

WINTERS BROS. WASTE SYSTEMS

THE STATE OF WASTE

A review of the solid waste crisis facing Long Island

FEBRUARY 22, 2023



This report was prepared using information from numerous sources, including the U.S. EPA, NYS-DEC, New York Metropolitan Transportation Council, the Long Island Solid Waste Leadership Council, Long Island Regional Planning Council, Stony Brook University, US Census Bureau, and the New York Climate Action Council. The recommendations were discussed with, and suggestions were made by, solid waste professionals and municipal staff across Long Island. The report is presented to encourage action and to address a very serious environmental, public health, and economic issue on Long Island.

WINTERS BROS.

WASTE SYSTEMS

Winters Bros. Waste Systems is proud to present our comprehensive report: *The State of Waste—A review of the solid waste crisis facing Long Island*. This report reviews the significant and unique challenges associated with managing the staggering amount of waste generated on Long Island. Importantly, the report offers recommendations to address the crisis.

As you read through this report, it is important to understand these facts:

- Long Island's 2.9 million residents produce more than 14 million pounds of municipal solid waste each day.
- Another 29.1 million pounds of Construction and Demolition (C&D) waste are produced each day.
- The Brookhaven Landfill—which buries incinerator ash, C&D waste, and automobile shredder waste—is expected to close in 2024.

Volumes of waste are increasing each year despite best efforts to recycle. Landfills are shutting down in the northeast forcing lawful companies to ship waste further at higher costs while increasing the risk of illegal dumping by unscrupulous individuals. And once the Brookhaven Landfill closes, transportation and logistical challenges will arise across Long Island. The challenges will affect all residents, businesses, builders, and municipalities in Nassau and Suffolk counties, including two cities, 13 towns and 96 villages. Most will see an increase in the cost of managing solid waste. Commuters will see more trucks on our already overcrowded highways and bridges. Environmentally, more trucks create more air pollution including particulate matter (PM10 and PM2.5), volatile organic compounds, and carbon emissions, which contribute to climate change as well as safety and road maintenance impacts.

At Winters Bros., we are driven to create a better Long Island—one block at a time, one town at a time—through unmatched solid waste and recycling services. We continue to invest in the future of Long Island. We finance the development of large-scale recycling facilities across Long Island. We work with customers to minimize waste and recover reusable and recyclable material from the waste stream. We provide solutions, such as the purchase of a short-line railroad capable of removing thousands of trucks from our roadway system, which will result in cleaner air. And we continue to explore alternative fuel vehicles, including natural gas and electric powered heavy-duty trucks.

Long Island is the place where we have not only chosen to grow our business, but also to raise our families. As professionals in the field, we are truly distressed about the state of waste on Long Island. As a region, we are at a crossroads with regards to the management of society's waste. There is no time to wait. We must act now.

This State of Waste report includes timely and realistic recommendations to address Long Island's solid waste crisis. Winters Bros. looks forward to advancing these recommendations as we continue to seek environmentally friendly and cost-effective waste management solutions for Long Island—now and in the future.

Environmentally yours,

Jimmy Winters

INTRODUCTION

Every day, Long Island's garbage seems to "go away"—at least from the generator's point of view. From Hempstead to the Hamptons, residents and business owners see their garbage disappear, not realizing the active crisis concerning where their waste goes and how it gets there. Day after day, week after week, month after month, Long Islanders generate more and more waste.

Collectively, we all need to do more to reduce the amount of waste generated each day. Long Island municipalities and the solid waste industry have worked together to identify ways to improve recycling and dispose of millions of tons of waste generated on Long Island. But, this requires substantial participation by everyone.

The future of waste management is alarming considering the dramatically increasing volumes of waste, the escalating costs of managing it, low recycling rates, and the shrinking capacity on Long Island to dispose of our waste.

Fortunately, there are solutions. Unfortunately, the solutions are neither cheap, nor easy to implement.

