Secretary of State
Oregon Audits Division

Oregon Liquor Control Commission

Oregon Has an Opportunity to Modernize Groundbreaking Bottle Bill on Its 50th Anniversary

November 2020

Report 2020-36

Secretary of State Bev Clarno
Audits Division Director Kip Memmott

Secretary of State
Oregon Audits Division

Executive Summary

Oregon Liquor Control Commission

Oregon Has an Opportunity to Modernize Groundbreaking Bottle Bill on Its 50th Anniversary

Why This Audit is Important

» The Bottle Bill, passed in 1971, is one of the most visible pieces of legislation in Oregon's history. Many Oregonians have participated in the process by buying or redeeming beverage containers.

» Consumers pay deposits on approximately 2 billion beverage containers annually.

» Current Oregon redemption rates are higher than some other Bottle Bill states, but have fallen below historical levels.

» The state is likely facing budget cuts in upcoming years.

» Eight out of ten Bottle Bill states collect unredeemed deposits to support environmental programs or the General Fund. Oregon and Iowa are the exception.

» Beverage distributors receive tens of millions of dollars in unredeemed deposits and revenue from the sale of scrap material each year.

What We Found

1. The state has an opportunity to collect unreturned bottle deposits to help fund environmental or recycling programs. (pg. 11)
2. This could be accomplished in one of several ways: By collecting all or part of unredeemed deposits by modifying unclaimed property laws; tying future deposit increases to redemption rates; or expanding the scope of the Bottle Bill to include wine and liquor sales. (pg. 11)
3. The Oregon Liquor Control Commission (OLCC) should work with entities under regulatory authority to ensure they are complying with existing unclaimed property laws. (pg. 12)
4. The Oregon Beverage Recycling Cooperative (OBRC) has created innovative ways to improve the consumer experience of returning containers. (pg. 15)
5. The Legislature should consider updating the bill to include additional incentives to enhance the positive environmental impacts of this innovative public policy. (pg. 13)

What We Recommend

We recommend that OLCC work with the Legislature, consumers, and industry to pursue modernization efforts of Oregon's Bottle Bill. We also recommend OLCC work with the Unclaimed Property Division to pursue unclaimed property relating to the Bottle Bill.

OLCC agreed with all of our recommendations. Their response can be found at the end of the report

The Oregon Secretary of State Audits Division is an independent, nonpartisan organization that conducts audits based on objective, reliable information to help state government operate more efficiently and effectively. The summary above should be considered in connection with a careful review of the full report.

Introduction

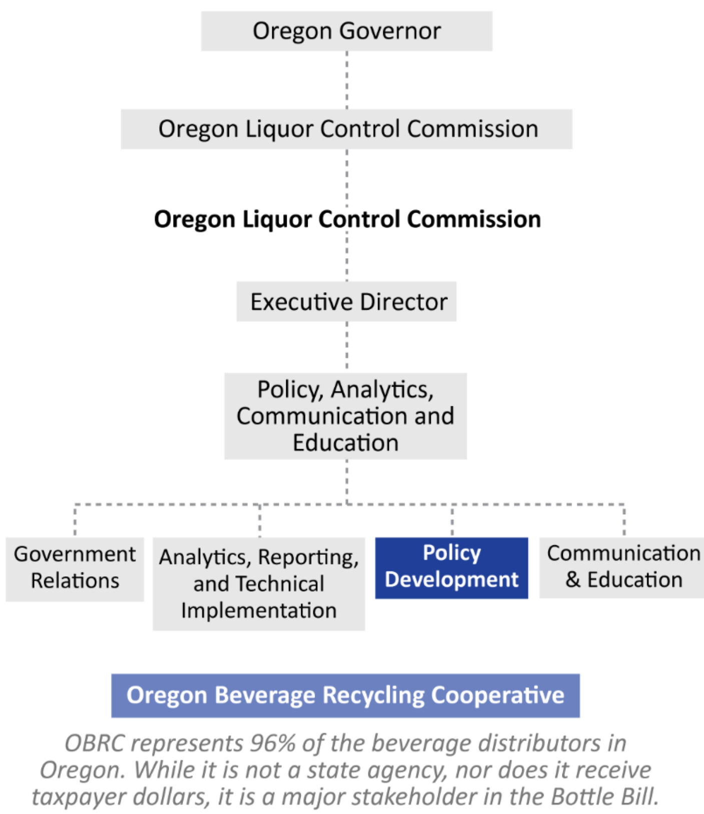
The Bottle Bill is one of the most visible pieces of legislation in Oregon's history. Nine other states have followed Oregon's lead by adopting similar innovative programs to reduce pollution and incentivize recycling.

Many Oregonians participate in the process by buying and redeeming containers with a refund value. While initially covering only soda and beer, the Bottle Bill statue has been expanded over the years to include most other beverage types. The inclusion of bottled water containers in 2007 significantly changed the way that containers were redeemed and recycled in Oregon.

The legislative changes to the Bottle Bill over the years demonstrate the need to reflect on the policy as conditions change and modernize it accordingly. It is within this context that we recommend several actions for consideration. These recommendations are intended to maximize the environmental policy goal of Oregon's groundbreaking Bottle Bill.

The Oregon Liquor Control Commission (OLCC) is responsible for administering Oregon's Bottle Bill. OLCC ensures that manufacturers, distributors, and retailers comply with the requirements of the Bottle Bill and approves the establishment of beverage container redemption centers. OLCC is also responsible for regulating the sale and service of alcoholic beverages and regulating the production, processing, and sale of recreational marijuana. The agency's policies are set, and executive director appointed by, a seven-member Board of Commissioners. Each Commissioner represents a state Congressional district, with one from the food and beverage industry, and are appointed by the Governor to four-year terms.

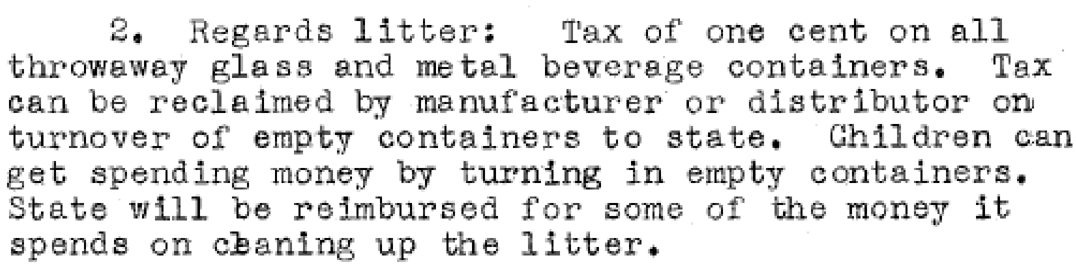
The agency operates with a budget of $247 million for the 2019-21 biennium, supporting four major programs and 362 full-time equivalent staff. OLCC's only source of funding relating to the Bottle Bill comes from the annual registration fees of redemption centers, which totaled approximately $75,000 in 2019.



Oregon’s landmark Bottle Bill has grown in scope over 50 years

Oregon’s Bottle Bill has come to symbolize the state’s emphasis on retaining its natural beauty. It was the very first legislation of its kind in the United States when it was enacted into law in 1971. The Bottle Bill sought to address a growing litter problem along beaches, highways, and other public areas. A 1971 legislative report states “[the Bottle Bill] is no panacea to all of the problems of littering. It is, however, a practical solution to one very large segment of Oregon’s litter and solid waste problems.” It was one of the most intensely lobbied bills in the history of the Legislature.

The idea for the bill appears to have come from Howard Steinbach, a Beaverton pharmacist, who wrote to Governor Tom McCall in 1967 proposing a one-cent tax on beverages.[1]



2. Regards litter: Tax of one cent on all throwaway glass and metal beverage containers. Tax can be reclaimed by manufacturer or distributor on turnover of empty containers to state. Children can get spending money by turning in empty containers. State will be reimbursed for some of the money it spends on cbaning up the litter.

Original letter from Howard Steinbach to Governor McCall.
Source: Oregon Secretary of State Archives.

Lawmakers saw the need to put in a significant financial incentive to recycle containers, and the bill passed with a five-cent refund value. According to archival records, at the time of the bill’s passage, a six-pack of beer cost $1.05, meaning a 5-cent deposit per bottle represented approximately 29% of the sale price. Today, a six-pack of beer typically sells for about $10, meaning the existing 10-cent deposit per bottle represents only about 6% of the sale price.

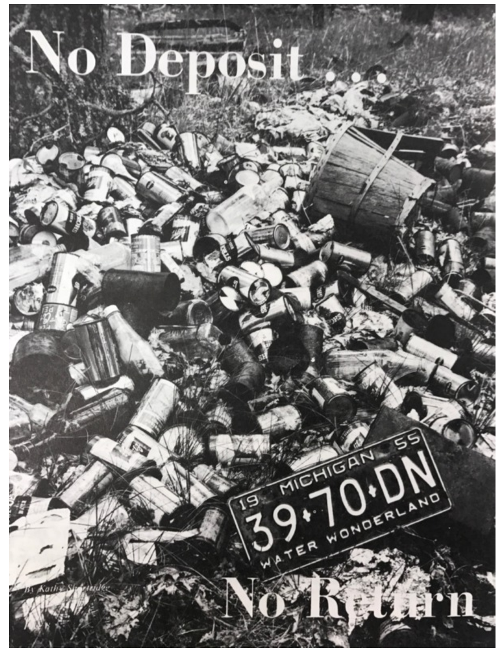
Governor McCall speaking at an Earth Day event in 1970.
Source: Oregon Secretary of State Archives.

[1] See Appendix A for copy of this letter and the Governor’s response.

