

We have aligned our marketing and sales strategies with other customer-facing teams—Customer Care, Business Development, Sales Operations, Marketing, Community Engagement, and Sustainability—in an effort to better serve our customers while delivering on several key strategic initiatives for sustainable growth. Through this focus, we are discovering new opportunities to serve customers, grow community trust, ignite passion in our people, build shareholder support, and improve our impact on society.

Our focus remains providing significant value “beyond the curb” to our customers and communities that we serve. As a part of our resource management services, we serve customers with multiple locations and are focused on growing our share of business with municipal, institutional, commercial and industrial customers. We leverage broader service offerings of the Resource Solutions operating segment to provide customers with a full set of solutions to augment our regional and divisional service capabilities.

While we continue to provide traditional waste and recycling services managed locally, our differentiated sustainable resource management allows us to meet our customers’ unique needs and delivers value beyond smaller competitors in local markets. We value and embrace the uniqueness of our local communities above the homogeneity of corporate process, while encouraging and supporting our local managers to engage with local government, non-profits, and business organizations.

Deep community engagement, supported by modern corporate brand governance and strategy gives us the flexibility needed to serve today’s customers and support thriving communities. A combination of corporate social responsibility efforts, strong brand placements, and marketing tactics are designed to unify and humanize our company while retaining existing customers and attracting new ones.

Risk Management, Insurance and Performance or Surety Bonds

We actively maintain environmental and other risk management programs that we believe are appropriate for our business. Our environmental risk management program includes evaluating existing facilities, as well as potential acquisitions, for compliance with environmental law requirements. Operating practices at all of our operations are intended to reduce the possibility of environmental contamination, enforcement actions and litigation. We also maintain a worker safety program, which focuses on safe practices in the workplace.

We carry a range of insurance intended to protect our assets and operations, including a commercial general liability policy and a property damage policy. A partially or completely uninsured claim against us (including liabilities associated with cleanup or remediation at our facilities), if successful and of sufficient magnitude, could have a material adverse effect on our business, financial condition and results of operations. Due primarily to market factors beyond our control, the insurance market is increasingly restrictive, potentially limiting our ability to obtain adequate coverage at reasonable prices, if at all. Any future difficulty in obtaining insurance could also impair our ability to secure future contracts, which may be conditioned upon the availability of adequate insurance coverage. See Item 1A, “*Risk Factors*” of this Annual Report on Form 10-K for further disclosure.

We self-insure for automobile and workers’ compensation coverage with reinsurance coverage limiting our maximum exposure. Our maximum exposure in fiscal year 2021 under the workers’ compensation plan was \$1.25 million per individual event. Our maximum exposure in fiscal year 2021 under the automobile plan was \$3.65 million per individual event.

Municipal solid waste collection contracts and landfill closure and post-closure obligations may require performance or surety bonds, letters of credit or other means of financial assurance to secure contractual performance. While we have not experienced difficulty in obtaining these financial instruments, if we are unable to obtain these financial instruments in sufficient amounts or at acceptable rates, we could be precluded from entering into additional municipal contracts or obtaining or retaining landfill operating permits.

We hold a 19.9% ownership interest in Evergreen National Indemnity Company (“Evergreen”), a surety company which provides surety bonds to secure our contractual obligations for certain municipal solid waste collection contracts and landfill closure and post-closure obligations. Our ownership interest in Evergreen is pledged to Evergreen as security for our obligations under the bonds they provide on our behalf.

Customers

We provide our collection services to commercial, institutional, industrial and residential customers. A majority of our commercial and industrial collection services are performed under one-to-five year service agreements, and fees are determined by such factors as: professional or management services required; collection frequency; type of equipment and containers furnished; the type, volume and weight of the solid waste, recyclables or organics collected; the distance to the disposal or processing facility; and the cost of disposal or processing. Our residential collection and disposal services are performed either on a subscription basis (with no underlying contract) with individuals, or through contracts with municipalities, homeowners' associations, apartment owners or mobile home park operators. We provide recycling services to municipalities, commercial haulers and commercial waste generators within the geographic proximity of the processing facilities.

We also provide brokerage services and overall resource management services providing a wide range of environmental services and zero waste solutions to large and complex organizations, as well as traditional collection, disposal and recycling services provided to large account multi-site customers.

Seasonality and Severe Weather

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

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

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

Regulation

Introduction

We are subject to extensive federal, state and local laws and regulations. The laws and regulations affecting us are administered by the United States Environmental Protection Agency (“EPA”) and other federal, state and local environmental, zoning, financial, health and safety agencies. Failure to comply with such requirements could result in substantial costs, including civil and criminal fines and penalties. Except as described in this Annual Report on Form 10-K, we believe that we are currently in substantial compliance with applicable federal, state and local environmental laws, permits, orders and regulations. Other than as disclosed herein, we do not currently anticipate any material costs to bring our existing operations into environmental compliance, although there can be no assurance in this regard for the future. We expect that our operations in the solid waste services industry will be subject to continued and increased regulation, legislation and enforcement oversight. We attempt to anticipate future legal and regulatory requirements and to keep our operations in compliance with those requirements.

In order to transport, process, or dispose of solid waste, it is necessary for us to possess and comply with one or more permits from federal, state and/or local agencies. We must renew these permits periodically, and the permits may be modified or revoked by the issuing agency under certain circumstances.

The principal federal statutes and regulations applicable to our operations are as follows:

The Resource Conservation and Recovery Act of 1976, as amended (“RCRA”)

The RCRA regulates the generation, treatment, storage, handling, transportation and disposal of solid waste and requires states to develop programs to ensure the safe disposal of solid waste. The RCRA divides waste into two categories, hazardous and non-hazardous. Wastes are generally classified as hazardous if they either (a) are specifically included on a list of hazardous wastes, or (b) exhibit certain characteristics defined as hazardous and are not specifically designated as non-hazardous. Wastes classified as hazardous waste are subject to more extensive regulation than wastes classified as non-hazardous, and businesses that deal with hazardous waste are subject to regulatory obligations in addition to those imposed on businesses that deal with non-hazardous waste.

Among the wastes that are specifically designated as non-hazardous are household waste and “special” waste, including items such as petroleum contaminated soils, asbestos, foundry sand, shredder fluff and most non-hazardous industrial waste products.

The EPA regulations issued under Subtitle C of the RCRA impose a comprehensive “cradle to grave” system for tracking the generation, transportation, treatment, storage and disposal of hazardous wastes. Subtitle C regulations impose obligations on generators, transporters and disposers of hazardous wastes, and require permits that are costly to obtain and maintain for sites where those businesses treat, store or dispose of such material. Subtitle C requirements include detailed operating, inspection, training and emergency preparedness and response standards, as well as requirements for manifesting, record keeping and reporting, corrective action, facility closure, post-closure and financial responsibility. Most states have promulgated regulations modeled on some or all of the Subtitle C provisions issued by the EPA, and in many instances the EPA has delegated to those states the principal role in regulating businesses which are subject to those requirements. Some state regulations impose obligations different from and in addition to those the EPA imposes under Subtitle C.

Leachate generated at our landfills and transfer stations is tested on a regular basis, and generally is not regulated as a hazardous waste under federal law. However, there is no guarantee that leachate generated from our facilities in the future will not be classified as hazardous waste.

In October 1991, the EPA adopted the Subtitle D regulations under RCRA governing solid waste landfills. The Subtitle D regulations, which generally became effective in October 1993, include siting restrictions, facility design standards, operating criteria, closure and post-closure requirements, financial assurance requirements, groundwater monitoring requirements, groundwater remediation standards and corrective action requirements. In addition, the Subtitle D regulations require that new landfill sites meet more stringent liner design criteria (typically, composite soil and synthetic liners or two or more synthetic liners) intended to keep leachate out of groundwater and have extensive collection systems to carry away leachate for treatment prior to disposal. Regulations generally require us to install groundwater monitoring wells at virtually all landfills we operate, to monitor groundwater quality and, indirectly, the effectiveness of the leachate collection systems. The Subtitle D regulations also require facility owners or operators to control emissions of landfill gas (including methane) generated at landfills exceeding certain regulatory thresholds. State landfill regulations must meet those requirements or the EPA will impose such requirements upon landfill owners and operators in that state.

The Federal Water Pollution Control Act of 1972, as amended (“Clean Water Act”)

The Clean Water Act regulates the discharge of pollutants into “navigable waters” or “waters of the United States” from a variety of sources, including solid waste disposal sites and transfer stations, processing facilities and waste-to-energy facilities (collectively, “solid waste management facilities”). If pollutants from our solid waste management facilities are discharged into streams, rivers or other surface waters, or if there is a functional equivalent of a direct discharge into navigable waters, the Clean Water Act would require us to apply for and obtain a discharge permit, conduct sampling and monitoring and, under certain circumstances, reduce the quantity of pollutants in such discharge. A permit also may be required if run-off or leachate from our solid waste management facilities is discharged to an offsite treatment facility. Almost all solid waste management facilities must comply with the EPA’s storm water regulations, which govern the discharge of regulated storm water to surface waters.

Under federal regulation, facilities that have above ground and/or below ground petroleum storage capacities over certain thresholds may be subject to regulations and/or permitting under the Clean Water Act. Many of our facilities have petroleum storage and are required to have a spill, prevention, control and countermeasures plan to prevent petroleum release to waters of the United States due to a spill, rupture or leak.

Several states in which we operate have been delegated the authority to implement the Clean Water Act requirements and in some cases the regulations are more stringent than the federal regulations. We believe we are in compliance with the Clean Water Act regulations; however future changes to the law or regulations could have a material impact on our business.

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (“CERCLA”)

CERCLA established a regulatory and remedial program intended to provide for the investigation and remediation of facilities where, or from which, a release of any hazardous substance into the environment has occurred or is threatened. CERCLA has been interpreted to impose retroactive, strict, and under certain circumstances, joint and severable, liability for the costs to investigate and clean up facilities on current owners and operators of the site, former owners and operators of the site at the time of the disposal of the hazardous substances, as well as the generators and certain transporters of the hazardous substances. CERCLA imposes liability for the costs of evaluating and addressing damage to natural resources. The costs of CERCLA investigation and cleanup can be substantial. Liability under CERCLA does not depend upon the existence or disposal of “hazardous waste” as defined by RCRA, but can be based on the presence of any of approximately 800 “hazardous substances” listed by the EPA, many of which can be found in household waste. The definition of “hazardous substances” in CERCLA incorporates substances designated as hazardous or toxic under the Federal Clean Water Act, Clean Air Act and Toxic Substances Control Act (“TSCA”). If we were found to be a responsible party for a CERCLA cleanup, under certain circumstances, the enforcing agency could pursue us or any other responsible party, for all investigative and remedial costs, even if others also were liable. CERCLA also authorizes the EPA to impose a lien in favor of the United States upon all real property subject to, or affected by, a remedial action for all costs for which the property owner is liable. CERCLA provides a responsible party with the right to bring a contribution action against other responsible parties for their allocable share of investigative and remedial costs. Our ability to obtain reimbursement for amounts we pay in excess of our allocable share of such costs would be limited by our ability to identify and locate other responsible parties and to prove the extent of their responsibility and by the financial resources of such other parties.

The Clean Air Act of 1970, as amended (“Clean Air Act”)

The Clean Air Act, generally through state implementation of federal requirements, regulates emissions of air pollutants from certain landfills based upon the date the landfill was constructed, the total capacity of the landfill and the annual volume of emissions. The EPA has promulgated new source performance standards regulating air emissions of certain regulated pollutants (non-methane organic compounds) from municipal solid waste landfills. Landfills located in areas where ambient levels of regulated pollutants exceed certain thresholds may be subject to more extensive air pollution controls and emission limitations. In addition, the EPA has issued standards regulating the disposal of asbestos-containing materials under the Clean Air Act.

The EPA is also focusing on the emissions of greenhouse gases (“GHG”), including carbon dioxide and methane. In December 2009, the EPA issued its “endangerment finding” that carbon dioxide poses a threat to human health and welfare, providing the basis for the EPA to regulate GHG emissions. In December 2009 the EPA’s “Mandatory Reporting of Greenhouse Gases” rule went into effect, requiring facilities that emit twenty-five thousand metric tons or more per year of GHG emissions to submit annual reports to the EPA.

In May 2010, the EPA issued the so-called “GHG Tailoring Rule”, which described how certain sources that emit GHG would be subject to heightened Clean Air Act Prevention of Significant Deterioration (“PSD”) / Title V regulation. In June 2014, the U.S. Supreme Court issued a decision partially invalidating the GHG Tailoring Rule and in 2015, the D.C. Circuit directed the EPA to consider further revisions to its regulations. In August 2016, the EPA proposed revisions to PSD and Title V regulations to clarify when sources would require permits based on GHG thresholds. We do not know whether or when the EPA will finalize regulations, or what obligations such regulations will impose on our operations.

The adoption of other laws and regulations, which may include the imposition of fees or taxes, could adversely affect our collection and disposal operations. Additionally, certain of the states in which we operate are implementing air pollution control regulations, including regional cap and trade systems, relating to GHG that may be more stringent than regulations the EPA may promulgate. Several states have passed Climate Protection or Global Warming Acts intended to achieve statewide goals in reduction of GHG emissions. Changing environmental regulations could require us to take any number of actions, including purchasing emission allowances, developing mitigation strategies, or installing additional pollution control technology, and could make some operations less profitable, which could adversely affect our results of operations.

Congress has considered various options, including a cap and trade system, which could impose a limit on and establish a pricing mechanism for GHG emissions and emission allowances. There also is pressure for the United States to join international efforts to control GHG emissions.

The Clean Air Act regulates emissions of air pollutants from our processing facilities. The EPA has enacted standards that apply to those emissions. It is possible that the EPA, or a state where we operate, will enact additional or different emission standards in the future.

All of the federal statutes described above authorize lawsuits by private citizens to enforce certain provisions of the statutes. In addition to a penalty award to the United States, some of those statutes authorize an award of attorney's fees to private parties successfully advancing such an action.

The Occupational Safety and Health Act of 1970, as amended ("OSHA")

OSHA establishes employer responsibilities and authorizes the Occupational Safety and Health Administration to promulgate and enforce occupational health and safety standards, including the obligation to maintain a workplace free of recognized hazards likely to cause death or serious injury, to comply with adopted worker protection standards, to maintain certain records, to provide workers with required disclosures and to implement certain health and safety training programs. A variety of those promulgated standards may apply to our operations, including those standards concerning notices of hazards, safety in excavation and demolition work, the handling of asbestos and asbestos-containing materials, and worker training and emergency response programs.

The Public Utility Regulatory Policies Act of 1978, As Amended ("PURPA")

PURPA exempts qualifying facilities from most federal and state laws governing the financial organization and rate regulation of electric utilities, and generally requires electric utilities to purchase electricity generated by qualifying facilities at a price equal to the utility's full "avoided cost". Our landfill gas-to-energy facilities are self-certified as "qualifying facilities".

State and Local Regulations

Each state in which we now operate or may operate in the future has laws and regulations governing (1) water and air pollution, and the generation, storage, treatment, handling, processing, transportation, incineration and disposal of solid waste and hazardous waste; (2) in most cases, the siting, design, operation, maintenance, closure and post-closure maintenance of solid waste management facilities; and (3) in some cases, vehicle emissions limits or fuel types, which impact our collection operations. Such standards typically are as stringent as, and may be more stringent and broader in scope than, federal regulations. Most of the federal statutes noted above authorize states to enact and enforce laws with standards that are more protective of the environment than the federal analog. In addition, many states have adopted statutes comparable to, and in some cases more stringent than, CERCLA. Those statutes impose requirements for investigation and remediation of contaminated sites and liability for costs and damages associated with such sites, and some authorize the state to impose liens to secure costs expended addressing contamination on property owned by responsible parties. Some of those liens may take priority over previously filed instruments. Some states have enacted statutes that impose liability for substances in addition to the "hazardous substances" listed by EPA under CERCLA.

Many municipalities in which we currently operate or may operate in the future also have ordinances, laws and regulations affecting our operations. These include zoning and health measures that limit solid waste management activities to specified sites or conduct, flow control provisions that direct the delivery of solid wastes to specific facilities or to facilities in specific areas, laws that grant the right to establish franchises for collection services and then put out for bid the right to provide collection services, and bans or other restrictions on the movement of solid wastes into a municipality.

Some states have enacted laws that allow agencies with jurisdiction over waste management facilities to deny or revoke permits based on the applicant's or permit holder's compliance status. Some states also consider the compliance history of the corporate parent, subsidiaries and affiliates of the applicant or permit holder.

Certain permits and approvals issued under state or local law may limit the types of waste that may be accepted at a solid waste management facility or the quantity of waste that may be accepted at a solid waste management facility during a specific time period. In addition, certain permits and approvals, as well as certain state and local regulations, may limit a solid waste management facility to accepting waste that originates from specified geographic areas or seek to restrict the importation of out-of-state waste or otherwise discriminate against out-of-state waste. Generally, restrictions on importing out-of-state waste have not withstood judicial challenge. However, from time to time federal legislation is proposed which would allow individual states to prohibit the disposal of out-of-state waste or to limit the amount of out-of-state waste that could be imported for disposal and would require states, under certain circumstances, to reduce the amounts of waste exported to other states. Although such legislation has not been passed by Congress, if similar legislation is enacted, states in which we operate solid waste management facilities could limit or prohibit the importation of out-of-state waste. Such actions could materially and adversely affect the business, financial condition and results of operations of any of our solid waste management facilities within those states that receive a significant portion of waste originating from out-of-state.

Certain states and localities may restrict the export of waste from their jurisdiction, or require that a specified amount of waste be disposed of at facilities within their jurisdiction. In 1994, the U.S. Supreme Court rejected as unconstitutional and therefore invalid, a local ordinance that sought to limit waste going out of the locality by imposing a requirement that the waste be delivered to a particular privately-owned facility. However, in 2007, the U.S. Supreme Court upheld a U.S. District Court ruling that the flow control regulations in Oneida and Herkimer counties in New York requiring trash haulers to use publicly-owned transfer stations are constitutional, and therefore valid. Additionally, certain state and local jurisdictions continue to seek to enforce such restrictions. Some proposed federal legislation would allow states and localities to impose flow restrictions. Those restrictions could reduce the volume of waste going to solid waste management facilities in certain areas, which may materially adversely affect our ability to operate our facilities and/or affect the prices we can charge for certain services. Those restrictions also may result in higher disposal costs for our collection operations. Flow control restrictions could have a material adverse effect on our business, financial condition and results of operations.

There has been an increasing trend at the state and local levels to mandate or encourage both waste reduction at the source and waste recycling, and to prohibit or restrict the disposal in landfills of certain types of solid wastes, including yard wastes and leaves, certain construction or architectural wastes, food wastes, beverage containers, newspapers, household appliances and electronics such as computers, and batteries. Regulations reducing the volume and types of wastes available for transport to and disposal in landfills could affect our ability to operate our landfill facilities. Vermont, for example, enacted Act 148, containing among other things, a phased waste ban for recyclables, organics and leaf/yard waste. The law became effective July 1, 2012, with phased deadlines for compliance beginning 2014 through 2020. Vermont also passed a law requiring recycling of architectural waste from construction or demolition of a commercial project. The law became effective in January 2015.

In September 2020, the Massachusetts Department of Environmental Protection proposed amendments to the state's waste ban regulations to add mattresses and textiles as materials banned from disposal, and to lower the threshold of the existing commercial organics material waste ban. According to the Massachusetts Department of Environmental Protection, these changes require amendments to the regulations, which will have an effective date of November 1, 2022.

New York State revised its regulations governing solid waste management, 6 NYCRR Part 360, effective in November 2017. The revised regulations, among other things, include requirements to conduct landfill liner integrity testing and install radiation detectors at certain facilities. New York has also enacted the Food Donation and Food Scraps Recycling Law, which requires certain generators to separate and donate or recycle food scraps starting in January 2022.

Although there is no federal law governing extended producer responsibility ("EPR") regulations; many states have implemented or are contemplating EPR regulations for certain products. EPR regulations are intended to place responsibility for ultimate management or end-of-useful-life handling of the products they create. In addition to financial responsibility, an EPR program may include responsibility for local take-back or recycling programs. For example, several states in which we operate have EPR regulations for electronic waste. In 2021, the Maine Legislature passed EPR legislation for packaging, and rulemaking will commence in 2022. If broad EPR laws or regulations continue to be adopted, and are managed under a manufacturer implemented program, it could have an impact on our business.

The EPA and environmental agencies within individual states in which we operate also consider and promulgate changes to water quality standards, action levels, remediation goals, and other federal or state regulatory standards for individual compounds or classes of compounds. These changes can also include the development of new or more stringent standards for "Emerging Contaminants", including per- and polyfluoroalkyl substances, pharmaceutical compounds, and a variety of synthetic chemical compounds used in manufacturing and industrial processes. In December 2016, EPA also designated ten chemical substances for risk evaluations under TSCA, and in December 2019, EPA designated an additional 20 chemical substances for risk evaluation, based on the requirements of the June 2016 Frank R. Lautenberg Chemical Safety for the 21st Century Act. Changes in regulatory standards for existing or emerging contaminants can result in higher levels of cost and effort associated with the performance of environmental investigations and ongoing compliance at our facilities.

Information about our Executive Officers

Our executive officers and their respective ages are as follows:

Name	Age	Position
John W. Casella	71	Chairman of the Board of Directors, Chief Executive Officer and Secretary
Edwin D. Johnson	65	President and Chief Operating Officer
Edmond “Ned” R. Coletta	46	Senior Vice President and Chief Financial Officer
Christopher B. Heald	57	Vice President and Chief Accounting Officer
Shelley E. Sayward	47	Senior Vice President and General Counsel

John W. Casella has served as Chairman of our Board of Directors since July 2001 and as our Chief Executive Officer since 1993. Mr. Casella also served as our President from 1993 to July 2001 and as Chairman of our Board of Directors from 1993 to December 1999. In addition, Mr. Casella has served as Chairman of the Board of Directors of Casella Waste Management, Inc., a wholly owned subsidiary of ours, since 1977. Mr. Casella is also an executive officer and director of Casella Construction, Inc., a company owned by Mr. Casella and his brother Douglas R. Casella, also a member of our Board of Directors, which specializes in general contracting, soil excavation and heavy equipment work, and which performs landfill-construction and related services for us. Mr. Casella has been a member of numerous industry-related and community service-related state and local boards and commissions, including the National Recycling Coalition, Board of Directors of the Associated Industries of Vermont, the Association of Vermont Recyclers, the Vermont State Chamber of Commerce, the Rutland Industrial Development Corporation, and the Rutland Regional Medical Center. Mr. Casella has also served on various state task forces, serving in an advisory capacity to the Governors of Vermont and New Hampshire on solid waste issues. Mr. Casella holds an Associate of Science degree in Business Management from Bryant & Stratton College and a Bachelor of Science degree in Business Education from Castleton University.

Edwin D. Johnson has served as our President and Chief Operating Officer since December 2012. From July 2010 until December 2012, Mr. Johnson served as our Senior Vice President & Chief Financial Officer. From March 2007 until he joined us in 2010, Mr. Johnson served as the Executive Vice President and Chief Financial Officer and Chief Accounting Officer of Waste Services, Inc. Mr. Johnson has over 35 years of experience as a senior executive, including over two decades in the waste industry. During his career, Mr. Johnson also served on the board of directors of Attwoods, plc, Able Telcom and the College of St Joseph. Mr. Johnson received his MBA from Florida International University, his Bachelor of Science degree in Accounting and Administration from Washington & Lee University and is a Certified Public Accountant in Florida.

Edmond “Ned” R. Coletta has served as our Senior Vice President, Chief Financial Officer and Treasurer since December 2012. Mr. Coletta joined us in December 2004 and has served most recently as our Vice President of Finance and Investor Relations from January 2011 to December 2012. Prior to that Mr. Coletta served as our Director of Finance and Investor Relations from August 2005 to January 2011. From 2002 until he joined us, Mr. Coletta served as the Chief Financial Officer and was a member of the Board of Directors of Avedro, Inc. (FKA ThermalVision, Inc.), an early-stage medical device company that he co-founded. From 1997 to 2001, he served as a research and development engineer for Lockheed Martin Michoud Space Systems. Mr. Coletta holds an MBA from the Tuck School of Business at Dartmouth College and a Bachelor of Science degree from Brown University in Materials Science Engineering.

Christopher B. Heald has served as our Vice President of Finance and Chief Accounting Officer since January 2013. Mr. Heald joined us in September 2001 and has served in positions of increasing responsibility, including as our Director of Financial Reporting and Analysis from July 2010 to January 2013 and as our Accounting Manager from August 2002 to July 2010. Mr. Heald is a Certified Public Accountant and holds a Bachelor of Science degree in Business Administration from the University of Vermont. Effective March 31, 2022, Mr. Heald will retire from his position as Vice President of Finance, Chief Accounting Officer, and transition into the role of Finance Advisor, effective as of April 1, 2022.

Shelley E. Sayward has served as our Senior Vice President and General Counsel since January 2021, and prior to that in various roles in our legal department since November 2006. She was previously our Vice President and Assistant General Counsel from September 2014 until January 2021 and was our Associate General Counsel from September 2008 to September 2014. Prior to joining us, Ms. Sayward held sales and marketing roles with GlaxoSmithKline and Abbott Laboratories, as well as a sales and managerial position with First American Financial Corporation. Ms. Sayward holds a Bachelor of Arts degree from Middlebury College, completed a four-year law clerkship program, and is licensed to practice law in the State of Vermont.

ITEM 1A. RISK FACTORS

The following material factors, among others, could cause actual results to differ materially from those indicated by forward-looking statements made in this Annual Report on Form 10-K and presented elsewhere by management from time to time. The risks and uncertainties described below are those that we have identified as material, but are not the only risks and uncertainties facing us. Our business is also subject to general risks and uncertainties that affect many other companies, including overall economic and industry conditions, especially in the northeastern United States, where our operations and customers are principally located, changes in laws or accounting rules or other disruptions of expected economic or business conditions. Additional risks and uncertainties not currently known to us or that we currently believe are not material also may impair our business's results of operations and financial condition.

We have in place an Enterprise Risk Management process that involves systematic risk identification and mitigation covering the categories of strategic, financial, operational, and compliance risk. The goal of enterprise risk management is not to eliminate all risk, but rather to identify and assess risks; assign, mitigate and monitor risks; and report the status of our risks to the Board of Directors and its committees.

Risks Related to Our Business and Industry

We are subject to general macroeconomic risks in the waste industry, including, but not limited to, the effects of the COVID-19 pandemic, fuel prices, labor supply, and inflation, any of which risks, if realized, may adversely affect our financial performance and results of operations.

To varying degrees, our business is sensitive to changes in macroeconomic conditions that impact our operating costs and financial performance including, but not limited to, the COVID-19 pandemic discussed in the following risk factor, inflation, fuel prices, and labor supply. Inflationary increases in costs, including, but not limited to, current inflationary pressures associated with fuel, labor and certain capital items, as our business is capital intensive, can have a material adverse effect on our business and operating results.

The price and supply of fuel is unpredictable and fluctuates based on events beyond our control, including among others, geopolitical developments, supply and demand for oil and gas, actions by the Organization of the Petroleum Exporting Countries and other oil and gas producers, war and unrest in oil producing countries and regional production patterns. Because fuel is needed to run our fleet of trucks, price escalations for fuel increase our operating expenses. In fiscal year 2021, we used approximately 8.8 million gallons of diesel fuel in our solid waste operations. Although we have an energy and environmental fee program, which includes an energy component that floats on a monthly basis based on diesel fuel prices, contractual restrictions and competitive conditions may impact our opportunity to pass this fee on to our customers in all circumstances.

The hiring of drivers and mechanics is necessary to service our customers. We face competition in the hiring of drivers and mechanics and may face labor shortages at these positions. This competition may come from other waste management companies, but it also comes from other employers who hire drivers and maintain fleets, such as companies that provide courier delivery services, including United Parcel Service, Inc. and FedEx Corporation, as well as from a tightening labor market. As a result, certain positions currently experience, have historically experienced, and may experience in the future, high turnover rates or labor shortages, which can lead to increased recruiting, training and retention costs. If we are unable to hire and retain sufficient numbers of drivers to service our collection and disposal routes and mechanics to maintain our trucks, our financial condition and operating results could be materially impacted.

Inflationary pressures have affected, and may continue to affect, our operating margins. 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. 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.

The COVID-19 pandemic has adversely affected, and may continue to adversely affect, our business, outlook, liquidity and results of operations, and we have experienced and may continue to experience reductions in demand for certain of our services.

The COVID-19 pandemic has caused, and may continue to cause, economic disruption across our geographic footprint. As an essential service provider we have continued our operations throughout the COVID-19 pandemic. However, as a result of the COVID-19 pandemic we have experienced increased costs of doing business, including, but not limited to, higher costs associated with providing a safe working environment for our employees (such as increased costs associated with the protection of our employees, including costs for additional safety equipment, hygiene products, testing supplies and enhanced facility cleaning), employee impacts from illness, supporting a remote administrative workforce, community response measures, the inability of customers to continue to pay for services, and temporary facility closures of our customers. We also experienced decreased demand for our services, as revenues declined, primarily in fiscal year 2020, as some of our commercial collection

customers requested service level decreases, construction activity decreased and volumes into our landfills declined on lower economic activity. Demand for services has since improved in fiscal year 2021 as local economies have reopened, as allowed by State Governments, and our collection and disposal volumes, as well as overall operations, have been less impacted by the effects of the COVID-19 pandemic. Furthermore, residual macroeconomic effects associated with the pandemic have negatively impacted the global supply chain, labor markets and distribution networks leading to heightened inflation across labor, select services and goods, and capital investments.

Due to the uncertain and evolving nature of economic conditions, we are unable to determine or predict the full extent of any possible continuing impact that the COVID-19 pandemic will have on our business going forward. The extent of the effects of the COVID-19 pandemic on our business, results of operations, liquidity, and cash resources will ultimately depend on future developments that are highly uncertain and cannot be predicted with accuracy. These include, but are not limited to, the extent of continuing spread of COVID-19 across our geographic footprint, the administration rates and effectiveness of vaccines, the severity and containment of certain COVID-19 variants; and the pace and extent to which the States in which we operate continue to facilitate a return to normal economic and operations conditions. The COVID-19 pandemic may also materially adversely affect our operating and financial results in a manner that is not currently known to us or that we do not currently consider to present significant risks to our operations. To the extent the COVID-19 pandemic adversely affects our business and financial results, it may also have the effect of heightening many other risks described in this section, any of which could materially and adversely affect our business, results of operations and financial condition.

We face substantial competition in the solid waste services industry, and if we cannot successfully compete in the marketplace, our business, financial condition and results of operations may be materially adversely affected.

The solid waste services industry is highly competitive, has undergone a period of consolidation and requires substantial labor and capital resources. The markets in which we compete are served by, or are adjacent to markets served by, one or more of the large national or super regional solid waste companies, as well as numerous regional and local solid waste companies. Intense competition exists not only to provide services to customers, but also to acquire other businesses within each market. Some of our competitors have significantly greater financial and other resources than we do. From time to time, competitors may reduce the price of their services in an effort to expand market share or to win a competitively bid contract. These practices may require us to reduce the pricing of our services and may result in a loss of business or revenues.

As is generally the case in our industry, municipal contracts are typically subject to periodic competitive bidding. We may not be the successful bidder to obtain or retain these contracts. If we are unable to compete with larger and better capitalized companies or replace municipal contracts lost through the competitive bidding process with comparable contracts or other revenue sources within a reasonable time period, our revenues would decrease and our operating results could be materially adversely affected.

In our solid waste disposal markets, we also compete with operators of alternative disposal and recycling facilities and with counties, municipalities and solid waste districts that maintain their own solid waste collection, recycling and disposal operations. We are also increasingly competing with companies which seek to use parts of the waste stream as feedstock for renewable energy supplies. Public entities may have financial advantages because of their ability to charge user fees or similar charges, impose taxes and apply resulting revenues, access tax-exempt financing, transport waste to disposal sites outside of the northeastern markets, and, in some cases, utilize government subsidies.

In addition, we may be impacted by the development and commercialization of disruptive technologies that may materially change how waste management services are provided. If we are unable to gain access to these technologies or to compete effectively against them, our financial results may suffer.

Our growth strategy focuses on complementing or expanding our business through the acquisition of companies or assets, or the development of new operations. However, we may be unable to complete these transactions and, if executed, these transactions may not improve our business or may pose significant risks and could have a negative effect on our operations.

Our growth strategy includes engaging in acquisitions or developing operations or assets with the goal of complementing or expanding our business. We have made, and we may make in the future, acquisitions to densify existing operations, expand service areas and grow services for our customers. These acquisitions may include “tuck-in” acquisitions within our existing markets, acquisitions of assets that are adjacent to or outside of our existing markets, or larger, more strategic acquisitions. In addition, from time to time we may acquire businesses that are complementary to our core business strategy. We may not be able to identify suitable acquisition candidates, and if we identify suitable acquisition candidates, we may be unable to successfully negotiate the acquisition at a price or on terms and conditions acceptable to us. Furthermore, we may be unable to obtain the necessary regulatory approvals to complete potential acquisitions.