THE CRISIS IS NOW

"The crisis is not looming...it is here NOW."

- Edward Romaine, Supervisor of the Town of Brookhaven at a meeting hosted by the Long Island Regional Planning Council on February 27, 2020.

Supervisor Romaine is correct. The crisis is, in fact, here, and it is now. Here are the undeniable facts:

Fact #1: 2.9 million residents of Long Island produce an enormous amount of waste.

4.9 pounds of municipal solid waste per person per day

X 2,917,251 people on Long Island

= 14,294,530 pounds of municipal solid waste per day

X 365 days per year

= 5,217,503,450 pounds of municipal solid waste per year

or 2,608,751 tons per year

Moreover, the 2.6 million tons of waste per year does NOT include the additional 5.3 million tons of construction and demolition waste (C&D) that is generated from home renovation projects, commercial construction and demolition projects on Long Island every year.

Fact #2: The Brookhaven Landfill is going to close.

Fact #3: Waste must go somewhere.

Despite our best efforts to reduce and recycle, there is still a significant amount of waste that must be managed.



Caption Clockwise. 1. Waste is collected from homes and businesses across Long Island. Per capita waste regeneration rates are 4.9 pounds of waste per person per day. 2. Transfer trailers are commonly used to move waste around and off Long Island. 3. Bales of recyclable paper are produced at the Brookhaven Material Recycling Facility in Yaphank. Recycling is a sustainable and preferred process for managing society's waste.

WHERE DOES WASTE GO?

The current system of managing waste involves hundreds of trucks traveling up and down Long Island streets collecting waste and recyclables generated by residents, business, institutions, and other establishments. Most municipal solid waste (MSW) from homes that is not recycled goes to one of four waste-to-energy plants where the garbage is burned, and electrical power is generated. Most commercial waste generated from offices, businesses, stores and shops on Long Island is shipped off Long Island by truck. The ash from the incineration process is disposed of on Long Island—most of it at the Brookhaven Landfill. The Town of Babylon has an ash monofil which accepts ash from the incinerator located in Babylon.

Waste that is not burned is transported off Long Island to distant landfills where it is buried. The long hauling of waste requires thousands of tractor trailer loads of waste traveling over our congested and aging roadway systems. Recyclables are transported to several recycling centers where the material is processed, sorted and cleaned. The sorted recyclables are then transported for further processing before they make their way to a manufacturing process where the recyclables are remanufactured into new items.

Construction and Demolition waste is typically delivered to transfer stations where the material is processed and recyclables, such as concrete and metals, are recovered. The remaining waste is taken to disposal sites - both on and off Long Island. Currently, there are three active landfills on Long Island that accept C&D waste:

- Brookhaven Landfill in Yaphank
- 110 Sand Company landfill in Melville
- Islip landfill in Hauppauge

Most of the waste that leaves Long Island is transported by truck (91%), while the remaining waste is shipped via rail (9%).

With the Brookhaven Landfill set to close at the end of 2024, the vast majority of waste will need to be transported off Long Island.

DEFINING THE WASTE CRISIS POINT BY POINT

1. There is a lack of disposal capacity for waste on Long Island, which drives the constant need for off-Island transportation and disposal assets.
2. The lack of disposal capacity exists for both municipal solid waste (MSW) and construction and demolition debris ("C&D").
3. Most of the commercial waste is already transported and disposed off Island.
4. The residential waste from at least five of Long Island's townships (Oyster Bay, Riverhead, Southampton, Shelter Island and East Hampton) and two cities (Glen Cove and Long Beach) is transported off-Island for disposal.
5. Between the residential garbage and commercial trash, thousands of tons a day of MSW are transported off-Island by truck.
6. Even with the Brookhaven Landfill and 110 Sand in operation, a significant amount of C&D debris is currently being transported off-Island by truck and rail.
7. Currently, the Brookhaven Landfill manages about 1.2 million tons per year of waste materials including C&D, waste from vehicle shredding and scrap yards, and ash from incinerators.
8. When the Brookhaven Landfill closes in 2024, approximately 60,000 trucks will be needed to haul the 1.2 million tons of waste that was going to the landfill (1,200,000 tons / 20 tons per truckload = 60,000 trucks needed).