The Bottle Bill was successfully championed by Governor Tom McCall in 1971 after an earlier bill failed in 1969. As noted, nine other states have followed Oregon's lead and passed their own container deposit laws.

The addition of bottled water containers in 2007 changed the way that containers were redeemed and recycled

After remaining relatively untouched for over 30 years, the Bottle Bill has since undergone important changes. In 2007, the Legislature expanded the law by adding a refund value to water and flavored water containers. Adding bottled water to the law had a significant impact on how containers were redeemed. In most cases, beer and soft drink distributors ran one franchise in each area, making it simple to assign responsibility for redemptions in various regions of the state.



Source: University of Michigan.

Over time, the private sector banded together to create a unified system of redemption throughout the state. The state's first distributor cooperative formed in 1987. In 2009, several cooperatives combined forces to create the Oregon Beverage Recycling Cooperative (OBRC), which currently provides recycling services for the program by operating 25 redemption centers, 18 BottleDrop Express sites, and collecting containers from over 2,250 retail locations in Oregon. OBRC represents 96% of the beverage distributors in Oregon, making it a primary stakeholder in the Bottle Bill. As it is not a state agency, it does not receive government funding.

The 2007 expansion also created the Bottle Bill Task Force, a nine-member body made up of legislators, government officials, and recycling and industry specialists who were responsible for studying and making recommendations on beverage container collection and refund issues. Among other topics, the task force researched the impacts of increasing deposit values and how to allocate the deposit value of unredeemed beverage containers.

The task force issued four key recommendations in 2008, including:

- A statewide system of redemption centers run by the beverage industry;
- Expanding the list of eligible containers to include sports drinks, coffees, teas, juices, wines, and liquors;
- Increasing the deposit value to ten cents; and
- Setting a goal redemption rate of 80% for the new system.

The recommendations of the task force received legislative support in 2009; however, they were never passed into law. Interest in updating the law continued in the following years, especially as the redemption rate fell to 75%, down from over 90% in the early years of the bill. In 2011, bipartisan legislation was passed that incorporated elements of the task force's recommendations, including a redemption center pilot project; expanding eligible containers to all beverages except wine, liquor, and milk or milk substitutes; as well as an increase in the deposit value to ten cents if redemption rates fell below 80% for two consecutive years.

Oregon led the way for other states to pass container deposit laws

Nine other states followed Oregon's lead and adopted Bottle Bills: California, Connecticut, Hawaii, Iowa, Maine, Massachusetts, Michigan, New York, and Vermont. Delaware also enacted a Bottle Bill in 1982 but was repealed in 2010.[2] Other states like Washington, Texas, and Tennessee have attempted to pass their own legislation, but have failed. Hawaii's 2002 Bottle Bill was the most recent to be enacted into law.

Figure 1: Every Bottle Bill state has a unique structure

State	Year	Current Deposit	Handling Fees	Unredeemed Deposit Beneficiary
Oregon	**1971**	**10¢**	**N**	**100% distributors**
Vermont	1972	5¢ 15¢ liquor	Y	100% state (environmental)
Maine	1976	5¢ 15¢ liquor/wine	Y	Variable- state and distributors
Michigan	1976	10¢	N	75% state (environmental) 25% retailers
Connecticut	1978	5¢	Y	100% state (General Fund)
Iowa	1978	5¢	Y	**100% distributors**
Massachusetts	1981	5¢	Y	100% state (General Fund)
New York	1982	5¢	Y	80% state (General Fund) 20% distributors
California	1986	5¢ < 24 oz. 10¢ ≧ 24 oz.	Y	100% state (program administration)
Hawaii	2002	5¢	Y	100% state (program administration)

Source: National Conference of State Legislatures and each state's respective Bottle Bill website.

While other states followed Oregon's lead, each state's program is structured differently. In some other states, beverage distributors pay handling fees to retail stores or redemption centers to help cover operation costs. These fees range anywhere from a fraction of a cent to four cents per container.

Another key difference between Oregon and other Bottle Bill states is which entity retains the value of unredeemed deposits. When an eligible container is purchased in Oregon, but is either recycled curbside or is thrown away, the deposit amount on that container is unredeemed and the value is retained by the beverage distributors.

The issue of unredeemed deposits was not considered during the 1971 session and may have been an unintended consequence of the initial Bottle Bill legislation. However, the Legislature has previously considered the collection of unredeemed deposits. Former Secretary of State Phil Keisling, with the support of Governor John Kitzhaber, led an effort during the 1990s to fund the Oregon Plan for Salmon with unredeemed deposits, but was unsuccessful. The issue of who benefits from consumer's unredeemed deposits has been debated in the past, but no changes have been adopted.

[2] State officials reported that Delaware's redemption rate was only 12%, due to some retailers refusing to accept returned cans and bottles. Delaware's repealed bottle bill was replaced with a four-cent non-refundable recycling fee. The non-refundable fees were designed to provide start-up funding to help create single-stream curbside recycling. The fees were set to sunset in 2014, or after $22 million was raised.

OLCC administers the Bottle Bill program on behalf of the state

While OLCC is responsible for administering the Bottle Bill, it has a limited oversight role of the process and of OBRC. OLCC ensures that manufacturers, distributors, and retailers comply with the requirements of the Bottle Bill. There are two enforcement staff who educate consumers and retailers on rules and respond to complaints. OLCC is also responsible for approving the establishment of beverage container redemption centers operated by OBRC and calculating and posting the annual redemption rate. Redemption center locations are generally approved if OLCC finds that the center would provide a convenient service to consumers.

The Department of Environmental Quality (DEQ) has no oversight role of the Bottle Bill but is a key stakeholder and supporter of the legislation. Each year, DEQ compiles data on post-consumer recycling in the Oregon Material Recovery and Waste Generation Rates Report.[3] Information from this report, which includes redemption data under the Bottle Bill, allows DEQ to determine energy savings and greenhouse gas reductions.

Costs of litter pickup
The Oregon Department of Transportation spent more than $4 million in the last five years to pick up litter.
Source: Oregon Department of Transportation

The Bottle Bill redemption process involves consumers, retailers, and distributors

When beverage distributors drop off inventory at retail stores, they charge the store for the deposit amount. Beverage distributors forward the collected deposits to OBRC. When consumers purchase eligible beverages, they pay the store the deposit amount. At this point in the process, retailers are made "whole."

Consumers can return their eligible containers to stores or to an OBRC-run Bottle Drop location. OBRC reimburses stores the deposit amount for returned containers, regularly picks up redeemed containers at retailers and Bottle Drop locations, and sells the recyclable containers, also known as scrap materials, to recycling plants. Proceeds from the sale of scrap material are passed to beverage distributors. OBRC has a partnership with ORPET[4] to operate a plastic recycling business.

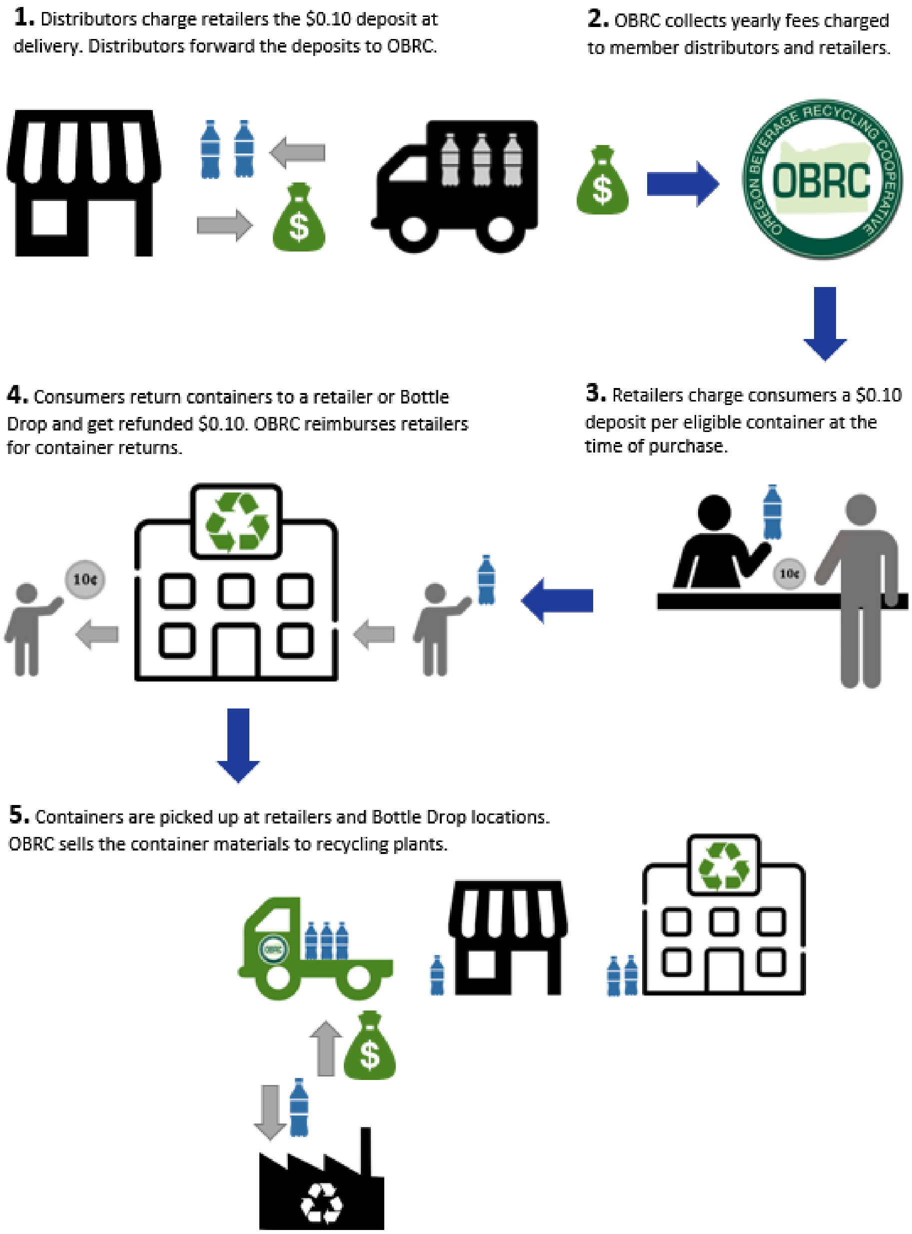
Most of OBRC's containers come from returns at their BottleDrop redemption centers. About 40% of returns come through retail stores. Beverage distributors and retailers that are not affiliated with OBRC are generally still required to accept container returns from consumers. OBRC charges affiliated retailers to pick up their redeemed containers. However, it can be cost prohibitive for retailers to not be part of the program, and most do participate. Figure 2 outlines the general process in Oregon.