Our ability to achieve the benefits from acquired businesses, including cost savings and operating efficiencies, depends in part on our ability to successfully integrate the operations of such acquired businesses with our operations. The integration of acquired businesses and other assets may require significant management time and resources that would otherwise be available

for the ongoing management of our existing operations. Any operations, properties or facilities that we acquire may be subject to unknown liabilities, such as undisclosed environmental contamination, or other environmental liability, including off-site disposal liability for which we would have no recourse, or only limited recourse, to the former owners of such operations or properties. As a result, if claims for liabilities were asserted against us based upon ownership of an acquired property, we might be required to pay significant sums to settle it, which could adversely affect our financial results and cash flows. For information regarding our business acquisitions, see Note 5, *Business Combinations* to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

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

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

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

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

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

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

For information about legal proceedings and outstanding claims against us and our subsidiaries, and environmental remediation matters, including the recognition of accretion expense in other accrued liabilities and other long-term liabilities, see Note 12, *Commitments and Contingencies* to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

We may be unable to obtain or maintain required permits or to expand existing permitted capacity of our landfills, which could decrease our revenue and increase our costs.

We are required to obtain government permits to operate our facilities, including all of our landfills. There is no guarantee that we will be able to obtain the requisite permits and, even if we could, that any permit (and any existing permits we currently hold) will be renewed or modified as needed to fit our business needs. Localities where we operate generally seek to regulate some or all landfill and transfer station operations, including siting and expansion of operations. The laws and regulations adopted by municipalities in which our landfills and transfer stations are located may limit or prohibit the expansion of a landfill or transfer station, as well as the amount of solid waste that we can accept at the landfill or transfer station on a daily, quarterly or annual basis, and any effort to acquire or expand landfills and transfer stations, which typically involves a significant amount of time and expense. In addition, state laws applicable to certain of our landfills require that the state determine whether acceptance of waste at the landfill not generated within the state provides a substantial public benefit. We may not be successful in obtaining new landfill or transfer station sites, including a landfill under development by us in Dalton, New Hampshire, or expanding the permitted capacity of any of our current landfills and transfer stations. If we are unable to develop additional disposal and transfer station capacity, our ability to achieve economies of scale from the internalization of our waste stream will be limited. If we fail to receive new landfill permits or renew existing permits, we may incur landfill asset impairment and other charges associated with accelerated closure. See Note 12, *Commitments and Contingencies* to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K for disclosure about legal matters impacting our permitting efforts.

Fluctuations in commodity prices and diminished markets for recyclable materials that we sell to customers may adversely affect our results of operations and cash flows.

Our processing business involves the purchase and sale of recyclable materials, some of which are priced on a commodity basis. Our results of operations and cash flows may be adversely affected by falling purchase or resale prices or market requirements for recyclable materials. The resale and purchase prices of, and market demand for, recyclable materials are subject to changes in economic conditions and numerous other factors beyond our control, which may result in decreased demand of recyclable materials and lower commodity prices. The commodity markets continue to see ongoing variable pricing, although domestic demand for mixed paper in the Northeast started to increase in fiscal year 2021 with a few end user manufacturing mills expanding production lines. Significant price fluctuations may adversely affect our results of operations and cash flows in the form of higher operating costs or lower revenues. Although we have restructured many of our recycling contracts to require the respective municipalities to absorb some of the impact of declining commodity prices, these restructured contracts have had the impact of significantly increasing the costs to municipalities for continuing to offer recycling services to their customers. In the event that the costs of such services become excessive, such municipalities could discontinue their recycling programs altogether, which could materially affect our financial results. See Item 7A, "Quantitative and Qualitative Disclosure About Market Risk" for further discussion over the impacts of commodity prices on our operations.

We are upgrading our technology infrastructure and there can be no assurance that our efforts will be completed on the projected timetable or that our investment will result in the expected gains.

Upgrades to our technology infrastructure are ongoing and include a limited pilot of a new service management system, on-board computers, dynamic route optimization, procurement optimization, and other systems that we believe will improve our internal processes and the productivity of our employees. These upgrades are complex and there can be no assurance that they will result in expected productivity gains and operating cost reductions on our anticipated timeline, if at all. In addition, if we are not able to maintain the security of our data, confidential information about us or our customers or suppliers could be inadvertently disclosed, subjecting us to possible expenses and other liabilities as well as adversely impacting customer and other third-party relationships. If we are unable to benefit from new technologies, we may be at a competitive disadvantage to other companies in the waste management industry, in which case our operating results could suffer.

Cybersecurity incidents could negatively impact our business and our relationships with customers, adversely affecting our financial results and exposing us to litigation risk.

We use computer technology, including computer and information networks, in substantially all aspects of our business operations. We also use mobile devices, social networking and other online activities to connect with our customers and our employees to be able to process transactions and provide information that we feel is necessary to manage our business. Such uses give rise to cybersecurity risks, including security breach, espionage, system disruption, theft and inadvertent release of information. Our business involves the storage and transmission of numerous classes of sensitive and/or confidential information and intellectual property, including customers' personal information, private information about employees, and

financial and strategic information about us and our business partners. We also rely on a Payment Card Industry compliant third party to protect our customers' credit card information. Further, as we pursue our strategy to grow through acquisitions and to pursue new initiatives that improve our operations and cost structure, we are also expanding and improving our information technologies, resulting in a larger technological presence and corresponding exposure to cybersecurity risk. If we fail to assess and identify cyber security risks associated with acquisitions and new initiatives, we may become increasingly vulnerable to such risks. Additionally, while we have implemented and continue to implement measures to prevent security breaches and cyber incidents, our preventive or detection measures and incident response efforts may not be entirely effective, especially as cyber security attacks continue to evolve and become more sophisticated, often are not recognized until launched against a target and may be difficult to detect for a long time. We are also exposed to cybersecurity risk with respect to data and other information that may be shared with third parties in connection with our business operations, if such third parties become subject to security breaches or other releases of information.

If company, personal or otherwise protected information is improperly accessed, tampered with or distributed, we may face significant financial exposure, including incurring significant costs to remediate possible injury to the affected parties. We may also be subject to sanctions and civil or criminal penalties if we are found to be in violation of the privacy or security rules under laws protecting confidential information. If our established network of security controls, policy enforcement mechanisms, educational awareness programs and monitoring systems that we use to address these threats to technology fail, the theft, destruction, loss, misappropriation, or release of sensitive and/or confidential information or intellectual property, or interference with our information technology systems or the technology systems of third parties on which we rely, could result in business disruption, negative publicity, brand damage, violation of privacy laws, loss of customers, potential litigation and liability and competitive disadvantage. While we have purchased insurance coverage for cybersecurity risks, there can be no assurance that any such coverage would be adequate to cover potential liability.

Our business is geographically concentrated and is therefore subject to regional economic downturns.

Our operations and customers are concentrated principally in New England, New York, Connecticut and Pennsylvania. Therefore, our business, financial condition and results of operations are susceptible to regional economic downturns and other regional factors, including state regulations and budget constraints and severe weather conditions. In addition, as we seek to expand in our existing markets, opportunities for growth within this region will become more limited and the geographic concentration of our business will increase.

Our results of operations and financial condition may be negatively affected if we inadequately accrue for final capping, closure and post-closure costs or by the timing of these costs for our waste disposal facilities.

We have material financial obligations relating to final capping, closure and post-closure costs of our existing owned or operated landfills and will have material financial obligations with respect to any disposal facilities that we may own or operate in the future. Once the permitted capacity of a particular landfill is reached and additional capacity is not authorized, or a determination is made to cease operations at a landfill due to other considerations, the landfill must be closed and capped, and we must begin post-closure maintenance. We establish accruals for the estimated costs associated with such final capping, closure and post-closure obligations over the anticipated useful life of each landfill on a per ton basis. We have provided and expect that we will in the future provide accruals for financial obligations relating to final capping, closure and post-closure costs of our owned or operated landfills, generally for a term of 30 years after closure of a landfill. Our financial obligations for final capping, closure or post-closure costs could exceed the amounts accrued or amounts otherwise receivable pursuant to trust funds established for this purpose. Such a circumstance could result in significant unanticipated charges that would have an adverse effect on our business.

In addition, the timing of any such final capping, closure or post-closure costs, which exceed established accruals, may further negatively affect our business. Since we will be unable to control the timing and amounts of such costs, we may be forced to delay investments or planned improvements in other parts of our business or we may be unable to meet applicable financial assurance requirements. Any of the foregoing would negatively affect our business and results of operations.

For information regarding our final capping, closure and post-closure obligations, see Note 10, *Final Capping, Closure and Post-Closure Costs* to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

Our insurance coverage and self-insurance reserves may be inadequate to cover all significant risk exposures.

The provision of environmental services, including the operation of landfills, a substantial fleet of trucks and other waste-related assets, involves risks. These risks include, among others, the risk of truck accidents, equipment defects, malfunctions and failures, improper use of dangerous equipment, the release of hazardous substances, fire and explosion, any of which could result in environmental liability, personal injury, loss of life, business interruption or property damage or destruction. We carry a range of insurance policies intended to protect our assets and operations, including general liability insurance, property damage and environmental risk insurance. While we endeavor to purchase insurance coverage appropriate to our risk assessment, and seek to minimize our exposure to these risks through maintenance, training and compliance programs, we are unable to predict with certainty the frequency, nature or magnitude of claims for direct or consequential damages, and as a result our insurance program may not fully cover us for losses we may incur. In addition, as a result of a number of catastrophic weather and other events in the United States, insurance companies have incurred substantial losses and accordingly in many cases they have substantially reduced the nature and amount of insurance coverage available to the market, have broadened exclusions, and/or have substantially increased the cost of such coverage. It is likely that the tight insurance markets will continue into the foreseeable future. A partially or completely uninsured claim against us (including liabilities associated with cleanup or remediation at our facilities), if successful and of sufficient magnitude, could have a material adverse effect on our business, financial condition and results of operations. Any future difficulty in obtaining insurance could also impair our ability to secure future contracts, which may be conditioned upon the availability of adequate insurance coverage. In addition, claims associated with risks we have retained under our self-insurance programs may exceed our recorded reserves which could negatively impact future earnings. See Note 3, *Summary of Significant Accounting Policies* to our consolidated financial statements included under Item 8, "*Financial Statements and Supplementary Data*" of this Annual Report on Form 10-K for disclosure about our self-insurance liabilities and related costs.

We could be precluded from entering into contracts or obtaining or maintaining permits or certain contracts if we are unable to obtain third-party financial assurance to secure our contractual obligations.

Public solid waste collection, recycling and disposal contracts, and obligations associated with landfill closure and post-closure typically require performance or surety bonds, letters of credit or other means of financial assurance to secure our contractual performance. We currently obtain performance and surety bonds from Evergreen National Indemnity Company, in which we hold a 19.9% equity interest. If we are unable to obtain the necessary financial assurance in sufficient amounts or at acceptable rates, we could be precluded from entering into additional municipal contracts or from obtaining or retaining landfill management contracts or operating permits.

We may be required to write-off or impair capitalized costs or intangible assets in the future or we may incur restructuring costs or other charges, each of which could harm our earnings.

In accordance with generally accepted accounting principles in the United States, we capitalize certain expenditures and advances relating to our acquisitions, landfills, cost method investments and development projects. In addition, we have considerable unamortized assets. From time to time in future periods, we may be required to incur a charge against earnings in an amount equal to any unamortized capitalized expenditures and advances, net of any portion thereof that we estimate will be recoverable, through sale or otherwise, relating to: (1) any operation or other asset that is being sold, permanently shut down or impaired or has not generated or is not expected to generate sufficient cash flow; (2) any landfill or development project, or growth oriented investment that is not expected to be successfully completed or generate a sufficient return on investment; and (3) any goodwill or other intangible assets that are determined to be impaired.

In response to such charges and costs and other market factors, we may be required to implement restructuring plans in an effort to reduce the size and cost of our operations and to better match our resources with our market opportunities. As a result of such actions, we would expect to incur restructuring expenses and accounting charges which may be material. Several factors could cause a restructuring to adversely affect our business, financial condition and results of operations, including potential disruption of our operations, the development of our landfill capacity and recycling technologies and other aspects of our business. Employee morale and productivity could also suffer and result in unintended employee attrition. Any restructuring would require substantial management time and attention and may divert management from other important work. Moreover, we could encounter delays in executing any restructuring plans, which could cause further disruption and additional unanticipated expense.

Our revenues and our operating income experience seasonal fluctuations, which could adversely affect our operational results in certain quarters and cause our results to fluctuate.

Our transfer and disposal revenues have historically been higher in the late spring, summer and early fall months, which when combined with operating and other fixed costs that remain constant throughout the fiscal year, results in seasonal fluctuations in our operating performance. This seasonality reflects the lower volume of solid waste during the late fall, winter and early spring months primarily because the volume of waste relating to C&D activities decreases substantially during the winter months in the northeastern United States where we are geographically located.

Adverse weather conditions, including those brought about by climate change, may limit our operations and increase the costs of collection and disposal.

Our collection and landfill operations could be adversely impacted by extended periods of inclement weather, or by increased severity of weather, including as a result of climate change. Adverse weather 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.

Efforts by labor unions to organize our employees could divert management attention and increase our operating expenses.

Certain groups of our employees have chosen to be represented by unions, and we have negotiated collective bargaining agreements with these groups. The negotiation of collective bargaining agreements could divert management attention and result in increased operating expenses and lower net income (or increased net loss). If we are unable to negotiate acceptable collective bargaining agreements, we may be subject to union-initiated work stoppages, including strikes. Depending on the type and duration of any labor disruptions, our revenues could decrease and our operating expenses could increase, which could adversely affect our financial condition, results of operations and cash flows. As of January 31, 2022, approximately 6% of our employees were represented by unions.

Our enterprise risk management process may not be effective in mitigating the risks to which we are subject, or in reducing the potential for losses in connection with such risks.

Our enterprise risk management framework is designed to minimize or mitigate the risks to which we are subject, as well as any losses stemming from such risks. Although we seek to identify, measure, monitor, report, and control our exposure to such risks, and employ a broad and diversified set of risk monitoring and mitigation techniques in the process, those techniques are inherently limited in their ability to anticipate the existence or development of risks that are currently unknown and unanticipated. The ineffectiveness of our enterprise risk management framework in mitigating the impact of known risks or the emergence of previously unknown or unanticipated risks may result in our incurring losses in the future that could adversely impact our financial condition and results of operations.

We may be adversely affected by market responses to our environmental, social and governance ("ESG") practices and may not be effective in mitigating the risks associated with ESG expectations and emerging ESG regulations, or in reducing the potential for losses in connection with such risks.

We are subject to risks related to our ESG activities and disclosures that may adversely affect our market outlook, brand and reputation, and financial performance, which may impact our ability to achieve our long-term business objectives. Our ESG practices are designed to bring our actions and impacts into alignment with broader societal goals and environmental limits. Although we have developed a framework and perform a global reporting initiative to identify, measure, monitor, report, and control our ESG practices and related exposure to ESG expectations and regulations, we may not achieve our sustainability goals and commitments, or we may improperly report on our progress toward achieving our sustainability goals and commitments, which could result in negative publicity that could affect our brand and reputation, and accordingly, adversely impact our financial condition and results of operations.

Risks Related to Our Indebtedness

We have substantial debt and have the ability to incur additional debt. The principal and interest payment obligations of such debt may restrict our future operations.

As of December 31, 2021, we had approximately \$562.6 million of outstanding principal indebtedness (excluding approximately \$28.1 million of outstanding letters of credit issued under our amended and restated credit agreement term loan A facility and revolving line of credit facility ("Revolving Credit Facility" and, together with the term loan A facility, the "Credit Facility"). This amount of indebtedness and our debt service requirements may limit our financial flexibility to access additional capital and make capital expenditures and other investments in our business, to withstand economic downturns and interest rate increases, to plan for or react to changes in our business and our industry, and to comply with the financial and other covenants included in the Credit Facility. Additionally, if we do not comply with financial and other covenants, we may be required to take actions such as reducing or delaying capital expenditures, selling assets, restructuring or refinancing all or part of our existing Credit Facility or seeking additional equity capital. Our ability to satisfy our obligations and to reduce our total debt depends on our future operating performance and on economic, financial, competitive and other factors, many of which are beyond our control. As of December 31, 2021, we had \$271.9 million of unused commitments remain under the Revolving Credit Facility, subject to customary borrowing conditions, and approximately \$33.8 million in cash and cash equivalents available for any future payment obligations.

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.

Risks Related to Our Common Stock

Holders of our Class A common stock are entitled to one vote per share, and holders of our Class B common stock are entitled to ten votes per share. The lower voting power of the Class A common stock may negatively affect the attractiveness of our Class A common stock to investors and, as a result, its market value.

We have two classes of common stock: Class A common stock, which is entitled to one vote per share, and Class B common stock, all of which are beneficially owned by John W. Casella, our Chairman and Chief Executive Officer, and his brother, Douglas R. Casella, a member of our Board of Directors, and which is entitled to ten votes per share. Except for the election of one of our directors and in certain limited circumstances required by applicable law, holders of Class A common stock and Class B common stock vote together as a single class on all matters to be voted on by our stockholders. As of January 31, 2022, an aggregate of 988,200 shares of our Class B common stock, representing 9,882,000 votes, were outstanding. Based on the number of shares of common stock outstanding as of January 31, 2022, the shares of our Class A common stock and Class B common stock beneficially owned by John W. Casella and Douglas R. Casella represented approximately 16.8% of the aggregate voting power of our stockholders. Consequently, John W. Casella and Douglas R. Casella are able to substantially influence all matters for stockholder consideration and constitute, and are expected to continue to constitute, a significant portion of the shares entitled to vote on all matters requiring approval by our stockholders. The difference in the voting power of our Class A common stock and Class B common stock could diminish the market value of our Class A common stock if investors attribute value to the superior voting rights of our Class B common stock and the power those rights confer.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our headquarters is located at 25 Greens Hill Lane, Rutland, Vermont 05701, where we currently lease approximately 12,000 square feet of office space.

Our principal property and equipment consists of land, landfills, buildings, machinery and equipment, rolling stock and containers. At January 31, 2022, we operated eight subtitle D landfills, four of which we own and four of which we lease; one landfill permitted to accept C&D materials that we own; 65 transfer stations, 35 of which we own, ten of which we lease and 20 of which we operate under a contract; 50 solid waste collection facilities, 29 of which we own, 20 of which we lease and one of which we operate under a contract; 23 recycling processing facilities, 13 of which we own, seven of which we lease and three of which we operate under a contract; three landfill gas-to-energy facilities that we own; and 26 corporate office and other administrative facilities, six of which we own and 20 of which we lease (See Item 1, “*Business*” of this Annual Report on Form 10-K for property information by operating segment and location). We believe that our property and equipment are adequately maintained and sufficient for our current operations.

ITEM 3. LEGAL PROCEEDINGS

The information required by this Item is provided in Note 12, *Commitments and Contingencies* to our consolidated financial statements included in Item 8, “*Financial Statements and Supplementary Data*” of this Annual Report on Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our Class A common stock trades on the Nasdaq Global Select Market ("Nasdaq Stock Market") under the symbol CWST. There is no established trading market for our Class B common stock. As of January 31, 2022, there were approximately 500 holders of record of our Class A common stock and two holders of record of our Class B common stock.

For purposes of calculating the aggregate market value of the shares of common stock held by non-affiliates, as shown on the cover page of this Annual Report on Form 10-K, we have assumed that all the outstanding shares of Class A common stock were held by non-affiliates except for the shares beneficially held by directors and executive officers and funds represented by them.

Dividends

No dividends have ever been declared or paid on our common stock and we do not anticipate paying any cash dividends on our common stock in the foreseeable future.

The information required by Item 201(d) of Regulation S-K is included in Part III of this Annual Report on Form 10-K.

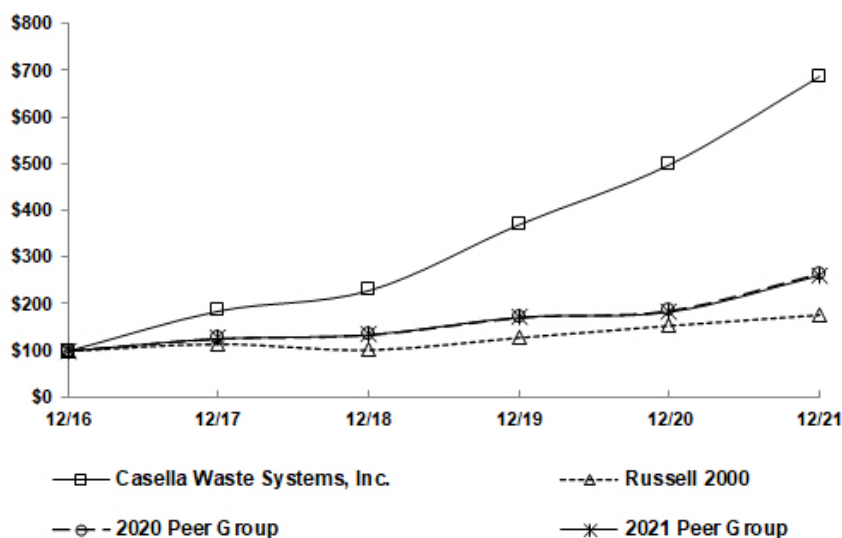
Stock Performance Graph

The following performance graph and related information shall not be deemed "soliciting material" or "filed" with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, each as amended, except to the extent that we specifically incorporate it by reference into such filing.

The stock performance graph below compares the percentage change in cumulative stockholder return on our Class A common stock for the period from December 31, 2016 through December 31, 2021, with the cumulative total return on the Russell 2000 Index and our Industry Peer Groups ("2020 Peer Group" and "2021 Peer Group"). The stock performance graph assumes the investment on December 31, 2016 of \$100.00 in our Class A common stock at the closing price on such date, in the Russell 2000 Index, the 2021 Peer Group and the 2020 Peer Group, and that dividends are reinvested. No dividends have been declared or paid on our Class A common stock.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Casella Waste Systems, Inc., the Russell 2000 Index,
2020 Peer Group and 2021 Peer Group



*\$100 invested on 12/31/16 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

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	December 31, 2016	December 31, 2017	December 31, 2018	December 31, 2019	December 31, 2020	December 31, 2021
Casella Waste Systems, Inc.	\$ 100.00	\$ 185.50	\$ 229.57	\$ 370.91	\$ 499.19	\$ 688.32
Russell 2000	\$ 100.00	\$ 114.65	\$ 102.02	\$ 128.06	\$ 153.62	\$ 176.39
2020 Peer Group (1)	\$ 100.00	\$ 126.02	\$ 134.05	\$ 171.10	\$ 186.06	\$ 264.93
2021 Peer Group (2)	\$ 100.00	\$ 126.37	\$ 134.42	\$ 171.57	\$ 182.62	\$ 259.70

(1) The 2020 Peer Group is comprised of Waste Connections Inc., Covanta Holding Corp., Waste Management, Inc. and Republic Services, Inc.

(2) The 2021 Peer Group is comprised of GFL Environmental, Inc., Waste Connections Inc., Waste Management, Inc. and Republic Services, Inc. In fiscal year 2021, Covanta Holding Corp., which had been included in the historical Peer Group in the prior year, was acquired and the stock for Covanta Holding Corp., ceased trading. We replaced Covanta Holding Corp. with GFL Environmental, Inc. in our new Peer Group.

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion of our financial condition and results of operations should be read in conjunction with the consolidated financial statements and notes thereto, and other financial information, included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements and involves numerous risks and uncertainties. Our actual results may differ materially from those contained in any forward-looking statements.

Discussion and analysis of the fiscal year ended December 31, 2020 ("fiscal year 2020") compared to the fiscal year ended December 31, 2019 is included under the heading Item 7, "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2020 as filed with the Securities and Exchange Commission on February 19, 2021.

Company Overview

Casella Waste Systems, Inc., a Delaware corporation, and its wholly-owned subsidiaries (collectively, "we", "us" or "our"), is a regional, vertically integrated solid waste services company. We provide resource management expertise and services to residential, commercial, municipal, institutional and industrial customers, primarily in the areas of solid waste collection and disposal, transfer, recycling and organics services. We provide integrated solid waste services in seven states: Vermont, New Hampshire, New York, Massachusetts, Connecticut, Maine and Pennsylvania, with our headquarters located in Rutland, Vermont. We manage our solid waste operations on a geographic basis through two regional operating segments, the Eastern and Western regions, each of which provides a full range of solid waste services. We manage our resource-renewal operations through the Resource Solutions operating segment. Effective January 1, 2021, we realigned the Resource Solutions operating segment, which includes our larger-scale recycling and commodity brokerage operations along with our organics services and large scale commercial and industrial services, from our historical lines-of-service of recycling, organics and customer solutions into two lines-of-service: processing and non-processing. We realigned the Resource Solutions operating segment to leverage our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver a comprehensive solution for our larger commercial, municipal, institutional and industrial customers that have more diverse waste and recycling needs. Processing services consist of the receipt of recycled, sludge or other organic materials at one of our materials recovery, processing or disposal facilities, where it is then sorted, mixed and/or processed, and then disposed of or sold. Non-processing services consist of brokerage services and overall resource management services, which provide a wide range of environmental services and zero waste solutions to large and complex organizations, as well as traditional collection, disposal and recycling services provided to large account multi-site customers.

As of January 31, 2022, we owned and/or operated 50 solid waste collection operations, 65 transfer stations, 23 recycling facilities, eight Subtitle D landfills, three landfill gas-to-energy facilities and one landfill permitted to accept construction and demolition ("C&D") materials.

Acquisitions and Divestitures

Acquisitions

We have a business development team that identifies acquisition candidates, categorizes the opportunity by strategic fit and perceived level of financial accretion, establishes contact with the appropriate representative of the acquisition candidate and gathers further information on the acquisition candidate.

We have made in the past, and we may make in the future, acquisitions to densify existing operations, expand service areas, and grow services for our customers. These acquisitions may include "tuck-in" acquisitions within our existing markets, assets that are adjacent to or outside of our existing markets, or larger, more strategic acquisitions. In addition, from time to time, we may acquire businesses that are complementary to our core business strategy. We face competition for acquisition targets, particularly the larger and more meaningful targets, but we believe that our strong relationships and reputation in New England, New York and Connecticut help to offset this factor.

In fiscal year 2021, we acquired ten businesses: a residential, commercial and roll-off collection business in eastern Connecticut that operates a rail-served C&D processing and waste transfer facility, a waste transfer station, a single-stream recycling facility, and several other recycling operations whose assets and liabilities are allocated between our Eastern region and Resource Solutions operating segments; a solid-waste collection business that operates a waste transfer station, a septic and portable toilet business, and two tuck-in solid-waste collection businesses in our Eastern region; and a solid-waste transfer station business, a waste composting and food-scrap hauling business, a solid-waste collection business that operates a waste transfer station, and two tuck-in solid-waste collection businesses in our Western region for total consideration of \$171.7 million, including \$166.5 million in cash and \$5.2 million in holdbacks to sellers and contingent consideration.

In fiscal year 2020, we acquired ten businesses: seven tuck-in solid waste collection businesses and a solid waste collection business in our Western region, a transportation business in our Eastern region, and one recycling operation in our Resource Solutions operating segment for total consideration of \$33.5 million, including \$29.0 million in cash and \$4.5 million in holdbacks to sellers.

Divestitures

From time to time, we may sell or divest certain investments or other components of our business. These divestitures may be undertaken for a number of reasons, including: to generate proceeds to pay down debt; as a result of a determination that the specified asset will provide inadequate returns to us or that the asset no longer serves a strategic purpose in connection with our business; or as a result of a determination that the asset may be more valuable to a third-party. We will continue to look to divest certain activities and investments that no longer enhance or complement our core business if the right opportunity presents itself.

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, including landfill, transfer and transportation, landfill gas-to-energy, and processing services. We derive a substantial portion of our collection revenues from commercial, industrial and municipal services that are generally performed under service agreements or pursuant to contracts with municipalities. The majority of our residential collection services are performed on a subscription basis with individual 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. We manage our resource-renewal operations through the Resource Solutions operating segment, which includes processing and non-processing services. Revenues from processing services are derived from municipalities and customers in the form of processing fees, tipping fees, and commodity sales, primarily comprised of newspaper, corrugated containers, plastics, ferrous and aluminum, and organic materials such as our earthlife® soils products including fertilizers, composts and mulches. Revenues from non-processing services are derived from brokerage services and overall resource management services providing a wide range of environmental services and zero waste solutions to large and complex organizations, as well as traditional collection, disposal and recycling services provided to large account multi-site customers.

The table below shows revenue attributable to services provided (in millions) for the following periods:

	Fiscal Year Ended December 31,		\$ Change
	2021	2020	
Collection	\$ 442.7	\$ 391.4	\$ 51.3
Disposal	197.0	175.5	21.5
Power	5.1	4.1	1.0
Processing	9.3	7.3	2.0
Solid waste operations	654.1	578.3	75.8
Processing	93.3	62.5	30.8
Non-processing	141.8	133.8	8.0
Resource Solutions operations	235.1	196.3	38.8
Total revenues	\$ 889.2	\$ 774.6	\$ 114.6

Solid waste revenues

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

	Period-to-Period Change For Fiscal Year 2021 vs Fiscal Year 2020	
	Amount	% Growth
Price	\$ 22.8	3.9 %
Volume	12.9	2.2 %
Surcharges and other fees	(2.0)	(0.3)%
Commodity price and volume	2.0	0.3 %
Acquisitions	40.2	7.0 %
Closed operations	(0.1)	— %
Solid waste revenues	\$ 75.8	13.1 %

Price.

The price change component in fiscal year 2021 solid waste revenues growth from the prior year is a result of the following:

- \$16.8 million from favorable collection pricing; and
- \$6.0 million from favorable disposal pricing associated with our landfills and transfer stations.

Volume.

The volume change component in fiscal year 2021 solid waste revenues growth from the prior year is a result of the following:

- \$7.4 million from higher disposal volumes (of which \$4.1 million relates to higher transfer station volumes and \$3.1 million relates to higher third-party landfill volumes as a result of increased activity and an increased demand for services due to economic recovery from the prior year, which was negatively impacted by the COVID-19 pandemic, and \$0.2 million relates to higher transportation volumes);
- \$4.8 million from higher collection volumes as a result of increased activity, new customer growth and an increased demand for services due to economic recovery from the prior year, which was negatively impacted by the COVID-19 pandemic; and
- \$0.7 million from higher processing volumes.

Surcharges and other fees.

The surcharges and other fees change component in fiscal year 2021 solid waste revenues growth from the prior year is associated with the sustainability recycling adjustment fee ("SRA Fee") and the energy component of the energy and environmental fee. The SRA Fee floats on a monthly basis conversely with recycled commodity prices, which were higher as compared to the prior year periods, resulting in lower SRA Fee revenues. This was partially offset by the impact of the energy component of the energy and environmental fee, which floats on a monthly basis in conjunction with diesel fuel prices, which were higher as compared to the prior year, resulting in higher energy fee revenues.

Commodity price and volume.

The commodity price and volume change component in fiscal year 2021 solid waste revenues growth from the prior year is a result of the following:

- \$1.9 million from favorable commodity and energy pricing; and
- \$0.1 million due primarily to higher commodity processing volumes.

Acquisitions.

The acquisitions change component in fiscal year 2021 solid waste revenues growth is a result of increased acquisition activity in line with our growth strategy, including the following:

- the timing and acquisition of ten businesses in fiscal year 2021: a residential, commercial and roll-off collection business in eastern Connecticut that operates a rail-served C&D processing and waste transfer facility, a waste transfer station, a single-stream recycling facility, and several other recycling operations whose assets and liabilities are allocated between our Eastern region and Resource Solutions operating segments; a solid-waste collection business that operates a waste transfer station, a septic and portable toilet business, and two tuck-in solid-waste collection businesses in our Eastern region; and a solid-waste transfer station business, a waste composting and food-scrap hauling business, a solid-waste collection business that operates a waste transfer station, and two tuck-in solid-waste collection businesses in our Western region; and
- the timing and acquisition of ten businesses in fiscal year 2020: seven tuck-in solid waste collection businesses and a solid waste collection business in our Western region, a transportation business in our Eastern region, and one recycling operation in our Resource Solutions operating segment.

Resource Solutions revenues

The change component in fiscal year 2021 resource solutions revenues growth of \$38.8 million from the prior year period is the result of the following:

- \$17.0 million from the favorable impact of commodity pricing in the marketplace (not including the negative impact of lower intercompany tipping fees that were reduced due to higher commodity pricing);
- \$9.6 million from acquisition activity;
- \$8.0 million from higher non-processing revenues due to higher volumes; and
- \$4.2 million from higher processing volumes driven by higher recycling commodity volumes and other processing volumes.

Operating Expenses

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

	Fiscal Years Ended December 31,				\$ Change			
	2021		2020					
Cost of operations	\$	582.4	65.5 %	\$	515.6	66.6 %	\$	66.8
General and administration	\$	118.8	13.4 %	\$	102.4	13.2 %	\$	16.4
Depreciation and amortization	\$	103.6	11.6 %	\$	90.8	11.7 %	\$	12.8

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, the cost of purchasing materials to be recycled, 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.

