

NEWSDAY

Glass recycling on Long Island hampered by hodgepodge approach, limited uses, experts say



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The challenges of recycling on LI: 'This is the residue pile'

At the Town of Brookhaven's materials recycling facility in Yaphank, the more easily recyclable items are separated from the stuff that generally ends up in the landfill. NewsdayTV's Steve Langford takes a look at Brookhaven's recycling efforts. Credit: Newsday/John Paraskevas, John Conrad Williams Jr.; Barry Sloan
By Carl MacGowan carl.macgowan@newsday.com [CarlMacGowan](#) September 16, 2023 5:00 am

April Golden and Santa Fogarty of Coram trek to Brookhaven Town Hall in Farmingville about once a month to deposit a box of empty pickle jars and wine bottles in the steel waste container outside.

Unlike in most Long Island towns where glass is picked up curbside on recycling day, Brookhaven residents drop their glass recyclables at 14 collection centers, including at firehouses, senior centers, libraries and parks.

Longtime friends Golden, 70, and Fogarty, who is "a little older," said they don't mind making the eight-mile drive to town hall. They just want to help save the planet.

"Who knows what they do with this stuff," Golden said. "But we feel we're doing it for the environment."

WHAT TO KNOW

- **Limited uses for recycled glass** cause towns across Long Island to pay to get rid of the material.
- **Critics say Long Island's glass recycling programs** vary widely and should be replaced by a single, unified system.
- **Experts say recycling glass** will become more difficult and expensive as town landfills, among the few local customers for recycled glass, start to close.

Challenges to glass recycling

For most of Long Island, however, the seemingly simple act of recycling glass has become a frustrating and often expensive exercise in waste management in which towns employ a hodgepodge of collection and disposal methods, resulting in a system that some industry experts say is inefficient and should be replaced with a single, unified approach.

A Newsday examination shows Brookhaven is the only large Long Island town where residents bring glass to designated drop-off sites. The town stopped curbside collection of glass in 2018, when it was forced to revamp its recycling system following a worldwide collapse of commodities prices.



Glass bottles collected from the various drop-off sites in Brookhaven are brought to the recycling area at the town's landfill in Yaphank. From there it gets moved elsewhere to be crushed. Credit: Newsday/John Paraskevas

Recycling experts say much of the Island — like the rest of the northeastern United States — relies on an obsolete collection system in which glass is mixed with plastics and other items. Critics say that results in dirty glass that is less valuable to manufacturers and also contaminates other recyclable products, harming their market value.

Instead of being turned into new bottles and jars, Long Island glass instead is used to cover landfills, aid drainage at municipal industrial sites and serve as an "aggregate" ingredient in asphalt and concrete mixtures.

Limited use for recycled glass

Compounding the issue, experts said, is that limited uses for glass force towns to pay thousands of dollars to send the material to private companies and other towns. And, they add, disposing of glass will become more difficult and expensive as town landfills, among the few local customers for recycled glass, start to close within the next decade.

Scott DeFife, president of the Glass Packaging Institute, a trade group based in Arlington, Virginia, that represents manufacturers, said more towns should follow Brookhaven's lead and collect glass separate from other recyclables. Removing glass before it gets to the recycling plant would result in cleaner glass that would

be potentially more valuable to manufacturers who could turn it into new glass products.

Long Island lacks companies that could convert used glass into new jars and bottles, DeFife said. He believes the Island's 13 towns should work together to develop a unified program that could speed development of a centralized processing plant.

"I would probably have companies that would be interested in putting a project together," DeFife said. "But I haven't found an entity where I could talk to all the communities on Long Island."

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Scott DeFife, president, Glass Packaging Institute, Arlington, Virginia

Local officials, however, say they are hampered by state law, which requires municipalities to collect recyclables — including glass, paper, cardboard, metals and many types of plastics — but doesn't provide much direction about how to do so.

Consequently, recycling systems on Long Island vary widely, including those in Hempstead, Smithtown and Islip, which provide curbside pickup, and others, such as Southold and Shelter Island, where residents generally deposit glass and other recyclables at town collection centers.

Finding takers for recyclables

Towns also are on their own when it comes to finding takers for their recyclables. Many, such as Huntington and Oyster Bay, send them to private haulers such as Omni Recycling in Westbury or Winters Bros. Waste Systems in West Babylon, each of which uses smashed glass for drainage or adds it to concrete mixtures. But others, including Smithtown and Riverhead, ship glass — either separately or with other material — to towns such as Brookhaven and Islip, which use it as landfill cover or for drainage projects.