OBRC 2019 program facts
- 30.8 million pounds recycled
- 25 redemption centers
- 2,508 return locations served
- 5.2 million green bags processed
- 450 employees
- $44 million operating budget
- $1.3 million raised by consumers for charities

Source: Oregon Beverage Recycling Cooperative 2019 Annual/Quarterly Reports

[3] DEQ's Material Recovery and Waste Generation Reports can be found at https://www.oregon.gov/deq/recycling/Pages/Survey.aspx
[4] ORPET, LLC, is a joint venture formed by Pacific PET Recycling and OBRC to create a polyethylene terephthalate, or PET, recycling facility in Oregon.

Figure 2: The Bottle Bill process is multi-faceted and involves several entities



Note that Figure 2 shows the general process when OBRC is involved. Not all beverage distributors and retailers in Oregon are affiliated with OBRC, and the process would be different in those instances.

Consumers in Oregon have four options to redeem containers:

Self-serve returns: At OBRC's BottleDrop locations, consumers can return up to 350 containers per person, per day, using reverse vending machines. Most retail stores will accept 24, 50, or 144 containers per person, per day, depending on the location and size of the retailer.

Hand-counted returns: At BottleDrop locations, consumers can have up to 50 containers hand-counted by OBRC staff per day. Hand-counts at retail stores are 24, 50, or 144 containers per person, per day, depending on the location and size of retailer.

Green bag program: Consumers register for a BottleDrop account online or in person. Green bags can be purchased at BottleDrop redemption centers or at participating retailers.

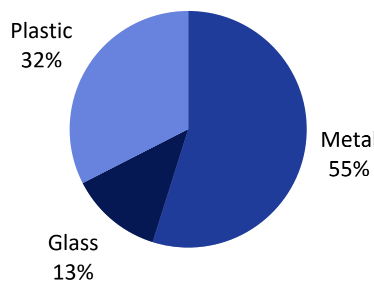
Consumers fill the bags up with eligible containers and drop the bags at a redemption center or participating retailer, without waiting in line. OBRC staff will count the containers and credit the consumer's account within seven business days. Each green bag costs 20 cents and a processing fee of 40 cents is charged per bag. Accounts are limited to 15 green bags per quarter, but some retailers may have daily limits. See page 14 for more detailed information about the program.

BottleDrop Give: This program works like the green bag program, except refunds are credited to an eligible charity or nonprofit chosen by the consumer.

The sale of scrap materials to recyclers can be profitable for distributors

Recycled containers are separated into three distinct categories: aluminum (metal), glass, and plastic. In Oregon, metal makes up more than half of the redeemed containers, followed by plastic and glass, as shown in Figure 3.

Figure 3: Aluminum cans are the most redeemed type of container



Source: OLCC redemption data.

The value of scrap glass and plastic material is minimal, and, depending on the market, could even have a negative value; this means that OBRC and other distributors would have to pay a recycling plant to take the material. Aluminum is much more profitable than glass or plastic. In 2019, the average sale price of scrap aluminum was $1,065 per ton in the Pacific Northwest, compared to the average price of scrap glass or plastic at $0.28 or $0.08 per ton, respectively.

It is possible that OBRC and other beverage distributors have negotiated even more favorable rates than what is calculated below, due to purity and quality of the material. Figure 4 shows the estimated statewide scrap revenues from 2016 to 2019. In 2019, the statewide sale of scrap materials was estimated to be at least $17 million, which went to beverage distributors. In addition to revenues for scrap materials and retaining tens of millions in unredeemed deposits in recent years, OBRC also collects various other fees from consumers, retailers, and distributors to fund their operations, although the exact amounts collected are not reported to OLCC.[5]

Figure 4: Aluminum cans are profitable as scrap metal

	2016	2017	2018	2019
Estimated scrap metal revenue	$10,211,823	$14,476,758	$19,060,636	$17,038,404
Estimated scrap glass revenue	$11,178	$12,577	$14,548	$14,034
Estimated scrap plastic revenue	$254	$466	$593	$471
Total statewide scrap revenue	**$10,223,254**	**$14,489,801**	**$19,075,777**	**$17,052,908**

Source: Conservative estimates calculated by auditors using OLCC redemption data and regional material price data provided by DEQ. It is possible that OBRC and other distributors could be earning higher returns based on the quality of their scrap materials.

[5] See audit results for detailed statewide totals of unredeemed deposits.

Compliance with the Bottle Bill can be challenging for some retailers

Retailers in Oregon who sell beverages included in the Bottle Bill, in most cases, must accept container returns. Consumers can also return their containers at BottleDrop redemption centers, which are operated by OBRC. Retailers are often in opposition to Bottle Bills because of the time and costs associated with container redemption. Retailers need to have staff available to manage reverse vending machines that count containers. Reverse vending machines need a lot of maintenance and are prone to breakdowns. If a retailer does not have reverse vending machines, they need to have staff available to do hand-counts of containers, which can take away from customer service in other areas of the store. OLCC reported that retailers also must deal with unsanitary conditions related to container redemptions. Empty containers can attract insects and rodents, which could pose health concerns.

Some retailers have challenges in finding enough physical space to store empty containers before they are picked up by OBRC or other distributors. There have been instances where thieves have broken into spaces to steal already redeemed containers, in order to redeem them again. In fact, Beaverton police arrested a serial burglar in 2019 who claimed he stole enough containers from OBRC redemption centers to buy a new car and fund his gambling habit.

Consumers can have issues with redemptions, too. Redemption areas at centers or at retail stores can have unpleasant odors and can be unsanitary because of liquids being spilled on the ground. There are often long wait times to return cans using reverse vending machines. The process of physically redeeming containers at retailers or redemption centers can be unpleasant, and some people would rather use curbside recycling, for which they already pay.

The value of the deposit has decreased dramatically over time

Redemption rates appear to be closely tied to deposit values. The higher the deposit value, the greater the financial incentive a consumer has to recycle the container, which appears to yield higher redemption rates. As noted earlier, the Legislature in 1971 wanted to establish strong financial incentives for consumers to recycle containers.[6] As inflation increases, the value of the deposit has declined dramatically. In 1971, a nickel had the same buying power as $0.32 in 2020. The deposit has also fallen in terms of the percentage of sale prices.

Figure 5: A nickel used to buy a lot more in 1971

Source: Consumer Price Index.

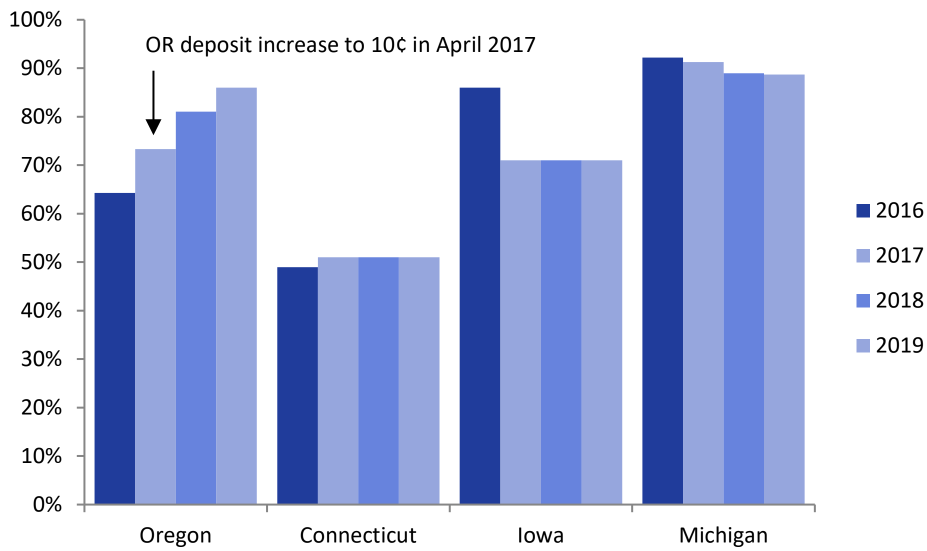
Redemption rates in the early years were reported to be over 90%, and since then, the rate has declined. The rate fell below 80% for two consecutive years, which triggered the increase to ten cents on April 1, 2017.

Figure 6 shows the redemption rates for three other states. Michigan's redemption rate is consistently much higher than other states, likely because their ten-cent deposit has historically been the highest in the nation, until Oregon's recent change to ten-cent deposits. The sharp increase in Oregon's rate appears to demonstrate the value of placing a strong financial incentive for recycling beverage containers.

---

[6] See Appendix A for details.

Figure 6: Higher deposit values appear to result in higher redemption rates



Source: OLCC data and each state's respective container deposit authority.