THE NEED FOR BETTER LOGISTICS AND ADDITIONAL INFRASTRUCTURE

Before the Brookhaven landfill closes, people (citizens, politicians, regulators, and industry officials) must acknowledge the need for additional facilities to manage society's waste in an environmentally sound manner.

The existing network of transfer stations, waste-to-energy plants, trucks, and rail is not sufficient to handle the volume of waste that will be displaced following the closure of the Brookhaven landfill. Additional infrastructure will need to be developed, including enhancements to freight rail transportation systems. Currently, there are three waste transfer stations that ship waste by rail to distant landfills. The existing waste to rail operations are located in:

- Farmingdale, NY – Operated by Winters Bros.
- Lindenhurst, NY – Operated by Winters Bros.
- Brentwood, NY – Operated by Omni-Brentwood. The Town of Islip approved a site plan, and the State granted a permit for a new transfer station in Brentwood. This facility opened in October 2022.

There are three other rail projects in various stages of development:

- Medford – The Town of Brookhaven approved plans for a new C&D transfer station at the Gershow Scrap Yard in Medford.
- Yaphank – Winters Bros. is working to develop a project in Yaphank.
- Smithtown – Carlson Corp. is working to develop a project in Kings Park.

There is a need for a substantial increase in transportation capacity to manage deliveries to and shipments from Long Island. Rail is more sustainable with significantly less environmental impacts when compared to truck transportation.

In December of 2022, New York State's Climate Action Council recommended the wider utilization and expansion of transportation of freight via rail, stating that the "state should work with federal partners to improve the reliability of intercity passenger rail service and strengthen the freight rail system. These improvements will provide New Yorkers with additional low-carbon options for longer-distance travel and improve the environmental sustainability of the goods movement system."

RECOMMENDATIONS TO ADDRESS LONG ISLAND'S WASTE CRISIS

The following are recommendations we believe will address the existing waste crisis on Long Island.

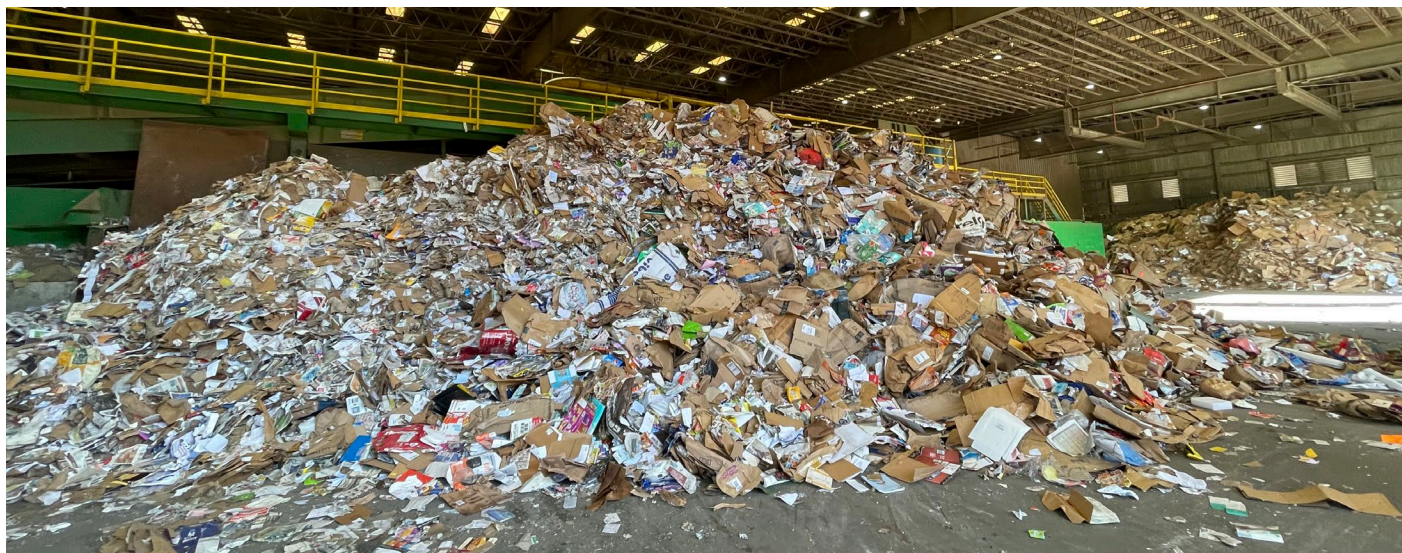
1. Create a regional approach for planning. In December 2010, the New York State Department of Environmental Conservation (NYS-DEC) adopted the current version of the *State Solid Waste Management Plan, Sustainable Materials Management Strategy for New York State – Beyond Waste*. Today, the State's current solid waste management plan (from 2010) is out of date. It is essential to use the working knowledge of municipal and private solid waste management professionals to initiate and undertake a proactive strategy for the future management of solid waste on Long Island. Planning Units—comprising towns, villages, cities, and certain municipal entities—must participate in waste management planning on Long Island. The NYS-DEC must work in conjunction with municipalities to facilitate solutions, policy, and plans specific to Long Island.

