

**Analysis of S.379
An Act Improving Recycling
in the Commonwealth, so-called**

An analysis of the effects of passage of S.379
on litter, recycling, employment,
and state and local financing

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Executive Summary

In conjunction with the state's bottlers, supermarkets, and liquor industry, Senator Michael Moore and Representative John Binienda have filed *S.379, An Act Improving Recycling in the Commonwealth*, as, they assert, an alternative to the Massachusetts Bottle Bill.

Our analysis of the bill concludes that S.379 would take the Commonwealth backwards, resulting in a sharp decrease in the recycling rate of beverage containers, and would precipitate a significant increase in litter.

The main provisions of the bill:

- a) repeals the 30 year old Bottle Bill, now responsible for the recycling of 80% of containers with a deposit
- b) institutes a temporary tax on industry, purported to pay for recycling but phasing out after an undetermined time period
- c) imposes a mandate on cities and towns to conjure up over \$75 million worth of recycling infrastructure

In addition, if enacted, the bill would eliminate a minimum of 1600 jobs, and create a significant financial burden to the state's cities and towns.

Background

The Massachusetts Bottle Bill, the nickel deposit on beverage containers, is the state's most successful recycling and litter prevention program. Since the Bottle Bill's passage, over 35 *billion* containers have been redeemed, contributing to a healthier environment, cleaner and safer communities, and a stronger economy.

The original Bottle Bill, which the State Legislature passed in 1982, covers only carbonated beverages (soda and beer). Beverages like bottled water, sports drinks, and flavored teas, which did not exist in significant numbers when the bill was passed, are not covered. This allows us to compare the net effect of the existing bottle bill, extrapolating what would happen if no beverages had deposits, as proposed in S.379.

Over 3.3 billion beverage bottles are sold every year in Massachusetts. The vast majority of these are single serving containers, and are consumed outside the home, out of reach of curbside recycling programs. The bottle bill, by placing a small yet effective incentive on returning and redeeming these containers, generates a huge positive impact on whether the container will be recycled, discarded in the trash, or littered.

The bottle bill is a classic example of *producer responsibility* legislation. The original intent of the bottle bill was to place the tasks of collection, disposal, and/recycling on those who have generated the product: the bottlers. After 30 years, the legislation has lived up to its goal – and more. In states without container deposits, the burden of cleanup, disposal and recycling is placed on the taxpayer, whether s/he consumes bottled beverages or not.

The container deposit system has no effect on prices. When a consumer buys a bottle of soda, s/he pays the price plus a nickel. When it's returned, the nickel deposit is refunded.

For the past ten years, the Coalition to Update the Bottle Bill, which has grown over time to over 100 organizations, has worked to get an update to the Massachusetts Bottle Bill. Their goal is to extend

the deposit system to cover non-carbonated beverages. Implementing this would nearly quadruple the recycling rate of water, juice, and sports drink containers.

This proposed update has tremendous popular support, as evidenced by numerous polls, endorsements, and grassroots activism, and in the last two years has passed through the Senate twice. Despite this strong support, the proposed update has never come up for a vote in the House, remaining “stuck” on Beacon Hill. The major opponents of the bill include the large chain supermarkets, the bottlers, and the beer lobby.

With three decades of the existing bottle bill’s success and widespread public support, the proposed update has some powerful opponents, who, to date, appear to have been influential in blocking the bill’s passage.

Among the claims the opponents make:

1. “Updating the Bottle Bill will result in higher prices for consumers.”
In fact, it has been documented that the bottle bill has no effect on retail pricing. Bottlers have been claiming negative price impacts since 1983 – and continue to do so in other states that are considering container deposit bills. However, research shows that this claim is without merit. A 2011 wide ranging report¹ from the Massachusetts Department of Environmental Protection debunked a range of industry assertions. Their report concluded that prices are typically the same in bottle bill and non-bottle bill states, and were actually slightly higher in New Hampshire (with no deposit) and lowest in Maine (with the broadest deposit system).
2. “The Bottle Bill is a tax, at a time when we need less taxes, not more.”
Anyone with a dictionary can tell the difference between a deposit and a tax. This claim has no basis in fact, as noted by Massachusetts Taxpayer’s Foundation President Michael Widmer. *“The deposit system associated with the Bottle Bill is not a tax, it’s an entirely different type of charge,”* “I know a tax when I see one,” commented Barbara Anderson of Citizens for Limited Taxation, *“and whatever else I might think of the Bottle Bill, it’s not a tax.”*
3. “The Bottle Bill is outdated, now that we have curbside recycling.” Even with curbside recycling, the statistics show that only 23% of containers without a deposit get recycled, while 80% of containers with a deposit are recycled. This is in significant part due to the fact that empty single-use beverage containers consumed “on the go” are seldom brought home by consumers to be placed in curbside bins.