Bottle Bill laws provide multiple environmental benefits

A 2013 study found that Bottle Bill states recycle twice as much as states without a container deposit. The legislation helps to ensure that materials used to manufacture beverage containers are recycled, which reduces the energy required to produce the containers and reduces greenhouse gases.

The recyclable material from a Bottle Bill system is much cleaner than curbside recycling, which employs a single stream recycling process. Single stream refers to a system in which paper, plastic, metals, and other containers are mixed in a collection truck, rather than being sorted by type. Broken glass and other materials can end up contaminating the collection process.

Furthermore, the Bottle Bill provides economic incentives for individuals to pick up containers strewn on beaches, roadways, and other natural areas. Government-funded studies in seven states showed reductions in beverage container litter ranging from 69% to 84%, and reductions in total litter as a result of Bottle Bills.

These studies help confirm that:

- States with Bottle Bills have less litter;
- Expanding existing Bottle Bills would reduce litter further; and
- Other methods of litter prevention are less effective.

A key element of the Bottle Bill was to control pollution by reducing litter associated with single use containers. It is important to note that various other industries in Oregon are also subject to implementing pollution control measures. For example, recent legislation has been targeted toward reducing carbon pollution. Industries can also be subject to fines and regulatory requirements, as observed in the Portland Metropolitan area in 2016 when it was discovered that art glass furnaces were leaking toxins in their fumes. Many of Oregon's industries are subject to various oversight and regulations that often have associated compliance costs in order to conduct business in Oregon.

COVID-19 has hindered consumers' ability to redeem containers, though OBRC has taken actions to maintain redemption options

In March 2020, Oregon's Governor signed an executive order that required people to stay at home unless absolutely necessary. As a result, OLCC decided to not enforce the requirement for retailers to accept empty beverage container returns through the end of May 2020 to help ensure the safety of customers and store personnel.

As counties reopened, these restrictions were gradually lifted. Throughout this time, BottleDrop sites operated by OBRC continued to remain open, although at a reduced capacity to comply with social distancing and public health measures. As expected, there have been long lines waiting outside of OBRC's redemption centers, with some wait times being reported to be over two hours. OBRC received a Paycheck Protection Program loan of between $2 million and $5 million to help protect against job losses as a result of the pandemic.

OBRC has made efforts to keep redemption centers open during this time when many Oregonians are feeling financial pressures from the pandemic. OBRC has encouraged the use of the green bag program, which allows consumers to drop off pre-filled bags at certain locations without waiting in line. Limitations on access to returns during the pandemic impacted vulnerable populations, such as the homeless, that often rely upon collecting containers as a source of income.

Audit Results

The year 2021 marks the 50th anniversary of Oregon's historic Bottle Bill. As a result of this legislation, Oregon has benefitted from decreased litter along roadways and beaches, as well as reduced greenhouse gas emissions that result from using recycled materials. In 2019, over two billion containers were sold in Oregon, which translates into over $200 million in deposits.

Oregon has an opportunity to enhance state revenues by adopting the practices of other states by collecting unredeemed container deposits. Natural resource programs are facing budget shortfalls and unredeemed containers could help solve some of the gap. Potential opportunities exist that could increase the positive environmental impact of the policy, like expanding the scope of the program to include more beverages, or tying future deposit increases to low redemption rates as was done in the past, as well as continuing to support the industry's efforts by establishing an enhanced incentive structure.

OBRC, the state's largest stakeholder in the Bottle Bill, has been innovative in approaches to increase redemptions and improve consumers' experiences. OLCC should consider working with the Legislature to update the bill to include additional incentives for ensuring high redemption rates and better environmental outcomes.

Oregon has an opportunity to enhance state revenues

Natural resource programs — which are generally funded by a mix of user fees, lottery, General Fund dollars, and federal grants — have seen budget shortfalls in recent years. User fee revenues, like admittance to state parks, are likely to decrease substantially as a direct result of the pandemic. Lottery funds have also been impacted, as bars, restaurants, and sporting events have closed or have limited capacity due to the pandemic. Programs that heavily rely on these types of funding sources, like natural resources, are likely to see significant budget cuts in the future.

The original intent of Oregon's Bottle Bill was of conservation, to keep the state free of litter and trash. In the spirit of the original law, Oregon should consider following in the footsteps of other Bottle Bill states and use some or all unredeemed deposits to fund recycling or other environmental programs.

Massachusetts and Michigan were the first to pass Bottle Bill escheat[7] laws in 1989, allowing unredeemed deposits to revert to the state. Escheat laws ensure that property is not left in limbo without recognized ownership. New York and Vermont are the most recent states to pass their own laws in 2008 and 2018. Lawsuits challenging these escheat laws have been filed in some states but have all ruled in favor of the state. Escheat laws for unclaimed estates and other property have existed for hundreds of years.

Oregon and Iowa are outliers
Every other Bottle Bill state except for Iowa and Oregon, collects unredeemed deposits as a source of state revenue.

Unredeemed deposits can add up to significant amounts, as seen in Figure 7. The amount of Oregon's unredeemed deposits grew by more than 25% from 2016 to 2018 but saw a decrease in 2019. This decrease is likely due to the five-cent increase in the deposit and the additional beverage containers added to the bill. Assuming redemption rates have held steady at 90% per year and an annual sales growth of 6%, we estimated Oregon's total unredeemed deposits to be more than $500 million between 1971 to 2020.

[7] Escheat is a legal term describing the transfer of property of a person who has died without heirs to the state.

Figure 7: Most Bottle Bill states saw increases in unredeemed deposits from 2016 to 2019

State	2016	2017	2018	2019
California	235,380,000	250,913,000	269,452,000	257,325,000
Connecticut	33,367,977	34,757,128	35,351,284	34,994,707
Hawaii	14,344,750	11,623,935	15,701,830	18,027,785
Iowa	13,440,000	13,440,000	26,709,000	26,709,000
Massachusetts	46,674,887	45,559,835	47,790,324	53,609,125
Michigan	29,957,769	33,792,220	42,831,020	43,024,568
New York	108,557,733	114,068,107	117,664,686	110,962,750
Oregon	**31,563,585**	**33,454,621**	**40,154,301**	**30,661,911**

Source: Each state's container deposit authority. Note that Maine and Vermont only recently started collecting unredeemed deposit data.

As mentioned earlier, redemption rates are strongly tied to deposit values. As inflation increases over time, Oregon may see increases in unredeemed deposits. Michigan, the other ten-cent deposit state, has seen redemption rates fall and unredeemed deposits increase by more than 43% from 2016 to 2019.

Some unredeemed deposits meet existing statutory definitions for unclaimed property

When returning containers, consumers can get their refund value in a few different ways. If returns are at a retail store, consumers can get cash immediately or receive a voucher that can be handed in for cash. If a consumer goes to a BottleDrop affiliated location, amounts are credited to consumers' BottleDrop accounts, which can then be cashed out at various locations around the state.

State laws specify that these types of accounts that have had no activity for three years, either credits or withdrawals, are subject to unclaimed property laws.[8] The Department of State Lands oversees the unclaimed property program for the state. As of August 2020, OBRC is working with the Department of State Lands to report inactive accounts and remit that unclaimed property to the Common School Fund in accordance with existing law.

Unclaimed property law also suggests that same-day redemption vouchers from reverse vending machines could also be considered unclaimed property if they go unredeemed. However, the cost of calculating this unclaimed property may exceed its value. OLCC should work with the entities under their regulatory authority to ensure that they are following unclaimed property laws.

Expanding the Bottle Bill to include wine and liquor would have positive environmental impacts

Wine and liquor are mostly bottled in plastic or glass containers. Glass containers can generally be recycled repeatedly without a loss in quality or purity; recycled glass can also be substituted for most of the necessary raw materials. Recycling plastic would also have environmental benefits. Recycled materials use about 88% less energy than creating containers with new raw materials.

[8] See Oregon Revised Statute 98.005- 98.436 and https://unclaimed.oregon.gov/

Wine and liquor bottles were not included in Oregon's initial Bottle Bill or in subsequent reforms. Other states have deposits on wine and liquor. It's likely that these beverages are the largest remaining category of containers that are not currently included in the law, except for milk and milk substitutes

The idea to include these containers in Oregon has been circulated in prior years. If the law were expanded to include these beverages, that would result in an estimated 100 million additional containers subject to the Bottle Bill. Adding these containers could pose challenges to current redemption technology, though. Oregon should consider expanding the law to include these containers.

Even though beverage containers can be recycled curbside, a proportion of those recycled containers can still end up in landfills each year, despite the successes of the Bottle Bill. As noted earlier, the Bottle Bill recycling process results in much cleaner recyclable material.

Figure 8: Each year millions of containers still end up in landfills or as litter

Bancorp Tower in downtown Portland used to show scale of environmental challenges under the Bottle Bill.
*Due to the perspective of the photograph, the visible area of the blue section begins on the 7th floor.
Source: OAD calculations based OLCC sales and redemption data and OBRC fraud estimates.

As shown in Figure 8, if all unredeemed containers were gathered and put into a large building, it would likely fill up 17 floors of a skyscraper. If wine and liquor bottles were added to the Bottle Bill, they would fill an additional 12 floors. OBRC estimates almost 100 million containers are fraudulently redeemed each year, which would result in an undercount of how many Oregon containers are actually redeemed. Fraudulent redemptions would potentially fill five more floors.

Oregon's Bottle Bill can be modernized to enhance incentives to better meet the public policy goal

The Bottle Bill can be improved to include better incentives for both the beverage industry and consumers to increase redemptions. For example, under the existing structure, the lower the redemption rate — the less that people return beverage containers — the more revenue the beverage industry accrues.

