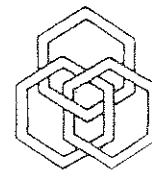


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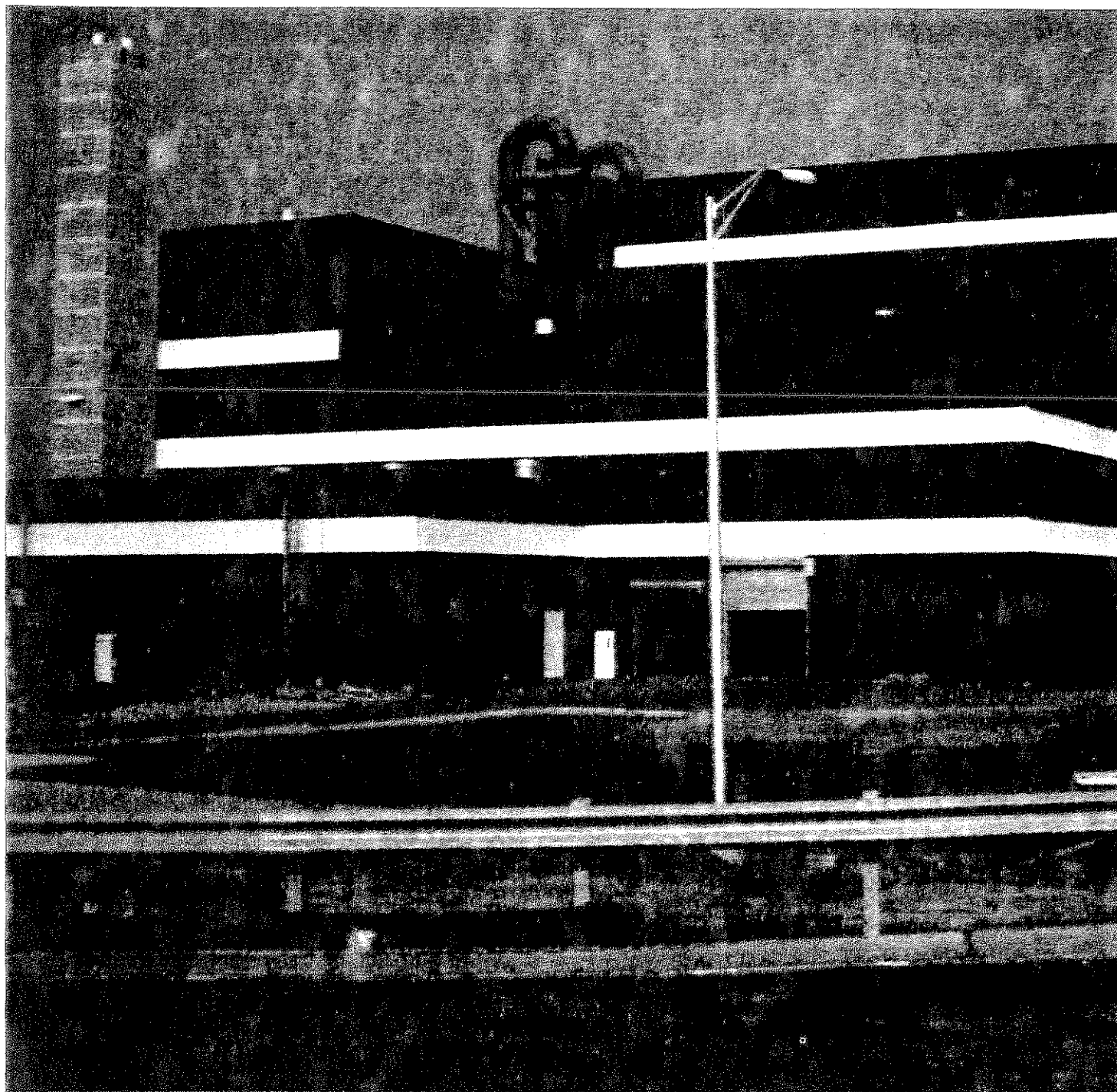


News from State University of New York at Buffalo and Stony Brook and the College of Environmental Science and Forestry

Vol. 5, No.2

1993

Five Years of Solid Waste Planning in New York State



What Hath Albany Wrought? Long Island and the New York State Solid Waste Management Plan

By David Tonjes and R. Lawrence Swanson



David Tonjes

Introduction

In 1988 New York State implemented its Solid Waste Management Plan, which established a hierarchy of waste management strategies: 1) waste reduction, recycling, and reuse; 2) incineration with energy recovery, and; 3) landfilling. The state also set a goal of reducing the waste stream by 50 percent while increasing the rate of recycling to 50 percent by 1997 (New York State Department of Environmental Conservation (NYSDEC), 1988). Long Island, already facing the closure of its landfills due to the 1983 "Long Island Landfill Law" (NYS Legislature, 1983), was thrust by this management plan into a time of immense change.