S.379, *An Act Improving Recycling in the Commonwealth* has been introduced and touted as an ‘alternative’ to the Updated Bottle Bill. But as this report shows, S.379 would actually be an unparalleled setback for recycling and litter reduction in the Commonwealth.

SUMMARY OF S.379

The main provisions of S.379 include:

- Repeal of the 30 year old bottle bill; (5 cent deposit on certain beverage containers).
- Institution of a one cent industry-paid tax on all beverage containers, whether or not they're recycled, and subsequently elimination of this tax after an unspecified period.
- Placement of 50% of the tax revenue (see above) in the State's general fund.
- The remaining 50% would provide funds, an average of just \$9,700 per municipality, to collect the added litter, pay for additional recycling, and collect additional trash. However, these funds would be distributed by grants, not population.
- A requirement for the installation and servicing of public litter receptacles, at an estimated state and municipal cost of \$76-\$121 million.

Analysis of S. 379

Our researchers concluded that S. 379 would, if passed, turn the state backwards in its efforts to recycle more and litter less; cost the state, cities, and towns approximately \$76-\$121 million per year, and pull the rug out from any recycling efforts it initiates by sunseting the funding it provides at the start.

Specifically, S.379 would:

- Result in significant job losses in the state's recycling industries, estimated at over 1,600 additional lost jobs;
- Slash the recycling rate on beverage containers, which now stands at 80%² for those with a nickel deposit, to 23%³; which is the current rate for all beverages without a deposit;
- Increase container litter 9-fold for all carbonated beverages and beer, based on evaluations of container deposit laws in 9 states;
- Cost the state \$37 million in lost revenue⁴.

The Massachusetts Bottle Bill was passed 31 years ago. It is the most effective program ever devised to *prevent* litter. Not only has the Massachusetts bottle bill been a huge success, it has become a model for other states, Canadian provinces, and nations throughout the world, including all or parts of Australia, Austria, Belgium, Canada, Croatia, Denmark, Finland, Germany, Guam, Iceland, Israel, Netherlands, Norway, Sweden, Switzerland, as well as other countries.

- No other system in *any country* approaches the high recycling rates of a deposit system.
- As a result of the bottle bill and other recycling efforts, 80% of *deposit* beverage containers are recycled compared to only 23% that curbside collection captures of non-covered containers.
- It stops litter *before it becomes litter*. Litter collection is expensive; it is more cost effective to stop it before it occurs.
- It also stops valuable petroleum-based plastics from going to our state's increasingly full and increasingly scarce landfills.
- It dramatically reduces litter, which otherwise burdens our state and municipalities to clean up.
- It saves communities up to \$7 million in trash disposal costs.
- It provides the feedstock for Massachusetts-based recycled materials such as upholstery, carpeting, and Polartec-type fleece.
- Is an important component of the state's booming recycling economy, which represents roughly \$498 million in annual payroll, and an estimated \$95 million in state tax revenue.⁵
- The bottle bill also captures on-the-go beverages, which are out of the reach of curbside programs.

S.379 taxes all beverages in containers, whether or not they're recycled

The bottlers propose a temporary tax on all beverages, which they would pay. This would amount to \$34 million in temporary⁶ revenue.

Distribution of tax revenue collected under S.379	
<i>Gross receipts from 1 cent tax</i>	<i>34,000,000</i>
Distribution of funds	
Amount deposited to general fund	17,000,000
Grants to recycling companies and municipalities	13,600,000
Funds for litter prevention and removal (would average \$9,687 per municipality)	3,400,000
Total	34,000,000

While this may appear to be a generous contribution, it must be noted that the state is already receiving \$37 million in inadvertent revenue due to *voluntarily forfeited deposits*. (Often likened to a fine imposed by a library for overdue books, the state nevertheless has been utilizing these funds.) In contrast to the bottler-supported S.379, the bottle bill update proposed by the Coalition to Update the Bottle Bill would increase inadvertent income to \$51 million.

The existing bottle bill is not a tax, but the proposal in S.379 is. A tax – by definition – is *money that you must pay the government*. A deposit is something that you *temporarily provide, typically to a merchant – and that you get back later*. A voluntarily-forfeited deposit isn't a tax either. Rather, it is a voluntarily-forfeited deposit.

S.379 would direct half of the taxes to the general fund, and the other half to a panoply of quasi-recycling projects while specifically allowing taxpayer funds to go to corporate interests.