Oregon increased its redemption rate to 86% from 81% in 2019. The increase was likely due to three things: increased consumer incentives to return containers valued at 10 cents, adding other beverage containers to the law, and innovations of OBRC to improve access to redemption options.

Oregon's redemption rates

2013	71%
2014	68%
2015	64%
2016	64%
2017	73%
2018	81%
2019	86%

Source: OAD calculation based on OLCC data.

Documentation from the 2008 Bottle Bill Task Force Report noted that declines in the redemption rate could result in rising revenues to distributors. This incentive structure makes it more difficult to achieve the policy goals behind the Bottle Bill. Public policy outcomes would likely be improved if the industry had better financial incentives to increase redemption rates, rather than face declining funding as redemption rates go up.

More could be done to increase accessibility, accountability, and convenience for consumers

While the green bag program is more convenient for consumers, it is not free. Consumers must pay 20 cents to buy each green bag and are charged 40 cents per bag as a processing fee. Dealer redemption sites, which are typically located in grocery stores, but are serviced by OBRC, accept green bags and will pay the 40-cent processing fee to OBRC on behalf of the consumer. Another benefit to dealer redemption sites is that consumers are not limited to 15 green bags per quarter, per account. However, dealer redemption sites are a newer innovation and are not available to all consumers. For example, consumers who live in Salem and do not want to pay the 40-cent processing fee must commute to Monmouth, Dallas, or Canby to drop off their green bags.

A recurring online complaint with the program is incorrect amounts being credited to accounts based on the number of containers or bags redeemed. The BottleDrop website does state that "OBRC is committed to using the best commercial efforts to accurately count containers (within a margin of error of +/- 2 containers per bag)". Customers may contact BottleDrop customer service with questions and concerns about bag counts.


Green bags being prepared for redemption.
Source: Oregon Recycling Beverage Cooperative.

However, customer service has experienced a large increase in calls due to the pandemic, and response times are slower. Out of more than 15 calls auditors made to customer service, and numerous waits on hold, we were only able to reach a customer service representative once. Auditors also observed OBRC facilities in Portland and Salem and noted long lines for reverse vending machines during visits. Although the COVID pandemic certainly increased the demand for OBRC's services as retailers shut down redemption options per OLCC rules, online reviews noted problems with wait lines and customer service at OBRC redemption facilities that predate the pandemic.

We tested a small sample of green bags, which were dropped at locations in the Salem area. Two bags were dropped at a dealer redemption site, which means zero processing fees for the consumer and the bags do not count toward the quarterly limit of 15 bags. Another seven bags were dropped at an OBRC redemption center. We dropped a total of 450 containers, 50 per bag.

Auditor's BottleDrop account activity

-$2.00	1 box of green bags (10 x $0.20)
-$2.80	Processing fees (7 x $0.40)
+ $45.00	Redeemed containers (450 x $0.10)
$40.20	expected balance
$39.90	actual balance
-$0.30	difference

We found that overall, the amount credited to our account was within the margins of error listed on the BottleDrop website. However, it was impossible for us to identify where the differences in our calculation came from, because the account only lists the total balance, not the detailed amounts credited per bag. One of the bags that we dropped at a dealer redemption site was incorrectly counted toward the quarterly limit. Corrections can be made by calling customer service, but the burden falls on consumers to know the amounts that should be credited to their account, which is difficult to determine with the current system. OBRC appears responsive to complaints posted to the Better Business Bureau website on this issue. However, consumers should be able to see a detailed accounting of returned containers, no matter the method of redemption. To further increase transparency, OLCC should be able to inspect financial details of

Bottle Bill regulated entities to better understand their financial needs to operate recycling programs in support of the Bottle Bill.

As of 2019, OBRC has opened 25 redemption centers, with most centers in metropolitan areas. There have been some instances where residents were not in favor of redemption centers being placed in their neighborhood. In recent years, Beaverton and Portland residents have been opposed to redemption centers in their neighborhoods and have cited safety, noise, sanitation, declining property values, and theft concerns. Those redemption centers were eventually built. OLCC noted that siting these locations can be difficult for OBRC due to local politics and a "not in my backyard" mentality.

Funding to operate redemption centers is collected from participating retailers in geographic proximity to the center. As such, there appears to be no financial incentive for OBRC to increase the availability of redemption centers once they have covered a specific geographic region. Retailers are generally in favor of redemption centers, because they tend to decrease returns for nearby stores and the amount of storage space and personnel needed to store and handle cans and bottles. OLCC and the Legislature should consider crafting legislation that would incentivize beverage distributors to increase accessibility and convenience for consumers.

OBRC has expanded programs to help increase redemption rates

To combat falling redemption rates in the state, OBRC created different programs to make it easier for consumers to get their deposit back. The green bag program has been one of OBRC's most successful innovations. The program and BottleDrop accounts were created in 2010. By the summer of 2020, accounts increased to over 525,000, or about 1,000 accounts per day.

OBRC has been piloting a new program in partnership with retailers where consumers can drop green bags directly at a store, instead of needing to go to a traditional redemption center. While COVID-19 has hindered the ability of OBRC on current expansion plans, a retailer we spoke to thinks the process was much too slow prior to the pandemic. While these innovations have made it more convenient for consumers, more could be done to increase convenience and encourage redemption.

In recent years, OBRC has also restarted a refillable bottles program to achieve better environmental outcomes. In early 2020, OBRC reported that there were more than 598,000 bottles in circulation in Oregon, a fraction of total containers sold. The bottles can be returned by any of the methods described earlier and are then sorted, washed, inspected, and delivered back to Oregon's craft beverage producers.

A bottler filling glass bottles between 1850-1930.
Source: New York Public Library.

OBRC's innovation follows a sustainable practice first deployed over 100 years ago, when beverage containers were designed to be reused. As single use containers grew in use, consumers began to discard the containers along highways, beaches, and other natural areas across the nation, which led Oregon and other states to adopt Bottle Bills.

Fraudulent redemptions appear to be a substantial threat to the program

Currently, there is no tracking system to determine where a beverage container is sold and where it is redeemed. Requiring beverage bottlers across the country and around the world to identify and label products to be sold only in Oregon is not feasible. When containers purchased in Washington State, which does not have a deposit, are redeemed in Oregon, it undercuts Oregon's Bottle Bill by artificially inflating redemption rates, a key indicator of system performance. Fraud is a significant problem to the system, but unfortunately, there is not an easy solution.

Interstate bottle redemption in popular culture

The scheme of transporting beverage containers across state lines is so well-known that it made its way into an episode of *Seinfeld*, where characters conspired to take a mail truck filled with bottles and cans to Michigan, where they could get ten cents for each container, rather than the nickel in New York.

Fraud has been reported in other Bottle Bill states. An analysis of Vermont's Bottle Bill estimated their border fraud at 10%. Staff at OBRC believe fraud from Washington could cost Oregon's system around $10 million a year — about 5% of Oregon's total redemptions, which would mean Oregon's true redemption could be several percentage points lower than currently reported. A further complicating risk is that Washingtonians are legally allowed to return containers purchased in Oregon. In 2019, the Legislature passed a law which describes the act of intentionally redeeming out-of-state containers as fraudulent; violators can be fined up to $250. As of the issuance of this report, OLCC and OBRC are not aware of any violators and auditors concluded this law is almost impossible to enforce.

In 2018, California officials arrested three people who were believed to have transported empty containers from Arizona to California for years and defrauded the government of more than $16 million. Fraud from the California and Idaho borders is likely happening to a certain degree as well, since Idaho does not have a deposit, and California's deposit amounts are generally lower. Fraud in Oregon is likely concentrated in Portland, simply due to population density, but is probably occurring along much of the state's borders. It is likely that an increase to a state's deposit amount would increase fraud from border states.

Auditors observed two Portland BottleDrop redemption centers near the Washington border. During those hours, numerous people driving cars with Washington license plates redeemed containers, as well as cars with front or rear plates removed. While we are unable to validate OBRC's claim of upwards of $10 million a year in fraudulent returns, we believe that the fraud risk is plausible and could potentially amount to millions of containers per year. News articles have reported that residents of Vancouver, Washington, are upset at others going through their trash and recyclables for cans and bottles. In 2018, the C-TRAN bus service from Vancouver to Portland banned containers from their bus lines. OLCC reported that they, along with OBRC, have been contacted by a group that is developing a proposal for a Bottle Bill in Washington. There has also been some interest in passing a national law. While there is no easy solution, the state should consider working with the state of Washington to determine if there are opportunities to engage in a regional Bottle Bill partnership to reduce fraud and improve environmental outcomes.

While not considered redemption fraud, water dumping is a trend that has also been seen at redemption centers and at retailers. Water dumping occurs when a person uses Supplemental Nutrition Assistance Program benefits, commonly known as Food Stamps, to purchase bottled water, dump the water out, and then redeem the bottles for cash. While this is not redemption fraud, it is considered fraud by the U.S. Department of Agriculture.

OREGON Bottle Bill OR 10¢

Source: OLCC.

Recommendations

In order to comply with state statutes, we recommend that OLCC:

1. Work with entities under regulatory authority to ensure they are complying with existing unclaimed property laws.

In order to maximize the environmental policy goals of Oregon's Bottle Bill, we recommend that OLCC work with the Oregon Legislature to modernize the Bottle Bill by:

2. Consider crafting legislation that does one or more of the following:

    a. Have some or all unredeemed deposits escheat to the state to help fund environmental or recycling programs.

    b. Create better incentives for beverage distributors to increase container redemptions. For example, the legislature could consider providing incentive funding to the industry based on metrics for the number of containers redeemed or the number of redemption facilities in operation.

    c. Expand the scope of the program to include wine and liquor containers.

    d. Increase incentives for consumers to redeem containers by tying future deposit levels to redemption metrics. For example, if redemption rates fall below 80% for two consecutive years, increase the deposit level by a nickel.

    e. Increase transparency by authorizing OLCC to inspect additional financial details of Bottle Bill regulated entities to better understand their financial needs to operate recycling programs in support of the Bottle Bill.

    f. Increase transparency by requiring consumers be entitled to a detailed accounting of returned containers regardless of redemption method.

    g. Consider working with the State of Washington to determine if there are opportunities to engage in a regional Bottle Bill partnership to reduce fraud and improve environmental outcomes.