“It’s very hard to find a use other than the landfill [mixture],” said Martin Bellew, chief of Islip Town's trash and recycling programs. “One of the things we bring up with the state [is] they gotta assist us to find these markets.”

The state Department of Environmental Conservation said it is seeking to do just that, pointing to a program at upstate Alfred State College aimed at expanding recycling markets and finding unspecified new ways to recycle and reuse glass. The state has committed \$4.2 million to the effort, DEC officials said.

\$4.2 million

Committed by Gov. Kathy Hochul to Alfred State University project studying potential uses and markets for recycled glass

"New York State continues to invest in new opportunities to increase the reuse and recycling of glass as part of a more sustainable approach to waste reduction," DEC spokesman John J. Salka III said a statement emailed to Newsday. "Through collaboration and partnership with stakeholders, research institutes and municipalities, DEC continues to advance comprehensive strategies to more effectively reduce waste, invest in recycling infrastructure, encourage use of products that are easier to recycle, and support local economies."

Glass disposal costs vary

Calculating the costs that towns accrue for shipping glass to private haulers — or to other towns — is difficult. For one thing, towns often pay a single price to get rid of packages of glass bundled with plastics and metals.

Disposal costs vary, in part, because of wildly fluctuating market prices.

Southold pays Brookhaven \$18 per ton — a total of \$6,300 last year — to take its glass, while Huntington pays \$74.25 per ton — \$351,555 in 2022 — to ship glass, plastics and cans to Omni Recycling. Oyster Bay pays \$79.70 a ton for a private recycling company, Great Northern Fibers in West Babylon, to take its commingled glass, plastics and metals.

\$351,555

Paid last year by Huntington Town to ship glass, plastics and metal to Westbury recycling company

Those costs are sometimes covered by garbage taxes that towns assess to homeowners.

But while material such as plastics and paper usually bring a good price because of robust international markets in China and India, glass often is a money loser.

“There was a time when we were getting money for it,” Riverhead Town engineer Drew Dillingham said, “and now we’re actually paying to have it recycled.”

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Drew Dillingham, Riverhead Town engineer

Despite the fiscal hit to town balance sheets, Long Island officials said they have no plans to discontinue glass collections. That's because they are legally required to do it — recycling has been mandatory in New York since 1988 — and because they think the alternative is worse.

“We don’t want to see glass going back in the garbage,” Southold solid waste coordinator James Bunchuck said. “It’s cheaper than throwing it out as waste. ... [But] the years of generating revenue from household recycling programs is kind of over.”

The absence of a nearby manufacturer leaves towns with few alternatives for getting rid of glass, experts say.



Glass recycling bins can be found in several locations across the Town of Brookhaven, including at the Holtsville Ecology Center, seen here on Aug. 30. Credit: Newsday/John Paraskevas

A New Jersey glass recycler that Brookhaven briefly used closed two years ago.

Critics say manufacturers aren't interested in Long Island because most towns act independently rather than combining resources.

DeFife said Long Island's population of 3 million people should be more than enough to generate sufficient glass to attract manufacturers, but that is undermined by the tendency of municipalities on Long Island and elsewhere in the country to build cheap recycling systems that commingle glass with other material.

"This will sound crazy, but we cannot guarantee enough glass for them to make a viable business on Long Island," said Frank Roethel, a Stony Brook University professor and director of the school's Waste Reduction and Management Institute. "Every town on Long Island does it [recycling] differently. I guess if we had a regional approach [glass recycling might be more successful] ... but I don't see that happening."

Every town on Long Island does it [recycling] differently.

Frank Roethel, Stony Brook University

When it comes to glass, recycling experts said, Long Island mostly does it wrong. But the Island is not alone.

A July 12 report by the nonprofit Northeast Recycling Council said states from Maine to Pennsylvania, including New York, commonly pick up glass together with other material. The result, the report said, is that glass is used to cover landfills because it's too dirty to be useful in manufacturing.

In New York, the report said, an estimated 25,537 tons of glass was used as landfill cover in 2021, the last year data was available. Figures for Long Island were not available.

25,537

Tons of glass used as landfill cover in New York State in 2021

Susan Collins, who helped prepare the recycling council report, said glass collected with plastics and other items becomes contaminated by pieces of food and paper — and therefore loses its appeal to commercial buyers — as it moves from recycling bins to sanitation trucks to recycling processing centers.

Collins, president of the nonprofit Container Recycling Institute in Culver City, California, said she has seen chicken bones and dental floss mixed in with glass shards.