An explanation of the period-to-period change in cost of operations is as follows:

Third-party direct costs in fiscal year 2021 increased \$22.7 million from the prior year, while decreasing approximately (80) basis points as a percentage of revenues, due to the following:

- higher third-party disposal costs associated with increased solid waste volumes on organic growth and acquisition activity; and
- higher hauling and third-party transportation costs associated with increased solid waste volumes on organic growth and acquisition activity; higher non-processing and higher commodity and other processing volumes in our Resource Solutions operating segment.

Maintenance and repair costs in fiscal year 2021 increased \$17.7 million from the prior year, while increasing approximately 10 basis points as a percentage of revenues, due primarily to: higher overall fleet maintenance costs and higher facility maintenance costs in our Resource Solutions operating segment, and to a lesser extent the Eastern and Western regions, acquisition activity and an increased demand for services.

Direct labor costs in fiscal year 2021 increased \$17.1 million from the prior year, while increasing approximately 20 basis points as a percentage of revenues, due primarily to: higher labor and benefit costs on wage inflation in our markets and increased overtime on higher solid waste volumes associated with an increased demand for services and acquisition activity; higher health insurance costs; and higher workers compensation costs on claim activity.

Fuel costs in fiscal year 2021 increased \$5.5 million from the prior year, while increasing approximately 30 basis points as a percentage of revenues, due to higher volumes driven by acquisition activity, along with higher fuel prices.

Direct operational costs in fiscal year 2021 increased \$3.7 million from the prior year, while decreasing approximately (90) basis points as a percentage of revenues, due primarily to: higher landfill operating costs, including higher leachate costs and higher host community and royalty fees, and higher variable operating costs on increased activity; partially offset by lower equipment operating lease expense.

General and Administration

General and administration expenses include management, clerical and administrative compensation and overhead, professional services 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: increased overhead costs associated with wage inflation, human resources costs to attract, train and retain employees, and business growth; and higher equity compensation costs and accrued incentive compensation on improved performance.

Depreciation and Amortization

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

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

	Fiscal Year Ended December 31,				\$ Change
	2021		2020		
Depreciation expense	\$ 62.3	7.0 %	\$ 54.4	7.0 %	\$ 7.9
Landfill amortization expense	30.3	3.4 %	27.5	3.6 %	2.8
Other amortization expense	11.0	1.2 %	8.9	1.1 %	2.1
	<u>\$ 103.6</u>	<u>11.6 %</u>	<u>\$ 90.8</u>	<u>11.7 %</u>	<u>\$ 12.8</u>

The period-to-period change in depreciation and other amortization expense can be primarily attributed to increased investments in our fleet and acquisition activity. Landfill amortization expense increased primarily due to higher third-party and overall landfill volumes and changes to cost estimates and other assumptions from prior year periods.

Expense from Acquisition Activities and Other Items

In the fiscal years 2021 and 2020, we recorded charges of \$5.3 million and \$1.9 million, respectively, comprised primarily of legal, consulting and other similar costs associated with the acquisition and integration of acquired businesses or select development projects. See Note 5, *Business Combinations*, to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K for disclosure regarding acquisition activity.

Environmental Remediation Charge

In the fiscal year 2021, we recorded an environmental remediation charge of \$0.9 million associated with a settlement agreement to conduct restoration of a stream bed on lands adjoining our North Country Environmental Services landfill located in Bethlehem, New Hampshire. See Note 12, *Commitments and Contingencies*, to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K for further disclosure regarding the matter.

Southbridge Landfill Closure Charge, Net

In the fiscal year ended December 31, 2017, we initiated the plan to cease operations of our landfill located in Southbridge, Massachusetts ("Southbridge Landfill") and later closed it in November 2018 when Southbridge Landfill reached its final capacity. Accordingly, in fiscal years 2021 and 2020, we recorded charges associated with the closure of our Southbridge Landfill (in millions) as follows:

	Fiscal Year Ended December 31,	
	2021	2020
Legal and transaction costs (1)	\$ 0.9	\$ 2.3
Contract settlement charge (2)	0.6	—
Landfill closure project (credit) charge (3)	(1.0)	0.5
Legal settlement charge (4)	—	2.0
Environmental remediation charge (5)	—	(0.2)
Southbridge Landfill closure charge, net	<u>\$ 0.5</u>	<u>\$ 4.6</u>

- (1) We incurred legal costs as well as other transaction costs associated with various matters as part of the Southbridge Landfill closure.
- (2) We updated the cost estimates associated with a contract settlement charge associated with the Southbridge Landfill closure and the remaining future obligations due to the Town of Southbridge under the landfill operating agreement with the Town of Southbridge.
- (3) We recorded a landfill closure project (credit) charge associated with revised costs under the closure plan at Southbridge Landfill.
- (4) We established reserves and made payments associated with legal settlements associated with claims against us as part of the Southbridge Landfill closure.
- (5) We recorded an environmental remediation reversal associated with the completion of environmental remediation at the Southbridge Landfill.

See Note 12, *Commitments and Contingencies* to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K for further disclosure regarding the environmental remediation charge associated with the Southbridge Landfill closure.

Other expenses

Interest Expense, net

Our interest expense, net decreased \$(1.1) million in fiscal year 2021 due primarily to lower average interest rates on our debt associated with changes in London Inter-Bank Offered Rate ("LIBOR").

Provision (Benefit) for Income Taxes

Our provision (benefit) for income taxes was \$16.9 million in fiscal year 2021 and \$(52.8) million in fiscal year 2020. The provision for income taxes in fiscal year 2021 includes \$1.8 million of current income taxes and \$15.1 million of deferred

income taxes. For fiscal year 2020, the benefit for income taxes includes \$(0.5) million of current income taxes and \$(52.3) million of deferred income taxes. The effective rate for the fiscal year 2021 is 29% and is computed based on the statutory rate of 21% adjusted primarily for state taxes and nondeductible officer compensation.

The significant increase in the year-to-date deferred tax provision between the periods relates primarily to the \$61.3 million tax benefit recognized in fiscal year 2020 for the release of our valuation allowance. On a periodic basis, we reassess the valuation allowance on our deferred income tax assets, weighing positive and negative evidence to assess the recoverability of the deferred tax assets. In the quarter ended December 31, 2020, we assessed the valuation allowance and considered positive evidence, including significant cumulative consolidated income over the three years ended December 31, 2020, revenue growth and expectations of future profitability, and negative evidence, including the impact of a negative change in the economic climate, significant risks and uncertainties in the business and restrictions on tax loss utilization in certain state jurisdictions. After assessing both the positive evidence and the negative evidence, we determined it was more likely than not that the majority of our deferred tax assets would be realized in the future and released the valuation allowance on the majority of our net operating loss carryforwards and other deferred tax assets as of December 31, 2020, resulting in a benefit from income taxes of \$61.3 million. Following reassessment in fiscal year 2021, our judgement with regard to the realizability of our deferred tax assets remains consistent. We continue to maintain a valuation allowance related to deferred tax assets that would generate capital losses when realized and deferred tax assets related to certain state jurisdictions.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") was enacted which, among other things, allowed the carryback of remaining minimum tax credit carryforwards to tax year 2018. Prior to the CARES Act, the minimum tax credit carryforwards were fully refundable through tax year 2021, if not otherwise used to offset tax liabilities. A current income tax benefit of \$(1.0) million, offset by a \$1.0 million deferred tax provision, was recognized in the three months ended March 31, 2020 for the remaining minimum tax credit carried back to tax year 2018.

On December 22, 2017, the Tax Cuts and Jobs Act (the "TCJ Act") was enacted. The TCJ Act significantly changed U.S. corporate income tax laws by, among other things, changing carryforward rules for net operating losses. Our \$52.4 million in federal net operating loss carryforwards generated as of the end of tax year 2017 continue to be carried forward for 20 years and are expected to be available to fully offset taxable income earned in tax year 2022 and future tax years. Federal net operating losses generated after tax year 2017, totaling \$46.5 million carried forward to tax year 2022, will be carried forward indefinitely, but generally may only offset up to 80% of taxable income earned in a tax year. In addition, the TCJ Act added limitations on the deductibility of interest expense that become more restrictive beginning in tax year 2022 and potentially could limit the deductibility of some of our interest expense. Any interest expense limited may be carried forward indefinitely and utilized in later years subject to the limitation.

Segment Reporting

We report selected information about our reportable operating segments in a manner consistent with that used for internal management reporting. We classify our solid waste operations on a geographic basis through regional operating segments, our 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. Effective January 1, 2021, we realigned the Resource Solutions operating segment, which includes our larger-scale recycling and commodity brokerage operations along with our organics services and large scale commercial and industrial services, from our historical lines-of-service of recycling, organics and customer solutions into two lines-of-service: processing and non-processing. We realigned the Resource Solutions operating segment to leverage our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver a comprehensive solution for our larger commercial, municipal, institutional and industrial customers that have more diverse waste and recycling needs. Revenues from processing services are derived from municipalities and customers in the form of processing fees, tipping fees, commodity sales, and organic material sales. Revenues from non-processing services are derived from brokerage services and overall resource management services providing a wide range of environmental services and zero waste solutions to large and complex organizations, as well as traditional collection, disposal and recycling services provided to large account multi-site customers. Legal, tax, information technology, human resources, certain finance and accounting and other administrative functions are included in our Corporate Entities segment, which is not a reportable operating segment. Corporate Entities results reflect those costs not allocated to our reportable operating segments.

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

	Fiscal Year Ended December 31,		\$ Change
	2021	2020	
Eastern	\$ 264.6	\$ 220.3	\$ 44.3
Western	389.5	358.0	31.5
Resource Solutions	235.1	196.3	38.8
Total	<u>\$ 889.2</u>	<u>\$ 774.6</u>	<u>\$ 114.6</u>

Eastern Region

The following table provides details associated with the period-to-period change in revenues (dollars in millions and as percentage growth of solid waste revenues) attributable to services provided:

	Period-to-Period Change For Fiscal Year 2021 vs Fiscal Year 2020	
	Amount	% Growth
Price	\$ 9.0	4.1 %
Volume	10.0	4.6 %
Surcharges and other fees	(0.9)	(0.4)%
Commodity price and volume	0.2	0.1 %
Acquisitions	26.1	11.8 %
Closed operations	(0.1)	(0.1)%
Solid waste revenues	<u>\$ 44.3</u>	<u>20.1 %</u>

Price.

The price change component in fiscal year 2021 solid waste revenues growth from the prior year is a result of the following:

- \$6.2 million from favorable collection pricing; and
- \$2.8 million from favorable disposal pricing related to transfer stations and landfills.

Volume.

The volume change component in fiscal year 2021 solid waste revenues growth from the prior year is a result of the following:

- \$6.2 million from higher disposal volumes related to transfer stations and landfills as a result of increased activity and an increased demand for services due to economic recovery from the prior year, which was negatively impacted by the COVID-19 pandemic; and
- \$3.0 million from higher collection volumes as a result of increased activity, new customer growth and an increased demand for services due to economic recovery from the prior year, which was negatively impacted by the COVID-19 pandemic; and
- \$0.8 million from higher processing volumes.

Surcharges and other fees.

The surcharges and other fees change component in fiscal year 2021 solid waste revenues growth from the prior year is associated with the SRA Fee and the energy component of the energy and environmental fee. The SRA Fee floats on a monthly basis conversely with recycled commodity prices, which were higher as compared to the prior year periods, resulting in lower SRA Fee revenues. This was partially offset by the impact of the energy component of the energy and environmental fee, which floats on a monthly basis in conjunction with diesel fuel prices, which were higher as compared to the prior year, resulting in higher energy fee revenues.

Acquisitions.

The acquisitions change component in fiscal year 2021 solid waste revenues growth is a result of increased acquisition activity in line with our growth strategy, including the following:

- the timing and acquisition of a residential, commercial and roll-off collection business in eastern Connecticut that operates a rail-served C&D processing and waste transfer facility and a waste transfer station whose assets and liabilities are partially allocated to our Eastern region; a solid-waste collection business that operates a waste transfer station; a septic and portable toilet business; and two tuck-in solid-waste collection business; and
- the timing and acquisition of a transportation business in the prior year.

Western Region

The following table provides details associated with the period-to-period change in revenues (dollars in millions and as percentage growth of solid waste revenues) attributable to services provided:

	Period-to-Period Change For Fiscal Year 2021 vs Fiscal Year 2020	
	Amount	% Growth
Price	\$ 13.7	3.8 %
Volume	3.0	0.8 %
Surcharges and other fees	(1.1)	(0.3)%
Commodity price and volume	1.8	0.5 %
Acquisitions	14.1	4.0 %
Solid waste revenues	\$ 31.5	8.8 %

Price.

The price change component in fiscal year 2021 solid waste revenues growth from the prior year is a result of the following:

- \$10.5 million from favorable collection pricing; and
- \$3.2 million from favorable disposal pricing related to landfills and transfer stations.

Volume.

The volume change component in fiscal year 2021 solid waste revenues growth from the prior year is a result of the following:

- \$1.8 million from higher collection volumes as a result of increased activity, new customer acquisition and an increased demand for services due to economic recovery from the prior year, which was negatively impacted by the COVID-19 pandemic; and
- \$1.2 million from higher disposal volumes related mainly to transfer stations and, to a lesser extent transportation, due to an increased demand for services due to economic recovery from the prior year, which was negatively impacted by the COVID-19 pandemic.

Surcharges and other fees.

The surcharges and other fees change component in fiscal year 2021 solid waste revenues growth from the prior year is associated with the SRA Fee and the energy component of the energy and environmental fee. The SRA Fee floats on a monthly basis conversely with recycled commodity prices, which were higher as compared to the prior year periods, resulting in lower SRA Fee revenues. This was partially offset by the impact of the energy component of the energy and environmental fee, which floats on a monthly basis in conjunction with diesel fuel prices, which were higher as compared to the prior year, resulting in higher energy fee revenues.

Commodity price and volume.

The commodity price and volume change component in fiscal year 2021 solid waste revenues growth from the prior year is the result of favorable energy and commodity pricing and higher commodity processing volumes.

Acquisitions.

The acquisitions change component in fiscal year 2021 solid waste revenues solid waste growth is a result of increased acquisition activity in line with our growth strategy, including the following:

- the timing and acquisition of a solid-waste transfer station business, a waste composting and food-scrap hauling business, a solid-waste collection business that operates a waste transfer station, and two tuck-in solid-waste collection businesses; and

- the timing and acquisition of seven tuck-in solid waste collection businesses and a solid waste collection business in our Western region in the prior year.

Operating Income (Loss)

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

	December 31,		\$ Change
	2021	2020	
Eastern	\$ 12.9	\$ 11.6	\$ 1.3
Western	49.0	42.7	6.3
Resource Solutions	17.6	7.4	10.2
Corporate Entities	(1.8)	(2.4)	0.6
Total	\$ 77.7	\$ 59.3	\$ 18.4

Eastern Region

Eastern region operating income increased \$1.3 million in fiscal year 2021 from the prior year. Excluding the impact of the Southbridge Landfill closure charge, environmental remediation charge and the expense from acquisition activities, our operating performance in fiscal year 2021 improved as a result of revenue growth, inclusive of inter-company revenues, more than offsetting the following cost impacts discussed below.

Cost of operations: Cost of operations increased \$41.9 million in fiscal year 2021 from the prior year due to:

- higher disposal, hauling and transportation costs associated with increased solid waste volumes on acquisition activity as well as organic growth associated with increased demand for services due to increased activity associated with the economic recovery;
- higher direct labor costs due to wage inflation in our markets, increased overtime on business growth, higher health insurance costs and higher workers compensation costs on claims activity;
- higher direct operational costs due to increased landfill operating costs on volume growth, partially offset by lower equipment operating lease expense;
- higher fleet and facility maintenance costs, including operational support costs, on increased demand and acquisition activity; and
- higher fuel costs on higher volumes and higher fuel prices.

General and administration: General and administration expense increased \$6.7 million in fiscal year 2021 due to increased overhead costs associated with wage inflation, human resources costs to attract, train and retain employees and business growth, and higher equity compensation costs and accrued incentive compensation on improved performance.

Depreciation and amortization: Depreciation and amortization expense increased \$7.9 million in fiscal year 2021 due to increased investments in our fleet and acquisition activity, and higher landfill amortization expense primarily on higher landfill volumes and changes to cost estimates and other assumptions from prior year periods.

Western Region

Western region operating income increased \$6.3 million in fiscal year 2021 from the prior year. Excluding the impact of expense from acquisition activities, our operating performance in fiscal year 2021 improved as a result of revenue growth, inclusive of inter-company revenues, more than offsetting the following cost impacts discussed below.

Cost of operations: Cost of operations increased \$29.2 million in fiscal year 2021 from the prior year as a result of the following:

- higher disposal, hauling and transportation costs associated with increased solid waste volumes on acquisition activity as well as organic growth associated with increased demand for services due to increased activity associated with the economic recovery;
- higher direct labor costs due to wage inflation in our markets, increased overtime on business growth, higher health insurance costs and higher workers compensation costs on claims activity;
- higher fleet and facility maintenance costs, including operational support costs, on increased demand and acquisition activity;

- higher direct operational costs due to increased landfill operating costs, including host community and royalty fees, partially offset by lower equipment operating lease expense; and
- higher fuel costs on higher volumes and higher fuel prices.

General and administration: General and administration expense increased \$8.2 million in fiscal year 2021 due to increased overhead costs associated with wage inflation, human resources costs to attract, train and retain employees and business growth, and higher equity compensation costs and accrued incentive compensation on improved performance.

Depreciation and amortization: Depreciation and amortization expense increased \$4.6 million in fiscal year 2021 due to higher depreciation expense associated with increased investments in our fleet and acquisition activity, and higher landfill amortization expense on higher landfill volumes at certain of our landfills and changes to cost estimates and other assumptions from prior year periods.

Resource Solutions

Operating income increased \$10.2 million in fiscal year 2021 driven by revenue growth, inclusive of inter-company revenues, more than offsetting the following cost changes:

Cost of operations: Cost of operations increased \$17.3 million in fiscal year 2021 due to: increased hauling, disposal and transportation costs associated with acquisition activity, higher commodity and other processing volumes, higher non-processing volumes associated with our brokerage operations with high pass through of direct costs; and higher facility operation support costs; partially offset by lower third-party disposal costs on the internalization of more non-processing volumes.

General and administration: General and administration increased \$1.5 million due to higher accrued incentive compensation costs on improved performance and higher labor, benefit and other service costs on business growth.

Liquidity and Capital Resources

Recent Events

On December 22, 2021, we entered into an amended and restated credit agreement ("Amended and Restated Credit Agreement") which provides for a \$350.0 million aggregate principal amount term loan A facility ("Term Loan Facility") and a \$300.0 million revolving line of credit facility, with a \$75.0 million sublimit for letters of credit ("Revolving Credit Facility" and, together with the Term Loan Facility, the "Credit Facility"). We have \$271.9 million of undrawn capacity from our Revolving Credit Facility") and \$33.8 million of cash and cash equivalents as of December 31, 2021 to help meet our short-term and long-term liquidity needs.

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

	December 31,	
	2021	2020
Cash and cash equivalents	\$ 33.8	\$ 154.3
Restricted assets:		
Restricted investments securities - landfill closure	\$ 2.1	\$ 1.8
Debt:		
Current portion	\$ 9.9	\$ 9.2
Non-current portion	552.7	539.2
Total debt	\$ 562.6	\$ 548.4

Summary of Cash Flow Activity

A summary of cash flows (in millions) follows:

	Fiscal Year Ended December 31,		\$ Change
	2021	2020	
Net cash provided by operating activities	\$ 182.7	\$ 139.9	\$ 42.8
Net cash used in investing activities	\$ (293.2)	\$ (140.0)	\$ (153.2)
Net cash (used in) provided by financing activities	\$ (10.1)	\$ 151.0	\$ (161.1)

Cash flows from operating activities.

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

	Fiscal Year Ended December 31,	
	2021	2020
Net income	\$ 41.1	\$ 91.1
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	103.6	90.8
Interest accretion on landfill and environmental remediation liabilities	7.3	7.1
Amortization of debt issuance costs on long-term debt	2.3	2.2
Stock-based compensation	11.6	8.2
Operating lease right-of-use assets expense	13.8	16.3
Loss on sale of property and equipment	0.2	0.9
Southbridge Landfill non-cash closure (credit) charge, net	(0.4)	0.3
Non-cash expense from acquisition activities and other items	0.3	0.6
Environmental remediation charge	0.9	—
Deferred income taxes	15.1	(52.3)
	195.8	165.2
Changes in assets and liabilities, net	(13.1)	(25.3)
Net cash provided by operating activities	\$ 182.7	\$ 139.9

Net cash provided by operating activities increased \$42.8 million in fiscal year 2021 as compared to fiscal year 2020. This was the result of improved operational performance combined with the favorable cash flow impact associated with the changes in our assets and liabilities, net of effects of acquisitions and divestitures. For discussion of our improved operational performance in fiscal year 2021 as compared to fiscal year 2020, see *Results of Operations* included in this Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations." The favorable 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 fiscal year 2021 as compared to fiscal year 2020 was due primarily to the following:

- a \$29.1 million favorable impact to operating cash flows associated with the change in accounts payable based on increased activity, primarily on acquisitions, differences in the timing of payments and a slightly higher days payable outstanding; partially offset by

- a \$(13.2) million unfavorable impact to operating cash flows associated with the change in accounts receivable; and
- a \$(5.1) million unfavorable impact to operating cash flows associated with the change in prepaid expenses, inventories and other assets.

Cash flows from investing activities.

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

	Fiscal Year Ended December 31,	
	2021	2020
Acquisitions, net of cash acquired	\$ (170.7)	\$ (32.5)
Additions to property, plant and equipment	(123.3)	(108.0)
Proceeds from sale of property and equipment	0.8	0.5
Net cash used in investing activities	<u>\$ (293.2)</u>	<u>\$ (140.0)</u>

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

Acquisitions, net of cash acquired. In fiscal year 2021, we acquired ten businesses for total consideration of \$171.7 million, including \$166.5 million in cash and \$1.3 million in cash held in escrow accounts as holdbacks to sellers, and paid \$2.9 million in holdback payments on businesses previously acquired, as compared to fiscal year 2020, during which we acquired ten businesses for total consideration of \$33.5 million, including \$29.0 million in cash, and paid \$3.5 million in holdback payments on businesses previously acquired.

Capital expenditures. Capital expenditures were \$15.3 million higher in fiscal year 2021 as compared to fiscal year 2020 primarily due to timing differences and the following items:

- \$9.1 million in higher growth capital expenditures related primarily to investments to support business growth;
- \$8.8 million in higher replacement capital expenditures as additional capital spend on vehicles, machinery, equipment and containers more than offset lower capital spend on landfill development; and
- \$2.8 million in higher capital expenditures from phase VI construction and development costs related to long-term infrastructure at the Subtitle D landfill in Coventry, Vermont ("Waste USA Landfill") to facilitate future landfill airspace construction, which will significantly enhance the economic useful life of the Waste USA Landfill once construction is finished; partially offset by
- \$(5.5) million in lower capital expenditures associated with the integration of newly acquired operations, which includes planned capital expenditures following an acquisition, as well as non-routine development investments that are expected to provide long-term returns.

Cash flows from financing activities.

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

	Fiscal Year Ended December 31,	
	2021	2020
Proceeds from debt borrowings	\$ 3.7	\$ 157.0
Principal payments on debt	(10.3)	(149.4)
Payments of debt issuance costs	(3.7)	(1.5)
Proceeds from the exercise of share-based awards	0.2	0.1
Proceeds from the public offering of Class A Common Stock	—	144.8
Net cash (used in) provided by financing activities	<u>\$ (10.1)</u>	<u>\$ 151.0</u>

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

Debt activity. Net cash associated with debt activity decreased \$(14.2) million in fiscal year 2021 compared to fiscal year 2020. The decrease in financing cash flows is related to our strong cash position in fiscal year 2021, combined with the issuance of New York State Environmental Facilities Corporation Solid Waste Disposal Revenue Bonds Series 2020 ("New York Bonds 2020") and the pay down of our revolving credit facility in fiscal year 2020.

Payments of debt issuance costs. We paid \$3.7 million of debt issuance costs in fiscal year 2021 related to the refinancing of our credit facility as compared to \$1.5 million in fiscal year 2020 related to the issuance of \$40.0 million aggregate principal amount of New York Bonds 2020.

Proceeds from the public offering of Class A Common Stock. In fiscal year 2020, we completed a public offering of 2.7 million shares of our Class A common stock at a public offering price of \$56.00 per share. The offering resulted in net proceeds to us of \$144.8 million, after deducting underwriting discounts, commissions and offering expenses. The net proceeds from the offering were used for general corporate purposes, including acquisitions or development of new operations or assets with the goal of complementing or expanding our business, and for working capital and capital expenditures.

Outstanding Long-Term Debt

Credit Facility

On December 22, 2021, we entered into an Amended and Restated Credit Agreement, which provides for a \$350.0 million aggregate principal amount Term Loan Facility and a \$300.0 million Revolving Credit Facility, with a \$75.0 million sublimit for letters of credit. The previous credit agreement included \$347.4 million aggregate principal amount of outstanding term loan and a revolving line of credit facility that had not been borrowed against at the time of the amendment. The incremental proceeds from this transaction were used to pay related transaction expenses. 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 Amended and Restated Credit Agreement.

The Credit Facility has a 5-year term that matures in December 2026 and bears interest at a rate of LIBOR plus 1.375% per annum, which will be reduced to a rate of LIBOR plus as low as 1.125% upon us reaching a consolidated net leverage ratio of less than 2.25x. The Credit Facility contains customary benchmark replacement provisions pursuant to which, upon certain triggering events, the LIBOR benchmark used to calculate the LIBOR rate will be replaced with a secured overnight financing rate, as adjusted, on the terms and conditions in the Credit Facility. 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 December 31, 2021, further advances were available under the Credit Facility in the amount of \$271.9 million. The available amount is net of outstanding irrevocable letters of credit totaling \$28.1 million, at which date no amount had been drawn.

The Amended and Restated 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 December 31, 2021, we were in compliance with all financial covenants contained in the Amended and Restated Credit Agreement as follows (in millions):

Credit Facility Covenant	Fiscal Year Ended December 31, 2021	Covenant Requirements at December 31, 2021
Maximum consolidated net leverage ratio (1)	2.35	4.00
Minimum interest coverage ratio	11.43	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 and up to \$100.0 million (calculated at \$530.8 million as of December 31, 2021, or \$562.6 million of consolidated funded debt less \$31.8 million of cash and cash equivalents in excess of \$2.0 million and up to \$100.0 million as of December 31, 2021), divided by consolidated EBITDA. Consolidated EBITDA is based on operating results for the twelve months preceding the measurement date of December 31, 2021. Consolidated funded debt, net of unencumbered cash and cash equivalents in excess of \$2.0 million and up to \$100.0 million, and consolidated EBITDA as defined by the Amended and Restated 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 Consolidated EBITDA is as follows (in millions):

	Twelve Months Ended December 31, 2021
Net cash provided by operating activities	\$ 182.7
Changes in assets and liabilities, net of effects of acquisitions and divestitures	13.1
Loss on sale of property and equipment	(0.2)
Non-cash expense from acquisition activities and other items	(0.3)
Environmental remediation charge	(0.9)
Stock based compensation	(11.6)
Operating lease right-of-use assets expense	(5.6)
Southbridge Landfill non-cash closure charge, net	0.4
Interest expense, less amortization of debt issuance costs	18.9
Provision for income taxes, net of deferred income taxes	1.9
Adjustments as allowed by the Credit Agreement	27.4
Consolidated EBITDA	\$ 225.8

In addition to the financial covenants, the Amended and Restated 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 December 31, 2021, we were in compliance with all covenants contained in the Amended and Restated 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 tighten during these times as well.

Tax-Exempt Financings and Other Debt

As of December 31, 2021, we had outstanding \$162.0 aggregate principal amount of tax exempt bonds, \$45.7 million aggregate principal amount of finance leases and \$4.8 million aggregate principal amount of notes payable. See Note 11, *Debt* to our consolidated financial statements included under Item 8, "*Financial Statements and Supplementary Data*" of this Annual Report on Form 10-K for disclosure about debt.

Contractual Obligations

The following table sets forth a summary of our significant contractual cash obligations (in thousands) as of December 31, 2021. These obligations are reflected in our balance sheet and include obligations with scheduled maturities, as well as significant obligations pertaining to accrued environmental remediation liabilities and final capping, closure and post-closure asset retirement obligations at our landfills. Accordingly, this table is not meant to represent a forecast of our total cash expenditures for any of the periods presented.

	Less than one year	1 - 3 years	3 - 5 years	More than 5 years	Total
Debt	\$ 9,901	\$ 19,485	\$ 386,976	\$ 146,208	\$ 562,570
Interest obligations (1)	13,261	25,547	22,725	64,045	125,578
Non-cancellable operating leases	4,573	4,307	1,427	5,444	15,751
Landfill operating lease contracts	5,495	10,990	13,830	35,476	65,791
Pension plan contributions	147	294	294	1,436	2,171
Environmental remediation	354	1,436	626	4,308	6,724
Final capping, closure and post-closure	5,449	11,710	21,948	210,753	249,860
Total contractual cash obligations (2)	<u>\$ 39,180</u>	<u>\$ 73,769</u>	<u>\$ 447,826</u>	<u>\$ 467,670</u>	<u>\$ 1,028,445</u>

(1) Based on debt balances as of December 31, 2021. Interest obligations related to variable rate debt were calculated using variable rates in effect at December 31, 2021.

(2) Contractual cash obligations do not include accounts payable or accrued liabilities, which will be paid in the fiscal year ending December 31, 2022.

We have no contractual obligations related to unrecognized tax benefits at December 31, 2021. For further description regarding contractual obligations, see Note 8, *Leases*, Note 10, *Final Capping, Closure and Post-Closure Costs*, Note 12, *Commitments and Contingencies* and Note 16, *Income Taxes*, to our consolidated financial statements included in Item 8, "*Financial Statements and Supplementary Data*" of this Annual Report on Form 10-K.

Inflation

Inflationary increases in costs, including current inflationary pressures associated primarily with fuel, labor and certain capital item, have affected, and may continue to affect, our 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.

Critical Accounting Estimates and Assumptions

Our consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States ("GAAP") and necessarily include certain estimates and judgments made by management. On an on-going basis, management evaluates its estimates and judgments which are based on historical experience and on various other factors that are believed to be reasonable under the circumstances. The results of their evaluation form the basis for making judgments about the carrying values of assets and liabilities. However, even under optimal circumstances, estimates routinely require adjustments based on changing assumptions and circumstances, or new or better information becoming available. Accordingly, actual results may differ from these estimates under different assumptions and circumstances.

The following is a list of accounting policies that we believe are the most critical in understanding our consolidated financial position, results of operations and cash flows and that may require management to make subjective or complex judgments about matters that are inherently uncertain. Our significant accounting policies are more fully discussed in Note 3, *Summary of Significant Accounting Policies* of our consolidated financial statements included in Item 8, "*Financial Statements and Supplementary Data*" of this Annual Report on Form 10-K.

Landfill Accounting

Landfill Development Costs. We estimate the total cost to develop each of our landfill sites to its remaining permitted and expansion capacity (see landfill development costs discussed within the "*Property, Plant and Equipment*" accounting policy more fully discussed in Note 3, *Summary of Significant Accounting Policies* of our consolidated financial statements included in Item 8, "*Financial Statements and Supplementary Data*" of this Annual Report on Form 10-K). The projection of these landfill costs is dependent, in part, on future events. The remaining amortizable basis of each landfill includes costs to develop a site to its remaining permitted and expansion capacity and includes amounts previously expended and capitalized, net of accumulated airspace amortization, and projections of future purchase and development costs including capitalized interest. The interest capitalization rate is based on our weighted average interest rate incurred on borrowings outstanding during the period.

Under life-cycle accounting, all costs related to acquisition and construction of landfill sites are capitalized and charged to expense based on tonnage placed into each site. Landfill permitting, acquisition and preparation costs are amortized on the units-of-consumption method as landfill airspace is consumed. In determining the amortization rate for each of our landfills, preparation costs include the total estimated costs to complete construction of the landfills' permitted and expansion capacity. The average amortization rate per ton for our landfills during fiscal year 2021 and 2020 was \$7.03 and \$7.06, respectively.

Final Capping, Closure and Post-Closure Costs. The cost estimates for final capping, closure and post-closure activities at landfills for which we have responsibility are estimated based on our interpretations of current requirements and proposed or anticipated regulatory changes. We also estimate additional costs based on the amount a third-party would charge us to perform such activities even when we expect to perform these activities internally. We estimate the airspace to be consumed related to each final capping event and the timing of construction related to each final capping event and of closure and post-closure activities. Because landfill final capping, closure and post-closure obligations are measured at estimated fair value using present value techniques, changes in the estimated timing of construction of future landfill final capping and closure and post-closure activities would have an effect on these liabilities, related assets and results of operations.