Objective, Scope, and Methodology

Objective

The objective of this audit was to determine if opportunities exist to increase state revenue through the collection of unreturned bottle deposits.

Scope

We looked at legislative testimony and documents from 1969 to 2020. We analyzed return percentages and unredeemed deposit information from all Bottle Bill states for 2016 to 2019. We also reviewed Oregon return and sales data from 2013 to 2019.

Methodology

To achieve our objective, we analyzed beverage distributor sales and redemption data provided by OLCC from 2013 to 2019. We used this data and regional scrap material rates to calculate estimated statewide redemption rates, unredeemed deposits, and scrap material revenue.

We researched applicable laws from all Bottle Bill states, as well as reviewing studies conducted on the programs in Iowa and Vermont. We contacted each Bottle Bill state and requested their redemption rates and unredeemed deposits for 2016 to 2019 for comparison to Oregon. We reviewed hearings, testimony, and documents from the 1969, 1971, 2007, 2011, and 2019 legislative sessions in Oregon.

We interviewed key stakeholders, including staff at OLCC, DEQ, and OBRC, as well as a manager from a regional grocery chain and former Secretary of State Phil Keisling.

We also reviewed relevant news articles, publications, Google reviews, consumer complaints from the Better Business Bureau, and OBRC's publicly available annual and quarterly reports. Auditors reviewed documentation from OBRC's independent auditor. This documentation outlined the agreed upon procedures performed of OBRC's budgeted expenses for 2019 but we were not provided access to the detailed information.

Auditors observed two redemption centers in Portland near Interstates 5 and 205 to determine if fraud from Washington State was plausible. Auditors also signed up for a green bag account and dropped 450 total containers at locations in Salem and Dallas, to test the effectiveness of the program on a limited basis.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Although members of the audit team have participated in the Bottle Bill by purchasing and returning containers in Oregon, the team relied only upon the evidence they collected during the audit to inform all conclusions in this report.

We sincerely appreciate the courtesies and cooperation extended by officials and employees of OLCC, DEQ, the Department of State Lands, and OBRC during the course of this audit.

Appendix A: Selection of Archival Records relating to the Bottle Bill

The audit team unearthed multiple archival records pertaining to the Bottle Bill and included them in this appendix for educational and informational purposes.[9]

Letter from Howard Steinbach to Governor Tom McCall proposing a Bottle Bill

July 24, 1967

Tom McCall
Governor
Salem, Oregon

Dear Tom;

Two thoughts, no reply needed.

1. Regards Pollution: In the not to distance future most of the clean water flow in the state will have their banks lined with houses, if the present trend continues. If a stream flows through more than one county in the state, then the state must insist that all building along said stream confirms to state regulations regarding pollution.

2. Regards litter: Tax of one cent on all throwaway glass and metal beverage containers. Tax can be reclaimed by manufacturer or distributor on turnover of empty containers to state. Children can get spending money by turning in empty containers. State will be reimbursed for some of the money it spends on cleaning up the litter.

I hope the rest of the summer is cool.

Sincerely

Howard Steinbach
Bel-Aire Pharmacy
565 S.E. Allen
Beaverton, Oregon 97005

[9] A complete archival record of the 1971 Bottle Bill can be found online at the Secretary of State Archives website: https://sos.oregon.gov/archives/Pages/records/bottle-bill.aspx. Additional documents relating to legislative efforts around the Bottle Bill since 2007 can be found at http://olis.oregonlegislature.gov.

Governor Tom McCall's response to Howard Steinbach:

July 28, 1967

Mr. Howard Steinbach
Del-Aire Pharmacy
565 S. E. Allen
Beaverton, Oregon 97005

Dear Howard:

Your good suggestions require a reply. Your first point regarding pollution -- we are well on the way towards accomplishing the regulation which you suggested. It is a question now of adequate staff and adequate funding for developing local sewer treatment facilities.

On the second point --- I am in the process of developing a committee to work on the litter problem and one of the proposals which they will investigate will be the one you suggested. I concur in your hope that the remainder of the summer is cool in more ways than one!

Sincerely,

Governor

TM:ws

A selection of testimony from proponents in 1971 according to legislative minutes

Senator Gordon McKay stated that he had been on the interim committee which made a study of this problem for approximately 18 months. During those hearings, he said, they had heard from all segments of the industry and others who were interested in the problem. Although there were various funding proposals submitted that would not require a deposit, the committee felt that none of these would really do the job. He urged the Committee to take into consideration amendments that would improve the bill. At this time, however, he felt House Bill 1036 was the best solution to the problem.

Attorney General Lee Johnson spoke in favor of the bill on behalf of the Citizens Against Litter and on behalf of Representatives Au Coin, Paulus, Hanneman, Meeker and Macpherson. In view of the fact that this Committee had already had extensive hearings on Senate Bill 194, which is nearly identical to House Bill 1036, he said, he did not wish to be repetitious and that it simply boiled down to the fact that this bill is a commitment to deal with two of the major problems of our environment -- the problem of litter -- and probably more important -- the problem of solid waste. He said that the bill is by no means intended as a cure-all; rather it attacks a certain portion of the problem: a portion that is within the reach of a solution. He requested that he be allowed about five minutes after the opponents have testified because he understood that they might have some proposals and he would like to have the opportunity to reply to them. Chairman Roberts said she would see how the testimony went, and if there was time, she would grant his request.

Mr. Johnson said that the inferences that this bill would result in a higher cost to the consumer are not valid. Studies have proven that the cheapest product to the consumer is that product that is bottled in a returnable container. He also pointed out that with respect to the testimony of the gentleman from the American Can Company (Mr. Norman Dobyns), that company did not manufacture any beverage cans in this state so he did not see how 1269 employes would be affected. As to the problems in British Columbia, it was Mr. Johnson's feeling that some of their problem was because of the 2¢ deposit rather than the 5¢ deposit advocated in this bill.

Mr. Don Waggoner explained the results of a litter survey taken during March. The survey showed that the throw away container has a much greater chance of becoming litter than the deposit container. He said that he and his group support the bill because they believe it will significantly reduce the litter. Further, he felt that there was strong evidence that the 5¢ deposit would be effective in the return of these bottles.

Senator Edward Fadeley stated that he supported the bill on general principles: There is no right to pollute the environment. The bottling industry, he said, has assumed a method of operation that is contrary to that principle. They have assumed that there is a right to pollute and that they may use a system of doing business which encourages pollution. Their excuse is that the choice to pollute is on the individual who buys their product and does not dispose of it properly, but they have immensely increased and encouraged this choice to pollute by their choice of what sort of product they produce. This bill endeavors to overcome the choice of these industries by putting an economic incentive on the other side. They have given the consumer a direct incentive to pollute, which has resulted in pollution along all the streets and highways of this state, and indeed, throughout the nation. He said it seemed that we should not be overly concerned about the industry's economic difficulty resulting from their choice, when that choice has already cost the people of Oregon a great deal of money, some reduction in the livability of our environment, and it could be said, that this industry owes the people of Oregon millions of dollars because of their choice to select litter bound products.

Kess Cannon, Assistant for Governor McCall in the field of natural resources, emphasized that this measure is high priority legislation so far as the Governor is concerned. The Governor had spoken out clearly and forcefully in the 1969 Legislative Session in support of House Bill 1157, a similar measure, and his position has been made clear many times since then that he hopes the Senate will give rapid and favorable consideration to House Bill 1036.

Senator Macpherson concurred with Senator Willner that the effective date should not be extended. He said he could see no reason for passing the bill out if the date were to be extended past the next legislative session. After a great deal of discussion about the amount of deposit, and the effectiveness of the system presently being carried out in British Columbia, as well as the economic effect of the industry with respect to the price of glass and cans, it was determined that Chairman Roberts would attempt to work out appropriate language with Legislative Council that would be agreeable to the industry representatives as well as to the Committee.

Senator Macpherson said he had talked to people from British Columbia and that they had indicated that one of the reasons the law was not working as well as anticipated was because they had a 2¢ deposit when perhaps it should have been 5¢. It was apparently thought that the 5¢ deposit would have been advisable.

Redemption centers were discussed, but it seemed to be the consensus that these centers would have to be instituted somehow by the beverage industry and the administration problems would have to be worked out as they arose.

A selection of testimony from opponents in 1971 according to legislative minutes

Rep. Norman Howard stated that he was on the State and Federal Affairs Committee during the last session, and he said he was firmly convinced that there would have been a compromise bill come out of that Committee if there could have been a compromise. However, the proponents would not compromise below the 5¢ deposit, and an interim committee still maintained the 5¢ requirement. Further, he saw no chance of a compromise on this issue this year. House Bill 1949, he said, would have been a good tax bill, but it was tabled. He said he still preferred that bill to House Bill 1036 and urged that a compromise be made with HB 1949 in mind.

Dr. Robert F. Testin spoke in opposition to House Bill 1036. He said he had been working in the area of recycling and utilization of materials since about 1966. He pointed out the difference in the terms of "litter" and "solid waste" and explained what his company, Reynolds Aluminum, was doing toward the solid waste problem.