By 1992, it became apparent that landfilling was declining, and that recycling and incineration with energy recovery were on the upswing on Long Island. However, no institution was monitoring the changes. Therefore, the Waste Management Institute (WMI) at the University at Stony Brook contacted solid waste managers in the 15 towns and cities of Long Island and examined earlier studies (by *Newsday*, the New York Public Interest Research Group (NYPIRG), and the NYS Legislative Commission on Water Resource Needs of Long Island) to determine the size of the waste stream and the method of disposal for Long Island wastes for two discrete years, 1986 and 1991.

What Is MSW? How Is It Counted?

This study indicated that municipal solid waste (MSW) is subject to differing descriptions. How a waste stream was counted depended upon how it was defined. For example, the operator of a landfill might record scale weights of wastes accurately, but not distinguish among wastes (unless differing fees were involved). Construction and demolition debris (C&D) might not be differentiated from garbage collected through residential service, although C&D is not included in most definitions of MSW. An incinerator operator who did not process particular wastes (such as C&D, yard wastes, or tires) would exclude them from any reports. Municipalities sometimes differentiate large loads of commercially generated C&D from MSW, but include residentially generated C&D. In addition, the State directed that C&D be accounted for by municipal MSW plans despite Federal definitions that C&D is not MSW.

Land clearing debris was sometimes included

in a municipality's waste stream. Landfilling usually results in **all** wastes being counted together. Only distinctions resulting from differential tipping fees or internal bookkeeping requirements led some towns to separate material streams. If wood was chipped, and therefore **recycled**, the municipality counted it to help reach recycling goals. If landfilled, there was no incentive to include the wood in the "countable" waste stream. Municipalities without processing facilities wanted to claim the recycling credit, but had no means of quantifying private efforts.

These fundamental problems led to great disparities in waste stream definitions — exactly what to count.

The Size of Long Island's Waste Stream

Our objective was to calculate the wastes **generated** in each municipality, but statistics were generally kept only on wastes processed by municipalities through their own facilities. Thus, private carters who took the opportunity to dispose of wastes at cheaper tipping fees elsewhere were not accounted for. In rarer instances, there was the problem of distinguishing wastes entering a municipality to avoid higher tipping fees elsewhere. On the East End of Long Island, due to the absence of municipal collection services, many tonnages reported were only estimates, not actual scale weights. Therefore, in addition to determining **what** to count, **how** to count Long Island's wastes became a nearly insoluble problem.

How to Calculate MSW Disposal Methods

Another goal was to assess waste stream management and the changes in technologies employed for disposal, although it was difficult to enumerate this precisely. The source studies had differing objectives, and no standard format was used. It was tempting to simply use municipally provided information, but most municipalities did not account for MSW that was shipped to disposal sites outside of that particular municipality ("non system" wastes).

We therefore set about constructing an estimate. A weighted mean was developed from disparate reported tonnages, with data from municipalities weighted as equal to two other data sources (Table 1). Pooling this data produced Table 2 and Figure 1.

Another estimate was developed to account for uncertainty in assessing the methods of waste

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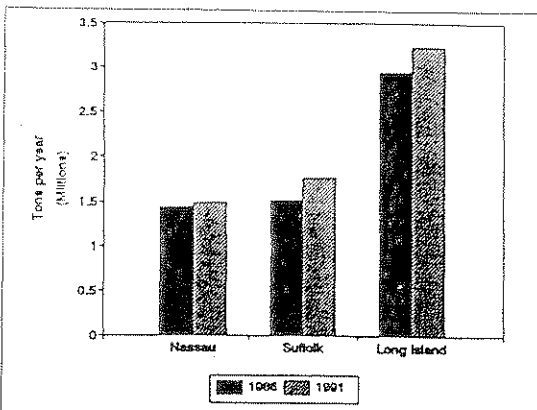


Figure 1: Nassau County, Suffolk County, and Long Island waste generation in tons per year.

Table 1

Municipality	1986 Weighted Mean	1991 Weighted Mean
Glen Cove	23,250 +/- 2,268	22,759 +/- 171
Hempstead	855,843 +/- 139,828	784,945 +/- 10,767
Long Beach	27,030 +/- 6,312	24,705 +/- 105
North Hempstead	277,060 +/- 63,115	268,638 +/- 46,164
Oyster Bay	253,073 +/- 35,400	377,507 +/- 106,848
Babylon	226,328 +/- 34,605	310,102 +/- 20,009
Brookhaven	412,133 +/- 100,760	495,413 +/- 22,776
East Hampton	19,633 +/- 1,113	38,925 +/- 1,109
Huntington	266,059 +/- 60,380	268,433 +/- 63,151
Islip	339,433 +/- 14,114	374,784 +/- 53,857
Riverhead	27,200 +/- 1,697	38,933 +/- 471
Shelter Island	3,953 +/- 848	3,952 +/- 758
Smithtown	123,762 +/- 28,290	116,301 +/- 8,822
Southampton	55,200 +/- 8,176	61,500 +/- 7,500
Southold	31,658 +/- 8,256	44,833 +/- 4,011

