

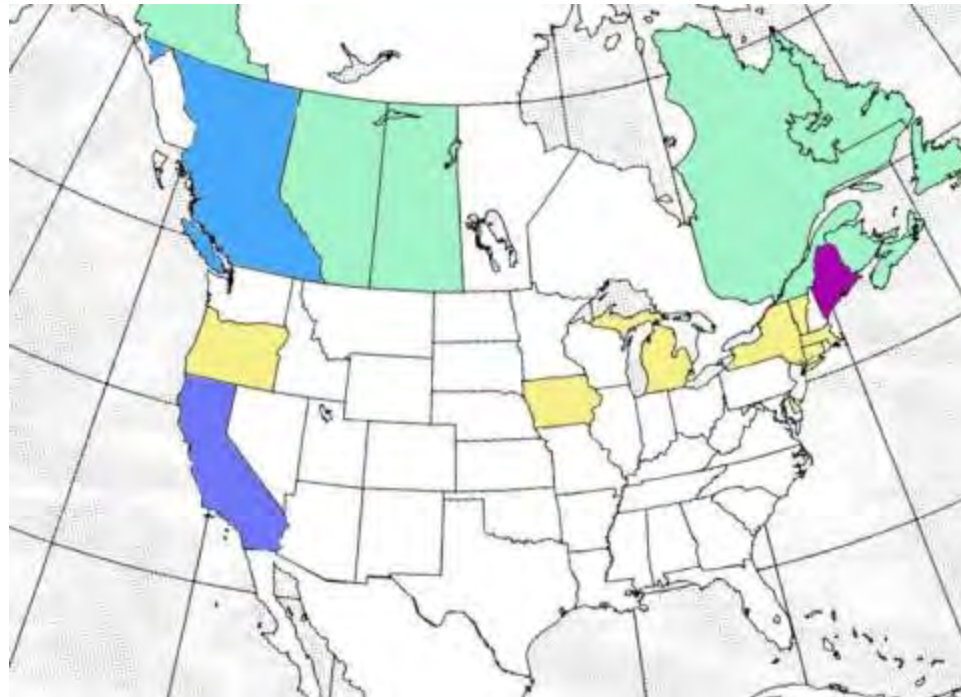


## British Columbia, California, and Maine Bottle Bills

November 9, 2007

Peter Spendelow

Oregon Department of Environmental Quality





# Maine

- **Passed by referendum in 1976, effective 1978**
- **Originally much like Oregon's law**
- **1 Cent handling fee introduced 1980**
- **1989 – Law expanded to cover all the beverages. British Columbia now covers, except paper drink boxes and gable tops**
- **Refund 5 cents for most containers, 15 cents for wine**
- **Handling fee now 3.5 cents per container, or 3 cents if commingling allowed between distributors**



# Maine Redemption

- **Handling fee leads to establishment of depots**
- **204 depots are redemption-only – no retail sales**
- **Another 100 or so do minimal retail – mainly depot operations**
- **Total of 800 locations take back containers – including many grocery stores**



# Distributor Responsibilities

- **No centralized accounting system – each distributor must collect and account for their own containers**
- **Distributors must collect their containers and pay refund value and handling fees to both the retailers they serve and the redemption centers in the area**
- **Almost all contract with one of the third party collection agents to collect their containers**
  - **Returnable Services / Nexcycle – largest 3<sup>rd</sup> party**
  - **Evergreen Environmental**
  - **Maine Recycling**
  - **National Beverage**
  - **United National Foods**



## Number of Sorts

- **Third party collection agents like Environmental Services must generally keep distributor/container types separate for accounting purposes**
- **Capitol Recycling in Augusta (owned by Nexcycle) sorts containers into 280 categories**
- **Biddleford Bottle and Can sorts containers into more than 400 categories.**
- **Gatorade wants their containers sorted into 9 categories – by type/size.**

# Maine

**Capitol  
Container  
owned by  
Nexcycle**



**Customers  
at the  
window  
generally  
with  
unsorted  
containers**



# Maine

**Staff count  
and sort  
containers  
into about  
18  
categories  
on first  
touch**



# Maine

**About 75-80% of containers sorted with one touch**



# Maine

**20-25% of  
containers  
taken to  
back area  
for further  
sorting**



# Maine

**More  
sorting  
and  
storage**



# Maine

**Third sort  
necessary  
for rarer  
containers**



# Maine

**Eventually  
containers  
are taken  
away or  
loaded out  
for  
processing**



**Sorting by distributor can lead to distinctive bales**



**Aluminum  
ready to be  
sold**



# Maine

**Rolando's  
Recycling –  
a small  
redemption  
center**



**Customer  
with  
unsorted  
containers  
in plastic  
bags**



**Sorting  
(first sort)  
and  
counting  
containers**



# Maine

**Customer  
gets paid**



# Maine

**Don Cook,  
Manager of  
Rolandos,  
sorts rarer  
containers  
into  
smaller  
containers**



# Maine

**Grocers  
not served  
by depots  
must take  
back  
containers**



# Maine

**High  
handling  
fees make it  
more  
economical  
for grocer**



# Maine

**RSVP  
Redemption  
Center uses  
reverse  
vending  
machines –  
rare for a  
depot**



# Maine

**But some  
containers  
do not fit in  
the  
machines  
and must be  
sorted by  
hand into  
bags**



# Maine

**CLYNK  
Drop & Go  
valet  
recycling?**



# Maine

**Customer drops of bag with personal bar code even after hours. CLYNK runs containers through machine and credits customer's account**



# Maine

**Machine  
must be fed  
by hand 1  
container at  
a time –  
handles  
2000  
containers  
per hour**



# Maine

**Machine scans bar codes, records count by container type, credits customer account, drops containers in appropriate bin**





## Return Rates 2005 Glass, Metal, Plastic

State/Province	Return Rate	
Oregon	82%	Includes, curbside, No water, juice
British Columbia	83%	
Maine	Unknown	Wide range of estimates
California	60%	