Mr. Richard Barger stated that he was representing Agripac Inc., a farmer owned, food processing company, with processing plants in Salem, Junction City, Corvallis and Eugene. During the height of the food processing season, he said, they employ in excess of 3,000 people. He described the serious economic consequences of a ban or deposit on beer and soda pop containers. He said it seemed fairly obvious to him that the can manufacturers would be virtually destroyed by this type of bill. He contended that a law of this sort would hurt every food packer, vegetable canner and fish packer in Oregon. For these reasons, he opposed the bill.

Mr. Kenneth H. Lemke, Manager of the Portland Plant of Owens Illinois, Inc., offered a statement in opposition to the bill (see Appendix C).

Mr. Ed Poyfair, representing Safeway Stores Inc., submitted his statement in opposition to the bill (see Appendix D).

Mr. William W. Wessinger, Chairman of the Board at Blitz-Weinhard Company, pointed out that his company resigned from the United States Brewers Association on January 1 of this year. (See Appendix E for Mr. Wessinger's statement.)

Mr. William Whitely, an attorney from Portland, and Mr. Dave Neal, a distributor, appeared together in opposition to the bill. Mr. Whitely stated that he was Secretary-Counsel of the Oregon Beer Distributors, representing about 76 members in the state, and handling about 90% of all the beer sold in the state. At their recent annual meeting in Coos Bay, a resolution was passed reflecting unanimous opposition to House Bill 1036. Mr. Neal confirmed his opposition to the bill, but was unable to testify at length because of the time limit.

HB 1036 PROVIDES FOR A FIVE CENT DEPOSIT ON ALL BEER AND SOFT DRINK BOTTLES AND CANS SOLD FOR OFF-PREMISE CONSUMPTION AND PROVIDES THAT THE RETAILER MUST GIVE THE REFUND.

WHY HB 1036 IS NEEDED

There is no doubt that beverage cans and bottles comprise a large amount of the litter along our highways, in our parks, lakes and streams, and on our beaches. Depending on the road and the method of computing, beverage cans and bottles comprise between 49% and 82.6% of all non-degradable litter.

The sale of non-returnable containers doubled from 1958 to 1966 and is expected to more than double again by 1976.

HB 1036 is no panacea to all of the problems of littering. It is, however, a practical solution to one very large segment of Oregon's litter and solid waste problems.

WILL HB 1036 WORK?

Yes. It is working now in Oregon.

In many Oregon based stores, beer in returnable bottles is sold with a one-cent deposit and a five-cent deposit on Coke and 7-Up. On October 16, 1970, William Wessinger noted that the sales of Blitz Weinhard beer in returnable six packs increased 21% during an eight month test.

A law similar to HB 1036 is now working in British Columbia. British Columbia's Litter Act became effective in part on August 15, 1970 and became effective in full January 1, 1971. The "non-returnable" bottle has virtually disappeared from the British Columbia market.

A simple deposit system worked in Oregon before the advent of the no deposit/no return one-way bottle, and there was no litter problem then. A similar system of deposits on bottles exists in Europe and there are no bottles left along the roads.

A deposit system also induces people to pick up and return any containers which a thoughtless person throws away or leaves behind. The Plaid Pantry Markets and a beer distributor in Bend, Oregon conclusively demonstrated that adults and children will, for as little as one-half cent a container, pick up the litter left by others.

In the 1950's the State of Vermont passed a law which prohibited the sale of beer in non-returnable bottles. The law, however, did not provide for a mandatory refund. The beer distributors refused to pay anything for the empty bottles and cans, and thus no economic motive was created for returning and recycling containers. The law did not work and was permitted to lapse.

WHAT WILL BE THE ECONOMIC EFFECTS OF HB 1036?

There is no doubt that the use of returnable bottles will have an effect upon certain segments of Oregon's beverage industry. In order to assess the economic changes, certain things must be understood about industry.

A returnable beer bottle costs 4 cents new, and, at present, makes on an average between 5 trips (estimate by Blitz Weinhard) and 19 trips (estimated by the Interim Committee). A one-way beer bottle costs 3 cents and makes one trip. A returnable 6 1/2 oz. Coke bottle costs approximately 10 cents new. It is estimated that a coke bottle also makes 19 trips. A one-way Coke bottle costs about 4 1/2 cents.

It has been difficult to secure the facts about the economics of the distribution of beer and soft drinks. We have been advised that the beer distributor charges the retailer a one cent deposit per bottle or 24 cents per case. When a customer buys a case of returnable bottles of beer, the one cent deposit is passed on to him. When he returns the bottle, he gets his one cent back. The retailer then sells the empty back to the brewery for 2 cents. We have been advised that the reason the retailer doubles his price from 1 cent to 2 cents which the brewery pays, is substantially below the 4 cents which is the price of a new bottle. Of course, a portion of this 2 cents is used to pay the additional handling and washing costs.

WHAT WILL HB 1036 DO TO THE INDUSTRIES AFFECTED?

We do not profess to know all the answers, but from a serious and careful analysis of the facts available to us, the following are our findings.

CAN AND BOTTLE MANUFACTURING

There is no doubt that HB 1036 will reduce the demand for beverage cans and bottles in Oregon. There are only two manufacturing plants that would be affected.

Continental Can Company is the only manufacturer of beverage cans in the State of Oregon. Of the total production of the plant, 20% of its capacity is for beverage cans. We assumed that some of the 20%, either empty or filled, is exported out of Oregon. The plant has 254 employees.

Owens Illinois is the only manufacturer of glass beverage bottles in Oregon. It has 400 employees and 75% of its production is one-way bottles. Likewise, we assume some of its production is for export out of the State of Oregon. The plant is easily convertible to returnable bottles.

BREWERS AND BOTTLERS

Blitz Weinhard is the only brewer in Oregon; there are 33 to 35 bottlers of soft drinks. There is no doubt that there would be increased costs in having to hire more drivers to bring in the returnables and more workers to sort and wash the bottles. It is difficult to calculate what would be the increase in employment inasmuch as there are great differences between a Portland bottler and one in a smaller town. It is likewise difficult to estimate if the savings in the cost of containers would offset costs of the increased payroll.

RETAILER

HB 1036 would place an increased expense on the retailer to handle, sort and store the empty returnable bottles.

It is estimated that this increase would be between 1/4 and 1/2 employee per store. There appears to be conflicting opinions as to whether the price at which beer distributors and soft drink bottlers repurchase the bottles is sufficient to pay for the increased costs to the retailer. We have, however, been informed that at least one large chain store makes money on its returnable bottle business.

We have also been advised that certain retail stores use returnable empties as a "loss leader" in inducing customers to return to the store.

As to the retailer, HB 1036 increases jobs and therefore costs. The costs must be paid for either by the savings in container costs or by increasing costs of the product to the consumer.

CONSUMER

The returnable bottle is the cheapest container for the customer. The cost per drink of beer or soda pop is less. Comparison shopping at Fred Meyer 2/13/71 shows as follows:

SIX PAK BLITZ

	RETURNABLE				NON-RETURNABLE	
Size	Price	Deposit	Net Price	Price per Oz.	Price	Price per Oz
11 oz. bottle	1.11	.06	1.05	$.0159	1.12	$.0169
12 oz. can					1.28	.0177

It is interesting to note that the leaders of the beverage industry have expressed opinions as to the superiority of the returnable bottle:

(a) Theodore Rosenak, President of Rheingold Breweries, Inc., October 16, 1970 "[The returnable bottle] brings its contents to the consumer at a lower true cost than does the metal can or a non-returnable bottle. The consumer saves money."

(b) J. Paul Armstrong, President of Coca-Cola Company, September, 1970, "And even though it is far more economical for consumers to buy our products in these returnable packages, some of our dealers--supermarkets and convenience stores--find it more desirable to handle one-way bottles and cans."

In summary, the non-returnable is a hidden tax on the consumer. First, he must pay more when he purchases a non-returnable container. Second, he pays the garbage collector to take it away. Third, he has to either pay taxes to have it cleaned up or have his environment desecrated.

INCIDENTAL ECONOMIC EFFECTS

HB 1036 would tend to reverse the concentration of production in larger and larger units, and would aid the small locally owned bottlers to retain their business. Before the one-way bottle and can, all soft drinks were bottled locally. Now, for instance, Coke is canned is Seattle by Pacific Food Products Co. and trucked to Portland, and Pepsi is canned in Yakima by Noel Canning Corp.

In 1958, there were 262 breweries in the United States. The U. S. Brewers Association recently estimated there are now less than 80. In 1958, 71,700 persons were employed by brewers. In 1969, there were 60,500, a decline of 15.5%. Based upon a wage rate of $8,714 in 1967, the 11,200 job decline amounted to a total of $97,596,800 less in payroll expenditures. This is attributable very largely to the one-way can and bottle, where the huge, often out-of-state manufacturers with large accumulation of capital, can manufacture with no concern to the problems of litter. In 1967, there were 3,403 soft drink bottling plants in the United States employing 123,400 persons with a payroll of $727,100,000. If the trend in the soft drink industry parallels the beer industry, which it has to date, a decline of 28.3% in the number of plants would amount to a drop in plants of 936 or a total of 2,440 plants. The number of employees will suffer a 15.6% decline to a total of 104,150. Using the 1967 payroll of $5,892, the total loss in payroll would be $113,421,000 yearly.

TAXES

It has been impossible to separate the costs in cleaning up our city streets and parks, our county roads and our state highways and establish a figure attributable to one way cans and bottles. However, the increased burden upon the taxpayers is great. The Highway Commission spent $330,000 in 1970 to pick up highway litter a large part of which was one way cans and bottles. It has been estimated that it costs Oregon 30 cents to pick up a can or bottle along the highway. It is estimated that in Michigan it is 35 cents and in New York above 40 cents.