Final capping activities include the installation of liners, drainage, compacted soil layers and topsoil over areas of a landfill where total airspace has been consumed and waste is no longer being received. Final capping activities occur throughout the life of the landfill. Our engineering personnel estimate the cost for each final capping event based on the acreage to be capped, along with the final capping materials and activities required. The estimates also consider when these costs would actually be paid and factor in inflation and discount rates. The engineers then quantify the landfill capacity associated with each final capping event and the costs for each event are amortized over that capacity as waste is received at the landfill.

Closure and post-closure costs represent future estimated costs related to monitoring and maintenance of a solid waste landfill after a landfill facility ceases to accept waste and closes. We estimate, based on input from our engineers, accountants, lawyers, managers and others, our future cost requirements for closure and post-closure monitoring and maintenance based on our interpretation of the technical standards of the Subtitle D regulations and the air emissions standards under the Clean Air Act of 1970, as amended, as they are being applied on a state-by-state basis. Closure and post-closure accruals for the cost of monitoring and maintenance include site inspection, groundwater monitoring, leachate management, methane gas control and recovery, and operation and maintenance costs to be incurred for a period which is generally for a term of 30 years after final closure of a landfill. In determining estimated future closure and post-closure costs, we consider costs associated with permitted and permittable airspace. See Note 10, *Final Capping, Closure and Post-Closure Costs* to our consolidated financial statements included under Item 8, "*Financial Statements and Supplementary Data*" of this Annual Report on Form 10-K for further disclosure about final capping, closure and post-closure asset retirement costs, including revisions in estimates.

Remaining Permitted Airspace. Our engineers, in consultation with third-party engineering consultants and surveyors, are responsible for determining remaining permitted airspace at our landfills. The remaining permitted airspace is determined by an annual survey, which is then used to compare the existing landfill topography to the expected final landfill topography.

Expansion Airspace. We currently include unpermitted expansion airspace in our estimate of remaining permitted and expansion airspace in certain circumstances. To be considered expansion airspace all of the following criteria must be met:

- we control the land on which the expansion is sought;
- all technical siting criteria have been met or a variance has been obtained or is reasonably expected to be obtained;
- we have not identified any legal or political impediments which we believe will not be resolved in our favor;
- we are actively working on obtaining any necessary permits and we expect that all required permits will be received; and

- senior management has approved the project based on a review of the engineering design and determination that the financial return profile meets our investment criteria.

For unpermitted airspace to be included in our estimate of remaining permitted and expansion airspace, the expansion effort must meet all of the criteria listed above. These criteria are evaluated annually by our engineers, accountants, lawyers, managers and others to identify potential obstacles to obtaining the permits. Once the remaining permitted and expansion airspace is determined in cubic yards, an airspace utilization factor ("AUF") is established to calculate the remaining permitted and expansion capacity in tons. The AUF is established using a process that considers the measured density obtained from annual surveys. When we include the expansion airspace in our calculation of remaining permitted and expansion airspace, we include the projected costs for development, as well as the projected asset retirement costs related to final capping, closure and post-closure of the expansion airspace in the amortization basis of the landfill. See Part I, Item 1, "Business" of this Annual Report on Form 10-K for more disclosure about permitted and permissible capacity at our landfills.

After determining the costs and the remaining permitted and expansion capacity at each of our landfills, we determine the per ton rates that will be expensed as waste is received and deposited at each of our landfills by dividing the costs by the corresponding number of tons. We calculate per ton amortization rates for assets associated with each final capping event, for assets related to closure and post-closure activities, and for all other costs capitalized or to be capitalized in the future for each landfill. These rates per ton are updated annually, or more frequently, as significant facts change.

It is possible that actual results, including the amount of costs incurred, the timing of final capping, closure and post-closure activities, our airspace utilization or the success of our expansion efforts could ultimately turn out to be significantly different from our estimates and assumptions. To the extent that such estimates or related assumptions prove to be significantly different than actual results, lower profitability may be experienced due to higher amortization rates, higher final capping, closure or post-closure rates, or higher expenses. Higher profitability may result if the opposite occurs. Most significantly, if it is determined that the expansion capacity should no longer be considered in calculating the recoverability of the landfill asset, we may be required to recognize an asset impairment. If it is determined that the likelihood of receiving an expansion permit has become remote, the capitalized costs related to the expansion effort are expensed immediately.

Environmental Remediation Liabilities

We have recorded environmental remediation liabilities representing our estimate of the most likely outcome of the matters for which we have determined that a liability is probable. These liabilities include potentially responsible party investigations, settlements, certain legal and consultant fees, as well as costs directly associated with site investigation and clean up, such as materials and incremental internal costs directly related to the remedy. We provide for expenses associated with environmental remediation obligations when such amounts are probable and can be reasonably estimated. We estimate costs required to remediate sites where it is probable that a liability has been incurred based on site-specific facts and circumstances. Estimates of the cost for the likely remedy are developed using third-party environmental engineers or other service providers. Where we believe that both the amount of a particular environmental remediation liability and timing of payments are reliably determinable, we inflate the cost in current dollars until the expected time of payment and discount the cost to present value. See Note 12, *Commitments and Contingencies* to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K for further disclosure about environmental remediation liabilities, including revisions in estimates.

Accounts Receivable, Net of Allowance for Credit Losses

Accounts receivable represent receivables from customers for collection, transfer, recycling, disposal and other services. Our accounts receivable are recorded when billed or when related revenue is earned, if earlier, and represent claims against third-parties that will be settled in cash. The carrying value of our accounts receivable, net of allowance for credit losses represents its estimated net realizable value. Estimates are used in determining our allowance for credit losses based on, among other things, our historical loss trends, the age of outstanding accounts receivable, and current and expected economic conditions. Additions charged to expense in fiscal year 2021 consider the current economic conditions and the potential impact to our customers' ability to pay for services that we have provided. Our reserve is evaluated and revised on a monthly basis. Past due accounts receivable are written off when deemed to be uncollectible. See Note 6, *Accounts Receivable, Net of Allowance for Credit Losses* to our consolidated financial statements under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K for further disclosure about changes to the allowance for credit losses.

Goodwill and Other Intangibles

In testing for goodwill impairment, we estimate the fair value of each reporting unit, which we have determined to be our geographic operating segments and our Resource Solutions operating segment, and compare the fair value with the carrying value of the net assets of each reporting unit. If the fair value is less than its carrying value, then we would recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, noting that the amount is not to exceed the total amount of goodwill allocated to that reporting unit.

To determine the fair value of each of our reporting units as a whole we use discounted cash flow analyses, which require significant assumptions and estimates about the future operations of each reporting unit. Significant judgments inherent in this analysis include the determination of appropriate discount rates, the amount and timing of expected future cash flows and growth rates. The cash flows employed in our discounted cash flow analyses are based on financial forecasts developed internally by management. Our discount rate assumptions are based on an assessment of our risk adjusted discount rate, applicable for each reporting unit. In assessing the reasonableness of our determined fair values of our reporting units, we evaluate our results against our current market capitalization.

We elected to perform a quantitative analysis as part of our annual goodwill impairment test for fiscal year 2021. As of October 1, 2021, our Eastern, Western, and Resource Solutions reporting units indicated that the fair value of each reporting unit exceeded its carrying amount, including goodwill. Furthermore, in each case the fair value of our Eastern, Western, and Resource Solutions reporting units exceeded its carrying value by in excess of 180.0%. We incurred no impairment of goodwill as a result of our annual goodwill impairment tests in fiscal years 2021 or 2020. However, there can be no assurance that goodwill will not be impaired at any time in the future.

Intangible assets consist primarily of covenants not-to-compete and customer relationships. Intangible assets are recorded at fair value and are amortized based on the economic benefit provided or using the straight-line method over their estimated useful lives. Covenants not-to-compete and customer relationships are typically amortized over a term of no more than 10 years. See Note 5, *Business Combinations and Contingencies* and Note 9, *Goodwill and Intangible Assets* to our consolidated financial statements included under Item 8, "*Financial Statements and Supplementary Data*" of this Annual Report on Form 10-K for further disclosure.

Recovery of Long-Lived Assets

We continually assess whether events or changes in circumstances have occurred that may warrant revision of the estimated useful lives of our long-lived assets (other than goodwill) or whether the remaining balances of those assets should be evaluated for possible impairment. Long-lived assets include, for example, capitalized landfill costs, other property and equipment, identifiable intangible assets, and operating lease right-of-use assets. Events or changes in circumstances that may indicate that an asset may be impaired include the following:

- a significant decrease in the market price of an asset or asset group;
- a significant adverse change in the extent or manner in which an asset or asset group is being used or in its physical condition;
- a significant adverse change in legal factors or in the business climate that could affect the value of an asset or asset group, including an adverse action or assessment by a regulator;
- an accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset;
- a current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset or asset group;
- a current expectation that, more likely than not, a long-lived asset or asset group will be sold or otherwise disposed of significantly before the end of its previously estimated useful life; or
- an impairment of goodwill at a reporting unit.

There are certain indicators listed above that require significant judgment and understanding of the waste industry when applied to landfill development or expansion. For example, a regulator may initially deny a landfill expansion permit application although the expansion permit is ultimately granted. In addition, management may periodically divert waste from one landfill to another to conserve remaining permitted landfill airspace. Therefore, certain events could occur in the ordinary course of business and not necessarily be considered indicators of impairment due to the unique nature of the waste industry.

If an impairment indicator occurs, we perform a test of recoverability by comparing the carrying value of the asset or asset group to its undiscounted expected future cash flows. We group our long-lived assets for this purpose at the lowest level for which identifiable cash flows are primarily independent of the cash flows of other assets or asset groups. If the carrying values are in excess of undiscounted expected future cash flows, we measure any impairment by comparing the fair value of the asset or asset group to its carrying value.

To determine fair value, we use discounted cash flow analyses and estimates about the future cash flows of the asset or asset group. This analysis includes a determination of an appropriate discount rate, the amount and timing of expected future cash flows and growth rates. The cash flows employed in our discounted cash flow analyses are typically based on financial forecasts developed internally by management. The discount rate used is commensurate with the risks involved. We may also rely on third-party valuations and or information available regarding the market value for similar assets.

If the fair value of an asset or asset group is determined to be less than the carrying amount of the asset or asset group, impairment in the amount of the difference is recorded in the period that the impairment occurs. Estimating future cash flows requires significant judgment and projections may vary from the cash flows eventually realized. We incurred no impairment of long-lived assets in fiscal years 2021 or 2020. However, there can be no assurance that long-lived assets will not be impaired at any time in the future.

Self-Insurance Liabilities and Related Costs

We are self-insured for vehicles and workers' compensation with reinsurance coverage limiting our maximum exposure. Our maximum exposure in fiscal year 2021 under the workers' compensation plan was \$1.25 million per individual event. Our maximum exposure in fiscal year 2021 under the automobile plan was \$3.65 million per individual event. The liability for unpaid claims and associated expenses, including incurred but not reported losses, is determined by management with the assistance of a third-party actuary and reflected in our consolidated balance sheet as an accrued liability. We use a third-party to track and evaluate actual claims experience for consistency with the data used in the annual actuarial valuation. The actuarial-determined liability is calculated based on historical data, which considers both the frequency and settlement amount of claims. Our estimated accruals for these liabilities could be significantly different than our ultimate obligations if variables such as the frequency or severity of future events differ significantly from our assumptions. Our self-insurance reserves totaled \$19.8 million and \$16.9 million as of December 31, 2021 and December 31, 2020, respectively. Our estimated accruals for these liabilities could be significantly different than our ultimate obligations if variables such as the frequency or severity of future events differ significantly from our assumptions.

Income Taxes

We use estimates to determine our provision for income taxes and related assets and liabilities and any valuation allowance recorded against our net deferred tax assets. Valuation allowances have been established for the possibility that tax benefits may not be realized for certain deferred tax assets. Deferred income taxes are recognized based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities, calculated using currently enacted tax rates. We record net deferred tax assets to the extent we believe these assets will more likely than not be realized. In making this determination, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies and recent financial operations. In the event we determine that we would be able to realize our deferred income tax assets in the future in excess of their net recorded amount, we will make an adjustment to the valuation allowance which would reduce the provision for income taxes.

We account for income tax uncertainties according to guidance on the recognition, de-recognition and measurement of potential tax benefits associated with tax positions. We recognize interest and penalties relating to income tax matters as a component of income tax expense.

See Note 16, *Income Taxes* to our consolidated financial statements included under Item 8, "*Financial Statements and Supplementary Data*" of this Annual Report on Form 10-K for further disclosure, including the effect of the valuation allowance release.

Contingent Liabilities

We are subject to various legal proceedings, claims and regulatory matters, the outcomes of which are subject to significant uncertainty. We determine whether to disclose or accrue for loss contingencies based on an assessment of whether the risk of loss is remote, reasonably possible or probable, and whether it can be reasonably estimated. We analyze our litigation and regulatory matters based on available information to assess the potential liabilities. Management's assessment is developed based on an analysis of possible outcomes under various strategies. We accrue for loss contingencies when such amounts are probable and reasonably estimable. If a contingent liability is only reasonably possible, we will disclose the potential range of the loss, if estimable. We record losses related to contingencies in cost of operations or general and administration expenses, depending on the nature of the underlying transaction leading to the loss contingency. See Note 12, *Commitments and Contingencies* for disclosure about loss contingencies, as applicable. Contingent liabilities accounted for under purchase accounting are recorded at their fair values. These fair values may be different from the values we would have otherwise recorded, had the contingent liability not been assumed as part of an acquisition of a business. See Note 5, *Business Combinations* and Note 14, *Fair Value of Financial Instruments* to our consolidated financial statements included under Item 8, "Financial Statement and Supplementary Data" of this Annual Report on Form 10-K for disclosure about contingent consideration accounted for under purchase accounting.

Stock-Based Compensation

All share-based compensation cost is measured at the grant date, based on the estimated fair value of the award, and is recognized as expense-in general and administration expense over the employee's requisite service period. For purposes of calculating stock-based compensation expense, forfeitures are accounted for as they occur. Our equity awards granted generally consist of stock options, including market-based performance stock options, restricted stock, restricted stock units and performance stock units, including market-based performance stock units.

The fair value of each stock option grant is estimated using a Black-Scholes option-pricing model. The fair value of restricted stock, restricted stock unit and performance stock unit grants is at a price equal to the fair market value of our Class A common stock at the date of grant. The fair value of market-based performance stock unit grants is valued using a Monte Carlo pricing model. See Note 13, *Stockholders' Equity* to our consolidated financial statements included under Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K for further disclosure.

New Accounting Standards

For a description of the new accounting standards that may affect us, see Note 2, *Accounting Changes* to our consolidated financial statements included in Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE 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 reduce exposure to interest rate risk involves entering into interest rate derivative agreements to hedge against adverse movements in interest rates related to the variable rate portion of our long-term debt. We have designated these derivative instruments as highly effective cash flow hedges, and therefore the change in fair value is recorded in our stockholders' equity as a component of accumulated other comprehensive loss and included in interest expense at the same time as interest expense is affected by the hedged transactions. Differences paid or received over the life of the agreements are recorded as additions to or reductions of interest expense on the underlying debt and included in cash flows from operating activities.

As of December 31, 2021 and December 31, 2020, our active interest rate derivative agreements had a total notional amount of \$195.0 million and \$190.0 million, respectively. According to the terms of the agreements, we receive interest based on the 1-month LIBOR index, in some instances restricted by a 0.0% floor, and pay interest at a weighted average rate of approximately 2.51%. The agreements mature between February 2022 and December 2026.

Additionally, we have forward starting interest rate derivative agreements that replace active agreements with a total notional amount of \$85.0 million that mature between February 2027 and May 2028. We will receive interest based on the 1-month LIBOR index, restricted by a 0.0% floor, and will pay interest at a weighted average rate of approximately 1.55%.

We have designated these derivative instruments as highly effective cash flow hedges, and therefore the change in fair value is recorded in our stockholders' equity as a component of accumulated other comprehensive loss and included in interest expense at the same time as interest expense is affected by the hedged transactions. Differences paid or received over the life of the agreements are recorded as additions to or reductions of interest expense on the underlying debt and included in cash flows from operating activities.

As of December 31, 2021, we have \$212.6 million of fixed rate debt as of December 31, 2021 in addition to the \$195.0 million fixed through our interest rate derivative agreements. We had interest rate risk relating to approximately \$155.0 million of long-term debt as of December 31, 2021. The weighted average interest rate on the variable rate portion of long-term debt was approximately 1.5% at December 31, 2021. Should the average interest rate on the variable rate portion of long-term debt change by 100 basis points, we estimate that our annual interest expense would change by up to approximately \$1.6 million.

Commodity Price Volatility

Through our recycling operation, we market a variety of materials, including fibers such as old corrugated cardboard and old newsprint, plastics, glass, ferrous and aluminum metals. We may use a number of strategies to mitigate impacts from commodity price fluctuations including: (1) charging collection customers a floating SRA Fee to reduce recycling commodity risks; (2) in-bound material recovery facilities ("MRF") customers receiving a revenue share or indexed materials purchases in higher commodity price markets, or charging these same customers a processing cost or tipping fee per ton in lower commodity price markets; (3) selling recycling commodities to out-bound MRF customers through floor price or fixed price agreements; or (4) entering into fixed price contracts or hedges that mitigate the variability in cash flows generated from the sales of recycled paper at floating prices. Although we have introduced these risk mitigation programs to help offset volatility in commodity prices and to offset higher labor or capital costs to meet more stringent contamination standards, we cannot provide assurance that we can use these programs with our customers in all circumstances or that they will mitigate these risks in an evolving recycling environment. We do not use financial instruments for trading purposes and are not a party to any leveraged derivatives. As of December 31, 2021, we were not party to any commodity hedging agreements.

Should commodity prices change by \$10 per ton, we estimate that our annual operating income margin would change by approximately \$1.3 million annually. 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 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Casella Waste Systems, Inc.

Opinions on the Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Casella Waste Systems, Inc. and subsidiaries (the Company) as of December 31, 2021 and 2020, and the related consolidated statements of operations, comprehensive income, stockholders' equity (deficit) and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively, the financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

As discussed in Management's Report on Internal Control Over Financial Reporting, management has excluded: Mark Wright Construction (Mark Wright); Willimantic Waste Paper Co., Inc. (Willimantic); Guard Contracting Corp., 3755 River Road LLC and Triad Recycling and Energy Corp., (collectively Triad); Union Transfer, LLC and 1700 Union Road, LLC (collectively Union); and Stateline Waste Management, LLC (Stateline), because they were acquired by the Company in purchase business combinations during the third and fourth quarters of 2021 and have not yet been fully incorporated into the Company's internal controls over financial reporting. We have also excluded Mark Wright, Willimantic, Triad, Union, and Stateline from our report of internal controls over financial reporting. Collectively, Mark Wright, Willimantic, Triad, Union, and Stateline represent total assets and revenues of approximately 14% and 4%, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2021.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and

evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed 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. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Landfill Accounting

As described in Note 3 of the consolidated financial statements, the Company capitalizes landfill acquisition and development costs and charges those costs to expense on a units-of-consumption method as landfill airspace is consumed. In addition, the Company accrues an asset retirement obligation for estimated capping, closure and post-closure costs related to its landfills. As described in Note 7 of the consolidated financial statements, as of December 31, 2021, the Company's landfill assets totaled \$677.0 million, and the associated amortization expense for the year ended December 31, 2021 was \$30.3 million. As described in Note 10 of the consolidated financial statements, as of December 31, 2021, the Company estimated its accrued capping, closure and post-closure costs at \$86.9 million. The landfill asset amortization and accrued capping, closure and post-closure costs are based on estimates of future cash flows, which require significant assumptions and estimates about the future operations and retirement of each landfill. Management estimates the costs and timing of expected future cash flows based on various assumptions at each individual landfill including:

- The future landfill development costs, as well as costs associated with the final capping, closure and post closure activities.
- Remaining permitted and unpermitted expansion airspace, which is estimated by Company engineers, in consultation with third-party engineers and surveyors, who utilize annual aerial surveys.
- Compaction factors, or airspace utilization factors (AUF), which are estimated using a process that considers the measured density obtained from annual aerial surveys.
- Inflation rates and the credit adjusted risk-free rate

We identified the Company's landfill asset amortization expense and accrued capping, closure and post-closure costs as a critical audit matter because of the significant assumptions and judgments made by management. Auditing management's assumptions and judgements involved a high degree of auditor judgment and increased audit effort due to the impact these assumptions have on the amounts recorded by the Company.

Our audit procedures related to landfill asset amortization expense and accrued capping, closure and post-closure costs included the following, among others:

- We obtained an understanding of the relevant controls related to landfill asset amortization expense and accrued capping, closure and post-closure costs and tested such controls for design and operating effectiveness, including those over the determination of the appropriate credit adjusted risk-free and inflation rates, compaction factors, the amount and timing of expected future cash flows, and permitted and unpermitted airspace.
- We tested internal and external data used by management in the future cost estimates for both the calculation of landfill asset amortization expense rates and capping, closure and post-closure activities, by evaluating the reasons for

significant changes in assumptions from historical trends and determined whether the change from the historical trend was appropriate and identified in the proper period.

- We confirmed the landfill topography drawings and results of aerial surveys directly with the third-party engineers. We agreed relevant data outputs from the topography drawings, such as permitted and unpermitted expansion airspace, to the relevant data inputs in management's estimates of future cash flows.
- We compared remaining permitted airspace to issued permits and evaluated management's determination of unpermitted expansion airspace through a comparison of airspace and annual aerial surveys.
- We compared the results of the compaction factors calculated by aerial surveys to the factors utilized by management in the estimates of future cash flows.
- We assessed the appropriateness of the methodology used by management in developing the inflation rate, and we tested the completeness and accuracy of the underlying data utilized by management.
- We evaluated the appropriateness of the methodology used by management in developing the credit adjusted risk-free rate and tested it by comparing the Company's credit adjusted risk-free rate to an independent data source.
- We assessed the qualifications, reputation, and objectivity of management's third-party engineering specialists.

Valuation of Certain Intangible Assets and Favorable Leasehold Interest in Business Combinations

As described in Note 5 of the consolidated financial statements, the Company completed the acquisition of ten businesses during the year ended December 31, 2021, for total consideration of \$171.7 million. The Company accounted for these transactions under the acquisition method of accounting for business combinations. Accordingly, the purchase price was allocated, on a preliminary basis, to the assets acquired and liabilities assumed primarily based on their respective fair values, including identified intangible assets of \$46.4 million and \$38.0 million of operating and financing lease right-of-use assets, which were recorded based upon the measurement principles in the lease accounting guidance with fair value adjustments for favorable terms. Of the identified intangible assets acquired, the most significant included customer relationship intangible assets of \$36.2 million and a trade name intangible asset of \$8.4 million. The Company also recorded a favorable leasehold interest of \$26.6 million at fair value as part of the operating and financing lease right-of-use assets. The Company estimated the fair value of these assets using both income and market approaches, which required management to make significant estimates and assumptions.

We identified the valuation of certain customer relationship intangible assets, the trade name intangible asset, and the favorable leasehold interest as a critical audit matter because of the significant estimates and assumptions management used in the fair value determination. Auditing management's forecasts of future revenue and expenses, as well as the selection of the attrition, royalty, and discount rates, and the determination of market rents, required a high degree of auditor judgment and an increased audit effort, including the use of our valuation specialists, due to the impact these assumptions have on the estimates of fair value.

Our audit procedures that pertained to certain customer relationship intangible assets, the trade name intangible asset, and the favorable leasehold interest included the following, among others:

- We obtained an understanding of the relevant controls related to the valuation of the intangible assets and favorable leasehold interest and tested such controls for design and operating effectiveness. This included management's controls over forecasts of future revenue and expenses, the selection of the attrition rates, royalty rates, discount rates, and the determination of market rents.
- We read the purchase and sale agreements to understand and evaluate the terms of the acquisitions.
- We evaluated the reasonableness of management's forecasts of future revenue and expenses and the selection of attrition rates by comparing the projections to historical results or industry benchmarks and tested the underlying data for accuracy and completeness.
- We utilized our valuation specialists to assist in the following procedures, among others:
 - Evaluating the appropriateness of the valuation models and methods used by management and testing their mathematical accuracy.
 - Comparing the source information underlying the determination of the discount rates and the royalty rate to publicly available market data and verifying the accuracy of the calculations.
 - Testing the market rents used by management by independently obtaining market data to validate the appropriateness of the rents selected by management.

/s/ RSM US LLP

We have served as the Company's auditor since 2010.

Boston, Massachusetts

February 18, 2022

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

	December 31, 2021	December 31, 2020
ASSETS		
CURRENT ASSETS:		
Cash and cash equivalents	\$ 33,809	\$ 154,342
Accounts receivable, net of allowance for credit losses of \$3,276 and \$2,333, respectively	86,979	74,198
Refundable income taxes	—	229
Prepaid expenses	12,766	9,289
Inventory	9,729	7,868
Other current assets	3,196	1,328
Total current assets	146,479	247,254
Property, plant and equipment, net of accumulated depreciation and amortization of \$973,094 and \$900,882, respectively	644,604	510,512
Operating lease right-of-use assets	93,799	95,310
Goodwill	232,860	194,901
Intangible assets, net	93,723	58,324
Restricted assets	2,122	1,848
Cost method investments	11,264	11,264
Deferred income taxes	43,957	61,163
Other non-current assets	14,772	13,322
Total assets	\$ 1,283,580	\$ 1,193,898

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)

	December 31, 2021	December 31, 2020
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES:		
Current maturities of debt	\$ 9,901	\$ 9,240
Current operating lease liabilities	7,307	8,547
Accounts payable	63,086	49,198
Accrued payroll and related expenses	22,210	17,282
Accrued interest	2,042	2,126
Contract liabilities	3,404	2,685
Current accrued capping, closure and post-closure costs	7,915	10,268
Other accrued liabilities	36,328	31,862
Total current liabilities	152,193	131,208
Debt, less current portion	542,503	530,411
Operating lease liabilities, less current portion	56,375	60,979
Accrued capping, closure and post-closure costs, less current portion	78,999	72,265
Deferred income taxes	868	912
Other long-term liabilities	30,185	35,981
COMMITMENTS AND CONTINGENCIES		
STOCKHOLDERS' EQUITY:		
Class A common stock, \$0.01 par value per share; 100,000,000 shares authorized; 50,423,000 and 50,101,000 shares issued and outstanding, respectively	504	501
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	652,045	639,247
Accumulated deficit	(224,999)	(266,099)
Accumulated other comprehensive loss, net of tax	(5,103)	(11,517)
Total stockholders' equity	422,457	362,142
Total liabilities and stockholders' equity	\$ 1,283,580	\$ 1,193,898

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

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands)

	Fiscal Year Ended December 31,		
	2021	2020	2019
Revenues	\$ 889,211	\$ 774,584	\$ 743,290
Operating expenses:			
Cost of operations	582,403	515,646	508,656
General and administration	118,834	102,410	92,782
Depreciation and amortization	103,590	90,782	79,790
Expense from acquisition activities	5,304	1,862	2,687
Southbridge Landfill closure charge, net	496	4,587	2,709
Environmental remediation charge	924	—	—
Withdrawal costs - multiemployer pension plan	—	—	3,591
	<u>811,551</u>	<u>715,287</u>	<u>690,215</u>
Operating income	<u>77,660</u>	<u>59,297</u>	<u>53,075</u>
Other expense (income):			
Interest income	(302)	(303)	(367)
Interest expense	21,229	22,371	25,102
Other income	(1,313)	(1,073)	(1,439)
Other expense, net	<u>19,614</u>	<u>20,995</u>	<u>23,296</u>
Income before income taxes	<u>58,046</u>	<u>38,302</u>	<u>29,779</u>
Provision (benefit) for income taxes	<u>16,946</u>	<u>(52,804)</u>	<u>(1,874)</u>
Net income	<u>\$ 41,100</u>	<u>\$ 91,106</u>	<u>\$ 31,653</u>
Basic earnings per share attributable to common stockholders:			
Weighted average common shares outstanding	<u>51,312</u>	<u>48,793</u>	<u>47,226</u>
Basic earnings per common share	<u>\$ 0.80</u>	<u>\$ 1.87</u>	<u>\$ 0.67</u>
Diluted earnings per share attributable to common stockholders:			
Weighted average common shares outstanding	<u>51,515</u>	<u>49,045</u>	<u>47,966</u>
Diluted earnings per common share	<u>\$ 0.80</u>	<u>\$ 1.86</u>	<u>\$ 0.66</u>

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

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

	Fiscal Year Ended December 31,		
	2021	2020	2019
Net income	\$ 41,100	\$ 91,106	\$ 31,653
Other comprehensive income (loss), before tax:			
Hedging activity:			
Interest rate swap settlements	(4,743)	(3,644)	(498)
Interest rate swap amounts reclassified into interest expense	4,763	3,679	115
Unrealized gain (loss) resulting from changes in fair value of derivative instruments	8,480	(7,540)	(4,350)
Other comprehensive income (loss)	8,500	(7,505)	(4,733)
Tax effect related to items of other comprehensive income (loss)	2,086	(2,029)	—
Other comprehensive income (loss), net of tax	6,414	(5,476)	(4,733)
Comprehensive income	\$ 47,514	\$ 85,630	\$ 26,920

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

CASELLA WASTE SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF
STOCKHOLDERS' EQUITY (DEFICIT)
(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	—	—
Issuances of Class A common stock	3,996	1,227	12	—	—	3,984	—	—
Issuance of Class A common stock - acquisition	—	67	1	—	—	(1)	—	—
Stock-based compensation	7,223	—	—	—	—	7,223	—	—
Comprehensive income:								
Net income	31,653	—	—	—	—	—	31,653	—
Other comprehensive loss								
Hedging activity	(4,733)	—	—	—	—	—	—	(4,733)
Balance, December 31, 2019	122,753	46,803	468	988	10	485,332	(357,016)	(6,041)
Cumulative effect of new accounting principle	(189)	—	—	—	—	—	(189)	—
Issuance of Class A common stock - equity offering	144,790	2,703	27	—	—	144,763	—	—
Issuances of Class A common stock	939	559	5	—	—	934	—	—
Issuance of Class A common stock - acquisition	—	36	1	—	—	(1)	—	—
Stock-based compensation	8,219	—	—	—	—	8,219	—	—
Comprehensive income:								
Net income	91,106	—	—	—	—	—	91,106	—
Other comprehensive loss								
Hedging activity	(5,476)	—	—	—	—	—	—	(5,476)
Balance, December 31, 2020	362,142	50,101	501	988	10	639,247	(266,099)	(11,517)
Issuances of Class A common stock	1,250	322	3	—	—	1,247	—	—
Stock-based compensation	11,551	—	—	—	—	11,551	—	—
Comprehensive income:								
Net income	41,100	—	—	—	—	—	41,100	—
Other comprehensive income								
Hedging activity	6,414	—	—	—	—	—	—	6,414
Balance, December 31, 2021	\$ 422,457	50,423	\$ 504	988	\$ 10	\$ 652,045	\$ (224,999)	\$ (5,103)

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

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

	Fiscal Year Ended December 31,		
	2021	2020	2019
Cash Flows from Operating Activities:			
Net income	\$ 41,100	\$ 91,106	\$ 31,653
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	103,590	90,782	79,790
Interest accretion on landfill and environmental remediation liabilities	7,324	7,090	6,976
Amortization of debt issuance costs on long-term debt	2,288	2,169	2,293
Stock-based compensation	11,551	8,219	7,223
Operating lease right-of-use assets expense	13,827	16,257	17,270
Loss (gain) on sale of property and equipment	172	936	(892)
Southbridge Landfill non-cash closure (credit) charge, net	(356)	263	74
Non-cash expense from acquisition activities	315	554	65
Environmental remediation charge	924	—	—
Withdrawal costs - multiemployer pension plan	—	—	2,230
Deferred income taxes	15,073	(52,288)	(1,244)
Changes in assets and liabilities, net of effects of acquisitions and divestitures:			
Accounts receivable	(7,422)	5,815	(5,464)
Landfill operating lease contract expenditures	(5,655)	(5,386)	(5,307)
Accounts payable	13,888	(15,226)	6,762
Prepaid expenses, inventories and other assets	(6,343)	(1,211)	(1,669)
Accrued expenses, contract liabilities and other liabilities	(7,539)	(9,158)	(22,931)
Net cash provided by operating activities	182,737	139,922	116,829
Cash Flows from Investing Activities:			
Acquisitions, net of cash acquired	(170,647)	(32,457)	(75,379)
Additions to property, plant and equipment	(123,295)	(108,108)	(103,165)
Proceeds from sale of property and equipment	788	533	750
Proceeds from property insurance settlement	—	—	332
Net cash used in investing activities	(293,154)	(140,032)	(177,462)
Cash Flows from Financing Activities:			
Proceeds from debt borrowings	3,701	157,000	197,800
Principal payments on debt	(10,305)	(149,378)	(243,374)
Payments of debt issuance costs	(3,684)	(1,531)	(749)
Proceeds from the exercise of share based awards	172	100	3,355
Proceeds from the public offering of Class A Common Stock	—	144,790	100,446
Proceeds from unregistered sale of Class A Common Stock	—	—	2,619
Net cash (used in) provided by financing activities	(10,116)	150,981	60,097
Net (decrease) increase in cash and cash equivalents	(120,533)	150,871	(536)
Cash and cash equivalents, beginning of period	154,342	3,471	4,007
Cash and cash equivalents, end of period	\$ 33,809	\$ 154,342	\$ 3,471

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

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

	Fiscal Year Ended December 31,		
	2021	2020	2019
Supplemental Disclosures of Cash Flow Information:			
Cash paid during the period for:			
Interest	\$ 19,025	\$ 20,117	\$ 23,183
Income tax payments (refunds), net	\$ 1,438	\$ (1,534)	\$ (1,631)
Supplemental Disclosures of Non-Cash Investing and Financing Activities:			
Non-current assets acquired through long-term financing obligations	\$ 20,753	\$ 18,069	\$ 13,053

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

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

1. BASIS OF PRESENTATION

Casella Waste Systems, Inc. (“Parent”) and its subsidiaries (collectively, “we”, “us” or “our”), is a regional, vertically integrated solid waste services company 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 or 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. Effective January 1, 2021, we realigned the Resource Solutions operating segment, which includes our larger-scale recycling and commodity brokerage operations along with our organics services and large scale commercial and industrial services, from our historical lines-of-service of recycling, organics and customer solutions into two lines-of-service: processing and non-processing. We realigned the Resource Solutions operating segment to leverage our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver a comprehensive solution for our larger commercial, municipal, institutional and industrial customers that have more diverse waste and recycling needs. Processing services consist of the receipt of recycled, sludge or other organic materials at one of our materials recovery, processing or disposal facilities, where it is then sorted, mixed and/or processed, and then disposed of or sold. Non-processing services consist of brokerage services, overall resource management services, which provide a wide range of environmental services and zero waste solutions to large and complex organizations, and traditional collection, disposal and recycling services provided to large account multi-site customers.