2. Reduce waste at the point of generation. Winters Bros. firmly believes in promoting a Zero Waste approach to waste management and planning, which emphasizes waste prevention as opposed to end-of-stream waste management. Beyond recycle and reuse, zero waste focuses on responsible production, consumption, reuse and recovery of all products, packaging and materials, without burning them, and without discharges to land, water, or air that

threaten the environment or public health. It is clearly an ideal, and not a “hard” target, but one that Long Island should aspire to reach, nonetheless.

3. Enhance Rail Infrastructure on Long Island. Alternative modes of off-island transportation of solid waste must be developed and expanded. The New York Climate Action Council got this one right. In the scoping document (see page 162), the council maintains that the state should work with federal partners to strengthen the freight rail system, stating “These improvements will provide New Yorkers with additional low-carbon options for longer-distance travel and improve the environmental sustainability of the goods movement system.”

Additional cost-effective and environmentally sound methods and capacity to transport waste off-island is needed. Over the last few years, the cost to transport waste off Long Island, via trucks, has doubled. Unfortunately, fewer trucks and drivers are available to accommodate the current demand. There is a pressing need for a substantial increase in capacity for off-island transportation, using multiple transportation methods, while maintaining a reasonable cost to the commercial marketplace and residents.



Piles of newspaper, cardboard and paper await processing for recycling. Local markets for recyclables will help to “close the loop” and strengthen recycling on Long Island.

4. **Enhance Waste Infrastructure on Long Island.**

State and local government, as well as the private sector, must work together to expand on-Island waste management capacity, including recycling, composting, anaerobic digestion and energy recovery through municipal waste combustion. State and local waste management and energy policies should encourage and incentivize the use of local solutions, thereby providing greater self-sufficiency, resilience and economic benefits.

5. **Enhance recycling.** Recycling is a great alternative to burning or burying waste. The recycling industry is challenged with high contamination rates, high processing costs, a lack of markets for recyclables, low participation rates, and fluctuating commodity values. For a recycling system to be successful, all involved parties—including consumers, collectors, processors, manufacturers and regulators—need to do their part, and work together to advance recycling among all generators.

6. **Develop and Grow Markets for Recyclables.** Markets for recyclables must be stimulated, expanded and sustained. Government can encourage market development by offering financial incentives to businesses that invest in recycling. Tax incentives can encourage the packaging industry to use more recovered materials in their manufacturing processes. Tax incentives can be credits, deductions, or exemptions from income, franchise, property, and excise taxes. Remember; when there are no markets, there is no recycling. Minimum content legislation can help (see Recommendation #9).