Waste Stream Estimates in Tons per Year
Municipally-provided Data Weighted by a Factor of Two

Table 2

Region	1986 Weighted Mean	1991 Weighted Mean
Nassau County	1,436,256 +/- 157,587	1,478,554 +/- 116,394
Suffolk County	1,505,359 +/- 127,024	1,753,176 +/- 89,218
Long Island	2,941,615 +/- 202,407	3,231,730 +/- 146,654

Waste Stream Estimates in Tons per Year
Pooled Means of Table 1 Data

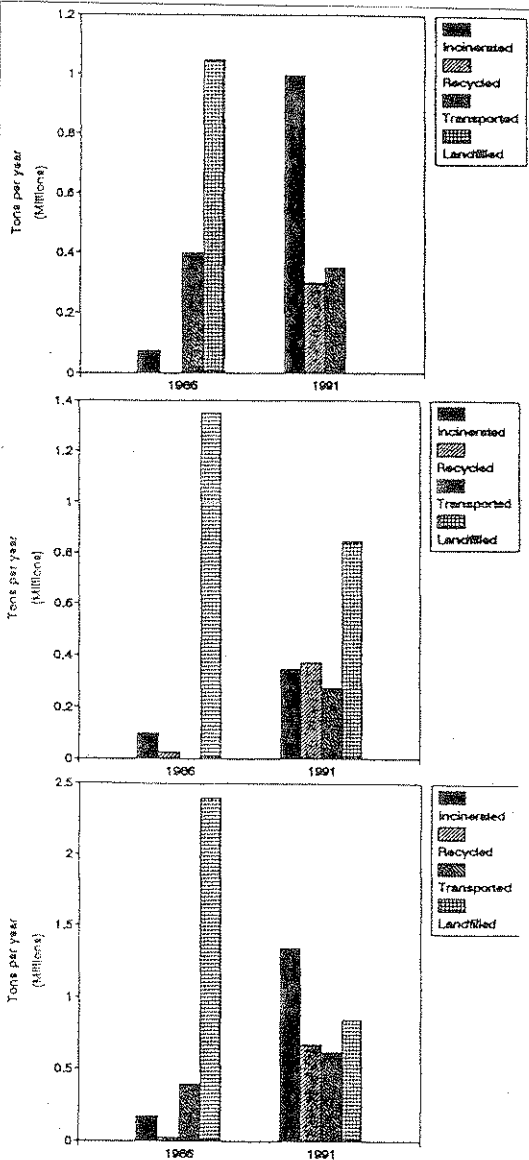


Table 3

Incinerated	Recycled	Transported	Landfilled	Total
Nassau County				
<u>1986</u>				
75,000	0	400,000	1,050,000	1,525,000
<u>1991</u>				
1,000,000	300,000	350,000 ¹	0	1,650,000
Suffolk County				
<u>1986</u>				
100,000(?) ²	25,000	0	1,350,000(?) ²	1,475,000
<u>1991</u>				
350,000	375,000	275,000 ¹	850,000	1,850,000
Long Island				
<u>1986</u>				
175,000	25,000	400,000	2,400,000	3,000,000
<u>1991</u>				
1,350,000	675,000	625,000 ¹	850,000	3,500,000

¹ "transported" could also mean recycled, because of the lack of information regarding Long Island's commercial carting community; this material was not disposed in a Long Island municipal venue.

² 100,000 tpy of Huntington's wastes assumed to have been incinerated, then landfilled -- only counted under "incinerated"