The accompanying 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.

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 material impact on our consolidated financial statements, or a possible material impact in the future, based on current account balances and activity follows:

Standard	Description	Effect on the Financial Statements or Other Significant Matters
Accounting standards adopted effective January 1, 2021		
ASU No. 2019-12: Income Taxes (Topic 740)	Reduces the complexity over accounting for income taxes by removing certain exceptions and amending guidance to improve consistent application of accounting over income taxes.	This guidance did not have a material impact on our consolidated financial statements and related disclosures upon adoption but may in the future.

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 impact on our consolidated financial statements based on current account balances and activity follows:

Standard	Description	Effect on the Financial Statements or Other Significant Matters
Accounting standards issued pending adoption		
ASU No. 2020-04: Reference Rate Reform (Topic 848), as amended through January 2021	Provides temporary optional guidance to ease the potential burden in applying GAAP to contract modifications and hedging relationships that reference London Inter-Bank Offered Rate ("LIBOR") or another reference rate expected to be discontinued, subject to meeting certain criteria.	We currently have interest rate derivative agreements with hedging relationships that reference LIBOR. This guidance provides optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. We are currently assessing the provisions of this guidance, and reviewing and updating our contracts, as applicable, for transition or fallback language that specifies how a replacement rate for LIBOR will be identified. We do not expect that the adoption of this guidance will have a material impact on our consolidated financial statements and related disclosures. This guidance will be in effect from March 12, 2020 through December 31, 2022. See Note 11, <i>Debt</i> for further disclosure over our interest rate derivative agreements and debt instruments that reference LIBOR.
ASU No. 2021-08: Accounting for Contract Assets and Contract Liabilities from Contracts with Customers (Topic 805)	Requires entities to apply ASC 606 to recognize and measure contract assets and contract liabilities in a business combination. This guidance improves comparability after the business combination by providing consistent recognition and measurement guidance for revenue contracts with customers acquired in a business combination and revenue contracts with customers not acquired in a business combination.	We have made in the past, and we may make in the future, acquisitions to densify existing operations, expand service areas, and grow services for our customers and these acquisitions may include contract assets or contract liabilities. We do not expect that the adoption of this guidance will have a material impact on our consolidated financial statements and related disclosures. This guidance is effective January 1, 2023 with early adoption permitted.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Management's Estimates and Assumptions

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 some cases, these estimates are difficult to determine, and we must exercise significant judgment. In preparing our consolidated financial statements, the estimates and assumptions that we consider to be significant and that present the greatest amount of uncertainty relate to our accounting for landfills, environmental remediation liabilities, asset impairments, accounts receivable valuation allowance, self-insurance reserves, deferred taxes and uncertain tax positions, estimates of the fair values of assets acquired and liabilities assumed in any acquisition, contingent liabilities and stock-based compensation. Each of these items is discussed in more detail elsewhere in these notes to consolidated financial statements, as applicable. Actual results may differ materially from the estimates and assumptions that we use in the preparation of our consolidated financial statements.

Cash and Cash Equivalents

We consider all highly liquid investments purchased with original maturities of three months or less to be cash equivalents.

Concentrations of Credit Risk

Financial instruments that potentially subject us to concentrations of credit risk consist of cash and cash equivalents, restricted investment securities, accounts receivable and derivative instruments. We maintain cash and cash equivalents and restricted investment securities with banks that at times exceed applicable insurance limits. We reduce our exposure to credit risk by maintaining such deposits with high quality financial institutions. Our concentration of credit risk with respect to accounts receivable is limited because of the large number and diversity of customers we serve, thus reducing the credit risk associated with any one customer group. As of December 31, 2021, no single customer or customer group represented greater than 5% of total accounts receivable. We manage credit risk through credit evaluations, credit limits, and monitoring procedures, but generally do not require collateral to support accounts receivable. We reduce our exposure to credit risk associated with derivative instruments by entering into agreements with high quality financial institutions and by evaluating and regularly monitoring their creditworthiness.

Accounts Receivable, Net of Allowance for Credit Losses

Accounts receivable represent receivables from customers for collection, transfer, recycling, disposal and other services. Our accounts receivable are recorded when billed or when related revenue is earned, if earlier, and represent claims against third-parties that will be settled in cash. The carrying value of our accounts receivable, net of allowance for credit losses represents its estimated net realizable value. Estimates are used in determining our allowance for credit losses based on, among other things, our historical loss trends, the age of outstanding accounts receivable, and current and expected economic conditions. Our reserve is evaluated and revised on a monthly basis. Past due accounts receivable are written off when deemed to be uncollectible. See Note 6, *Accounts Receivable, Net of Allowance for Credit Losses* for disclosure over allowance for credit losses.

Inventory

Inventory includes secondary fibers, recyclables ready for sale, and parts and supplies. Inventory is stated at the lower of cost (first-in, first-out) or market.

Property, Plant and Equipment

Property, plant and equipment is recorded at cost, less accumulated depreciation and amortization. We provide for depreciation and amortization using the straight-line method by charges to operations in amounts that allocate the cost of the assets over their estimated useful lives as follows:

Asset Classification	Estimated Useful Life
Buildings and improvements	10-30 years
Machinery and equipment	5-10 years
Rolling stock	5-10 years
Containers	5-12 years
Furniture and Fixtures	3-8 years

The cost of maintenance and repairs is charged to operations as incurred.

Landfill development costs are included in property, plant and equipment. Landfill development costs include costs to develop each of our landfill sites, including such costs related to landfill liner material and installation, excavation for airspace, landfill leachate collection systems, landfill gas collection systems, environmental monitoring equipment for groundwater and landfill gas, directly related engineering, capitalized interest, on-site road construction, and other capital infrastructure. Additionally, landfill development costs include all land purchases within the landfill footprint and the purchase of any required landfill buffer property. Under life-cycle accounting, these costs are capitalized and charged to expense based on tonnage placed into each site. See the "Landfill Accounting" accounting policy below for additional disclosure about the amortization of landfill development costs and Note 7, *Property, Plant and Equipment* for disclosure about property, plant and equipment.

Landfill Accounting

Life Cycle Accounting

Under life-cycle accounting, all costs related to acquisition and construction of landfill sites are capitalized and charged to expense based on tonnage placed into each site. Landfill permitting, acquisition and preparation costs are amortized on the units-of-consumption method as landfill airspace is consumed. In determining the amortization rate for each of our landfills, preparation costs include the total estimated costs to complete construction of the landfills' permitted and expansion capacity.

Landfill Development Costs

We estimate the total cost to develop each of our landfill sites to its remaining permitted and expansion capacity (see landfill development costs discussed within the "Property, Plant and Equipment" accounting policy above). The projection of these landfill costs is dependent, in part, on future events. The remaining amortizable basis of each landfill includes costs to develop a site to its remaining permitted and expansion capacity and includes amounts previously expended and capitalized, net of accumulated airspace amortization, and projections of future purchase and development costs including capitalized interest. The interest capitalization rate is based on our weighted average interest rate incurred on borrowings outstanding during the period. Interest capitalized during the fiscal years ended December 31, 2021 ("fiscal 2021"), December 31, 2020 ("fiscal year 2020") and December 31, 2019 ("fiscal year 2019") was \$718, \$413 and \$263, respectively.

Landfill Airspace

We apply the following guidelines in determining a landfill's remaining permitted and expansion airspace:

Remaining Permitted Airspace. Our engineers, in consultation with third-party engineering consultants and surveyors, are responsible for determining remaining permitted airspace at our landfills. The remaining permitted airspace is determined by an annual survey, which is then used to compare the existing landfill topography to the expected final landfill topography.

Expansion Airspace. We currently include unpermitted expansion airspace in our estimate of remaining permitted and expansion airspace in certain circumstances. To be considered expansion airspace all of the following criteria must be met:

- we control the land on which the expansion is sought;
- all technical siting criteria have been met or a variance has been obtained or is reasonably expected to be obtained;
- we have not identified any legal or political impediments which we believe will not be resolved in our favor;
- we are actively working on obtaining any necessary permits and we expect that all required permits will be received; and
- senior management has approved the project based on a review of the engineering design and determination that the financial return profile meets our investment criteria.

For unpermitted airspace to be included in our estimate of remaining permitted and expansion airspace, the expansion effort must meet all of the criteria listed above. These criteria are evaluated annually by our engineers, accountants, lawyers, managers and others to identify potential obstacles to obtaining the permits. Once the remaining permitted and expansion airspace is determined in cubic yards, an airspace utilization factor (“AUF”) is established to calculate the remaining permitted and expansion capacity in tons. The AUF is established using a process that considers the measured density obtained from annual surveys. When we include the expansion airspace in our calculation of remaining permitted and expansion airspace, we include the projected costs for development, as well as the projected asset retirement costs related to final capping, closure and post-closure of the expansion airspace in the amortization basis of the landfill.

After determining the costs and the remaining permitted and expansion capacity at each of our landfills, we determine the per ton rates that will be expensed as waste is received and deposited at each of our landfills by dividing the costs by the corresponding number of tons. We calculate per ton amortization rates for assets associated with each final capping event, for assets related to closure and post-closure activities, and for all other costs capitalized or to be capitalized in the future for each landfill. These rates per ton are updated annually, or more frequently, as significant facts change.

It is possible that actual results, including the amount of costs incurred, the timing of final capping, closure and post-closure activities, our airspace utilization or the success of our expansion efforts, could ultimately turn out to be significantly different from our estimates and assumptions. To the extent that such estimates or related assumptions prove to be significantly different than actual results, lower profitability may be experienced due to higher amortization rates, higher final capping, closure or post-closure rates, or higher expenses. Higher profitability may result if the opposite occurs. Most significantly, if it is determined that the expansion capacity should no longer be considered in calculating the recoverability of the landfill asset, we may be required to recognize an asset impairment. If it is determined that the likelihood of receiving an expansion permit has become remote, the capitalized costs related to the expansion effort are expensed immediately.

Final Capping, Closure and Post-Closure Costs

The following is a description of our landfill asset retirement activities and related accounting:

Final Capping Costs. Final capping activities include the installation of liners, drainage, compacted soil layers and topsoil over areas of a landfill where total airspace has been consumed and waste is no longer being received. Final capping activities occur throughout the life of the landfill. Our engineering personnel estimate the cost for each final capping event based on the acreage to be capped, along with the final capping materials and activities required. The estimates also consider when these costs would actually be paid and factor in inflation and discount rates. The engineers then quantify the landfill capacity associated with each final capping event and the costs for each event are amortized over that capacity as waste is received at the landfill.

Closure and Post-Closure Costs. Closure and post-closure costs represent future estimated costs related to monitoring and maintenance of a solid waste landfill after a landfill facility ceases to accept waste and closes. We estimate, based on input from our engineers, accountants, lawyers, managers and others, our future cost requirements for closure and post-closure monitoring and maintenance based on our interpretation of the technical standards of the Subtitle D regulations and the air emissions standards under the Clean Air Act of 1970, as amended, as they are being applied on a state-by-state basis. Closure and post-closure accruals for the cost of monitoring and maintenance include site inspection, groundwater monitoring, leachate management, methane gas control and recovery, and operation and maintenance costs to be incurred for a period which is generally for a term of 30 years after final closure of a landfill. In determining estimated future closure and post-closure costs, we consider costs associated with permitted and permissible airspace.

Our estimated future final capping, closure and post-closure costs, based on our interpretation of current requirements and proposed regulatory changes, are intended to approximate fair value. Absent quoted market prices, our cost estimates are based on historical experience, professional engineering judgment and quoted or actual prices paid for similar work. Our estimate of costs to discharge final capping, closure and post-closure asset retirement obligations for landfills are developed in today’s dollars. These costs are then inflated to the period of performance using an estimate of inflation, which is updated annually (1.6% as of December 31, 2021). Final capping, closure and post-closure liabilities are then discounted using the credit adjusted risk-free rate in effect at the time the obligation is incurred. The weighted average rate applicable to our asset retirement obligations as of December 31, 2021 is between approximately 5.5% and 9.9%, the range of the credit adjusted risk free rates effective since the adoption of guidance associated with asset retirement obligations in the fiscal year ended April 30, 2004. Accretion expense is necessary to increase the accrued final capping, closure and post-closure liabilities to the future anticipated obligation. To accomplish this, we accrete our final capping, closure and post-closure accrual balances using the same credit-adjusted risk-free rate that was used to calculate the recorded liability. Accretion expense on recorded landfill liabilities is recorded to cost of operations from the time the liability is recognized until the costs are paid. Accretion expense on recorded landfill liabilities amounted to \$6,775, \$6,436 and \$6,227 in fiscal years 2021, 2020 and 2019, respectively.

We provide for the accrual and amortization of estimated future obligations for closure and post-closure based on tonnage placed into each site. With regards to final capping, the liability is recognized, and the costs are amortized based on the remaining airspace related to the specific final capping event. See Note 10, *Final Capping, Closure and Post-Closure Costs* for disclosure about asset retirement obligations related to final capping, closure and post-closure costs.

We operate in states which require a certain portion of landfill final capping, closure and post-closure obligations to be secured by financial assurance, which may take the form of surety bonds, letters of credit and restricted investment securities. Surety bonds securing closure and post-closure obligations at December 31, 2021 and December 31, 2020 totaled \$209,275 and \$205,048, respectively. Letters of credit securing closure and post-closure obligations as of December 31, 2021 and December 31, 2020 totaled \$0 and \$0, respectively. See Note 14, *Fair Value of Financial Instruments* for disclosure about restricted investment securities securing closure and post-closure obligations.

Lease Accounting

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 three landfill operation and management agreements that we account for as operating leases. 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 bodies retain ownership of each landfill. There are no bargain purchase options and title to each of the properties does not pass to us at the end of the respective lease terms. 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 or 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 respective operating agreement.

We recognize 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 expense these costs in the period incurred rather than capitalizing such expenditures on our consolidated balance sheet. We identify lease and nonlease components in a contract to which consideration in the contract will be allocated. We may elect by class of underlying asset to choose not to separate nonlease components from lease components and instead account for each separate lease component and the nonlease components in a contract as part of the single lease component. We have elected to not separate lease components from nonlease components for property leases and are, therefore, not allocating consideration between lease and nonlease components for this asset class. 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 expense 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. See Note 8, *Leases* for further disclosure about lease costs and other lease information.

Goodwill and Intangible Assets

Goodwill. Goodwill is the excess of our purchase cost over the fair value of the net assets of acquired businesses. We do not amortize goodwill, but as discussed in the “*Asset Impairments*” accounting policy below, we assess our goodwill for impairment at least annually. See Note 9, *Goodwill and Intangible Assets* for disclosure about goodwill.

Intangible Assets. Intangible assets consist primarily of covenants not-to-compete, customer relationships, and trade names. Intangible assets are recorded at fair value and are amortized based on the economic benefit provided or using the straight-line method over their estimated useful lives. Covenants not-to-compete, customer relationships and trade names are typically amortized over a term of no more than 10 years. See Note 9, *Goodwill and Intangible Assets* for disclosure about intangible assets.

Investments in Unconsolidated Entities

Investments in unconsolidated entities over which we have significant influence over the investees’ operating and financing activities are accounted for under the equity method of accounting. As of December 31, 2021 and December 31, 2020, we had no investments accounted for under the equity method of accounting. Investments in affiliates in which we do not have the ability to exert significant influence over the investees’ operating and financing activities are accounted for under the cost method of accounting. As of both December 31, 2021 and December 31, 2020, we had cost method investments totaling \$11,264.

We monitor and assess the carrying value of our investments throughout the year for potential impairment and write them down to their fair value when other-than-temporary declines exist. Fair value is generally based on (i) other third-party investors’ recent transactions in the securities; (ii) other information available regarding the current market for similar assets and/or (iii) a market or income approach, as deemed appropriate.

When we assess the carrying value of our investments for potential impairment, determining the fair value of our investments is reliant upon the availability of market information and/or other information provided by third-parties to be able to develop an estimate of fair value. Considerable judgment is required in interpreting market data to develop the estimates of fair value. Accordingly, our estimates are not necessarily indicative of the amounts that we, or other holders of these investments, could realize in a current market exchange. The use of different assumptions and/or estimation methodologies could have a significant effect on the estimated fair values. The estimates of fair value could differ significantly from the amounts presented. See “*Asset Impairments*” accounting policy below.

Fair Value of Financial Instruments

Our financial instruments may include cash and cash equivalents, accounts receivable, restricted investment securities held in trust on deposit with various banks as collateral for our obligations relative to our landfill final capping, closure and post-closure costs, restricted cash reserved to finance certain capital projects, interest rate derivatives, trade payables and debt. Accounting standards include disclosure requirements around fair values used for certain financial instruments and establish a fair value hierarchy. The three-tier hierarchy prioritizes valuation inputs into three levels based on the extent to which inputs used in measuring fair value are observable in the market. Each fair value measurement is reported in one of three levels: 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. See Note 11, *Debt* and Note 14, *Fair Value of Financial Instruments* for fair value disclosure about debt and financial instruments, respectively. See the “*Derivatives and Hedging*” accounting policy below for the fair value disclosure about interest rate derivatives.

Business Combinations

We acquire businesses in the waste industry, including non-hazardous waste collection, transfer station, recycling and disposal operations, as part of our growth strategy. Businesses are included in the consolidated financial statements from the date of acquisition.

We recognize, separately from goodwill, the identifiable assets acquired and liabilities assumed at their estimated acquisition-date fair values. We measure and recognize goodwill as of the acquisition date as the excess of: (a) the aggregate of the fair value of consideration transferred, the fair value of any noncontrolling interest in the acquiree (if any) and the acquisition date fair value of our previously held equity interest in the acquiree (if any), over (b) the fair value of net assets acquired and liabilities assumed. If information about facts and circumstances existing as of the acquisition date is incomplete by the end of the reporting period in which a business combination occurs, we will report provisional amounts for the items for which the accounting is incomplete. The measurement period ends once we receive the information we were seeking; however, this period will not extend beyond one year from the acquisition date. Any material adjustments recognized during the measurement period will be recognized retrospectively in the consolidated financial statements of the current period. All acquisition related transaction and restructuring costs are to be expensed as incurred. See Note 5, *Business Combinations* for disclosure about business acquisitions.

Environmental Remediation Liabilities

We have recorded environmental remediation liabilities representing our estimate of the most likely outcome of the matters for which we have determined that a liability is probable. These liabilities include potentially responsible party investigations, settlements, certain legal and consultant fees, as well as costs directly associated with site investigation and clean up, such as materials and incremental internal costs directly related to the remedy. We provide for expenses associated with environmental remediation obligations when such amounts are probable and can be reasonably estimated. We estimate costs required to remediate sites where it is probable that a liability has been incurred based on site-specific facts and circumstances. Estimates of the cost for the likely remedy are developed using third-party environmental engineers or other service providers. Where we believe that both the amount of a particular environmental remediation liability and timing of payments are reliably determinable, we inflate the cost in current dollars until the expected time of payment and discount the cost to present value. See Note 12, *Commitments and Contingencies* for disclosure about environmental remediation liabilities.

Self-Insurance Liabilities and Related Costs

We are self-insured for vehicles and workers' compensation with reinsurance coverage limiting our maximum exposure. Our maximum exposure in fiscal year 2021 under the workers' compensation plan was \$1,250 per individual event. Our maximum exposure in fiscal year 2021 under the automobile plan was \$3,650 per individual event. The liability for unpaid claims and associated expenses, including incurred but not reported losses, is determined by management with the assistance of a third-party actuary and reflected in our consolidated balance sheets as an accrued liability. We use a third-party to track and evaluate actual claims experience for consistency with the data used in the annual actuarial valuation. The actuarial-determined liability is calculated based on historical data, which considers both the frequency and settlement amount of claims. Our self-insurance reserves totaled \$19,847 and \$16,946 as of December 31, 2021 and December 31, 2020, respectively. Our estimated accruals for these liabilities could be significantly different than our ultimate obligations if variables such as the frequency or severity of future events differ significantly from our assumptions.

Income Taxes

We use estimates to determine our provision for income taxes and related assets and liabilities and any valuation allowance recorded against our net deferred tax assets. Valuation allowances have been established for the possibility that tax benefits may not be realized for certain deferred tax assets. Deferred income taxes are recognized based on the expected future tax consequences of differences between the financial statement basis and the tax basis of assets and liabilities, calculated using currently enacted tax rates. We record net deferred tax assets to the extent we believe these assets will more likely than not be realized. In making this determination, we consider all available positive and negative evidence, including scheduled reversals of deferred tax liabilities, projected future taxable income, tax planning strategies and recent financial operations. In the event we determine that we would be able to realize our deferred income tax assets in the future in excess of their net recorded amount, we will make an adjustment to the valuation allowance which would reduce the provision for income taxes.

We account for income tax uncertainties according to guidance on the recognition, de-recognition and measurement of potential tax benefits associated with tax positions. We recognize interest and penalties relating to income tax matters as a component of income tax expense.

See Note 16, *Income Taxes* for disclosure related to income taxes, including the effect of the valuation allowance release in fiscal year 2020.

Derivatives and Hedging

We account for derivatives and hedging activities in accordance with derivatives and hedging accounting guidance that establishes accounting and reporting standards requiring that every derivative instrument (including certain derivative instruments embedded in other contracts) be recorded in the balance sheet as either an asset or liability measured at its fair value. The guidance requires that changes in the derivative's fair value be recognized currently in earnings unless specific hedge accounting criteria are met.

Our objective for utilizing derivative instruments is to reduce our exposure to fluctuations in cash flows due to changes in the commodity prices of recycled paper and adverse movements in interest rates.

Our strategy to hedge against fluctuations in the commodity prices of recycled paper is to enter into hedges to mitigate the variability in cash flows generated from the sales of recycled paper at floating prices, resulting in a fixed price being received from these sales. We evaluate the hedges and ensure that these instruments qualify for hedge accounting pursuant to derivative and hedging guidance. Designated as highly effective cash flow hedges, both the effective and ineffective portion of the change in the fair value of these derivatives is recorded in our stockholders' equity as a component of accumulated other comprehensive loss until the hedged item is settled and recognized as part of commodity revenue. If the price per short ton of the underlying commodity, as reported on the Official Board Market, is less than the contract price per short ton, we receive the difference between the average price and the contract price (multiplied by the notional tons) from the respective counter-party. If the price per short ton of the underlying commodity exceeds the contract price per short ton, we pay the calculated difference to the counter-party. The fair value of commodity hedges is obtained or derived from our counter-parties using valuation models that take into consideration market price assumptions for commodities based on underlying active markets. We were not party to any commodity hedge contracts as of December 31, 2021.

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. For interest rate derivatives deemed to be highly effective cash flow hedges, both the effective and ineffective portion of the change in fair value of these derivatives is recorded in our stockholders' equity as a component of accumulated other comprehensive loss and reclassified into earnings through interest expense in the same period or periods during which the hedged transaction affects earnings. See Note 14, *Fair Value of Financial Instruments* for fair value disclosure about derivative instruments and Note 11, *Debt* for further disclosure about interest rate derivatives.

Contingent Liabilities

We are subject to various legal proceedings, claims and regulatory matters, the outcomes of which are subject to significant uncertainty. We determine whether to disclose or accrue for loss contingencies based on an assessment of whether the risk of loss is remote, reasonably possible or probable, and whether it can be reasonably estimated. We analyze our litigation and regulatory matters based on available information to assess the potential liabilities. Management's assessment is developed based on an analysis of possible outcomes under various strategies. We accrue for loss contingencies when such amounts are probable and reasonably estimable. If a contingent liability is only reasonably possible, we will disclose the potential range of the loss, if estimable. We record losses related to contingencies in cost of operations or general and administration expenses, depending on the nature of the underlying transaction leading to the loss contingency. See Note 12, *Commitments and Contingencies* for disclosure about loss contingencies, as applicable. Contingent liabilities accounted for under purchase accounting are recorded at their fair values. These fair values may be different from the values we would have otherwise recorded, had the contingent liability not been assumed as part of an acquisition of a business. See Note 5, *Business Combinations* and Note 14, *Fair Value of Financial Instruments* for disclosure about contingent consideration accounted for under purchase accounting, as applicable.

Revenue Recognition

We disaggregate our revenues by applicable service line: collection, landfill, transfer, transportation, landfill gas-to-energy, processing, and non-processing. Under the revenue recognition guidance, revenues are measured based on the consideration specified in a contract with a customer. The circumstances that impact the timing and amount of revenue recognized for each applicable service line may vary based on the nature of the service performed. We generally recognize revenues for services over time as we satisfy the performance obligation by transferring control over the service to the customer as the service is performed and the benefit is received and consumed by the customer. Services are typically delivered in a series as a single bundled performance obligation over either a designated period of time or for specified number of services. Services may also be delivered as a single bundled service, on a period-to-period basis, or in a spot transaction. Consideration may be variable on a per ton basis and/or fixed. Fixed consideration is allocated to each distinct service and variable consideration is allocated to the increment of time that the service is performed, and we have the contractual right to the fee. Fees are typically billed weekly, monthly, quarterly or in advance. Generally, the amount of consideration that we have the right to receive that is invoiced to the customer directly corresponds to the value of our performance completed to date. We do not disclose the amount of variable consideration included in the transaction price that is allocated to outstanding performance obligations when the variable consideration is allocated entirely to unsatisfied performance obligations or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation. Revenues that are not satisfied over time are recognized at a point-in-time. This typically includes the sale of recycled or organic materials, as well as renewable energy credits ("RECs"). Revenues from the sale of organic or recycled materials are recognized at a point-in-time as control of the materials transfers to the customer upon shipment or pick-up by the customer. Revenues from the sale of RECs are recognized at a point-in-time as the trade is executed and control transfers to the customer.

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 \$13,071 and \$4,960 in fiscal years 2021 and 2020, respectively. Rebates are generally recorded as a reduction of revenues upon the sale of such materials, or upon receipt of the recycled materials at our facilities. We did not record any revenues in fiscal years 2021, 2020, or 2019 from performance obligations satisfied in previous periods.

Contract receivables, which are included in Accounts receivable, net are recorded when billed or when related revenue is earned, if earlier, and represent claims against third-parties that will be settled in cash. Accounts receivable, net includes gross receivables from contracts of \$89,232 and \$74,162 as of December 31, 2021 and December 31, 2020, 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 is transferred to the customer. Contract liabilities of \$3,404 and \$2,685 as of December 31, 2021 and December 31, 2020, respectively, are presented separately on the face of the Consolidated Balance Sheets. Due to the short-term nature of advanced billings, substantially all of the deferred revenue recognized as a contract liability as of December 31, 2020 and December 31, 2019 was recognized as revenue during fiscal years 2021 and 2020, respectively, when the services were performed. See Note 4, *Revenue Recognition* for disclosure over revenues by applicable service line.

Asset Impairments

Recovery of Long-Lived Assets. We continually assess whether events or changes in circumstances have occurred that may warrant revision of the estimated useful lives of our long-lived assets (other than goodwill) or whether the remaining balances of those assets should be evaluated for possible impairment. Long-lived assets include, for example, capitalized landfill costs, other property, plant and equipment, identifiable intangible assets, and operating lease right-of-use assets. Events or changes in circumstances that may indicate that an asset may be impaired include the following:

- a significant decrease in the market price of an asset or asset group;
- a significant adverse change in the extent or manner in which an asset or asset group is being used or in its physical condition;
- a significant adverse change in legal factors or in the business climate that could affect the value of an asset or asset group, including an adverse action or assessment by a regulator;
- an accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset;
- a current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset or asset group;
- a current expectation that, more likely than not, a long-lived asset or asset group will be sold or otherwise disposed of significantly before the end of its previously estimated useful life; or
- an impairment of goodwill at a reporting unit.

There are certain indicators listed above that require significant judgment and understanding of the waste industry when applied to landfill development or expansion. For example, a regulator may initially deny a landfill expansion permit application although the expansion permit is ultimately granted. In addition, management may periodically divert waste from one landfill to another to conserve remaining permitted landfill airspace. Therefore, certain events could occur in the ordinary course of business and not necessarily be considered indicators of impairment due to the unique nature of the waste industry.

If an impairment indicator occurs, we perform a test of recoverability by comparing the carrying value of the asset or asset group to its undiscounted expected future cash flows. We group our long-lived assets for this purpose at the lowest level for which identifiable cash flows are primarily independent of the cash flows of other assets or asset groups. If the carrying values are in excess of undiscounted expected future cash flows, we measure any impairment by comparing the fair value of the asset or asset group to its carrying value.

To determine fair value, we use discounted cash flow analyses and estimates about the future cash flows of the asset or asset group. This analysis includes a determination of an appropriate discount rate, the amount and timing of expected future cash flows and growth rates. The cash flows employed in our discounted cash flow analyses are typically based on financial forecasts developed internally by management. The discount rate used is commensurate with the risks involved. We may also rely on third-party valuations and or information available regarding the market value for similar assets.

If the fair value of an asset or asset group is determined to be less than the carrying amount of the asset or asset group, impairment in the amount of the difference is recorded in the period that the impairment occurs. Estimating future cash flows requires significant judgment and projections may vary from the cash flows eventually realized.

Goodwill. We annually assess goodwill for impairment during the fourth quarter of our fiscal year or more frequently if events or circumstances indicate that impairment may exist.

We may assess whether a goodwill impairment exists using either a qualitative or a quantitative assessment. If we perform a qualitative assessment, it involves determining whether events or circumstances exist that indicate it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. If based on this qualitative assessment we determine it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, we will not perform a quantitative assessment. If the qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, or if we elect not to perform a qualitative assessment, we perform a quantitative assessment to determine whether goodwill impairment exists at the reporting unit.

In testing for goodwill impairment, we estimate the fair value of each reporting unit, which we have determined to be our geographic operating segments and our Resource Solutions operating segment, and compare the fair value with the carrying value of the net assets of each reporting unit. If the fair value is less than its carrying value, then we would recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, noting that the amount is not to exceed the total amount of goodwill allocated to that reporting unit.

To determine the fair value of each of our reporting units as a whole we use discounted cash flow analyses, which require significant assumptions and estimates about the future operations of each reporting unit. Significant judgments inherent in this analysis include the determination of appropriate discount rates, the amount and timing of expected future cash flows and growth rates. The cash flows employed in our discounted cash flow analyses are based on financial forecasts developed internally by management. Our discount rate assumptions are based on an assessment of our risk adjusted discount rate, applicable for each reporting unit. In assessing the reasonableness of our determined fair values of our reporting units, we evaluate our results against our current market capitalization.

If the fair value of goodwill is less than its carrying value for a reporting unit, an impairment charge would be recorded to earnings. The loss recognized cannot exceed the carrying amount of goodwill. After a goodwill impairment loss is recognized, the adjusted carrying amount of goodwill becomes its new accounting basis.

In addition to an annual goodwill impairment assessment, we would evaluate a reporting unit for impairment if events or circumstances change between annual tests indicating a possible impairment. Examples of such events or circumstances include the following:

- a significant adverse change in legal status or in the business climate;
- an adverse action or assessment by a regulator;
- a more likely than not expectation that an operating segment or a significant portion thereof will be sold; or
- the testing for recoverability of a significant asset group within the operating segment.