The bottlers have been promoting increased recycling through infrastructure improvements. Approximately 90% of Massachusetts residents are served by curbside recycling, one of the highest percentages in the United States. Reaching 100% is impractical; these 10% are already dropping off their household refuse at centralized facilities. However, studies show that increasing access to curbside doesn't increase recycling rates.⁷

Recycled materials are processed by material recovery facilities (MRFs). Under S.379, MRFs can receive public funding, despite the fact that the state's MRFs already operate efficiently.

Of the tax proceeds, less than \$3.3 million would be distributed to the state's 351 cities and towns, as well as the Department of Conservation and Recreation (DCR). On average, each municipality would receive just \$9,687 to add hundreds of public recycling bins (at an average cost of \$1,886/bin). Our analysis indicates that municipalities would then be forced collect an estimated 2 billion additional containers placed in the trash, and deal with a 9-fold increase in litter.

S.379 replaces the proven effective bottle bill with a tax, which is levied whether or not the container is recycled. It doesn't provide an incentive to recycle, nor does it help prevent litter.

S.379 puts 1,600 people out of work immediately

Study after study – throughout the USA and the entire world – shows that recycling creates 8-10 times as many jobs as disposal. These are just some of the direct job losses that would happen if the bottle bill is repealed.

The state's redemption centers are typically small, family owned businesses employing 5 to 6 individuals on average. There are close to 100 redemption centers licensed by DEP. If S.379 is enacted, over 600 individuals who own or work at redemption centers would immediately be out of work.

Up to 500 more individuals who work at supermarkets, liquor stores, and convenience stores and those involved in cleaning, preparing, and separating the materials, from the point of receipt to the glass and plastic recycling centers, will lose their jobs.

Up to 100 in the trucking/cartage industry will immediately be put out of work.

Entire plants that recycle and process high quality bottle bill materials, like Verallia/Saint Gobain's plant in Milford (250 employees), and Strategic Material's in Franklin (50 employees), could potentially be forced to close.

When measuring the amount of jobs different recycling programs create, the bottle-deposit system is the clear winner. According to the Container Recycling Institute (CRI), an organization that studies the effects of recycling programs around the country, "deposit-return systems recover approximately three times more beverage container material than curbside recycling." For every 1,000 tons of this material collected, approximately 8-12 jobs are added in the recycling sector.

The recycling industry has long been a job-creator in Massachusetts. By increasing the amount of recyclable material available in Massachusetts, the Updated Bottle Bill would lead to job growth in the state's recycling corporations, and those companies that utilize recycled materials. Massachusetts would expect a *net increase of 1,500+ jobs* if the Bottle Bill Update, rather than S.379, is passed.

S.379 would slash the recycling rate on beverage containers from 80% to 23%

Our 80% redemption/recycling rate⁸ for containers covered by the bottle bill is almost four times *the non-bottle bill state average recycling rate of 23%*⁹.

If S.379 is implemented, roughly 1.26 billion more containers would be placed in the trash instead of being recycled.

Changes to Recycling Rates				
	<i>Total Sold</i>	<i>currently recycled</i>	<i>recycled under s.379</i>	<i>Change</i>
carbonated beverages	2,209,067,426	1,767,253,941	508,085,507	(1,259,168,434)
non-carbonated beverages	1,100,000,000	253,000,000	253,000,000	0
Total annual beverages	3,309,067,426	2,020,253,941	761,085,508	
Net change (decrease)				(1,259,168,434)

S.379 increases container litter 9-fold for carbonated beverages and beer

After conducting a series of clean-ups across the Commonwealth, the Massachusetts Riverways Program (now the Division of Ecological Restoration) found that “it is over nine times more likely that a non-deposit container will end up littering our waterways than will a deposit container.”¹⁰

After surveying litter along 213 miles of Maine shoreline, the Center for Marine Conservation found that bottle and can litter on state beaches dropped 30% within a year of their bottle bill expanding to include non-carbonated beverage containers. The New York group “Scenic Hudson” has also found that 61% of the container litter collected in its annual “Great River Sweep” consists of non-carbonated, non-deposit containers, even though they comprise only 22% of total beverage sales in New York. Even in New Jersey, which has a litter tax and a “Clean Communities” program, beverage container litter is slightly higher than the national average.¹¹

S.379 would require municipalities to place thousands of public litter receptacles, an estimated \$76-\$121 million cost

It is a common misconception that municipal recycling systems pay for themselves – or actually operate at a profit. The reality is that recycling collection is costly, and the value of the material fluctuates with the market and barely impacts the cost of collection. A municipal public works department doesn’t look at profitability as their primary responsibility. Their goal is to collect waste, and recycle as much as they possibly can.

In the past 8 years, there has been a marked increase in litter. Surveys of parks and interviews with park personnel and maintenance personnel in our cities and towns have determined that each year, litter is becoming more of a problem.^{12 13} There is a direct correlation between the amount of litter and the increasing share of the beverage market held by non-deposit containers.