Waste Generation in Tons Per Year
From Information on Methods of Waste Disposal

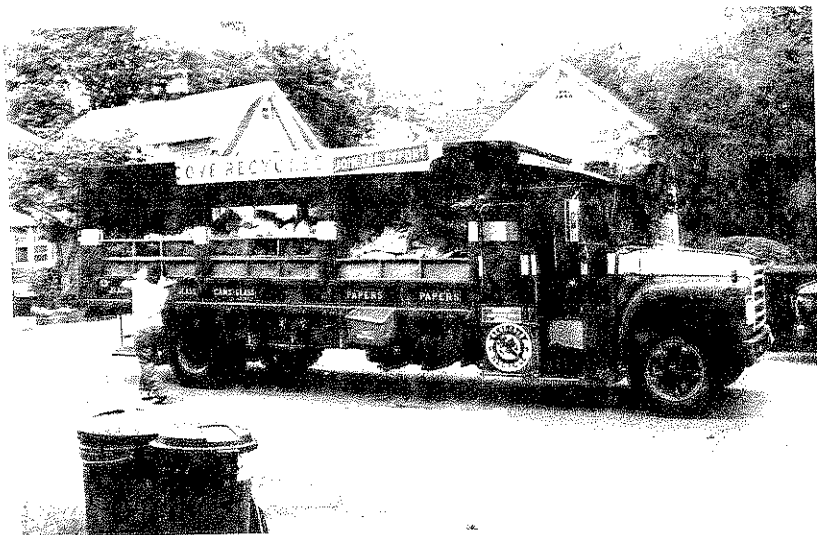
Town/City Nassau County	1986	1991	Recent Changes
Glen Cove	Incinerated entire waste stream.	Curbside recycling; incinerator closed for non-attainment of Clean Air Act standards; all non-recyclables shipped off-island.	Plans to refurbish and re-open incinerator (1).
Hempstead	Landfilled majority of its wastes, along with all MSW from City of Long Beach; some wastes shipped off-island.	Curbside recycling; yard wastes composted in Pennsylvania; WTE incineration of remaining MSW (excess capacity sold to private carters).	Completed Inter-Municipal Agreement (IMA) with Brookhaven, whereby Brookhaven agreed to landfill all incinerator ash in exchange for 200,000 tons per year WTE capacity (2). Oyster Bay also is negotiating for guaranteed WTE capacity (3).
Long Beach	Shipped waste to Hempstead to be landfilled.	Curbside recycling; WTE facility with excess capacity sold on the spot market.	Plans to build a Materials Recovery Facility (MRF). (4)
North Hempstead	Pilot recycling program; landfilled wastes with some material imported from New York City.	Curbside recycling; because landfill had closed due to noxious odors problems, remainder of MSW shipped off-island.	IMA allows for shipment of MSW to Babylon's recyclables recovery facility; remaining waste will be processed through Babylon's WTE plant (5).
Oyster Bay	Shipped all MSW off-island.	Curbside recycling processed through town MRF; yard waste composting; remainder shipped off-island.	Negotiating for guaranteed capacity at the Hempstead incinerator (3); also developing a marketing cooperative for collected newspapers with Huntington, Babylon, and Islip (6); has announced plans to build an MRF (7).

(1) D'Ambrosio, 1993, personal communication; (2) Tonjes and Heil, 1993; (3) Mitrey, 1993, personal communication; (4) Raab; 1992, personal communication; (5) NYSDEC, Region I, 1993; (6) Nester, 1993b; (7) Yevoli, 1993c; (9) Freedman, 1992a; (10) Nester, 1992; (11) Nester, 1993a; (12) Scully, personal communication; (13) Freedman, 1993b; (14) Wolke, 1992, personal communication; (15) Malcolm Pirnie, 1993b.

Table 4: Summary of municipal waste handling on Long Island (above and right)

Curbside sorting of recyclable materials, City of Glen Cove. Photo by Randall Young

disposal employed. The amount of wastes disposed of at a particular facility was generally well-known, and most municipalities had figures that differentiated wastes collected within the municipality. To account for wastes shipped off Long Island, especially for 1991, comparisons were made between waste generation rates of 1986 (or another year where the municipality disposed of most of its locally generated wastes) and 1991; the differences were generally assumed to have been transported to off-island disposal sites. The one exception to this methodology was Oyster Bay. To cover small errors in this methodology and its lack of precision, all annual tonnages were rounded to the nearest 25,000 tons (Table 3 and Figure 2).



Discussion of Waste Disposal Methods

Table 3 and Figure 2 illustrate what was intuitively known about the effects of the waste hierarchy compounded by the Long Island Landfill Law. Landfilling tonnages decreased by nearly two thirds between 1986 and 1991, while incineration tonnages increased by over one million tons per year. In 1991 incineration was the disposal method for nearly 40 percent of all of Long Island's MSW. The true extent of waste-to-energy (WTE) disposal on Long Island was masked, since the Huntington Smithtown incinerator, designed to burn 300,000 tons of waste per year, did not begin operation until December, 1991. Collection for recycling expanded from one general municipal recycling program (in Islip) and two pilot programs, to mandatory recycling programs in all fifteen municipalities, managing nearly 20 percent of the MSW. Out-of-state transportation, spurred by declining tipping fees off Long Island and skyrocketing fees at the local facilities, increased by over 50 percent.

Municipal Waste Management Techniques

Table 4 indicates the particular means of MSW management employed by Long Island municipalities in 1986 and 1991. It also presents recent developments and upcoming plans for each municipality.