7. **Advance Environmental Justice.** Environmental justice issues are real, and the fair and meaningful treatment of all people—regardless of race, ethnicity, creed, income, national origin, or education level—is paramount. The public has a right to participate in public decisions and actions that have an impact on their environment, communities, and neighborhoods. Fair and equal access to a safe and healthy environment is a basic human right. Regardless of which portions of solving the waste crisis move forward, everyone must have a voice and an opportunity to be heard. There needs to be engagement with communities on ALL major projects and substantive conversations with community members and stakeholders. Winters Bros. is proud to have an environmental justice



policy (See Attachment #1) and we encourage other businesses, institutions, and municipalities to adopt policies that address and advocate for environmental justice.

8. **Educate.** Renew educational efforts with a goal of creating a consistent message for improving the quantity and quality of the curbside recyclables that flow to recycling processing facilities. The public and private sectors need to educate all generators (commercial and residential) about recycling to reduce contamination in the recycling stream. Information that should be a part of educational efforts includes a universal list of materials acceptable for recycling and a “dos and don’ts” list for recycling.

9. **Pass Legislation to “Close the loop”.** Create a state law that mandates that any unit of government that establishes a waste diversion goal must also establish a utilization policy that matches or exceeds the diversion goal. Such a law will properly balance diversion and markets for recycled materials.

For far too long, legislative bodies at the State, county and local levels have adopted bans on the sale of certain materials and set recycling and reuse goals, but very little has been done to create markets for recyclable material. We need to change that.

Minimum Content Legislation (similar to the law that was established in New Jersey in 2022) is needed to jumpstart demand for recycled materials across Long Island and throughout New York. Minimum Content Legislation establishes post-consumer content standards for materials including plastic, glass, and

paper packaging and containers. Minimum Content Legislation supports the use of recovered materials and encourage this material to be manufactured into new products and packages.

10. Pass Legislation to Fix the Bottle Deposit

Law. Revise and modernize the NYS Bottle Bill that was created back in the 1980's. The law needs to be updated to improve and increase recycling within the state. The bottle bill was implemented many years ago, initially as an anti-litter bill, and the basic system has not been altered since the development of the larger-scale consumer recycling systems. The fix is simple: Increase the deposit for all glass containers to \$0.10 and include the deposit program on wine and spirit glass bottles.

11. Assist in the Development of Outlets for Organics and Food Waste.

Rather than being landfilled or burned, organic waste including food waste, leaves, trees/wood, farm waste, and animal waste can be recycled when managed properly. Long Island has extremely limited outlets available for the management of these materials.

12. Assist in developing solutions for ash management.

There are four incinerators on Long Island, producing approximately 425,000 tons of ash per year. About 350,000 tons of this ash is disposed of at the Town of Brookhaven landfill, with the remainder landfilled at the Town of Babylon's ash monofil. The Brookhaven landfill is expected to close in 2024 and the Babylon ash monofil has capacity for less than ten years from now. Ash management plans should



facilitate the recovery of additional recyclable metal and the use of components of ash.

13. Be Ready for the next storm. Municipalities should develop storm debris management plans that identify transportation assets and the locations of both temporary storage/transfer sites and permanent disposal sites for the management of storm debris. Because various types of waste are generated from storm events, the management plan should address what types of wastes will be accepted at each location. To lessen their burden during periods of emergency response, and avoid delaying cleanup contractors' activities, municipalities should have all applicable debris cleanup, transportation, and disposal contracts ready for execution before the arrival of the next major storm.