This is all wasted money. HB 1036 would eliminate some of these costs. It would likewise extend the life of the dumps for solid waste. A large part of the residue from incineration is glass and metal and these are largely from one-way cans and bottles.

WHAT PEOPLE THINK

On July 9, 1970, Gov. Tom McCall said Oregon should "put a price on the head of every beer and pop bottle sold." Statesman, July 10, 1970.

According to a poll conducted by the National Federation of Independent Business, of 287,166 of their members, 62% favor a ban on non-returnable soft drink and beer bottles and cans. In Oregon, 68% favored the ban. Grants Pass Courier, January 29, 1970.

Initiative #256 in the State of Washington secured 188,102 signatures between April and July, 1970, which is nearly twice the necessary number needed. A private poll taken in August for the beverage industry found that 80% of the voters were backing the issue. Wall Street Journal, November 2, 1970, page 6, col. 2. However, the initiative was defeated 48.7% to 51.3% after the glass and can makers, breweries, soft drink bottlers and labor unions had spent an estimated two million dollars, according to the December, 1970 issue of Softdrinks.

ALTERNATIVES

1. Do nothing and rely on the generally ineffectual attempts of public education and increased sensitivity. With Glass Container Manufacturers Institute launching a 7.5 million dollar campaign to promote the sale of one-way bottles, the future will be more littered than the present. Oregon Statesman, January 16, 1970.

*Shipments of beer and soft drinks in throw-away cans and bottles in the year 1970

	Throw-away bottles	Throw-away cans	TOTAL
Soft drinks	--6,000,000,000	9,000,000,000	15,000,000,000
beer	--6,230,000,000	15,100,000,000	21,330,000,000

Oregon is fortunate it still has returnable bottles. There are some stores in Oregon where it is impossible to buy beer and soft drinks in returnable bottles. There are some drinks in returnable bottles.

*The Role of Packaging in Solid Waste Management, 1966 to 1976, U. S. Department of Health, Education and Welfare

2. Tax and pick up. A tax placed on all beverages is a selective sales tax which would place a tax on the already squeezed grocery budget merely so the makers of cans and bottles can continue to make a polluting product and so the huge chain stores do not have to police their wastes as other industries do.

A tax would place the burden on all drinkers of beer or soft drinks whether they littered or not.

HB 1036 is a deposit, not a tax.

If the consumer brings his bottles back to be reused, his cost of groceries has not been raised. If he is a litterer, then he loses the deposit and it is collected by someone else who picks yp the returnable bottles.

By placing a tax on all beer and soft drink containers, there would be no inducement for the consumer to bring the bottle back. There is now no financial inducement to bring back cans and one-way bottles; as a result, they comprise the vast majority of the non-degradable litter in Oregon.

The tax would merely place the burden of cleaning up the roads on all beer and pop drinkers, not on those who litter.

CONCLUSION

The effects of HB 1036 would be to stop all litter from beverage cans and bottles.

It would shift some employment and result in increased employment in Oregon.

It would create few increased costs, which could not be absorbed by the savings resulting from the use of returnable containers.

Oregon
Kate Brown, Governor

Liquor Control Commission
9079 SE McLoughlin Blvd.
Portland, Oregon 97222-7355
503-872-5000
800-452-6522
www.oregon.gov/olcc

November 4, 2020

Kip Memmott, Director
Secretary of State, Audits Division
255 Capitol St. NE, Suite 500
Salem, OR 97310

Dear Mr. Memmott,

This letter provides a written response to the Audits Division's final draft audit report titled Oregon Has an Opportunity to Modernize Groundbreaking Bottle Bill on its 50th Anniversary.

In general, the OLCC agrees with the audit findings, including that Oregon's Bottle Bill should be updated. OLCC does not have the authority to make the suggested changes, but we agree that OLCC has a role to play in assisting with this process.

Below is our detailed response to each recommendation in the audit.

RECOMMENDATION 1

In order to comply with state statutes, we recommend that OLCC:

> Work with entities under regulatory authority to ensure they are complying with existing unclaimed property laws.

Agree or Disagree with Recommendation	**Target date to complete implementation activities**	**Name and phone number of specific point of contact for implementation**
Agree	As-directed by the Governor	Nathan Rix 971-401-1862

Narrative for Recommendation 1

Existing Oregon state statutes require that unclaimed property reverts to the State under certain circumstances. At the direction of the Governor, OLCC will work with the Department of Lands staff to identify unredeemed deposits that may lawfully be claimed by the State. OLCC will also work with OBRC, non-OBRC member distributors, and retailers as appropriate to develop a system for collecting those monies for the State.

RECOMMENDATION 2

In order to maximize the environmental policy goals of Oregon's Bottle Bill, we recommend that OLCC work with the Oregon Legislature to modernize the Bottle Bill by:

Consider crafting legislation that does one or more of the following:

a. Have some or all unredeemed deposits escheat to the state to help fund environmental or recycling programs.

b. Create better incentives for beverage distributors to increase container redemptions. For example, the legislature could consider providing incentive funding to the industry based on metrics for the number of containers redeemed or the number of redemption facilities in operation.

c. Expand the scope of the program to include wine and liquor containers.

d. Increase incentives for consumers to redeem containers by tying future deposit levels to redemption metrics. For example, if redemption rates fall below 80% for two consecutive years, increase the deposit level by a nickel.

e. Increase transparency by authorizing OLCC to inspect additional financial details of Bottle Bill regulated entities to better understand their financial needs to operate recycling programs in support of the Bottle Bill.

f. Increase transparency by requiring consumers be entitled to a detailed accounting of returned containers regardless of redemption method.

g. Consider working with the State of Washington to determine if there are opportunities to engage in a regional Bottle Bill partnership to reduce fraud and improve environmental outcomes.

Agree or Disagree with Recommendation	Target date to complete implementation activities	Name and phone number of specific point of contact for implementation
Agree	As-directed by the Governor	Nathan Rix 971-401-1862

Narrative for Recommendation 2

2a. Nearly every state that has a Bottle Bill Program collects unredeemed deposits for use by the state as opposed to leaving those funds in industry hands. The State of Oregon is facing a significant budget shortfall that could be helped by updating Oregon's Bottle Bill to divert unredeemed deposits to the state. If the Governor deems this a priority, OLCC will work with stakeholders and Department of Lands staff to identify unredeemed deposits and developing a system for collecting at least a portion of those monies for the state.

2b. While OLCC agrees that it would be beneficial to have better incentives for beverage distributors to increase container redemptions, this seems like an uphill battle. The audit found that distributors receive tens of millions of dollars in unredeemed deposits and revenue from the sale of scrap material each year, so it will be difficult to incentivize the industry more than they already are.

2c. Expanding the scope of the program to include wine and distilled liquor containers is a good idea because it increases the number of containers that are redeemable. Also, the more container types that are redeemable, the easier it will be for customers and retailers to recognize the few beverages that are exempt. Some wine and distilled liquor are now sold in cans just like ones that soda and beer are packaged in, so it makes sense to at least include them. Wine bottles should be able to go through reverse vending machines, but it may be a challenge for the wide variety of shapes and sizes of distilled liquor containers to be accepted by the machines. Expanding the Bottle Bill Program to include wine and distilled liquor will require a statute change, since those beverages are excluded by law.

2d. It is reasonable to add an incentive for consumers to redeem containers by establishing a statute that calls for an increase of the refund value from 10 cents to 15 cents, if annual redemption rates fall below 80% for two consecutive years. However, the Bottle Bill Program would never need to invoke that statute if it was easier for consumers to return their containers. Consumers struggle to return their containers when staff at stores illegally refuse to accept their containers, make it difficult to return them, are rude and disrespectful to consumers, and set up roadblocks to returning containers that discourage consumers from even trying. Educating staff at stores and consumers about the laws, even basic laws such as stores that don't have reverse vending machines also must accept container returns, would go a long way toward making container returns easier for consumers.

OBRC's Green Bag program is very successful, but the audit notes that a recurring complaint about the program is incorrect amounts being credited to accounts. More people would likely sign up for the Green Bag program, which in turn could increase the annual redemption rate, if consumers could see a detailed accounting of returned containers and develop trust in they'll actually receive credit for each container.

2e. If the system changes so that the State receives at least a portion of the unredeemed deposits, the OLCC agrees that increasing transparency in the container return program by authorizing OLCC to inspect additional financial details of Bottle Bill regulated entities will be essential.

2f. As noted in the response to 2d, consumers will have more confidence that each redeemable container they return was counted and credited to them if they are given a detailed accounting of returned containers, specifically for the Green Bag program but also for any other redemption method.

2g. Stores and redemption centers along the border with Washington are seeing many fraudulent container returns. A study is being done to design a Bottle Bill for the State of Washington, and OLCC will provide whatever support and partnership required to help them establish a return system, hopefully one with an equivalent refund value for the same types of containers as in Oregon.

Please contact Nathan Rix, Deputy Director (971-401-1862) with any questions.

Sincerely,

Nathan Rix

cc:

Audit Team

Ian Green, M.Econ, CGAP, CFE, CISA, Audit Manager

Kathy Davis, Staff Auditor

About the Secretary of State Audits Division

The Oregon Constitution provides that the Secretary of State shall be, by virtue of the office, Auditor of Public Accounts. The Audits Division performs this duty. The division reports to the elected Secretary of State and is independent of other agencies within the Executive, Legislative, and Judicial branches of Oregon government. The division has constitutional authority to audit all state officers, agencies, boards and commissions as well as administer municipal audit law.

This report is intended to promote the best possible management of public resources.
Copies may be obtained from:

Oregon Audits Division
255 Capitol St NE, Suite 500 | Salem | OR | 97310

(503) 986-2255
sos.oregon.gov/audits