It is noteworthy that even with the solid waste planning and facilities construction shown in Table 4, only four municipalities (Babylon, East Hampton, Hempstead, and Southampton) ha

Town Suffolk County	1986	1991	Recent changes/Future plans
Babylon	Landfilled entire waste stream.	Curbside recycling; yard wastes composted off-island; WTE plant processed remainder of waste stream.	Opened recyclables recovery facility where recyclables are removed without prior separation; entered IMA with North Hempstead to process their residential wastes (5); has traded ash-for-trash with Islip, Huntington, and Smithtown (8); near completion of market cooperative for collected newspapers with Huntington, Islip, and Oyster Bay (6).
Brookhaven	Landfilled entire waste stream.	Curbside recycling; MRF and two leaf-composting facilities in operation; other wastes landfilled in triple-lined cell along with incinerator ash from Hempstead.	Completed IMA with Hempstead, whereby Brookhaven agreed to landfill incinerator ash from Hempstead in exchange for 200,000 tons per year WTE capacity; issued Request for Proposals (RFP) for solid waste composting services; negotiating to landfill MSW until composting plant is built (2).
East Hampton	Pilot drop-off recycling program in place; remainder of waste stream landfilled.	Mandatory recyclables drop-off; yard waste composted or chipped; remainder of wastes landfilled; suing state with Riverhead, Shelter Island, and Southold to gain exemptions from Long Island Landfill Law.	Still pursuing appeals in lawsuit with state (9); plans MSW and recyclables processing facility.
Huntington	Landfilled entire waste stream, incinerating some for volume reduction.	Curbside recycling; yard waste composting site; shipped remainder of waste to Smithtown landfill most of the year; much commercial waste disposed of through private carters; opened WTE plant with Smithtown in December, 1991.	Traded ash-for-trash with Babylon, Islip, and Smithtown (8); closed yard waste composting site because of odor complaints (10); landfilling yard wastes at Smithtown landfill; recent IMA with Smithtown and Southold will result in yard waste's being shipped to Southold for composting in exchange for incinerator capacity for Southold MSW (11); completing marketing cooperative with Babylon, Islip, and Oyster Bay for newspapers (6).
Islip	Had first mandatory curbside recycling program on Long Island; landfilled remainder of wastes.	Incinerator, MRF, and one of the nation's largest yard waste composting sites in operation; a large portion of commercial waste stream managed by facilities outside the town because of high tipping fees.	Traded ash-for-trash with Babylon, Huntington, and Smithtown as capacity for wastes or ash matched respective needs (8); completing market cooperative with Babylon, Huntington, and Oyster Bay for newspaper (6); forced to stop grass composting because of odors complaints (12).
Riverhead	Landfilled entire waste stream.	Recyclables drop-off program, yard waste composting in place; landfilled remainder of waste stream; joined East Hampton, Shelter Island and Southold in suit to gain exemption from Long Island Landfill Law.	Still pursuing appeals against Landfill Law (9); negotiating with private company for MSW composting (13).
Shelter Island	Landfilled entire waste stream.	Drop-off recycling; landfilled remainder of wastes most of year; dropped suit to keep landfills open; instituted only per-bag disposal fee system on Long Island; began shipping waste off-island.	
Smithtown	Landfilled entire waste stream.	Curbside recycling in conjunction with modest MRF; yard waste privately composted; landfilled remainder of waste most of year (together with municipally collected wastes from Huntington); opened WTE plant with Huntington, December, 1991.	Traded ash-for-trash with Babylon, Islip and Huntington as trades met needs (8); forced to break contract with private composter because of odor complaints (14); landfills yard wastes at town landfill; recent IMA with Huntington and Southold will have yard waste shipped to Southold for composting in exchange for incinerator capacity for Southold MSW (11).
Southampton	Landfilled entire waste stream.	Drop-off recycling; yard wastes composted; obtained state permit to allow double-lined landfill to remain open through 1995.	Recently issued RFP for construction of new facility (or facilities) to compost yard and organic waste, and MSW and to process recyclables (15).
Southold	Landfilled entire waste stream.	Drop-off recycling; composted yard wastes, landfilled remainder; joined East Hampton, Riverhead and Shelter Island in suit to gain exemption from Long Island Landfill Law.	Recent IMA with Huntington and Smithtown will result in those towns shipping yard wastes to Southold for composting in exchange for incineration capacity; still pursuing appeals against Landfill Law (9).

Hampton, Hempstead, and Southampton) have been able to gain state approval of their solid waste management plans, which are required under the 1988 State Plan (Woodward, 1993, personal communication).