14. Fight against illegal dumping. Prevent and minimize illegal dumping through an increase in monitoring and enforcement. NYSDEC and local law enforcement agencies should increase enforcement activities to investigate and prosecute those individuals and companies engaged in illegal dumping. It should be anticipated that illegal dumping will increase as prices for the proper management of C&D continue to escalate and disposal capacity on the Island diminishes. There should be a coordinated effort between local law enforcement agencies and NYSDEC to investigate, provide surveillance, arrest, and prosecute illegal dumpers. State and local governments should also increase the fines and penalties for illegal dumping.



CONCLUSION

Long Island is at a crossroads with regard to its management of waste. The recommendations contained in this report should serve as a call to action to address Long Island's solid waste crisis. Implementing recommendations and successfully solving the solid waste crisis will require cooperation and coordination among the private sector, municipal government, state government, regulators, waste generators, legislators, planners, and policymakers.

When the Brookhaven Landfill closes, the tens of millions of pounds of construction and demolition debris generated by Long Islanders will have virtually nowhere to go—at least not locally. This will result in a drastic increase in waste removal costs for towns, villages, cities, and contractors, with residents ultimately paying the price. The higher costs will result in increased taxes, more expensive construction projects, and, worst of all, an excessive spike in illegal dumping throughout the region.

We must take a holistic approach to managing waste that includes waste reduction, reusing, recycling, and the environmentally sound management of the waste that cannot be reduced, reused or recycled. Transportation issues are critical. Environmental justice issues are also critical. Disposal capacity is vital. And, certainly, cost is a factor. Incineration on Long Island and shipping waste off Long Island are viable options. Each day, thousands of tons of MSW are burned while thousands of tons of MSW and C&D are trucked off Long Island. A portion of C&D is also shipped off the Island by rail for disposal out-of-state.

As we look toward the future, much more waste will need to be transported off Long Island. If transported by truck, there will be an increase in traffic congestion, air pollution, greenhouse gas emissions, and greater stress on our already crowded highway infrastructure.

Fixing Long Island's solid waste crisis is going to take every tool in the toolbox. We will need creativity, mixed with responsibility, to face down the crisis.

We have a problem today and a bigger problem when the landfill closes.

We know the landfill must close. But, without a smart, environmentally friendly solution, we will need 60,000 trucks to haul these additional materials off-island. This will further congest our roads and provide us with worse air quality.

Let's give this issue the attention that it requires and advance solutions that can benefit our communities.



Attachment 1:

WINTERS BROS.' POLICY ON ENVIRONMENTAL JUSTICE

Winters Bros. is committed to engaging with and supporting the communities in which we operate. We believe in the fair and meaningful treatment of all people, regardless of race, ethnicity, creed, income, national origin, or education level and the right of all people to participate in public decisions and actions which have an impact on their environment, communities, and neighborhoods.

Winters Bros. stands firmly by the belief that fair and equal access to a safe and healthy environment is a basic human right. In accordance with this belief, Winters Bros. seeks to address environmental issues that directly impact communities where we operate. It is our sincere intent to maintain an open line of communication with communities and take into consideration their thoughts on our operations. To remain transparent and equitable, Winters Bros. will integrate these core values that enable us to achieve our main goal of an environmentally efficient operations that is beneficial for the community and region.

To implement this policy, Winters Bros. works to:

- Reduce and minimize emissions from our facilities and vehicles.
- Reduce potential impacts of our operations, taking into account cumulative impacts for present and future generations.
- Identify and invest in projects that are beneficial to the environment, such as recycling facilities and rail transportation infrastructure.
- Create jobs to help the community and implement job hiring criteria which favors the hiring of people from the communities where our facilities are located.
- Engage with individuals and organizations in the communities in which we operate, or plan to operate, who are interested in learning more about our operations.
- Have open, two-way communication with communities on issues which may be of interest or concern to them, including the environment and quality of life. Such communication shall include participation in meetings with community members and affected groups.
- Have an enhanced public-participation strategy with communities on major projects and engage in substantive conversations with community members.
- Work diligently to respond to issues identified by communities in which we operate.
- Update this environmental justice policy to better communicate with all stakeholders.

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