We elected to perform a quantitative analysis as part of our annual goodwill impairment test for fiscal year 2021. As of October 1, 2021, our Eastern, Western and Resource Solutions reporting units indicated that the fair value of each reporting unit exceeded its carrying amount, including goodwill. Furthermore, in each case the fair value of our Eastern, Western and Resource Solutions reporting units exceeded its carrying value by in excess of 180%. We incurred no impairment of goodwill as a result of our annual goodwill impairment tests in fiscal years 2021, 2020 or 2019. However, there can be no assurance that goodwill will not be impaired at any time in the future.

Cost Method Investments. We monitor and assess the carrying value of our cost method investments throughout the year for potential impairment and write them down to their fair value when other-than-temporary declines exist. We incurred no impairment of cost method investments in fiscal year 2021, 2020 or 2019. There can be no assurance that our cost method investments will not be impaired at any time in the future.

Defined Benefit Pension Plan

We make contributions to one qualified multiemployer defined benefit pension plan, the New England Teamsters and Trucking Industry Pension Fund ("Pension Plan"). The Pension Plan provides retirement benefits to participants based on their service to contributing employers. We do not administer this plan. The Pension Plan's benefit formula is based on credited years of service and hours worked as defined in the Pension Plan document. Our pension contributions are made in accordance with funding standards established by the Employee Retirement Income Security Act of 1974 and the Internal Revenue Code, as amended by the Pension Protection Act of 2006. The Pension Plan's assets have been invested as determined by the Pension Plan's fiduciaries in accordance with the Pension Plan's investment policy. The Pension Plan's asset allocation is based on the Pension Plan's investment policy and is reviewed as deemed necessary. See Note 15, *Employee Benefit Plans* for disclosure about the Pension Plan.

Stock-Based Compensation

All share-based compensation cost is measured at the grant date based on the estimated fair value of the award and is recognized as expense-in general and administration expense over the employee's requisite service period. For purposes of calculating stock-based compensation expense, forfeitures are accounted for as they occur. Our equity awards granted generally consist of stock options, including market-based performance stock options, restricted stock, restricted stock units and performance stock units, including market-based performance stock units.

The fair value of each stock option grant is estimated using a Black-Scholes option-pricing model. The fair value of restricted stock, restricted stock unit and performance stock unit grants is at a price equal to the fair market value of our Class A common stock at the date of grant. The fair value of market-based performance stock unit grants is valued using a Monte Carlo pricing model. See Note 13, *Stockholders' Equity* for disclosure about stock-based compensation.

Earnings per Share

Basic earnings per share is computed by dividing the net income by the weighted average number of common shares outstanding during the period. Diluted earnings per share is calculated based on the combined weighted average number of common shares and potentially dilutive shares. Dilutive shares 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. See Note 18, *Earnings Per Share* for disclosure about the calculation of earnings per share.

Subsequent Events

We have evaluated subsequent events or transactions that have occurred after the consolidated balance sheet date of December 31, 2021 through the date of this filing of the consolidated financial statements with the SEC on this Annual Report on Form 10-K. We have determined that there are no subsequent events that require recognition or additional disclosure in this Annual Report on Form 10-K.

4. REVENUE RECOGNITION

We disaggregate our revenues by applicable service line as follows: collection, landfill, transfer, transportation, landfill gas-to-energy, processing and non-processing.

Collection

Collection revenues are principally generated by providing waste collection and disposal services to our customers. Services may be provided as needed or as scheduled. We derive a substantial portion of our collection revenues from commercial and industrial services, which typically have a standard contract duration of three years, along with municipal services that are generally performed pursuant to contracts with municipalities with varying terms. The majority of our residential collection services are performed on a subscription basis with individual households.

Landfill

Landfill disposal services primarily consist of receiving some form of acceptable solid waste materials at one of our landfills and appropriately disposing of it. Landfill customers are typically charged a tipping fee on a per ton basis for disposing of their solid waste at our disposal facilities. In general, these fees are variable in nature.

Transfer station

Transfer station disposal services primarily consist of receiving some form of acceptable solid waste materials at one of our transfer stations and appropriately disposing of it by transporting it to an appropriate disposal site. Transfer station customers are charged a tipping fee on a per ton basis for disposing of their solid waste at our transfer stations. In general, these fees are variable in nature.

Transportation

Transportation services consist of the transportation of large volumes of waste or recycled materials from a customer designated location to another location or disposal facility. Transportation customers are charged a fee on a per ton basis for transporting and/or disposal of the materials. In general, these fees are variable in nature.

Landfill gas-to-energy

Landfill gas-to-energy services primarily consist of the generation and sale of electricity from landfill gas-to-energy facilities located at certain of our landfills; the reservation of electric generating capacity to be used by a customer on demand; and the sale of RECs.

Processing

Processing services consist of the receipt of recycled, sludge or other organic materials at one of our materials recovery, processing or disposal facilities, where it is then sorted, mixed and/or processed, and then disposed of or sold. Revenues from processing services are derived from municipalities and customers in the form of processing fees, tipping fees, commodity sales, and organic material sales.

Non-processing

Revenues from non-processing services are derived from brokerage services; overall resource management services providing a wide range of environmental services and zero waste solutions to large and complex organizations; and traditional collection, disposal and recycling services provided to large account multi-site customers. In brokerage arrangements, we act as an agent that facilitates the sale of recyclable materials between an inbound customer and an outbound customer. Revenues from the brokerage of recycled materials are recognized on a net basis at the time of shipment. In general, these fees are variable in nature.

A table of revenues disaggregated by service line and timing of revenue recognition by operating segment follows:

Fiscal Year Ended December 31, 2021

	Eastern	Western	Resource Solutions	Total Revenues
Collection	\$ 175,816	\$ 266,869	\$ —	\$ 442,685
Landfill	25,241	66,732	—	91,973
Transfer	53,882	37,400	—	91,282
Transportation	1,683	12,047	—	13,730
Landfill gas-to-energy	1,052	4,086	—	5,138
Processing	6,895	2,386	93,323	102,604
Non-processing	—	—	141,799	141,799
Total revenues	<u>\$ 264,569</u>	<u>\$ 389,520</u>	<u>\$ 235,122</u>	<u>\$ 889,211</u>
Transferred at a point-in-time	\$ 166	\$ 1,719	\$ 63,666	\$ 65,551
Transferred over time	264,403	387,801	171,456	823,660
Total revenues	<u>\$ 264,569</u>	<u>\$ 389,520</u>	<u>\$ 235,122</u>	<u>\$ 889,211</u>

Fiscal Year Ended December 31, 2020

	Eastern	Western	Resource Solutions	Total Revenues
Collection	\$ 147,698	\$ 243,740	\$ —	\$ 391,438
Landfill	20,716	64,833	—	85,549
Transfer	44,730	34,117	—	78,847
Transportation	208	10,942	—	11,150
Landfill gas-to-energy	1,015	3,057	—	4,072
Processing	5,918	1,300	62,539	69,757
Non-processing	—	—	133,771	133,771
Total revenues	<u>\$ 220,285</u>	<u>\$ 357,989</u>	<u>\$ 196,310</u>	<u>\$ 774,584</u>
Transferred at a point-in-time	\$ 223	\$ 1,484	\$ 29,621	\$ 31,328
Transferred over time	220,062	356,505	166,689	743,256
Total revenues	<u>\$ 220,285</u>	<u>\$ 357,989</u>	<u>\$ 196,310</u>	<u>\$ 774,584</u>

Fiscal Year Ended December 31, 2019

	Eastern	Western	Resource Solutions	Total Revenues
Collection	\$ 149,165	\$ 222,876	\$ —	\$ 372,041
Landfill	19,362	73,657	—	93,019
Transfer	44,413	31,640	—	76,053
Transportation	198	12,625	—	12,823
Landfill gas-to-energy	890	2,686	—	3,576
Processing	5,447	1,728	53,981	61,156
Non-processing	—	—	124,622	124,622
Total revenues	<u>\$ 219,475</u>	<u>\$ 345,212</u>	<u>\$ 178,603</u>	<u>\$ 743,290</u>
Transferred at a point-in-time	\$ 159	\$ 921	\$ 23,206	\$ 24,286
Transferred over time	219,316	344,291	155,397	719,004
Total revenues	<u>\$ 219,475</u>	<u>\$ 345,212</u>	<u>\$ 178,603</u>	<u>\$ 743,290</u>

5. BUSINESS COMBINATIONS

In fiscal year 2021, we acquired the following businesses: a residential, commercial and roll-off collection business in eastern Connecticut that operates a rail-served construction and demolition processing and waste transfer facility, a waste transfer station, a single-stream recycling facility, and several other recycling operations whose assets and liabilities are allocated between our Eastern region and Resource Solutions operating segments; a solid-waste collection business that operates a waste transfer station, a septic and portable toilet business, and two tuck-in solid-waste collection businesses in our Eastern region; and a solid-waste transfer station business, a waste composting and food-scrap hauling business, a solid-waste collection business that operates a waste transfer station, and two tuck-in solid-waste collection businesses in our Western region.

In fiscal year 2020, we acquired the following businesses: seven tuck-in solid waste collection businesses and a solid waste collection business in our Western region, a transportation business in our Eastern region, and one recycling operation in our Resource Solutions operating segment.

In fiscal year 2019, we acquired the following businesses: three tuck-in solid waste collection businesses in our Eastern region, four tuck-in solid waste collection businesses, a business comprised of solid waste collection, transfer and recycling operations, and a business comprised of solid waste hauling and transfer assets in our Western region.

The operating results of these businesses are included in the accompanying audited consolidated statements of operations from each date of acquisition, and the purchase price has been allocated to the net assets acquired based on fair values at each date of acquisition, with the residual amounts recorded as goodwill. Purchase price allocations are based on information existing at the acquisition dates or upon closing the transactions, including contingent consideration. See Note 14, *Fair Value of Financial Instruments* for further disclosure about contingent consideration. Acquired intangible assets other than goodwill that are subject to amortization include customer relationships, trade names and covenants not-to-compete. These are amortized over a four to ten-year period from the date of acquisition. All amounts recorded to goodwill in fiscal years 2021 and 2020 are expected to be deductible for tax purposes.

The purchase price paid for these acquisitions and the allocation of the purchase price is as follows:

	Fiscal Year Ended December 31,		
	2021	2020	2019
Purchase Price:			
Cash used in acquisitions, net of cash acquired	\$ 166,489	\$ 28,990	\$ 72,118
Notes payable	—	—	2,714
Other non-cash consideration	—	—	5,470
Holdbacks to sellers and contingent consideration	5,194	4,490	1,875
Total	171,683	33,480	82,177
Allocated as follows:			
Current assets	7,218	181	2,051
Property, plant and equipment:			
Land	1,321	895	2,487
Finance lease right-of-use-assets	31,467	—	—
Buildings	11,046	1,908	5,422
Equipment	46,396	13,493	20,482
Operating lease right-of-use assets	6,500	—	—
Other non-current assets	—	—	367
Intangible assets:			
Trade names	8,350	—	—
Covenants not-to-compete	1,807	742	4,412
Customer relationships	36,195	7,663	26,759
Other liabilities, net	(5,182)	(484)	(3,122)
Finance leases	(11,367)	—	—
Deferred tax liability	—	—	(2,385)
Fair value of assets acquired and liabilities assumed	133,751	24,398	56,473
Excess purchase price to be allocated to goodwill	\$ 37,932	\$ 9,082	\$ 25,704

The following unaudited pro forma combined information shows our operational results as though each of the acquisitions completed had occurred as of January 1, 2019.

	Fiscal Year Ended December 31,		
	2021	2020	2019
Revenues	\$ 940,561	\$ 872,046	\$ 883,708
Operating income	\$ 76,576	\$ 58,121	\$ 55,328
Net income	\$ 36,486	\$ 83,585	\$ 25,946
Basic earnings per share attributable to common stockholders:			
Basic weighted average shares outstanding	51,312	48,793	47,226
Basic earnings per common share	\$ 0.71	\$ 1.71	\$ 0.55
Diluted earnings per share attributable to common stockholders:			
Diluted weighted average shares outstanding	51,515	49,045	47,966
Diluted earnings per common share	\$ 0.71	\$ 1.70	\$ 0.54

Certain purchase price allocations are preliminary and are based on information existing at the acquisition dates or upon closing the transaction. This includes purchase price allocation associated with the accounting for an acquisition in fiscal year 2021 that has not yet been completed because we have not finalized the valuations of certain tangible and intangible assets. Accordingly, the purchase price allocation is subject to change. The pro forma results have been prepared for comparative purposes only and are not necessarily indicative of the actual results of operations had the acquisitions taken place as of January 1, 2019 or the results of our future operations. Furthermore, the pro forma results do not give effect to all cost savings or incremental costs that may occur as a result of the integration and consolidation of the completed acquisitions.

6. ACCOUNTS RECEIVABLE, NET OF ALLOWANCE FOR CREDIT LOSSES

A summary of the changes to allowance for credit losses follows:

	Fiscal Year Ended December 31,		
	2021	2020	2019
Balance at beginning of period	\$ 2,333	\$ 1,468	931
Relative effect of new accounting principle	—	189	—
Provisions - charged to expense	1,896	1,971	1,360
Recoveries - bad debts written off, net of recoveries	(953)	(1,295)	(823)
Balance at end of period	\$ 2,276	\$ 2,333	1,468

7. PROPERTY, PLANT AND EQUIPMENT

A summary of property, plant and equipment is as follows:

	December 31,	
	2021	2020
Land	\$ 34,118	\$ 30,061
Landfills	677,023	635,144
Finance lease right-of-use assets	78,851	39,683
Buildings and improvements	187,810	169,325
Machinery and equipment	207,305	178,104
Rolling stock	252,642	204,333
Containers	179,949	154,744
	1,617,698	1,411,394
Less: accumulated depreciation and amortization	(973,094)	(900,882)
	<u>\$ 644,604</u>	<u>\$ 510,512</u>

Depreciation expense for fiscal years 2021, 2020 and 2019 was \$62,342, \$54,370 and \$45,060, respectively. Landfill amortization expense for fiscal years 2021, 2020 and 2019 was \$30,295, \$27,520 and \$27,512, respectively.

8. LEASES

A schedule of lease costs and other lease information follows:

	Fiscal Year Ended December 31, 2021	Fiscal Year Ended December 31, 2020
Lease cost:		
Amortization of right-of-use assets	\$ 5,118	\$ 3,736
Interest expense	1,446	1,201
Fixed lease cost - vehicles, equipment and property	5,562	8,476
Fixed lease cost - landfill operating leases	8,265	7,781
Fixed lease cost	13,827	16,257
Short-term lease cost	3,525	3,430
Variable lease cost	477	514
Total lease cost	<u>\$ 24,393</u>	<u>\$ 25,138</u>

Other information:

Cash paid for amounts included in the measurement of lease liabilities:

Financing cash flows for finance leases	\$ 6,534	\$ 4,940
Operating cash flows for operating leases	\$ 10,609	\$ 13,078
Right-of-use assets obtained in exchange for new finance lease liabilities	\$ 20,752	\$ 18,003
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 3,827	\$ 3,845

	December 31, 2021
Weighted-average remaining lease term - finance leases (years)	6.2
Weighted-average remaining lease term - operating leases (years)	10.4
Weighted-average discount rate - finance leases	3.6 %
Weighted-average discount rate - operating leases	4.7 %

Estimated minimum future lease obligations are as follows:

	Operating Leases	Finance Leases
Fiscal year ending December 31, 2022	\$ 10,068	\$ 8,323
Fiscal year ending December 31, 2023	8,148	8,512
Fiscal year ending December 31, 2024	7,149	8,403
Fiscal year ending December 31, 2025	7,813	8,243
Fiscal year ending December 31, 2026	7,444	7,691
Thereafter	40,920	10,745
Total lease payments	81,542	51,917
Less: interest expense	(17,860)	(6,193)
Lease liability balance	<u>\$ 63,682</u>	<u>\$ 45,724</u>

9. GOODWILL AND INTANGIBLE ASSETS

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

	December 31, 2020	Acquisitions	December 31, 2021
Eastern	\$ 30,873	\$ 21,199	\$ 52,072
Western	149,984	13,744	163,728
Resource Solutions	14,044	3,016	17,060
Total	<u>\$ 194,901</u>	<u>\$ 37,959</u>	<u>\$ 232,860</u>

	December 31, 2019	Acquisitions	December 31, 2020
Eastern	\$ 30,720	\$ 153	\$ 30,873
Western	141,055	8,929	149,984
Resource Solutions	14,044	—	14,044
Total	<u>\$ 185,819</u>	<u>\$ 9,082</u>	<u>\$ 194,901</u>

A summary of intangible assets is as follows:

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

	Covenants Not-to-Compete	Customer Relationships	Total
Balance, December 31, 2020			
Intangible assets	\$ 26,971	\$ 78,809	\$ 105,780
Less accumulated amortization	(20,547)	(26,909)	(47,456)
	<u>\$ 6,424</u>	<u>\$ 51,900</u>	<u>\$ 58,324</u>

Intangible amortization expense for fiscal years 2021, 2020 and 2019 was \$10,953, \$8,893 and \$7,218, respectively.

The intangible amortization expense estimated for the five fiscal years following fiscal year 2021 and thereafter is as follows:

Estimated Future Amortization Expense as of December 31, 2021

Fiscal year ending December 31, 2022	\$ 14,605
Fiscal year ending December 31, 2023	\$ 13,662
Fiscal year ending December 31, 2024	\$ 13,267
Fiscal year ending December 31, 2025	\$ 12,469
Fiscal year ending December 31, 2026	\$ 11,022
Thereafter	\$ 28,698

10. FINAL CAPPING, CLOSURE AND POST-CLOSURE COSTS

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 as further described in Note 3, *Summary of Significant Accounting Policies*. 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.

The changes to accrued final capping, closure and post-closure liabilities are as follows:

	Fiscal Year Ended December 31, 2021	
	2021	2020
Beginning balance	\$ 82,533	\$ 71,927
Obligations incurred	5,408	3,840
Revisions in estimates (1)	(836)	4,531
Accretion expense	6,775	6,436
Obligations settled (2)	(6,966)	(4,201)
Ending balance	<u>\$ 86,914</u>	<u>\$ 82,533</u>

(1) Relates to changes in estimates and assumptions concerning anticipated waste flow, cost and timing of future final capping, closure and post-closure activities at our landfills.

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

11. DEBT

A summary of debt is as follows:

	December 31,	
	2021	2020
Senior Secured Credit Facility:		
Amended and Restated Revolving Credit Facility due December 2026 ("Revolving Credit Facility"); bearing interest at LIBOR plus 1.375%	\$ —	\$ —
Revolving Credit Facility due May 2023 amended and restated in December 2021; bore interest at LIBOR plus 1.75%	—	—
Amended and Restated Term Loan A Facility due December 2026 ("Term Loan Facility"); bearing interest at LIBOR plus 1.375%	350,000	—
Term Loan A Facility due May 2023 amended and restated in December 2021; bore interest at LIBOR plus 1.75%	—	350,000
Tax-Exempt Bonds:		
New York State Environmental Facilities Corporation Solid Waste Disposal Revenue Bonds Series 2014 ("New York Bonds 2014R-1") due December 2044 - fixed rate interest period through 2029; bearing interest at 2.875%	25,000	25,000
New York State Environmental Facilities Corporation Solid Waste Disposal Revenue Bonds Series 2014R-2 ("New York Bonds 2014R-2") due December 2044 - fixed rate interest period through 2026; bearing interest at 3.125%	15,000	15,000
New York State Environmental Facilities Corporation Solid Waste Disposal Revenue Bonds Series 2020 ("New York Bonds 2020") due September 2050 - fixed rate interest period through 2025; bearing interest at 2.750%	40,000	40,000
Finance Authority of Maine Solid Waste Disposal Revenue Bonds Series 2005R-3 ("FAME Bonds 2005R-3") due January 2025 - fixed rate interest period through 2025; bearing interest at 5.25%	25,000	25,000
Finance Authority of Maine Solid Waste Disposal Revenue Bonds Series 2015R-1 ("FAME Bonds 2015R-1") due August 2035 - fixed rate interest period through 2025; bearing interest at 5.125%	15,000	15,000
Finance Authority of Maine Solid Waste Disposal Revenue Bonds Series 2015R-2 ("FAME Bonds 2015R-2") due August 2035 - fixed rate interest period through 2025; bearing interest at 4.375%	15,000	15,000
Vermont Economic Development Authority Solid Waste Disposal Long-Term Revenue Bonds Series 2013 ("Vermont Bonds") 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 2029; bearing interest at 2.95%	11,000	11,000
Other:		
Finance leases maturing through December 2107; bearing interest at a weighted average of 3.6%	45,724	31,486
Notes payable maturing through June 2027; bearing interest at a weighted average of 3.1%	4,846	4,933
Principal amount of debt	562,570	548,419
Less—unamortized debt issuance costs (1)	10,166	8,768
Debt less unamortized debt issuance costs	552,404	539,651
Less—current maturities of debt	9,901	9,240
	<u>\$ 542,503</u>	<u>\$ 530,411</u>

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

	December 31,	
	2021	2020
Amended and Restated Revolving Credit Facility and Term Loan Facility (collectively, the "Credit Facility")	\$ 5,884	\$ —
Revolving Credit Facility and Term Loan A Facility amended and restated in December 2021	—	3,839
New York Bonds 2014R-1	933	1,000
New York Bonds 2014R-2	268	329
New York Bonds 2020	1,283	1,461
FAME Bonds 2005R-3	262	347
FAME Bonds 2015R-1	413	482
FAME Bonds 2015R-2	268	343
Vermont Bonds	433	487
New Hampshire Bonds	422	480
	<u>\$ 10,166</u>	<u>\$ 8,768</u>

Credit Facility

On December 22, 2021, we entered into an amended and restated credit agreement ("Amended and Restated Credit Agreement"), which provides for a \$350,000 aggregate principal amount Term Loan Facility and a \$300,000 Revolving Credit Facility, with a \$75,000 sublimit for letters of credit. The previous credit agreement included \$347,375 aggregate principal amount of outstanding term loan and a revolving line of credit facility that had not been borrowed against at the time of amendment. The incremental proceeds from this transaction were used to pay related transaction expenses. 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 Amended and Restated Credit Agreement. The Credit Facility has a 5-year term that matures in December 2026 and bears interest at a rate of LIBOR plus 1.375% per annum, which will be reduced to a rate of LIBOR plus as low as 1.125% upon us reaching a consolidated net leverage ratio of less than 2.25x. The Credit Facility contains customary benchmark replacement provisions pursuant to which, upon certain triggering events, the LIBOR benchmark used to calculate the LIBOR rate will be replaced with a secured overnight financing rate, as adjusted, on the terms and conditions in the Credit Facility. 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 December 31, 2021, further advances were available under the Credit Facility in the amount of \$271,945. The available amount is net of outstanding irrevocable letters of credit totaling \$28,055, at which date no amount had been drawn.

The Amended and Restated Credit Agreement requires us to maintain a minimum interest coverage ratio and a maximum consolidated net leverage ratio, to be measured at the end of each fiscal quarter. In addition to these financial covenants, the Amended and Restated Credit Agreement also contains a number of important customary affirmative and negative covenants which restrict, among other things, our ability to sell assets, incur additional debt, create liens, make investments, and pay dividends. As of December 31, 2021, we were in compliance with the covenants contained in the Amended and Restated Credit Agreement. We do not believe that these restrictions impact our ability to meet future liquidity needs. An event of default under any of our debt agreements could permit some of our lenders, including the lenders under the Credit Facility, to declare all amounts borrowed from them to be immediately due and payable, together with accrued and unpaid interest, or, in the case of the Credit Facility, terminate the commitment to make further credit extensions thereunder, which could, in turn, trigger cross-defaults under other debt obligations. If we were unable to repay debt to our lenders or were otherwise in default under any provision governing our outstanding debt obligations, our secured lenders could proceed against us and against the collateral securing that debt.

Tax-Exempt Financings

New York Bonds. In fiscal year 2020, we completed the issuance of \$40,000 aggregate principal amount of New York Bonds 2020. The New York Bonds 2020, which are unsecured and guaranteed jointly and severally, fully and unconditionally by all of our significant wholly-owned subsidiaries, accrue interest at 2.75% per annum from September 2, 2020 through September 1, 2025, at which time they may be converted to a variable interest rate period or to a new term interest rate period. The New York Bonds 2020 mature on September 1, 2050. As of December 31, 2021, we had outstanding \$40,000 aggregate principal amount of New York Bonds 2020.

In fiscal year 2019, we completed the remarketing of \$25,000 aggregate principal amount of New York Bonds 2014R-1. As of December 31, 2021, we had outstanding \$25,000 aggregate principal amount of New York Bonds 2014R-1 and \$15,000 aggregate principal amount of 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 2014"). The New York Bonds 2014R-1 accrue interest at 2.875% per annum through December 2, 2029, 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 2014, 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 2014 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 2014.

Maine Bonds. As of December 31, 2021, we had outstanding \$25,000 aggregate principal amount of FAME Bonds 2005R-3, \$15,000 aggregate principal amount of FAME Bonds 2015R-1, and \$15,000 aggregate principal amount of 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 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 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 on May 1 and November 1 of each year 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 December 31, 2021, we had outstanding \$16,000 aggregate principal amount of 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 4.625% per annum through April 2, 2028, after which time there is a mandatory tender, and interest is payable semiannually on May 1 and November 1 of each year. 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. In fiscal year 2019, we completed the remarketing of \$11,000 aggregate principal amount of senior unsecured New Hampshire Bonds. As of December 31, 2021, we had outstanding \$11,000 aggregate principal amount of 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 2.95% per annum through maturity on April 1, 2029 and interest. During the fixed interest rate period, the New Hampshire Bonds are not supported by a letter of credit. Interest is payable on April 1 and October 1 of each year. 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.

Interest Expense

The components of interest expense are as follows:

	Fiscal Year Ended December 31,		
	2021	2020	2019
Interest expense on long-term debt and finance leases	\$ 19,201	\$ 20,084	\$ 22,553
Amortization of debt issuance costs	2,288	2,169	2,293
Letter of credit fees	458	531	519
Less: capitalized interest	(718)	(413)	(263)
Total interest expense	\$ 21,229	\$ 22,371	\$ 25,102

Cash Flow Hedges

Our strategy to reduce exposure to interest rate risk involves entering into interest rate derivative agreements to hedge against adverse movements in interest rates related to the variable rate portion of our long-term debt. We have designated these derivative instruments as highly effective cash flow hedges, and therefore the change in fair value is recorded in our stockholders' equity 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 and included in cash flows from operating activities.

As of December 31, 2021 and December 31, 2020, our active interest rate derivative agreements had a total notional amount of \$195,000 and \$190,000, respectively. According to the terms of the agreements, we receive interest based on the 1-month LIBOR index, in some instances restricted by a 0.0% floor, and pay interest at a weighted average rate of approximately 2.51%. The agreements mature between February 2022 and December 2026.

Additionally, we have forward starting interest rate derivative agreements that replace active agreements with a total notional amount of \$85,000 that mature between February 2027 and May 2028. We will receive interest based on the 1-month LIBOR index, restricted by a 0.0% floor, and will pay interest at a weighted average rate of approximately 1.55%.

We have designated these derivative instruments as highly effective cash flow hedges, and therefore the change in fair value is recorded in our stockholders' equity as a component of accumulated other comprehensive loss and included in interest expense at the same time as interest expense is affected by the hedged transactions. Differences paid or received over the life of the agreements are recorded as additions to or reductions of interest expense on the underlying debt and included in cash flows from operating activities.

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

	Balance Sheet Location	Fair Value	
		December 31, 2021	December 31, 2020
Interest rate swaps	Other non-current assets	\$ 424	\$ —
Interest rate swaps	Other accrued liabilities	\$ 3,796	\$ 4,774
Interest rate swaps	Other long-term liabilities	1,380	8,463
Total		\$ 5,176	\$ 13,237
Interest rate swaps	Accumulated other comprehensive loss, net	\$ (4,935)	\$ (13,434)
Interest rate swaps - tax benefit	Accumulated other comprehensive loss, net	(168)	1,917
		\$ (5,103)	\$ (11,517)

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

Statement of Operations Location	Fiscal Year Ended December 31,		
	2021	2020	2019
Interest expense	\$ 4,763	\$ 3,679	\$ 115

Fair Value of Debt

As of December 31, 2021, the fair value of our fixed rate debt, including the FAME Bonds, Vermont Bonds, New York Bonds 2020, New York Bonds 2014 and New Hampshire Bonds was approximately \$175,330 and the carrying value was \$162,000. The fair value of the FAME Bonds, Vermont Bonds, New York Bonds 2020, New York Bonds 2014 and 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 December 31, 2021, 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 the FAME Bonds, Vermont Bonds, New York Bonds 2020, New York Bonds 2014 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.

Future Maturities of Debt

Aggregate principal maturities of debt are as follows:

Estimated Future Payments as of December 31, 2021

Fiscal year ending December 31, 2022	\$ 9,901
Fiscal year ending December 31, 2023	8,085
Fiscal year ending December 31, 2024	11,400
Fiscal year ending December 31, 2025	41,975
Fiscal year ending December 31, 2026	345,001
Thereafter	146,208
	\$ 562,570

12. COMMITMENTS AND CONTINGENCIES

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.

Legal Proceedings

North Country Environmental Services Expansion Permit

On October 9, 2020, North Country Environmental Services, Inc. ("NCES") received a Type I-A Permit Modification (the "Permit") for Expansion in the Stage VI area of the NCES landfill located in Bethlehem, New Hampshire ("NCES Landfill"). On November 9, 2020, the Conservation Law Foundation ("CLF") filed an appeal of the Permit to the New Hampshire Waste Management Council (the "Council") on the grounds it failed to meet the public benefit criteria. On January 19, 2021, CLF filed a Complaint for Injunctive Relief with the Grafton Superior Court to enjoin NCES from accepting waste pursuant to the new Permit until such a time as CLF has exhausted its appeal rights. A hearing on the Complaint for Injunctive Relief was held on March 10, 2021; the Grafton Superior Court denied the motion on May 14, 2021. CLF did not appeal this decision. The Council denied NCES's Motion to Dismiss CLF's appeal for lack of standing by Order dated March 17, 2021. NCES filed a Motion to Reconsider on March 26, 2021, which was denied by the Council on May 11, 2021. A prehearing conference was held and a schedule for the case was established on June 8, 2021. NCES filed a Motion to Dismiss on the merits of the appeal on June 30, 2021. On July 16, 2021, CLF filed its objection to the Motion to Dismiss, and NCES filed its reply on July 26, 2021. The Council issued an Order on September 3, 2021 granting NCES's Motion to Dismiss, in part. CLF filed a Motion for Reconsideration on September 23, 2021, and NCES filed its objection on September 28, 2021 and CLF filed a reply on September 30, 2021. CLF's Motion for Reconsideration was granted on November 19, 2021, and its dismissed claims reinstated. On January 14, 2022 NCES filed a Motion in Limine seeking to exclude from evidence four potential evidentiary items on the basis that those items were either not directly related, or were not included in CLF's Notice of Appeal. On January 21, 2022 CLF filed an objection to NCES's motion, and on January 26, 2022 NCES filed a reply. On January 31, 2022, the Court issued an Order granting NCES's Motion in Limine with respect to three of the four items it sought to exclude from evidence, and denying its motion with respect to the remaining item. The hearing on the appeal is scheduled for February 18, 2022, and NCES will continue to vigorously defend against this litigation.

Hakes Landfill Litigation

On or about December 19, 2019, the New York State Department of Environmental Conservation ("Department") issued certain permits to us to expand the landfill owned and operated by Hakes C&D Disposal Inc. in the Town of Campbell, Steuben County, New York ("Hakes Landfill"). The permits authorize approximately five years of expansion capacity at the Hakes Landfill. The authorizations issued by the Department followed approvals issued by the Town of Campbell Planning Board ("Planning Board") in January 2019, and the Town Board of the Town of Campbell ("Town Board") in March 2019, granting site plan review and a zoning change for the project.

Litigation was commenced by the Sierra Club, several other non-governmental organizations, and several individuals ("the Petitioners"), challenging the approvals issued by the Department, the Planning Board and the Town Board in New York State Supreme Court, Steuben County (the "Hakes Litigation"). The challenge was based upon allegations that the agencies issuing these approvals did not follow the requirements of Article 8 of the Environmental Conservation Law of the State of New York, the State Environmental Quality Review Act, by failing to address certain radioactivity issues alleged by Petitioners to be associated with certain drilling wastes authorized for disposal at the Hakes Landfill. The Department opposed the Hakes

Litigation on procedural grounds. We and the Town of Campbell opposed the Hakes Litigation on the merits, and on July 31, 2020, the Court dismissed the Hakes Litigation on the merits. The Petitioners filed a notice of appeal. The time to appeal expired on February 10, 2021, and the attorney for the Petitioners confirmed that they are not pursuing the appeal. Accordingly, all approvals issued for the expansion project are now final and binding.