Conceptual Compliance with the Hierarchy

Waste Reduction

Our data show that waste reduction has not been successful. The data indicate a waste growth of 10 percent (greater than the standard deviations, and so probably not an artifact of the lack of precision). Arguments opposing this judgment include:

- 1) the study covered 1986 and 1991, and therefore an overall waste reduction from 1988-1991 could be outweighed by a waste generation increase from 1986 to 1991.
- 2) waste generation per capita may not have increased -- just the underlying population base. It should be noted, however, that the 1990 U.S. Census count for Long Island indicates a decrease in population, not an increase.
- 3) Long Island has only recently (1991 onwards) made more than token attempts to implement waste reduction policies. Due to the odor-associated failures of grass clipping composting, several municipalities now promote campaigns for mulching mowers or backyard composting. Yard waste constitutes a 10-15 percent portion of the waste stream.
- 4) If waste reduction steps were to achieve an 8 percent decrease (the state goal) in waste generation rates by 1997, the initial 1-2 percent achieved might be masked, and not be recognizable until it is a more substantial (and recognizable) 5 percent.

If there has been a failure to achieve significant waste reduction percentages, it may be because significant waste reduction occurs through manufacturers' initiatives, rather than local management strategies. Legislative efforts to curb packaging or other "useless" wastes, either on the State or Federal levels, may contribute significantly to waste reduction.

Recycling

Nowhere on Long Island has the recycling effort attained the level mandated by the state plan (40 percent+). Some residential waste programs may be approaching these levels, and many municipalities are banking on recyclables credits from composting (other than yard wastes) to bring their programs in line with the State goals. Others anticipate being able to count

commercial efforts as a key to meeting the goal.

Two municipalities have adopted a different means of increasing recyclables collection efforts. Babylon built, and North Hempstead has contracted for, the services of "dirty" Materials Recovery Facilities (MRFs). These are operations where recyclables are sorted from wastes not subject to source separation, and which are usually marketed at a discount because of soiling. Babylon processes only commercial wastes, and claims a 40 percent recovery rate. The operator of the North Hempstead dirty MRF receives that town's residential wastes, and achieves a more than 25 percent recovery rate (even after prior curbside recycling). It should be noted that the Babylon operation is in conflict with a 1988 NYS Law, GML-120-aa, which mandates source separation of all recyclables. Babylon is using its dirty MRF rather than mandating source separation of recyclables by businesses (Appell, 1992; personal communication). North Hempstead's commercial wastes are also delivered to the Babylon facility.

The commercial waste sector seems destined to be a perpetual accounting problem. The competitive nature of Long Island's private carting industry promotes secrecy as a business trademark, and the carters have not been cooperative with municipal efforts to collect recycling data. Larger entities will sometimes bypass the entire system and deal with recyclables brokers directly. Examples are firms with waste streams dominated by a single, profit-making waste (such as supermarkets and corrugated cardboard) or large companies capable of entering markets directly (such as Grumman Aerospace). Some form of reporting mechanism is necessary to allow the municipalities to augment residential recyclables totals.

Data are fragmentary, but it appears that most municipal programs achieve large recycling growth rates through the first two years or so of residential collection, before reaching a slow-growth plateau. Programs soon achieve good participation from most residents, and usually begin by collecting the large tonnage recyclables -- newspapers, bottles, and cans. Some programs have expanded to low-grade paper (junk mail), but large tonnage recyclables other than yard waste are difficult to identify.

Composting

Composting on Long Island is limited to yard waste at present. Yard waste composting suffered a setback when allegations were made linking the Town of Islip Yard Waste Compost site to the death of a vendor at a nearby train station. *Aspergillus*, a fungus with widespread distribu-

... that is found at greater concentrations in compost than background, is the subject of a State Department of Health investigation (Rabin, 1992) in connection with this incident.

Odors have also proven to be a cause of difficulties for several sites. The Town of Huntington closed its yard waste composting site due to complaints from corporate neighbors, and the Town of Islip's site has also been the subject of public meetings regarding odors. Grass clippings are cited as creating the odors. Project managers insist that incorporation of grass into existing windrows quickly stifles any odors, although nearby residents often disagree. Several private yard waste facilities have also received complaints of this nature (Lesser, 1993).

Programs for composting any materials other than yard waste, such as MSW or source-separated organic wastes, exist only in the planning stage. No municipality has yet signed a contract for such services, although three Requests for Proposals (RFPs) have been issued. Riverhead has only to sign a contract in order for its private vendor to break ground for an MSW composting facility. Residue rates from MSW composting operations are unknown, and whether the product will be as marketable as its sponsors believe also is yet to be proven.

Other Recycling Activities

Many municipalities are expanding wood chipping operations. This serves a dual purpose: avoided disposal costs and recycling credits. It is not clear how large the market for such wood chips is on Long Island.

Hazardous household waste collection programs (STOP programs) have had a checkered history on Long Island. Many municipalities instituted such programs in the late 1980s only to end them soon after. Reasons given for this change include a duplication of the County's program, cost of operating the service (Alexander, 1993), and the costs of planning and building a permanent facility -- a process that has now taken over two years in Brookhaven (Heil, 1993, personal communication). The environmental benefits associated with such programs -- and also the costs -- are substantial, considering the small tonnages of wastes so managed.