Municipalities already struggle to pay rising waste disposal fees. S.379 would increase the quantity of trash collected and result in additional municipal costs. Litter collection, which is a labor and cost intensive process, would also have to expand, as previously redeemed containers are haphazardly discarded into the environment.

If municipalities were to place public recycling receptacles adjacent to litter bins, they would incur expenses in both the initial cost of the bins plus the fees to service them.

Municipal Costs for Public Receptacles		
	<i>minimum</i>	<i>ideal</i> ¹⁴
Receptacle	\$660	\$660
Annual Service	\$1,225	\$1,225
population served per bin ¹⁵	160	100
bins needed	40,375	64,600
Total annual cost (statewide)	\$76,106,875	\$121,771,000
Total annual cost (avg per muni)	\$216,829	\$346,926

Boston alone would incur \$7 to \$12 million in new collection costs. Cities such as Lowell would see costs of up to \$2 million; Worcester up to \$3.4 million.

Under S.379, an average of just \$9,700 would be provided to each municipality.

S.379 will cost the state \$37 million in lost revenue

State Revenue			
	<i>Current</i>	<i>S.379, first year</i>	<i>S.379, after sunset provision</i>
Total State Revenue	\$37,000,000	\$34,000,000	\$0

S.379 increases profits at the public's expense

Few economic sectors have escaped suffering during the economic downturn, but the beverage industry defied this trend. Coca Cola, Pepsi, and Nestle Waters (Poland Springs) all reported record profits and record sales growth in recent years. Coca Cola alone exceeded \$40 billion in revenue annually¹⁶, as has Pepsi. Record sales and profits continue, as have their efforts to overturn container deposit laws worldwide.

The primary goal of any corporation – understandably – is to maximize profit. However it is the role of government to ensure that the disinterested corporate drive for ever-increasing profits does not interfere with the public good.

Conclusion

Repealing the bottle bill has no public benefit and would do significant public harm. Increasing litter, decreasing recycling, destroying jobs, and shifting the burden of cleanup to the taxpayer make no sense.

S.379 closely resembles New Jersey's litter tax, which taxes beverage containers and some other commonly littered items, and deploys the revenue to help clean up the mess. Despite New Jersey's litter tax and a "Clean Communities" program, beverage container litter remains higher than the national average,¹⁷ evidence that a tax like this fails to achieve the success of bottle deposit programs. The heart of the problem is that cleaning up litter after the fact is incredibly costly, and S.379 would result in significantly more litter across the state of Massachusetts.

The Sierra Club wishes a method existed to collect 100% of empty containers, but in the absence of a perfect solution, deposit systems have proven to be by far the most effective way to prevent litter and recycle beverage containers, year after year, across the country and around the world.

¹ Available at the website of Mass DEP. <http://www.mass.gov/dep/recycle/reduce/bottleca.htm>

² Massachusetts Dept. of Environmental Protection estimate of 70% redeemed plus 10% recycled curbside.

³ National Association for PET Container Resources (NAPCOR), Report 2008.

⁴ The state currently collects \$34 million from voluntarily forfeited deposits. Similar to the inadvertent revenue from a library's overdue book fines, nevertheless, this revenue would immediately cease.

⁵ The Massachusetts Recycling Economy (fact sheet), Mass DEP, Nov. 2010.

⁶ C. Flynn, Mass Food Assn, "[the tax] would sunset in a few years" Sept 4, 2013

⁷ The State of Garbage in America, Biocycle, Container Recycling Institute (website), retrieved Nov 2013.

⁸ Container Recycling Institute, website, retrieved Aug 2009

⁹ Bottled Up (2000-2010) - Beverage Container Recycling Stagnates, Container Recycling Institute, October 2013

¹⁰ The Charles River Cleanup, Mass Riverways, Cohen, R. Published by Container Recycling Institute 4/12/2003

¹¹ Steven R. Stein. "Sweating the Litter Things." Resource Recycling, May 2005.

¹² Town of Wayland, Wayland Beautification Project

¹³ Waste Reduction Program Assessment and Analysis for Massachusetts, Tellus Institute, Feb 2005

¹⁴ Littering Behavior in America, Keep America Beautiful, January 2009. This report illustrates the relationship between bin spacing and littering. The ideal spacing of less than 40 feet is approximately 1.5 times the typical spacing found in urban areas.

¹⁵ Estimates based on public litter receptacles in Cambridge MA, which has approx 650 public litter bins; Seattle WA which has 4200 public litter bins, and the City of Boston.

¹⁶ Strong Sales Lift Earnings at Coca-Cola, New York Times, April 12, 2012

¹⁷ Steven R. Stein. "Sweating the Litter Things." Resource Recycling, May 2005.