Ontario County, New York Class Action Litigation

On or about September 17, 2019, Richard Vandemortel and Deb Vandemortel ("Named Plaintiffs") filed a class action complaint against us in Ontario County Supreme Court (the "New York Court") on behalf of similarly situated citizens ("Class Members") in Ontario County, New York (the "New York Litigation"). The New York Litigation alleges that over one thousand (1,000) citizens constitute the putative class in the New York Litigation, and it seeks damages for diminution of property values and infringement of the putative class' rights to live without interference to their daily lives due to odors emanating from the Subtitle D landfill located in Seneca, New York, which is operated by us pursuant to a long-term Operation, Maintenance and Lease Agreement with Ontario County. The New York Litigation was served on us on October 14, 2019, and the parties commenced settlement negotiations in early 2020. On December 1, 2020, the parties entered into a settlement agreement (the "Settlement Agreement") and thereafter the Named Plaintiffs and Class Members' counsel ("Counsel") moved the New York Court for entry of the Order on Notice/Preliminary Approvals. A settlement fairness hearing was held on July 7, 2021, and the judge issued an Order and Final Judgment that was filed on July 8, 2021. The settlement included a \$750 payment to a Qualified Settlement Fund for the benefit of Counsel and one-time lump sum payments to the Named Plaintiffs and Class Members who opt into the Settlement Agreement, and these payments have been made. We also committed \$900 in expenses and capital improvements for remediation measures that have been completed.

Conservation Law Foundation, Inc. v Robert R. Scott, Commissioner, New Hampshire Department of Environmental Services

On or about February 11, 2021, the CLF filed a complaint against Robert R. Scott, Commissioner of the New Hampshire Department of Environmental Services ("DES"), in the Merrimac County Superior Court. The complaint alleges that DES has failed to comply with the duty to establish and update a solid waste plan for the State of New Hampshire, and the duty to rely on that solid waste plan in determining whether to grant permits for proposed waste disposal facilities, and seeks a declaratory judgment that DES is violating statutory solid waste planning and regulatory requirements; a writ of mandamus ordering DES to achieve compliance with the statutory solid waste plan requirement; and an order enjoining DES from reviewing, and issuing decisions on, permit applications for new or expanded waste facilities, including a landfill under development by us in Dalton, New Hampshire, as well as any further review and decision-making required for permits it has already granted, including our NCES Landfill, until it has a legally valid state solid waste plan. On or about February 16, 2021, our subsidiary, Granite State Landfill, LLC, filed a Motion to Intervene in the action, which was granted by the Merrimac County Superior Court on February 17, 2021. A hearing on CLF's request for preliminary injunctive relief and the parties' motions to dismiss was held April 9, 2021. The Court issued a decision on May 14, 2021 granting the defendants' Motions to Dismiss. CLF filed a Motion for Reconsideration which was denied by the Court on July 13, 2021. There has been no further action on this matter.

Environmental Remediation Liability

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.

North Country Environmental Services vs. New Hampshire Citizens Group

On or about March 8, 2018, the National Environmental Law Center ("NELC") and the Conservation Law Foundation ("CLF") (the "NH Citizen Groups") delivered correspondence to our subsidiary, NCEC, and us, providing notice of the NH Citizen Groups' intent to sue NCEC and us for violations of the Clean Water Act ("CWA") in conjunction with NCEC's operation of its NCEC Landfill. On May 14, 2018, the NH Citizen Groups filed a lawsuit against NCEC 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 and an order requiring NCEC to seek a Federal National Pollutant Discharge Elimination System permit for the operation of the NCEC Landfill. On June 15, 2018, we and NCEC filed a Motion to Dismiss the New Hampshire Litigation. On July 13, 2018, the NH 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 circuit courts were heard by the Supreme Court of the United States ("SCOTUS"), in the case identified as "County of Maui v. Hawaii Wildlife Fund ("MAUI"). Our motion for a stay was granted in the New Hampshire Litigation, and SCOTUS heard the case in 2019 and issued a ruling on April 23, 2020. SCOTUS remanded the case to the U.S. Court of Appeals for the Ninth Circuit in San Francisco (the "Circuit Court") ruling that the Circuit Court's standard as to whether ground water impacts to navigable waters is too broad. The NH Citizen Groups filed a motion with the New Hampshire Court on July 15, 2020 to amend their complaint based on MAUI. The New Hampshire Court granted the NH Citizen Groups' motion on September 2, 2020 and encouraged the parties to file motions for summary judgment. We filed our Motion for Summary Judgment on November 20, 2020 and the NH Citizen Groups filed a Motion for Summary Judgment on February 19, 2021. A hearing on motions for summary judgment was held on May 14, 2021. On May 24, 2021 the NH Citizen Group submitted a post-hearing filing requesting that the New Hampshire Court consider purported supplemental material facts discovered after the hearing, and to provide a response to questions posed by the Court at the hearing, in response to which we filed a Motion to Strike on June 2, 2021. The NH Citizen Group filed an Objection to the Motion to Strike on June 8, 2021. We filed a response on June 25, 2021. On August 11, 2021, the New Hampshire Court denied the parties' Motions for Summary Judgment and denied as moot the NH Citizen Groups' request that the Court consider purported supplemental material facts and NCEC's Motion to Strike. We filed a Motion for Partial Reconsideration on September 7, 2021, and on September 22, 2021 we filed a Motion to Temporarily Suspend the Procedural Schedule (assented to by the NH Citizen Groups) to allow the parties the opportunity to engage in settlement negotiations, which was granted by the New Hampshire Court on October 5, 2021. The parties entered into a Settlement Agreement on January 5, 2022 providing for dismissal of the New Hampshire Litigation, and for NCEC to (1) conduct restoration of a stream bed on lands owned by NCEC and adjoining the NCEC Landfill; and (2) contribute \$50 to the Ammonoosuc Conservation Trust ("ACT"), to be used solely for projects designed to promote restoration, preservation, protection, and/or enhancement of water quality in the Ammonoosuc River watershed. The Settlement Agreement, which took effect upon the January 11, 2022 Order of the New Hampshire Court, includes a requirement that we disclose that payments to the ACT were made pursuant to settlement of the New Hampshire Litigation.

We have recorded an environmental remediation liability related to our obligation associated with the restoration in 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 1.5%. Our expenditures could be significantly higher if costs exceed estimates.

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

	Fiscal Year Ended December 31, 2021	
Beginning balance	\$	—
Accretion expense		—
Obligations incurred		924
Ending balance	\$	924

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 was operated by SRD and later closed in November 2018 when Southbridge Landfill reached its final capacity. Those results indicated the presence of contaminants above the levels triggering notice and response obligations under MADEP regulations. In response to those results, we carried out an Immediate Response Action pursuant to Massachusetts General Law Chapter 21E (the “Charlton 21E Obligations”). Further, we implemented a plan to analyze and better understand the groundwater near the Southbridge Landfill and we investigated with the objective of identifying the source or sources of the elevated levels of contamination measured in the well samples.

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 issued a twenty (20) year bond for our portion of the Waterline costs in the amount of \$4,089. We have agreed to reimburse the Town for periodic payments under such bond. Construction of the Waterline is complete and homeowners are relying on municipal water supply. Bond reimbursement to the Town commenced in the quarter ended June 30, 2020.

We have recorded an environmental remediation liability related to our obligation associated with 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.

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

	Fiscal Year Ended December 31,	
	2021	2020
Beginning balance	\$ 4,261	\$ 4,596
Accretion expense	109	118
Obligations incurred	—	28
Revisions in estimates (1)	—	(188)
Obligations settled (2)	(281)	(293)
Ending balance	\$ 4,089	\$ 4,261

(1) The revisions in estimates are associated with the completion of the environmental remediation at the site. See Note 17, *Other Items and Charges* to our consolidated financial statements for further discussion.

(2) May include 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 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. On December 3, 2021, the DEC certified the completion of remediation work and approved a post-remediation site management plan at the Potsdam site.

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. 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 1.9%.

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

	Fiscal Year Ended December 31,	
	2021	2020
Beginning balance	\$ 939	\$ 1,151
Obligations settled (1)	(65)	(212)
Ending balance	\$ 874	\$ 939

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

The total expected environmental remediation payments, in today’s dollars, for each of the five succeeding fiscal years and the aggregate amount thereafter are as follows:

Estimated Future Environmental Remediation Payments as of December 31, 2021

Fiscal year ending December 31, 2022	\$ 354
Fiscal year ending December 31, 2023	667
Fiscal year ending December 31, 2024	769
Fiscal year ending December 31, 2025	308
Fiscal year ending December 31, 2026	318
Thereafter	4,308
Total	\$ 6,724

A reconciliation of the expected aggregate non-inflated, undiscounted environmental remediation liability to the amount recognized in our consolidated balance sheet at December 31, 2021 is as follows:

Undiscounted liability	\$ 6,724
Less discount, net	(837)
Liability balance - December 31, 2021	\$ 5,887

Any substantial liability incurred by us arising from environmental damage could have a material adverse effect on our business, financial condition and results of operations. We are not presently aware of any other situations that would have a material adverse impact on our business, financial condition, results of operations or cash flows.

13. STOCKHOLDERS' EQUITY

Public Offering of Class A Common Stock

In fiscal year 2020, we completed a public offering of 2,703 shares of our Class A common stock at a public offering price of \$56.00 per share. The offering resulted in net proceeds to us of \$144,790, after deducting underwriting discounts, commissions and offering expenses. The net proceeds from the offering were used for general corporate purposes, including acquisitions or development of new operations or assets with the goal of complementing or expanding our business, and for working capital and capital expenditures.

In fiscal year 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 used for general corporate purposes, including acquisitions or development of new operations or assets with the goal of complementing or expanding our business, working capital and capital expenditures.

In fiscal year 2019, we completed the unregistered sale of 59 shares of our Class A common stock at a price of \$44.15 per share. The sale resulted in net proceeds to us of \$2,619. The shares were previously held in escrow according to the terms of our acquisition of WSI and released to us for liquidation to offset costs associated with the environmental remediation of the WSI's Potsdam, New York site. We recorded a \$2,619 reduction of goodwill in line with business combination standards in place at the time the shares held in escrow were issued. See Note 12, *Commitments and Contingencies* for additional disclosure.

Common Stock

The holders of the Class A common stock are entitled to one vote for each share held. The holders of the Class B common stock are entitled to ten votes for each share held, except for the election of one director, who is elected by the holders of the Class A common stock exclusively. The Class B common stock is convertible into Class A common stock on a share-for-share basis at the option of the shareholder.

Preferred Stock

We are authorized to issue up to 944 shares of preferred stock in one or more series. As of December 31, 2021 and December 31, 2020, we had no shares issued.

Stock Based Compensation

Stock Incentive Plans

2016 Incentive Plan. 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 or otherwise result in shares not being issued.

As of December 31, 2021, there were 933 Class A common stock equivalents available for future grant under the 2016 Plan, inclusive of additional Class A common stock equivalents that were previously issued under terminated plans and have become available for grant because such awards expired or otherwise resulted in shares not being issued.

Our equity awards granted consist of stock options, restricted stock, restricted stock units and performance stock units, including market-based performance stock units.

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.

Restricted stock, restricted stock units and 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.

Restricted stock granted to non-employee directors vest incrementally over a three year period beginning on the first anniversary of the date of grant. Restricted stock units granted to non-employee directors vest in full on the first anniversary of the grant date. Restricted stock units vest incrementally over an identified service period beginning on the grant date based on continued employment. Performance stock units and 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.

Stock Options

A summary of stock option activity is as follows:

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding, December 31, 2020	90	\$ 8.91		
Granted	8	\$ 68.78		
Exercised	(21)	\$ 8.03		
Forfeited or expired	—	\$ —		
Outstanding, December 31, 2021	77	\$ 15.68	4.4	\$ 5,366
Exercisable, December 31, 2021	69	\$ 9.18	3.8	\$ 5,227

During fiscal years 2021, 2020 and 2019, stock-based compensation expense for stock options was \$28, \$0 and 0, respectively.

During fiscal years 2021, 2020 and 2019, the aggregate intrinsic value of stock options exercised was \$1,238, \$296 and \$19,475, respectively.

As of December 31, 2021, we had \$172 of unrecognized stock-based compensation expense related to outstanding stock options to be recognized over a weighted average period of 2.6 years.

Our calculation of stock-based compensation expense associated with stock options granted was made using the Black-Scholes valuation model. Expected life is calculated based on the weighted average historical life of the vested stock options, giving consideration to vesting schedules and historical exercise patterns. Risk-free interest rate is based on the U.S. Treasury yield curve for the period of the expected life of the stock option. Expected volatility is calculated using the weekly historical volatility of our Class A common stock over the expected life. The fair value of stock options granted in fiscal year 2021 were calculated assuming no expected dividend yield using a weighted average expected life of 7.1 years, a risk-free interest rate of 0.9%, and an expected volatility of 31.3%. We did not grant any new stock options in fiscal years 2020 or 2019.

The Black-Scholes valuation model requires extensive use of accounting judgment and financial estimation. Application of alternative assumptions could produce significantly different estimates of the fair value of stock-based compensation and consequently, the related amounts recognized in the consolidated statements of operations.

Other Stock Awards

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

	Restricted Stock, Restricted Stock Units, and Performance Stock Units (1)	Weighted Average Grant Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value
Outstanding, December 31, 2020	307	\$ 41.55		
Granted	108	\$ 67.65		
Class A common stock vested	(157)	\$ 37.03		
Forfeited or canceled	(9)	\$ 51.11		
Outstanding, December 31, 2021	249	\$ 55.40	1.7	\$ 21,282
Unvested, December 31, 2021	417	\$ 56.44	1.6	\$ 35,602

- (1) Market-based performance stock unit grants are included at 100%. Attainment of maximum performance targets and market achievements would result in the issuance of an additional 168 shares of Class A common stock currently included in unvested. The market-based performance stock unit grants that vested in fiscal year 2021 resulted in the issuance of 98 additional shares of Class A common stock.

During fiscal years 2021, 2020 and 2019, stock-based compensation expense related to restricted stock, restricted stock units and performance stock units was \$11,241, \$7,965 and \$7,036, respectively.

During fiscal years 2021, 2020 and 2019, the total fair value of other stock awards vested was \$20,106, \$18,329 and \$8,177, respectively.

As of December 31, 2021, total unrecognized stock-based compensation expense related to outstanding restricted stock was \$83, which will be recognized over a weighted average period of 1.9 years. As of December 31, 2021, total unrecognized stock-based compensation expense related to outstanding restricted stock units was \$4,025, which will be recognized over a weighted average period of 1.7 years. As of December 31, 2021, total unrecognized stock-based compensation expense related to performance stock units was \$7,121, which will be recognized over a weighted average period of 1.7 years.

The weighted average fair value of market-based performance stock units granted during fiscal year 2021 was \$69.86 per award, which was calculated using a Monte Carlo pricing model assuming a risk free interest rate of 0.29% and an expected volatility of 37.1% assuming no expected dividend yield. Risk-free interest rate is based on the U.S. Treasury yield curve for the expected service period of the award. Expected volatility is calculated using the daily volatility of our Class A common stock over the expected service period of the award.

The Monte Carlo pricing model requires extensive use of accounting judgment and financial estimation. Application of alternative assumptions could produce significantly different estimates of the fair value of stock-based compensation and consequently, the related amounts recognized in the consolidated statements of operations.

We also recorded \$281, \$254 and \$186 of stock-based compensation expense related to our Amended and Restated 1997 Employee Stock Purchase Plan during fiscal years 2021, 2020 and 2019, respectively.

Tax benefit for income taxes associated with stock-based compensation during fiscal years 2021, 2020 and 2019 of \$(2,304), \$(6,796) and \$(97), respectively.

Accumulated Other Comprehensive Loss, Net of Tax

Accumulated other comprehensive loss, net of tax is a component of stockholders' equity included in the accompanying consolidated balance sheets and includes, as applicable, the effective portion of changes in the fair value of our cash flow hedges and the changes in fair value of our marketable securities.

The changes in the balances of each component of accumulated other comprehensive loss, net of tax are as follows:

	Interest Rate Swaps
Balance as of December 31, 2018	\$ (1,308)
Other comprehensive loss before reclassifications	(5,286)
Amounts reclassified from accumulated other comprehensive loss	553
Other comprehensive loss	(4,733)
Balance as of December 31, 2019	(6,041)
Other comprehensive loss before reclassifications	(11,184)
Amounts reclassified from accumulated other comprehensive loss	3,679
Income tax benefit related to items in other comprehensive loss	2,029
Other comprehensive loss	(5,476)
Balance as of December 31, 2020	(11,517)
Other comprehensive income before reclassifications	3,737
Amounts reclassified from accumulated other comprehensive loss	4,763
Income tax provision related to items in other comprehensive income	(2,086)
Other comprehensive income	6,414
Balance as of December 31, 2021	\$ (5,103)

A summary of reclassifications out of accumulated other comprehensive loss, net of tax for fiscal years 2021, 2020 and 2019 is as follows:

Details About Accumulated Other Comprehensive Loss, Net of Tax Components	Fiscal Year Ended December 31,			Affected Line Item in the Consolidated Statements of Operations
	2021	2020	2019	
Interest rate swaps	\$ 4,763	\$ 3,679	\$ 115	Interest expense
	4,763	3,679	115	Income before income taxes
	(1,142)	(2,029)	—	Provision (benefit) for income taxes
	<u>\$ 5,905</u>	<u>\$ 5,708</u>	<u>\$ 115</u>	Net income

14. 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 on a Recurring Basis and Non-Recurring Basis

Our financial instruments include cash and cash equivalents, accounts receivable, restricted investment securities held in trust on deposit with various banks as collateral for our obligations relative to our landfill final capping, closure and post-closure costs, interest rate derivatives, contingent consideration related to acquisitions, trade payables and debt. The carrying values of cash and cash equivalents, accounts receivable and trade payables approximate their respective fair values due to their short-term nature. The fair value of restricted investment securities held in trust, which are valued using quoted market prices, are included as restricted assets in the Level 1 tier below. The fair value of interest rate derivatives included in the Level 2 tier below is calculated using discounted cash flow valuation methodologies based upon the one month LIBOR yield curves that are observable at commonly quoted intervals for the full term of the swaps. We recognize all derivatives accounted for on the balance sheet at fair value. See Note 11, *Debt* for disclosure about the fair value of debt.

Recurring Fair Value Measurements

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

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

	Fair Value Measurement at December 31, 2020 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	\$ 1,848	\$ —	\$ —
Liabilities:			
Interest rate swaps	\$ —	\$ 13,237	\$ —

Non-Recurring Fair Value Measurements

Summaries of our financial assets and liabilities that are measured at fair value on a non-recurring basis are as follows:

	Fair Value Measurement at December 31, 2021 Using:		
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Liabilities:			
Contingent consideration - acquisition	\$ —	\$ —	\$ 1,919

The fair value of contingent consideration - acquisition included in the Level 3 tier is calculated using a discounted cash flow valuation methodology based upon a probability-weighted analysis of success payments related to permit expansion.

15. EMPLOYEE BENEFIT PLANS

Defined Contribution Plan

We offer our eligible employees the opportunity to contribute to a 401(k) plan ("401(k) Plan"). Under the provisions of the 401(k) Plan participants may direct us to defer a portion of their compensation to the 401(k) Plan, subject to Internal Revenue Code limitations. In fiscal year 2021, we provided an employer matching contribution for hourly employees equal to 100% of every dollar an employee invests up to 1% of annual income and 50% of additional employee contributions up to a maximum contribution into the 401(k) Plan of 3% of annual income. In fiscal year 2021, we provided an employer matching contribution for salaried employees equal to 50% of every dollar an employee invests in the 401(k) Plan up to a maximum contribution of one thousand five hundred dollars or up to 2% of annual income, whichever is greater, per employee per calendar year. Participants vest in employer contributions ratable over a two-year period. Employer contributions for fiscal years 2021, 2020 and 2019 amounted to \$2,811, \$2,357 and \$1,608, respectively.

Employee Stock Purchase Plan

We offer our eligible employees the opportunity to participate in an employee stock purchase plan. Under this plan, qualified employees may purchase shares of Class A common stock by payroll deduction at a 15% discount from the market price. During fiscal years 2021, 2020 and 2019, 20, 20 and 23 shares, respectively, of Class A common stock were issued under this plan. As of December 31, 2021, 54 shares of Class A common stock were available for distribution under this plan.

Multiemployer Pension Plan

We make contributions to a multiemployer defined benefit pension plan, the New England Teamsters and Trucking Industry Pension Fund (the “Pension Plan”), under the terms of a collective bargaining agreement (“CBA”) that covers certain of our union represented employees. The EIN or Pension Plan Number for the Pension Plan is 04-6372430. The Pension Plan provides retirement benefits to participants based on their service to contributing employers. We do not administer the Pension Plan. The risks of participating in a multiemployer pension plan are different from a single-employer pension plan in that: (i) assets contributed to the multiemployer pension plan by one employer may be used to provide benefits to employees or former employees of other participating employers; (ii) if a participating employer stops contributing to the plan, the unfunded obligations of the plan may be required to be assumed by the remaining participating employers; and (iii) if we choose to stop participating in our multiemployer Pension Plan, we may be required to pay the plan a withdrawal amount based on the underfunded status of the plan.

In fiscal year 2019, we reached an agreement to withdraw from the Pension Plan by entering into Withdrawal and Re-entry Agreements with the Pension Plan. In accordance with FASB ASC 450 - Contingencies, because of our withdrawal from the Pension Plan, we recorded an obligation of \$3,194 and a charge of \$3,591 as pension withdrawal expense, offset by a \$397 retroactive contribution credit recorded as cost of operations, in fiscal year 2019. While the withdrawal generates a fixed yearly contingent liability for us for a period of approximately seventeen (17) years, it caps our gross payments at \$4,224 significantly reducing our cash exposure from the potential \$18,511 withdrawal liability as determined based on a complete withdrawal prior to withdrawing from the Pension Plan. As per the Re-entry Agreements and upon withdrawal, we re-entered the Pension Plan as a new employer with certainty from a liability perspective. As of December 31, 2021, we had a remaining obligation of \$1,674 in aggregate principal amount associated with our withdrawal. We did not, however, change the terms of our CBA with Local 170, which remained in effect until it expired on June 30, 2020, at which time a new agreement was entered into. As a new employer in the Pension Plan, our contributions are projected to fully fund the benefits accrued by our employees in the Pension Plan. As of December 31, 2021, our employees were fully funded as a new employer in the Pension Plan, subject to the terms of the Agreements. Subsequent withdrawal from the Pension Plan, under certain circumstances, may result in a change in the payment schedule required to settle the remaining obligation associated with our withdrawal. During fiscal years 2021, 2020 and 2019, we made contributions to the Pension Plan of \$398, \$390 and \$409, respectively.

16. INCOME TAXES

A summary of the provision (benefit) for income taxes is as follows:

	Fiscal Year Ended December 31,		
	2021	2020	2019
Federal			
Current	\$ —	\$ (951)	\$ (951)
Deferred	12,356	(35,177)	(699)
	<u>12,356</u>	<u>(36,128)</u>	<u>(1,650)</u>
State			
Current	1,873	435	321
Deferred	2,717	(17,111)	(545)
	<u>4,590</u>	<u>(16,676)</u>	<u>(224)</u>
Provision (benefit) for income taxes	<u>\$ 16,946</u>	<u>\$ (52,804)</u>	<u>\$ (1,874)</u>

On a periodic basis, we reassess the valuation allowance on our deferred income tax assets, weighing positive and negative evidence to assess the recoverability of the deferred tax assets. In the fourth quarter of fiscal year 2020, we assessed the valuation allowance and considered positive evidence, including significant cumulative consolidated income over the three years ended December 31, 2020, revenue growth and expectations of future profitability, and negative evidence, including the impact of a negative change in the economic climate, significant risks and uncertainties in the business and restrictions on tax loss utilization in certain state jurisdictions. After assessing both the positive evidence and the negative evidence, we determined it was more likely than not that the majority of our deferred tax assets would be realized in the future and released the valuation allowance on the majority of our net operating loss carryforwards and other deferred tax assets as of December 31, 2020, resulting in a benefit from income taxes of \$61,317. Following reassessment in fiscal year 2021, our judgement with regard to the realizability of our deferred tax assets remains consistent. As of December 31, 2021, we maintained a valuation allowance of \$6,094 primarily related to deferred tax assets that would generate capital losses when realized and deferred tax assets related to certain state jurisdictions.

In assessing the realizability of carryforwards and other deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. We adjust the valuation allowance in the period management determines it is more likely than not that deferred tax assets will or will not be realized. The change in the valuation allowance was a decrease of \$388 for fiscal year 2021 and \$61,317 for fiscal year 2020. In determining the need for a valuation allowance, we have assessed the available means of recovering deferred tax assets, including the ability to carryback net operating losses, the existence of reversing temporary differences, and available sources of future taxable income. We have also considered the ability to implement certain strategies, such as a potential sale of assets that would, if necessary, be implemented to accelerate taxable income and use expiring deferred tax assets.

During fiscal year 2020, we recognized a \$(297) deferred tax benefit due to a reduction of the deferred tax liability related to indefinite lived assets. The financial statement value of indefinite lived goodwill was reduced as a result of a settlement of an acquisition contingency that pre-dated the effective date of ASC 805, which resulted in a reduction of the related deferred tax liability.

During fiscal year 2019, we recognized a \$(2,385) deferred tax benefit, due to a reduction of the valuation allowance on acquisitions. In determining the need for a valuation allowance, we assessed the available means of recovering deferred tax assets, including the existence of reversing temporary differences. The valuation allowance decreased due to the recognition of additional reversing temporary differences from the \$2,385 deferred tax liability recorded through goodwill on the acquisition of a company in May 2019. The deferred tax liabilities related to the acquisition was based on the impact of temporary differences between the amounts of assets and liabilities recognized for financial reporting purposes and such amounts recognized for income tax purposes.

The differences in the provision (benefit) for income taxes and the amounts determined by applying the Federal statutory rate to income before income taxes are as follows:

	Fiscal Year Ended December 31,		
	2021	2020	2019
Federal statutory rate	21 %	21 %	21 %
Tax at statutory rate	\$ 12,190	\$ 8,043	\$ 6,254
State income taxes, net of federal benefit	3,868	1,615	1,008
Change in valuation allowance	(388)	(61,317)	(4,420)
Federal effect of change in state valuation allowance	74	3,803	—
Non-deductible officer compensation	1,338	487	1,359
Non-deductible expenses	322	656	638
Deductible stock awards	(363)	(3,790)	(6,004)
Tax credits	(153)	(130)	(82)
Deferred tax adjustments	—	(2,047)	—
Other, net	58	(124)	(627)
Provision (benefit) for income taxes	<u>\$ 16,946</u>	<u>\$ (52,804)</u>	<u>\$ (1,874)</u>

Deferred income taxes reflect the impact of temporary differences between the amounts of assets and liabilities recognized for financial reporting purposes and such amounts recognized for income tax purposes. A summary of deferred tax assets and liabilities is as follows:

	December 31,	
	2021	2020
Deferred tax assets:		
Accrued expenses and reserves	\$ 41,723	\$ 35,444
Net operating loss carryforwards	24,177	34,364
General business and state tax credit carryforwards	7,617	8,044
Stock awards	3,436	2,824
Unrealized loss on swaps	1,461	3,798
Other	2,264	2,307
Total deferred tax assets	80,678	86,781
Less: valuation allowance	(6,094)	(6,482)
Total deferred tax assets after valuation allowance	74,584	80,299
Deferred tax liabilities:		
Amortization of intangibles	(18,042)	(18,044)
Tax over book depreciation of property and equipment	(13,297)	(1,875)
Other	(156)	(129)
Total deferred tax liabilities	(31,495)	(20,048)
Net deferred tax asset	\$ 43,089	\$ 60,251

The net deferred tax asset at December 31, 2021 is reflected on the balance sheet as a long-term deferred federal and state tax asset of \$43,957 and a long-term deferred state tax liability of \$(868).

As of December 31, 2021, we have, for federal income tax purposes, net operating loss carryforwards of approximately \$52,384 that expire in the fiscal years ending December 31, 2032 through 2037 and \$46,453, which do not expire. We have state net operating loss carryforwards of approximately \$41,105 that expire in the fiscal years ending December 31, 2022 through 2041 or that do not expire in certain jurisdictions. In addition, we have \$6,575 general business credit carryforwards which expire in the fiscal years ending December 31, 2022 through 2041 and \$1,319 state credit carryforwards which expire in fiscal years ending December 31, 2038 through 2039. Sections 382 and 383 of the Internal Revenue Code can limit the amount of net operating loss and credit carryforwards which may be used in a tax year in the event of certain stock ownership changes. With the exception of \$1,756 federal net operating losses we acquired through acquisitions, we are not currently subject to these limitations but could become subject to them if there were significant changes in the ownership of our stock.

The provisions of FASB ASC 740-10-25-5 prescribe the minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. Additionally, FASB ASC 740-10-25-5 provides guidance on de-recognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure and transition. Under FASB ASC 740-10-25-5, an entity may only recognize or continue to recognize tax positions that meet a “more likely than not” threshold. To the extent interest and penalties are not assessed with respect to uncertain tax positions, amounts accrued are reflected as a reduction of the overall income tax provision. As of December 31, 2021 and 2020, we did not have any uncertain tax positions.

We are subject to U.S. federal income tax, as well as income tax of multiple state jurisdictions. Due to Federal and state net operating loss carryforwards, income tax returns from years ending in 1998 through 2021 remain open for examination, with limited exceptions.

17. OTHER ITEMS AND CHARGES**Southbridge Landfill Closure Charge, Net**

In the fiscal year ended December 31, 2017, we initiated the plan to cease operations of the Southbridge Landfill and later closed it in November 2018 when Southbridge Landfill reached its final capacity. Accordingly, in fiscal years 2021, 2020 and 2019, we recorded charges associated with the closure of the Southbridge Landfill as follows:

	Fiscal Year Ended December 31,		
	2021	2020	2019
Legal and transaction costs (1)	\$ 868	\$ 2,285	\$ 2,709
Contract settlement charge (2)	572	—	—
Landfill closure project (credit) charge (3)	(944)	490	—
Legal settlement charge (4)	—	2,000	—
Environmental remediation charge (5)	—	(188)	—
Southbridge Landfill closure charge, net	<u>\$ 496</u>	<u>\$ 4,587</u>	<u>\$ 2,709</u>

- (1) We incurred legal costs as well as other transaction costs associated with various matters as part of the Southbridge Landfill closure.
- (2) We updated the cost estimates associated with a contract settlement charge associated with the Southbridge Landfill closure and the remaining future obligations due to the Town of Southbridge under the landfill operating agreement with the Town of Southbridge.
- (3) We recorded a landfill closure project (credit) charge associated with revised costs under the closure plan at Southbridge Landfill.
- (4) We established reserves and made payments associated with legal settlements associated with claims against us as part of the Southbridge Landfill closure.
- (5) We recorded an environmental remediation reversal associated with the completion of environmental remediation at the Southbridge Landfill.

See Note 12, *Commitments and Contingencies* for further disclosure about the environmental remediation charge associated with the Southbridge Landfill closure.

Expense from Acquisition Activities

In the fiscal years 2021, 2020 and 2019, we recorded charges of \$5,304, \$1,862 and \$2,687, respectively, comprised primarily of legal, consulting and other similar costs associated with the acquisition and integration of acquired businesses or select development projects. See Note 5, *Business Combinations* for disclosure regarding acquisition activity.

18. EARNINGS PER SHARE

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

	Fiscal Year Ended December 31,		
	2021	2020	2019
Numerator:			
Net income	\$ 41,100	\$ 91,106	\$ 31,653
Denominator:			
Class A common stock	50,423	50,101	46,803
Class B common stock	988	988	988
Shares to be issued - acquisition	—	—	36
Unvested restricted stock	(2)	(2)	—
Effect of weighted average shares outstanding	(97)	(2,294)	(601)
Basic weighted average common shares outstanding	51,312	48,793	47,226
Impact of potentially dilutive securities:			
Dilutive effect of stock options and stock awards	203	252	740
Diluted weighted average common shares outstanding	51,515	49,045	47,966
Antidilutive potentially issuable shares	10	—	2

19. RELATED PARTY TRANSACTIONS**Services**

During fiscal years 2021, 2020 and 2019, we retained the services of Casella Construction, Inc. ("CCI"), a company substantially owned by sons of John Casella, our Chairman and Chief Executive Officer, and Douglas Casella, a member of our Board of Directors, as a contractor in developing or closing certain landfills owned by us as well as providing transportation and construction services. Total purchased services charged to operations or capitalized to landfills for fiscal years 2021, 2020 and 2019 were \$15,206, \$12,601 and \$7,574, respectively, of which \$1,325 and \$1,297 were outstanding and included in either accounts payable or other current liabilities as of December 31, 2021 and December 31, 2020, respectively.

In addition to the total purchased services, we provided various waste collection and disposal services to CCI. Total revenues recorded for fiscal years 2021, 2020 and 2019 were \$430, \$288 and \$132, respectively.

Leases

In the fiscal year ended April 30, 1994, we entered into two leases for operating facilities with a partnership of which John Casella, our Chairman and Chief Executive Officer, and Douglas Casella, a member of our Board of Directors, are the general partners. The leases have since been extended through August 2023. The terms of the lease agreements require monthly payments of approximately \$29. Total expense charged to operations for fiscal years 2021, 2020 and 2019 under these agreements was \$297, \$319 and \$339, respectively.