Incineration

No new incinerators are expected to be built to add to the five operating waste-to-energy facilities, although Glen Cove is in the process of retro-fitting its plant to meet the 1990 Clean Air Act. Ash disposal remains a problem for several of these facilities, particularly Huntington/Smithtown and Islip.

Landfilling

The only landfill facility expected to be constructed in the near future is the Brookhaven Landfill expansion. This is for the residues from recycling operations by and within Brookhaven, and for incinerator ash from the Hempstead WTE plant, for 20 years (Wehran-New York, Inc., 1992). This is permissible under the Long Island Landfill Law, and is a landfilling option espoused in the State Plan. The Town of Southampton has an approved Solid Waste Management Plan which calls for landfilling of some MSW during summer, when the town's waste stream more than doubles over winter waste generation rates (Malcolm Pirnie, 1993a). The town's double-lined landfill is acceptable under the Landfill Law. The current cell is expected to reach capacity around 1995, however, and a new cell may have to be constructed.

Three other double-lined landfills exist on Long Island. The Town of Islip's is located in the deep-recharge area, and is being rapidly filled with "inert" materials such as cleanfill and C&D (Mitrey, 1993, personal communication). The Town of Babylon is planning to use its landfill for its own WTE residues (Appell, 1993, personal communication). Smithtown's landfill was used to dispose of Huntington and Smithtown's MSW while their WTE plant was under construction, and is currently being used to dispose yard wastes and C&D (Sievers, 1993). These uses make it ineligible under the Long Island Landfill Law as a site for incinerator ash disposal.

Another noteworthy landfilling issue on Long Island is the non-compliance of East Hampton, Riverhead, and Southold with the Landfill Law. All three towns have carried appeals of this law to the highest level of State court, which upheld the validity of the law and its interpretation by the NYSDEC. The towns are currently re-appealing

Sorting conveyor at Town of Brookhaven Materials Recovery Facility. Photo by R.L. Swanson

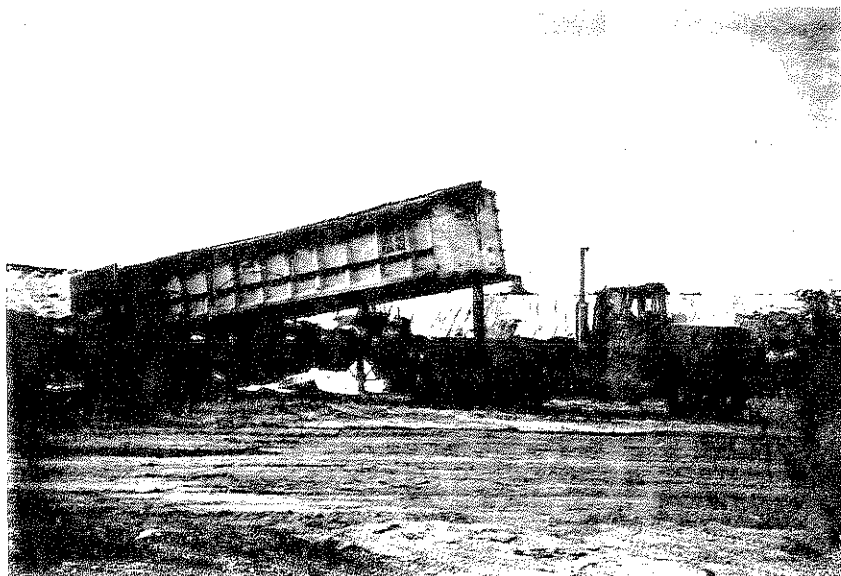


on the grounds of prior sovereignty. All three towns have plans for alternatives to landfilling, and some observers believe that the entire controversy has been an exercise in comparative economics. This view of the situation holds that the towns decided that legal fees and fines were cheaper than the unattractive alternative of finding other disposal options.

Since almost all of Long Island's current solid waste planning energies are being spent on recycling (especially composting) and waste reduction, Long Island is in compliance with the spirit of the State Waste Management Plan. Supporters of greater recycling efforts would differ with this analysis, however. They claim that the results of these efforts (a 20 percent recycling rate) indicate that a great deal of lip service is being paid to the state hierarchy, but solid waste managers have merely refocused their interest on incineration and long-distance waste disposal as a replacement for the now-banned local landfills. These waste management strategies are relatively easy to implement, needing only money, and placement of a facility. Recycling, the preferred option, is much more difficult to implement, needing the management of the population rather than finances. Intensive recycling would require changes in lifestyles and practices, upsetting voters and political contributors, and so, according to supporters of recycling, is untenable in the status quo atmosphere found on Long Island.