Another problem is product labels with sticky adhesives that are difficult to remove, further reducing the value of the glass, waste experts said.

And glass breaks as it is collected and moved across conveyor belts at processing plants.

Pieces of broken glass also lodge in plastic and metal containers, making those products more difficult to sell to manufacturers.

'Glass is not a good neighbor'

“The reality is that glass is not a good neighbor in the recycling bin,” said Will Flower, vice president of Winters Bros., which operates Brookhaven's recycling plant.

Before Brookhaven stopped commingling glass with other recyclables, dozens of conveyor belt gears called star screens had to be replaced every six months because broken glass degraded the heavy rubber pieces, Flower said.

The reality is that glass is not a good neighbor in the recycling bin.

Will Flower, vice president, Winters Bros. Waste Systems

The screens' life span tripled to 18 months when the town began processing glass separately, he said.

In addition, Brookhaven cut maintenance costs by about \$450,000 annually since switching glass collection to drop-off centers, according to Flower.



Will Flower, vice president of Winters Bros., which operates Brookhaven's recycling plant, outside Brookhaven Town's Material Recycling Facility in Yaphank on Aug. 30. Credit: Newsday/John Paraskevas

The market values of plastics, aluminum and other recyclables processed at the Brookhaven facility "have been much greater" since the town started collecting glass separately, town spokesman Kevin Molloy said.

Bellew, of Islip Town, questioned how many residents would haul glass to collection centers.

"It sounds nice to have drop-offs, but what do you think the [participation] rate is for that?" Bellew said. "They [would] just throw it out in the garbage."

DeFife said glass is normally "super easy" to turn into other glass products, adding it's "a real shame" when glass is converted into industrial dust.

Perhaps the biggest problem facing recycled glass, local officials said, is the lack of a marketplace willing to pay money for it.

The lack of potential buyers led three towns — Brookhaven, Smithtown and Oyster Bay — to drop curbside glass collections in 2018. That required the towns to obtain waivers from state law that require curbside glass pickup.

The towns jointly commissioned a Stony Brook University study to prove to state officials that Long Island lacks a market for recycled glass.

The Stony Brook study, led by Roethel and released last year, concluded that the prospect for selling glass "looks bleak." It added that restoring curbside glass collection in Brookhaven would cost the town between \$1 million and \$ 2.8 million annually due to increased collection costs and repairs at the recycling center.

DEC officials sent the report back to Brookhaven last year, saying it didn't support the towns' contentions.

Smithtown resumed glass collections late last year, when it swung a deal to ship glass to Islip. Oyster Bay started picking up glass from homes again in January after agreeing to send it to Great Northern Fibers.

Smithtown's veering from curb collections to deposit centers and back again confounded at least one resident.

"It irritates me that the town doesn't seem committed to doing the right thing," John Lynch, 52, of Smithtown, who works in corporate communications, said in an interview this past spring.

If the town had been correct when it argued there was no viable glass recycling market, he said, manufacturers who sell products that use the material "should be paying a tax" to subsidize its reuse.



Glen McAvoy, of East Patchogue, deposits glass bottles at a drop-off center at the Town of Brookhaven's Holtsville Ecology Center on Aug. 30. Credit: Newsday/John Paraskevas

Brookhaven hasn't brought back curbside pickups because officials say they can't find a buyer for glass. A pilot program begun around 2020 to sell glass to a New Jersey company ended a year later when the processor, Pace Glass Recycling, which had boasted a new \$90 million plant, closed and filed for bankruptcy.

But using crushed glass as landfill cover is not a long-term solution, as Town Supervisor Edward P. Romaine has said the dump is expected to close by about 2026 when it runs out of capacity.

Roethel said the landfill's closure will make glass recycling even more difficult — likely forcing towns to pay higher disposal fees.

"The cost is going to increase," Roethel said. "No doubt about it."

With Brinley Hineman, Deborah S. Morris, Ted Phillips, Tara Smith, Nicholas Spangler, Joe Werkmeister and Darwin Yanes

How to recycle glass

Glass recycling varies among Long Island's 13 towns. Check your town's website for guidelines and for information on which items are not accepted.

Here's one town's advice:

RINSE jars and bottles

REMOVE caps, lids and wire rings

DON'T break glass

Plate glass (such as car windows), drinking glasses, light bulbs and window panes should not go into recycling bins

SOURCE: Town of Huntington



By Carl MacGowan

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Carl MacGowan is a Long Island native who covers Brookhaven Town after having previously covered Smithtown, Suffolk County courts and numerous spot news and feature stories over his 20-plus year career at Newsday.