Landfill Post-closure

We have agreed to pay the cost of post-closure on a landfill owned by John Casella, our Chairman and Chief Executive Officer, and Douglas Casella, a member of our Board of Directors. We paid the cost of closing this landfill in 1992, and the post-closure maintenance obligations are expected to last until the fiscal year ending December 31, 2024. In fiscal years 2021, 2020 and 2019, we paid \$12, \$8 and \$9, respectively, pursuant to this agreement. As of December 31, 2021 and December 31, 2020, we have accrued \$14 and \$25, respectively, for costs associated with its post-closure obligations.

20. SEGMENT REPORTING

We report selected information about our reportable operating segments in a manner consistent with that used for internal management reporting. We classify our solid waste operations on a geographic basis through regional operating segments, our Western and Eastern regions. Revenues associated with our solid waste operations are derived mainly from solid waste collection, transfer, transportation and disposal, landfill gas-to-energy, processing, and recycling services in the northeastern United States. We manage our resource-renewal operations through the Resource Solutions operating segment. Effective January 1, 2021, we realigned the Resource Solutions operating segment, which includes our larger-scale recycling and commodity brokerage operations along with our organics services and large scale commercial and industrial services, from our historical lines-of-service of recycling, organics and customer solutions into two lines-of-service: processing and non-processing. We realigned the Resource Solutions operating segment to leverage our core competencies in materials processing, industrial recycling, organics and resource management service offerings to deliver a comprehensive solution for our larger commercial, municipal, institutional and industrial customers that have more diverse waste and recycling needs. Revenues from processing services are derived from municipalities and customers in the form of processing fees, tipping fees, commodity sales, and organic material sales. Revenues from non-processing services are derived from brokerage services and overall resource management services providing a wide range of environmental services and zero waste solutions to large and complex organizations, as well as traditional collection, disposal and recycling services provided to large account multi-site customers. Revenues classification by service line reported in fiscal years 2020 and 2019 have been reclassified to conform with the presentation for fiscal year 2021. Legal, tax, information technology, human resources, certain finance and accounting and other administrative functions are included in our Corporate Entities segment, which is not a reportable operating segment. Corporate Entities results reflect those costs not allocated to our reportable operating segments.

Fiscal Year Ended December 31, 2021

Segment	Outside revenues	Inter-company revenue	Depreciation and amortization	Operating income (loss)	Interest expense, net	Capital expenditures	Goodwill	Total assets
Eastern	\$ 264,569	\$ 66,126	\$ 33,572	\$ 12,937	\$ 456	\$ 31,489	\$ 52,072	\$ 357,446
Western	389,520	132,914	61,055	49,035	159	72,892	163,728	688,826
Resource Solutions	235,122	3,258	7,060	17,591	168	12,094	17,060	127,304
Corporate Entities	—	—	1,903	(1,903)	20,144	6,820	—	110,004
Eliminations	—	(202,298)	—	—	—	—	—	—
	<u>\$ 889,211</u>	<u>\$ —</u>	<u>\$ 103,590</u>	<u>\$ 77,660</u>	<u>\$ 20,927</u>	<u>\$ 123,295</u>	<u>\$ 232,860</u>	<u>\$ 1,283,580</u>

Fiscal Year Ended December 31, 2020

Segment	Outside revenues	Inter-company revenue	Depreciation and amortization	Operating income (loss)	Interest expense, net	Capital expenditures	Goodwill	Total assets
Eastern	\$ 220,285	\$ 53,102	\$ 25,669	\$ 11,635	\$ 275	\$ 29,292	\$ 30,873	\$ 223,492
Western	357,989	116,658	56,457	42,688	141	71,989	149,984	642,003
Resource Solutions	196,310	10,675	6,279	7,357	201	2,477	14,044	88,512
Corporate Entities	—	—	2,377	(2,383)	21,451	4,350	—	239,891
Eliminations	—	(180,435)	—	—	—	—	—	—
	<u>\$ 774,584</u>	<u>\$ —</u>	<u>\$ 90,782</u>	<u>\$ 59,297</u>	<u>\$ 22,068</u>	<u>\$ 108,108</u>	<u>\$ 194,901</u>	<u>\$ 1,193,898</u>

Fiscal Year Ended December 31, 2019

Segment	Outside revenues	Inter-company revenue	Depreciation and amortization	Operating income (loss)	Interest expense, net	Capital expenditures	Goodwill	Total assets
Eastern	\$ 219,475	\$ 54,738	\$ 24,322	\$ 9,503	\$ 218	\$ 24,499	\$ 30,720	\$ 207,060
Western	345,212	98,420	47,650	42,019	63	63,547	141,055	599,047
Resource Solutions	178,603	10,762	5,342	5,807	156	12,475	14,044	90,660
Corporate Entities	—	—	2,476	(4,254)	24,298	2,644	—	35,415
Eliminations	—	(163,920)	—	—	—	—	—	—
	<u>\$ 743,290</u>	<u>\$ —</u>	<u>\$ 79,790</u>	<u>\$ 53,075</u>	<u>\$ 24,735</u>	<u>\$ 103,165</u>	<u>\$ 185,819</u>	<u>\$ 932,182</u>

Amount of our total revenue attributable to services provided are as follows:

	Fiscal Year Ended December 31,					
	2021		2020		2019	
Collection	\$ 442,685	49.8 %	\$ 391,438	50.5 %	\$ 372,041	50.1 %
Disposal	196,985	22.2 %	175,546	22.7 %	181,895	24.5 %
Power generation	5,138	0.6 %	4,072	0.5 %	3,576	0.5 %
Processing	9,281	1.0 %	7,218	1.0 %	7,175	1.0 %
Solid waste operations	654,089	73.6 %	578,274	74.7 %	564,687	76.1 %
Processing	93,323	10.5 %	62,539	8.0 %	53,981	7.1 %
Non-processing	141,799	15.9 %	133,771	17.3 %	124,622	16.8 %
Resource Solutions operations	235,122	26.4 %	196,310	25.3 %	178,603	23.9 %
Total revenues	<u>\$ 889,211</u>	<u>100.0 %</u>	<u>\$ 774,584</u>	<u>100.0 %</u>	<u>\$ 743,290</u>	<u>100.0 %</u>

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. 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 December 31, 2021. 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, 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 Securities Exchange Act of 1934, as amended, 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 Securities Exchange Act of 1934, as amended, is accumulated and communicated to our 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 December 31, 2021, 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.

Management’s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2021. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework in 2013. Based on its assessment, management concluded that, as of December 31, 2021, our internal control over financial reporting is effective based on those criteria. The effectiveness of our internal control over financial reporting as of December 31, 2021 has been audited by RSM US LLP, an independent registered public accounting firm. RSM US LLP has issued an attestation report on our internal control over financial reporting, which is included herein.

We completed the acquisitions of Mark Wright Construction (“Mark Wright”) on August 1, 2021; Willimantic Waste Paper Co., Inc. (“Willimantic”) on July 26, 2021; Guard Contracting Corp., 3755 River Road LLC and Triad Recycling and Energy Corp., (collectively “Triad”) on September 1, 2021; Union Transfer, LLC and 1700 Union Road, LLC (collectively “Union”) on October 1, 2021; and Stateline Waste Management, LLC (“Stateline”) on December 1, 2021. Since we have not yet fully incorporated the internal controls and procedures of Mark Wright, Willimantic, Triad and Stateline into our internal control over financial reporting, management excluded Mark Wright, Willimantic, Triad and Stateline from its assessment of the effectiveness of the Company’s internal control over financial reporting as of December 31, 2021. Collectively, Mark Wright, Willimantic, Triad and Stateline constituted approximately 14% of our total assets as of December 31, 2021 and 4% of our total revenues for the year ended December 31, 2021.

Changes in Internal Control Over Financial Reporting

No change in our internal control over financial reporting occurred during the fiscal quarter ended December 31, 2021 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None.

PART III**ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information required by this Item (except for information required with respect to our executive officers which is set forth under “*Information about our Executive Officers*” in Item 1 of Part I of this Annual Report on Form 10-K) has been omitted from this Annual Report on Form 10-K, and is incorporated herein by reference from our definitive proxy statement for the 2022 Annual Meeting of Stockholders that we intend to file with the Securities and Exchange Commission within 120 days after the end of fiscal year ended December 31, 2021 (the “Proxy Statement”), under the sections captioned “Board of Directors”, “Corporate Governance” and “Ownership of Our Common Stock”.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated herein by reference from the Proxy Statement under the sections captioned “Executive and Director Compensation and Related Matters” and “Corporate Governance”.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item (except for the information required with respect to equity compensation plan information, which is set forth under “Equity Compensation Plan Information” below) is incorporated herein by reference from the Proxy Statement under the section captioned “Ownership of Our Common Stock”.

Equity Compensation Plan Information

The following table shows information about the securities authorized for issuance under our equity compensation plans as of December 31, 2021:

	(a)	(b)	(c)
Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (1)	Weighted-average exercise price of outstanding options, warrants and rights (2)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a) (3))
Equity compensation plans approved by security holders	324,386	\$ 15.68	986,543
Equity compensation plans not approved by security holders	—	\$ —	—
Total	324,386	\$ 15.68	986,543

- (1) Performance stock units, including market-based performance stock units are included at the 100% attainment level. Attainment of maximum performance targets and market achievements could result in the issuance of an additional 167,638 shares of Class A common stock.
- (2) The weighted average exercise price of outstanding options, warrants and rights excludes restricted stock units and other equity-based awards that do not have an exercise price.
- (3) Includes 932,620 shares of our Class A common stock issuable under our 2016 Incentive Plan and 53,923 shares of our Class A common stock issuable under our Amended and Restated 1997 Employee Stock Purchase Plan.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item is incorporated herein by reference from the Proxy Statement under the section captioned “Corporate Governance”.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item is incorporated herein by reference from the Proxy Statement under the section captioned “Proposal 3 - Ratification of the Appointment of Independent Auditors”.

PART IV**ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES**

- (a)(1) Consolidated Financial Statements included under Item 8.
 Report of Independent Registered Public Accounting Firm – RSM US LLP.
 Consolidated Balance Sheets as of December 31, 2021 and December 31, 2020.
 Consolidated Statements of Operations for fiscal years 2021, 2020 and 2019.
 Consolidated Statements of Comprehensive Income for fiscal years 2021, 2020 and 2019.
 Consolidated Statement of Stockholders' Equity (Deficit) for fiscal years 2021, 2020 and 2019.
 Consolidated Statements of Cash Flows for fiscal years 2021, 2020 and 2019.
 Notes to Consolidated Financial Statements.

- (a)(2) Financial Statement Schedules:
 All schedules have been omitted because the required information is not significant or is included in the consolidated financial statements or notes thereto, or is not applicable.

- (a)(3) Exhibits:

Exhibit No.	Description
3.1	Second Amended and Restated Certificate of Incorporation of Casella Waste Systems, Inc., as amended (incorporated herein by reference to Exhibit 3.1 to the quarterly report on Form 10-Q of Casella as filed on December 7, 2007 (file no. 000-23211)).
3.2	Third Amended and Restated By-Laws of Casella Waste Systems, Inc., as amended (incorporated herein by reference to Exhibit 3.1 to the annual report on Form 10-K of Casella as filed on February 19, 2021 (file no. 000-23211)).
4.1	Form of stock certificate of Casella Class A common stock (incorporated herein by reference to Exhibit 4 to Amendment No. 2 to the registration statement on Form S-1 of Casella as filed on October 9, 1997 (file no. 333-33135)).
4.2	Certificate of Designation creating Series A Convertible Preferred Stock (incorporated herein by reference to Exhibit 4.1 to the current report on Form 8-K of Casella as filed on August 18, 2000 (file no. 000-23211)).
4.3	Description of Securities Registered Under Section 12 of the Exchange Act (incorporated herein by reference to Exhibit 4.3 to the annual report on Form 10-K of Casella as filed on February 19, 2021 (file no. 000-23211)).
4.4	FAME Financing Agreement, dated as of August 1, 2015, between Casella and the Finance Authority of Maine (incorporated herein by reference to Exhibit 4.1 to the current report on Form 8-K of Casella as filed on August 27, 2015 (file no. 000-23211)).
4.5	FAME Guaranty Agreement, dated as of August 1, 2015, by and between the guarantors named therein and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.2 to the current report on Form 8-K of Casella as filed on August 27, 2015 (file no. 000-23211)).
4.6	Loan Agreement, dated as of December 1, 2014, between New York State Environmental Facilities Corporation and Casella (incorporated herein by reference to Exhibit 4.1 to the current report on Form 8-K of Casella as filed on December 18, 2014 (file no. 000-23211)).
4.7	NYSEFC Amended and Restated Guaranty Agreement, dated as of June 1, 2016, by and between the guarantors named therein and U.S. Bank National Association, as Trustee (incorporated herein by reference to Exhibit 4.1 to the current report on Form 8-K of Casella as filed on June 2, 2016 (file no. 000-23211)).
4.8	BFA Guaranty Agreement, dated as of October 1, 2014, by and among U.S. Bank National Association, as Trustee, and the guarantors identified therein (incorporated herein by reference to Exhibit 10.1 to the current report on Form 8-K of Casella as filed on October 16, 2014 (file no. 000-23211)).

Exhibit No.	Description
4.9	Financing Agreement dated as of March 1, 2013 between Casella and the Vermont Economic Development Authority, relating to issuance of Vermont Economic Development Authority Solid Waste Disposal Revenue Bonds (incorporated herein by reference to Exhibit 10.1 to the current report on Form 8-K of Casella as filed April 5, 2013 (file no. 000-23211)).
4.10	VEDA Guaranty Agreement, dated as of March 1, 2013, by and among U.S. Bank National Association, as Trustee, and the guarantors identified therein (incorporated herein by reference to Exhibit 4.8 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
4.11	Financing Agreement dated as of March 1, 2013 between Casella and the Business Finance Authority of the State of New Hampshire, relating to issuance of Business Finance Authority of the State of New Hampshire Solid Waste Disposal Revenue Bonds (incorporated herein by reference to Exhibit 10.2 to the current report on Form 8-K of Casella as filed on April 5, 2013 (file no. 000-23211)).
4.12	Financing Agreement between Casella and Finance Authority of Maine, dated as of December 1, 2005, relating to issuance of Finance Authority of Maine Solid Waste Disposal Revenue Bonds (Casella Waste Services, Inc. Project) Series 2005 (incorporated herein by reference to Exhibit 10.1 to the current report on Form 8-K of Casella as filed on January 4, 2006 (file no. 000-23211)).
4.13	First Amendment dated as of February 1, 2012 to Financing Agreement dated as of December 1, 2005, by and among Finance Authority of Maine, U.S. Bank National Association, as Trustee, Bank of America, as Credit Provider, and Casella (incorporated herein by reference to Exhibit 10.1 to the quarterly report on Form 10-Q of Casella as filed on March 2, 2012 (file no. 000-23211)).
4.14	Second Amendment dated as of February 1, 2017 to Financing Agreement dated as of December 1, 2005, by and among Finance Authority of Maine, U.S. Bank National Association, as Trustee, Bank of America, as Credit Provider, and Casella (incorporated herein by reference to Exhibit 4.2 to the current report on Form 8-K as filed on February 7, 2017 (file no. 000-23211)).
4.15	FAME Amended and Restated Guaranty Agreement, dated as of February 1, 2017, by and among U.S. Bank National Association, as Trustee, and the guarantors identified therein (incorporated herein by reference to Exhibit 4.1 to the current report on Form 8-K of Casella as filed on February 7, 2017 (file no. 000-23211)).
4.16	Loan Agreement, dated as of September 1, 2020, between New York State Environmental Facilities Corporation and Casella Waste Systems, Inc (incorporated herein by reference to Exhibit 4.1 to the Current Report on Form 8-K of Casella as filed on September 2, 2020 (file no. 000-23211)).
4.17	Guaranty Agreement, dated as of September 1, 2020, by and between the guarantors named therein and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.2 to the Current Report on Form 8-K of Casella as filed on September 2, 2020 (file no. 000-23211)).
10.1	Lease Agreement, as Amended, between Casella Associates and Casella Waste Management, Inc., dated August 1, 1993 (Rutland lease) (incorporated herein by reference to Exhibit 10.17 to the registration statement on Form S-1 of Casella as filed on August 7, 1997 (file no. 333-33135)).
10.2	Second Amendment to Lease Agreement, by and between Casella Associates and Casella Waste Management, Inc., dated as of November 20, 1997 (Rutland lease). (incorporated herein by reference to Exhibit 10.25 to the registration statement on Form S-1 of Casella as filed on June 25, 1998 (file no. 333-57745)).
10.3	Amendment to Lease Agreement dated as of March 13, 2008, between Casella Associates and Casella, amending Lease Agreement dated August 1, 1993, as amended (Rutland lease). (incorporated herein by reference to Exhibit 10.7 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.4	Lease Agreement, as Amended, between Casella Associates and Casella Waste Management, Inc., dated August 1, 1993 (Montpelier lease). (incorporated herein by reference to Exhibit 10.18 to the registration statement on Form S-1 of Casella as filed on August 7, 1997 (file no. 333-33135)).
10.5	Amendment to Lease Agreement dated as of March 13, 2008, between Casella Associates and Casella, amending Lease Agreement dated August 1, 1993, as amended (Montpelier lease) (incorporated herein by reference to Exhibit 10.9 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.6	Lease, Operations and Maintenance Agreement between CV Landfill, Inc. and Casella Waste Systems, Inc. dated June 30, 1994 (incorporated herein by reference to Exhibit 10.20 to the registration statement on Form S-1 of Casella as filed on August 7, 1997 (file no. 333-33135)).

Exhibit No.	Description
10.7*	Employment Agreement between Casella and John W. Casella dated December 8, 1999 (incorporated herein by reference to Exhibit 10.43 to the annual report on Form 10-K of Casella as filed on August 4, 2000 (file no. 000-23211)).
10.8*	Amendment to Employment Agreement by and between Casella and John W. Casella dated as of December 30, 2008 (incorporated herein by reference to Exhibit 10.3 to the quarterly report on Form 10-Q of Casella as filed on March 6, 2009 (file no. 000-23211)).
10.9*	2006 Stock Incentive Plan, as amended (incorporated herein by reference to Exhibit 10.13 to the annual report on Form 10-K of Casella as filed on March 2, 2016 (file no. 000-023211)).
10.10*	Form of Incentive Stock Option Agreement granted under 2006 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.14 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.11*	Form of Restricted Stock Agreement granted under 2006 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.15 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.12*	Form of Restricted Share Unit Agreement granted under 2006 Stock Incentive Plan (employee with employment contract) (incorporated herein by reference to Exhibit 10.16 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.13*	Form of Restricted Share Unit Agreement granted under 2006 Stock Incentive Plan (employee with no employment contract) (incorporated herein by reference to Exhibit 10.17 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.14*	Form of Restricted Stock Unit Agreement granted under 2006 Stock Incentive Plan (employee with employment contract) (incorporated herein by reference to Exhibit 10.18 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.15*	Form of Restricted Stock Unit Agreement granted under 2006 Stock Incentive Plan (employee with no employment contract) (incorporated herein by reference to Exhibit 10.19 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.16*	Form of Performance Share Unit Agreement granted under 2006 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.2 to the quarterly report on Form 10-Q of Casella as filed on September 4, 2008 (file no. 000-23211)).
10.17*	Form of Restricted Stock Unit Agreement granted under 2006 Stock Incentive Plan (adopted March 1, 2016) (employee with employment contract) (incorporated herein by reference to Exhibit 10.2 to the current report on Form 8-K of Casella as filed on March 7, 2016 (file no. 000-23211)).
10.18*	Form of Restricted Stock Unit Agreement granted under 2006 Stock Incentive Plan (adopted March 1, 2016) (employee with no employment contract) (incorporated herein by reference to Exhibit 10.3 to the current report on Form 8-K of Casella as filed on March 7, 2016 (file no. 000-23211)).
10.19*	Employment Agreement between Casella and Edwin D. Johnson dated as of July 6, 2010 (incorporated herein by reference to Exhibit 10.1 to the quarterly report on Form 10-Q of Casella as filed on September 3, 2010 (file no. 000-23211)).
10.20*	Letter Agreement between Casella and Edwin D. Johnson dated as of February 12, 2013 (incorporated herein by reference to Exhibit 10.26 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.21*	Employment Agreement between Casella and Edmond Coletta dated as of September 1, 2012 (incorporated herein by reference to Exhibit 10.28 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.22*	Employment Agreement between Casella and Christopher B. Heald dated as of March 1, 2016 (incorporated herein by reference to Exhibit 10.4 to the current report on Form 8-K of Casella as filed on March 7, 2016 (file no. 000-23211)).
10.23*	Employment Agreement between Casella and Shelley E. Sayward dated as of January 1, 2021 (incorporated herein by reference to exhibit 10.25 to the annual report on Form 10-K of Casella as filed on February 19, 2021 (file no. 000-23211)).

Exhibit No.	Description
10.24*	Letter Agreement between Casella and Edmond Coletta dated as of February 17, 2021 (incorporated herein by reference to exhibit 10.26 to the annual report on Form 10-K of Casella as filed on February 19, 2021 (file no. 000-23211)).
10.25*	Letter Agreement between Casella and Christopher B. Heald dated as of February 17, 2021 (incorporated herein by reference to exhibit 10.27 to the annual report on Form 10-K of Casella as filed on February 19, 2021 (file no. 000-23211)).
10.26*	Amended and Restated Employment Agreement between Casella and Christopher B. Heald dated as of October 25, 2021 (incorporated herein by reference to Exhibit 10.1 to the quarterly report on Form 10-Q of Casella as filed on October 29, 2021 (file no. 000-23211)).
10.27	Extension of Lease Agreements dated as of April 23, 2013, between Casella Associates and Casella, amending (i) Lease Agreement dated August 1, 1993, as amended (Montpelier lease) and (ii) Lease Agreement dated August 1, 1993, as amended (Rutland lease) (incorporated herein by reference to Exhibit 10.29 to the annual report on Form 10-K of Casella as filed on June 27, 2014 (file no. 000-23211)).
10.28*	Casella Waste Systems, Inc. Non-Equity Incentive Plan (incorporated herein by reference to Exhibit 10.1 of the current report on Form 8-K of Casella as filed on March 7, 2016 (file no. 000-23211)).
10.29*	Casella Waste Systems, Inc. 2016 Incentive Plan (incorporated herein by reference to Exhibit 99.1 to the Registration Statement on Form S-8 of Casella as filed on November 17, 2016 (file No. 333-214683)).
10.30*	Form of Restricted Stock Unit Agreement under 2016 Incentive Plan (employee with employment contract) (incorporated herein by reference to Exhibit 10.1 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.31*	Form of Restricted Stock Unit Agreement under 2016 Incentive Plan (employee with no employment contract) (incorporated herein by reference to Exhibit 10.2 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.32*	Form of Performance-Based Stock Unit Agreement under 2016 Incentive Plan (employee with employment contract) (incorporated herein by reference to Exhibit 10.3 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.33*	Form of Performance-Based Stock Unit Agreement under 2016 Incentive Plan (employee with no employment contract) (incorporated herein by reference to Exhibit 10.4 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.34*	Form of Restricted Stock Agreement under 2016 Incentive Plan (incorporated herein by reference to Exhibit 10.5 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.35*	Form of Incentive Stock Option Agreement under 2016 Incentive Plan (employee with employment contract) (incorporated herein by reference to Exhibit 10.6 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.36*	Form of Nonstatutory Stock Option Agreement under 2016 Incentive Plan (employee with employment contract) (incorporated herein by reference to Exhibit 10.7 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.37*	Form of Incentive Stock Option Agreement under 2016 Incentive Plan (employee with no employment contract) (incorporated herein by reference to Exhibit 10.8 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.38*	Form of Nonstatutory Stock Option Agreement under 2016 Incentive Plan (employee with no employment contract) (incorporated herein by reference to Exhibit 10.9 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.39*	Form of Performance-Based Stock Option Agreement under 2016 Incentive Plan (employee with employment contract) (incorporated herein by reference to Exhibit 10.10 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).
10.40*	Form of Performance-Based Stock Option Agreement under 2016 Incentive Plan (employee with no employment contract) (incorporated herein by reference to Exhibit 10.11 to the current report on Form 8-K of Casella as filed on November 22, 2016 (file No. 000-23211)).

Exhibit No.	Description
10.41*	Form of Restricted Stock Unit Agreement under 2016 Incentive Plan (non-employee director) (incorporated herein by reference to Exhibit 10.1 to the quarterly report on Form 10-Q of Casella as filed on November 2, 2017 (file No. 000-23211)).
10.42	Amended and Restated Credit Agreement, dated as of December 22, 2021, among Casella, the subsidiaries of Casella identified therein, Bank of America, N.A., as administrative agent, Merrill Lynch, Pierce Fenner & Smith Incorporated, Citizens Bank, N.A., JPMorgan Chase Bank, N.A. and Comerica Bank as joint lead arrangers, and the lenders party thereto (incorporated herein by reference to Exhibit 10.1 to the current report on Form 8-K of Casella as filed on December 28, 2021 (file No. 000-23211)).
10.43	Master Lease Agreement dated as of July 20, 2020 by and between Bank of America Leasing & Capital, LLC and Casella Waste Systems, Inc. (incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K of Casella as filed on July 22, 2020 (file no. 000-23211)).
10.44	Addendum to Master Lease Agreement No. 36629-90000 dated as of July 20, 2020 by and among Bank of America Leasing & Capital, LLC, Casella Waste Systems, Inc. and certain of its subsidiaries (incorporated herein by reference to Exhibit 10.2 to the Current Report on Form 8-K of Casella as filed on July 22, 2020 (file no. 000-23211)).
10.45	Purchase and Sale Agreement dated as of January 23, 2011 among Casella, KTI, CE Holdings II, LLC and CE Holding Company, LLC (incorporated herein by reference to Exhibit 2.1 to the quarterly report on Form 10-Q of Casella as filed on March 3, 2011 (file no. 000-23211)).
21.1 +	Subsidiaries of Casella Waste Systems, Inc.
23.1 +	Consent of RSM US LLP
31.1 +	Certification of Principal Executive Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
31.2 +	Certification of Principal Financial Officer required by Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as amended.
32.1 +	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes- Oxley Act of 2002.
101.INS	The instance document does not appear in the interactive data file because its XBRL tags are embedded within the inline XBRL document.
101.SCH	Inline XBRL Taxonomy Extension Schema Document.**
101.CAL	Inline XBRL Taxonomy Calculation Linkbase Document.**
101.LAB	Inline XBRL Taxonomy Label Linkbase Document.**
101.PRE	Inline XBRL Taxonomy Presentation Linkbase Document.**
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.**
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101.)

+ Filed Herewith

* This is a management contract or compensatory plan or arrangement.

** Submitted Electronically Herewith. Attached as Exhibit 101 to this report are the following formatted in inline XBRL (Extensible Business Reporting Language): (i) Consolidated Balance Sheets as of December 31, 2021 and December 31, 2020, (ii) Consolidated Statements of Operations for fiscal years 2021, 2020 and 2019, (iii) Consolidated Statements of Comprehensive Income for fiscal years 2021, 2020 and 2019, (iv) Consolidated Statement of Stockholders' Equity (Deficit) for fiscal years 2021, 2020 and 2019, (v) Consolidated Statements of Cash Flows for fiscal years 2021, 2020 and 2019, and (vi) Notes to Consolidated Financial Statements.

ITEM 16. FORM 10-K SUMMARY

Not applicable.

SIGNATURES

Pursuant to the requirements of the Section 13 or 15(d) of 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.

Dated: February 18, 2022

By: /s/ John W. Casella

John W. Casella
Chairman of the Board of Directors and Chief
Executive Officer
(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

Signature	Title	Date
<u>/s/ John W. Casella</u> John W. Casella	Chairman of the Board of Directors and Chief Executive Officer (Principal Executive Officer)	February 18, 2022
<u>/s/ Edmond R. Coletta</u> Edmond R. Coletta	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	February 18, 2022
<u>/s/ Christopher B. Heald</u> Christopher B. Heald	Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 18, 2022
<u>/s/ Douglas R. Casella</u> Douglas R. Casella	Director	February 18, 2022
<u>/s/ Joseph G. Doody</u> Joseph G. Doody	Director	February 18, 2022
<u>/s/ Rose Stuckey Kirk</u> Rose Stuckey Kirk	Director	February 18, 2022
<u>/s/ Gary Sova</u> Gary Sova	Director	February 18, 2022
<u>/s/ William P. Hulligan</u> William P. Hulligan	Director	February 18, 2022
<u>/s/ Michael K. Burke</u> Michael K. Burke	Director	February 18, 2022
<u>/s/ Michael L. Battles</u> Michael L. Battles	Director	February 18, 2022
<u>/s/ Emily Nagle Green</u> Emily Nagle Green	Director	February 18, 2022

Subsidiaries of Registrant

Name	Jurisdiction of Incorporation
171 Church Street, LLC	Vermont
AGreen Energy, LLC	Massachusetts
All Cycle Waste, Inc.	Vermont
BGreen Energy, LLC	Massachusetts
Blow Bros.	Maine
Bristol Waste Management, Inc.	Vermont
C.V. Landfill, Inc.	Vermont
Casella Major Account Services LLC	Vermont
Casella of Holyoke, Inc.	Massachusetts
Casella Recycling, LLC	Maine
Casella Transportation, Inc.	Vermont
Casella Waste Management of Massachusetts, Inc.	Massachusetts
Casella Waste Management of N.Y., Inc.	New York
Casella Waste Management of Pennsylvania, Inc.	Pennsylvania
Casella Waste Management, Inc.	Vermont
Casella Waste Services of Ontario LLC	New York
Chemung Landfill LLC	New York
Evergreen National Indemnity Company	Ohio
Forest Acquisitions, Inc.	New Hampshire
Granite State Landfill, LLC	New Hampshire
GreenerU, Inc.	Delaware
GroundCo LLC	New York
Hakes C & D Disposal, Inc.	New York
Hardwick Landfill, Inc.	Massachusetts
Hiram Hollow Regeneration Corp.	New York
KTI Environmental Group, Inc.	New Jersey
KTI Specialty Waste Services, Inc.	Maine
KTI, Inc.	New Jersey
New England Waste Services of ME, Inc.	Maine
New England Waste Services of N.Y., Inc.	New York
New England Waste Services of Vermont, Inc.	Vermont
New England Waste Services, Inc.	Vermont
Newbury Waste Management, Inc.	Vermont
NEWS of Worcester LLC	Massachusetts
NEWSME Landfill Operations LLC	Maine
North Country Environmental Services, Inc.	Virginia
Northern Properties Corporation of Plattsburgh	New York
North Rd, LLC	Vermont
Oxford Transfer Station, LLC	Delaware
Pine Tree Waste, Inc.	Maine
Portland C&D Site, Inc.	New York
Schultz Landfill, Inc.	New York
Southbridge Recycling & Disposal Park, Inc.	Massachusetts
Sunderland Waste Management, Inc.	Vermont
TAM, Inc.	Vermont
TAM Organics, LLC	Vermont
TAM Recycling, LLC	Vermont
The Hyland Facility Associates	New York
Tompkins County Recycling LLC	Delaware
Waste-Stream Inc.	New York
Willimantic Waste Paper Co., Inc.	Connecticut

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-40267, 333-43537, 333-43539, 333-43541, 333-43543, 333-43635, 333-67487, 333-92735, 333-31022, 333-100553, 333-141038, 333-163645, 333-175010, 333-199685 and 333-214683) and on Form S-3 (Nos. 333-85279, 333-88097, 333-95841, 333-31268, and 333-260602) of Casella Waste Systems, Inc. of our report dated February 18, 2022, relating to the consolidated financial statements, and the effectiveness of internal control over financial reporting of Casella Waste Systems, Inc. and subsidiaries, appearing in the Annual Report on Form 10-K of Casella Waste Systems, Inc. for the year ended December 31, 2021.

/s/ RSM US LLP

Boston, Massachusetts
February 18, 2022

CERTIFICATION

I, John W. Casella, certify that:

1. I have reviewed this Annual Report on Form 10-K of Casella Waste Systems, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 18, 2022

By: /s/ John W. Casella

John W. Casella

Chairman and Chief Executive Officer

(Principal Executive Officer)

CERTIFICATION

I, Edmond R. Coletta, certify that:

1. I have reviewed this Annual Report on Form 10-K of Casella Waste Systems, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 18, 2022

By: /s/ Edmond R. Coletta

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

STATEMENT PURSUANT TO 18 U.S.C. §1350**

Pursuant to 18 U.S.C. §1350, each of the undersigned certifies that, to his knowledge, this Annual Report on Form 10-K for the fiscal year ended December 31, 2021 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that the information contained in this report fairly presents, in all material respects, the financial condition and results of operations of Casella Waste Systems, Inc.

Date: February 18, 2022

By: /s/ John W. Casella

John W. Casella
Chairman and Chief Executive Officer
(Principal Executive Officer)

Date: February 18, 2022

By: /s/ Edmond R. Coletta

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

Date: February 18, 2022

By: /s/ Christopher B. Heald

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