Most solid waste managers claim that they recycle as much as possible, given the constraints of limited budgets, limited public participation, and inconsistent markets. A phrase often heard regarding recycling is that "the public would not support recycling if it knew the actual cost of recycling." Without intensive post-collection efforts, little of the material collected on Long Island would have a positive market value.

Segregated ash disposal being landfilled at Town of Brookhaven Landfill Facility. Photo by David Tonjes



To infuse value into MSW requires labor and time, and therefore money.

Recycling: Long Island and New York City

The tremendous potential for recyclables collection posed by New York City looms over Long Island's future. New York City has approximately three times the population of Long Island, and would present itself as a unified source of material. Long Island consists currently of fifteen different municipal markets, and almost all material collected on Long Island must physically pass through New York City before it can be reprocessed. One effect for Long Island from full-scale New York City recycling could be to further depress the low prices received for recyclables. Another could be that New York City will be able to offer huge product guarantees to recyclable outlets, and monopolize all convenient markets for Long Island recyclables.

One outgrowth has been the development of the Long Island Recycling Co-operative. This organization is stalled at this time, however, because two municipalities with close to one-third of Long Island's population (Islip and Brookhaven) have modern MRFs capable of producing waste newspaper with a positive value. Other prospective co-op members do not have this ability, and are willing to settle for a guarantee of no-cost recycling. Unless this economic difference can be settled, it is unlikely that the Co-op will be able to create the large market it had hoped for to combat New York City's immense potential.

The Effect of the Management Plan

It is difficult to ascribe all these changes and problems solely to the NYS Solid Waste Management Plan. The Long Island Landfill Law was also important in shaping the form of waste management on Long Island, at least insofar as the facilities that have been constructed to replace landfills. And the general rise in public demand for recycling services has helped to fuel the large increases in that form of waste management. However, the Management Plan has certainly forced these changes to aim for goals that might not have been those of Long Island's waste managers without the Plan. Certainly Long Island would not be experimenting on the scale it is now with unproven MSW composting plants without the recycling goals espoused within the New York State Solid Waste Management Plan.

The major complaints from local waste managers do not seem to concern the conceptual bases infused within the State's Solid Waste Management Plan. The need for greater protection of the environment, and a waste management strategy with a strong recycling component has been acknowledged.

Most local managers are dismayed by the embodiment of these ideals into what is perceived as an inflexibly enforced body of regulations. The widespread view that Albany bureaucrats are disengaged from the "real world of waste management" has led to a deteriorating relationship between the Department of Environmental Conservation and Long Island municipalities, as is most clearly seen in the legal battle over East End landfill closures, and is echoed in the lack of approved local Solid Waste Management Plans.

While Long Island has made progress towards implementation of the 1988 State Plan, the conflict regarding local autonomy and, perhaps, underlying philosophies regarding solid waste, continue to color the relationship between regulator and regulated. Initiatives by State legislators and the new Director of Solid Waste may be able to reverse the trend towards bad relationships, and enable all levels of government to work towards environmentally sound, practical, and economically affordable waste management practices for Long Island.

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Personal communications from:

Appell, Robert, Commissioner, Department of Environmental Control, Town of Babylon, Babylon, NY.

D'Ambrosio, Lou, Superintendent, Department of Public Works, City of Glen Cove, Glen Cove, NY.

Heil, James, Commissioner, Department of Waste Management, Town of Brookhaven, Medford, NY.

Mitrey, Robert, Solid Waste Engineer, New York State Department of Environmental Conservation, Region I, Stony Brook, NY.

Raab, Robert, Commissioner, Department of Public Works, City of Long Beach, Long Beach, NY.

Scully, Peter, Commissioner, Department of Environmental Control, Town of Islip, Islip, NY.

Wolke, Andrew, Sanitation Supervisor, Town of Smithtown, Smithtown, NY.

Woodard, David, Solid Waste Planner, New York Department of Environmental Conservation, Albany, NY.

First Symposium On Disposal Site Slated at Stony Brook

The National Oceanic and Atmospheric Administration (NOAA) and U.S. Environmental Protection Agency (EPA) will co-sponsor a symposium on the 106-mile Deepwater Municipal Sewage Sludge Disposal Site October 25 - 28 at the Marine Sciences Research Center, State University of New York at Stony Brook.

The dumpsite is 185 km east of Cape May, NJ. Between 1985 and 1991, nine New York and New Jersey municipalities used the site to dispose of large volumes of municipal sewage sludge. The Ocean Dumping Ban Act (ODBA) passed by Congress in 1988 closed the 106-Mile Site after December 31, 1991. The ODBA also required NOAA and EPA to conduct research and monitoring activities related to the dumpsite in order to assess the fate and potential effects of the material there.

The symposium at The Stony Brook Marine Sciences Research Center will be the first organized effort to report results emerging from the extensive research sponsored by NOAA and EPA at the dumpsite over the past few years.