Florida Department of
Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

February 1, 2010

The Honorable Charlie Crist
Governor of Florida
Plaza Level 05, The Capitol
400 South Monroe Street
Tallahassee, Florida 32399-0001

The Honorable Jeff Atwater, President
Florida Senate
Room 312, Senate Office Building
404 South Monroe Street
Tallahassee, Florida 32399-1100

The Honorable Larry Cretul, Speaker
Florida House of Representatives
420 The Capitol
402 South Monroe Street
Tallahassee, Florida 32399-1300

Dear Governor Crist, President Atwater and Speaker Cretul:

I am pleased to submit the *Retail Bags Report to the Legislature* as required in section 403.7033, Florida Statutes. The Energy, Climate Change, and Economic Security Act of 2008 directed the Florida Department of Environmental Protection (DEP) to analyze, research and report on the "necessity and efficacy" of statewide or local regulation of retail bags. This was in response to concern about the impact of retail bags on the environment and the growing interest among local governments to develop prohibitive ordinances. Pursuant to section 403.7033, Florida Statutes, no state or local retail bag regulations can be enacted until the Florida Legislature takes action.

The information and options in the enclosed report were developed based on extensive research and the invaluable contributions of stakeholders who participated in two public workshops. An even wider range of ideas were submitted through DEP's Web forum and E-mails.

Almost every retail establishment has some sort of bag for its customers and studies show that Americans used almost 90 billion retail bags in 2003. A small percentage of these bags are reused or recycled and while many retail establishments have taken steps

to address this problem, there is still a potential for harm to the environment due to improper handling and disposal. This report explains how improperly discarded plastic bags can affect wildlife, marine life, landfill operation and flood control systems and explores the various approaches that other states and countries have taken to address this issue. Included in the report is a wide-ranging set of options for decreasing the number of bags being used as well as increasing the number of bags being recycled.

DEP believes there are ways to reduce our dependency on these bags and to properly reuse or dispose of them. It is recommended that the Legislature review the available options and take action to discourage the use of single-use paper and plastic retail bags and encourage the use of reusable retail bags. I look forward to working with you as you consider them. With the cooperation and support of the retail industry working closely with local and state government, this goal can be achieved.

If you have questions regarding this report, please contact Mary Jean Yon, Director of DEP's Division of Waste Management, at (850) 245-8693 or Mary.Jean.Yon@dep.state.fl.us.

Sincerely,

Michael W. Sole
Secretary

Enclosure

cc: The Honorable Lee Constantine, Chair, Senate Environmental Preservation Committee
The Honorable Trudi Williams, Chair, House Agriculture and Natural Resources Committee
Mimi Drew, Deputy Secretary, Regulatory Programs, DEP
Cameron Cooper, Director, Office of Legislative Affairs, DEP
Mary Jean Yon, Director, Division of Waste Management, DEP

Retail Bags Report

For the Legislature

Florida Department of Environmental Protection

February 1, 2010

2600 Blair Stone Road MS 4570
Tallahassee, Florida 32399-2400
www.dep.state.fl.us

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www.dep.state.fl.us

Executive Summary

"Paper or plastic?" Millions of Floridians hear the question every week. Almost every retail establishment has a bag for its customers and Americans used almost 90 billion of them in 2003. Retail bags are most commonly paper and plastic single-use bags. Only a relatively small percentage are reused or recycled (12% of plastic bags and 37% of paper bags) while far too many damage the environment because people improperly handle and dispose of them. Besides being unsightly litter, discarded plastic bags harm land and marine wildlife, interfere with landfill operations, clog flood control systems, and breed mosquitoes. These problems are not unique to Florida. The most dramatic illustration of the environmental damage from plastic bags and other marine debris are the floating "garbage patches" in the Atlantic, Pacific and Indian Oceans—the largest covering an area almost twice that of the United States.

Only 12% of plastic bags and 37% of paper bags are reused or recycled.

As part of the Energy, Climate Change, and Economic Security Act of 2008 (Section 403.7033, Florida Statutes), the Florida Legislature directed the Department of Environmental Protection to undertake an analysis of the need for new or different regulation of auxiliary containers, wrappings, or disposable plastic bags used by consumers to carry products from retail establishments. The information contained within this report provides an assessment of the impacts associated with current use and disposal of these containers as well as an analysis of the efficacy and consequences associated with several potential policy options to provide policymakers the information needed to weigh and balance the effect of proposed actions on the environment, regulated community and the consumer.

The *necessity* of retail bag regulation is determined by examining the impact of retail bags on the environment. *Efficacy* is determined by examining the effectiveness of governments outside Florida in reducing the number and impact of retail bags through regulation. Nationally, retail bag regulations have been enacted or proposed at either the state or local level in 30 states. Retail bag regulations are also found on the six populated continents.

Improper handling and disposal of retail bags has been shown to harm the environment. While plastic bags may appear to be the major problem, the solution is not to switch to paper. Life cycle analyses show a higher level of environmental harm from manufacturing to disposal of paper compared to plastic bags. A switch to biodegradable or compostable bags is not the answer either. Since Florida has no solid waste commercial scale composting facility to handle these bags, they would end up in a landfill just like paper or plastic bags.

There are many locations with different types of retail bag regulations. While all strategies to reduce the use of retail bags have merit, some are more effective than others. Although they initially pose an inconvenience for some consumers, bans produce the fastest results, closely followed by user fees and taxes. Voluntary efforts are more readily accepted by the retail

industry and the public, but take more time to produce results. While voluntary efforts can be helpful in changing behavior patterns, their effectiveness is dependent on the number of retail establishments participating. Public education is crucial to any approach, to illuminate the damages caused by single-use bags, and the cost to undo the harm, and promote reusable bags. Collaboration with the retail sector is also essential.

Plastic and paper bags are not inherently bad but they have terrible consequences in a throw-away society—and there are simple, readily available ways to reduce our dependency and properly reuse, recycle or dispose of them. This report identifies strategies to discourage the use of single-use paper and plastic retail bags and encourage the use of reusable retail bags. With the cooperation and support of the retail industry working closely with local and state government, this goal can be achieved.

Acknowledgments

The Florida Department of Environmental Protection (DEP) extends its gratitude to the many stakeholders from the public and private sectors that invested their time and contributed their insights to the development of this report through public meetings, written comments and electronic submissions.

Two public meetings were held to exchange information and solicit input on the retail bags report and the surrounding issues. These meetings generated lively discussion and valuable information that helped produce this report.
- November 19, 2008 in Orlando - 36 attendees, excluding DEP staff
- November 19, 2009 in Tallahassee - 27 attendees, excluding DEP staff

DEP also established a web-based forum for ongoing public comments and regular stakeholder updates. Meeting summaries, draft notes and other details, as well as access to the web-based forum, can be found at www.dep.state.fl.us/waste/retailbags. This site has been visited nearly 6,000 times.

DEP also appreciates the involvements of the professional associations and trade organizations that effectively represented their members' interests and were critical in identifying options and recommendations:
- American Chemistry Council
- American Forest and Paper Association
- American Paper Bag Council
- Florida Dry Cleaners Coalition
- Florida Recycling Partnership
- Florida Retail Federation
- Recycle Florida Today
- Sierra Club of Florida

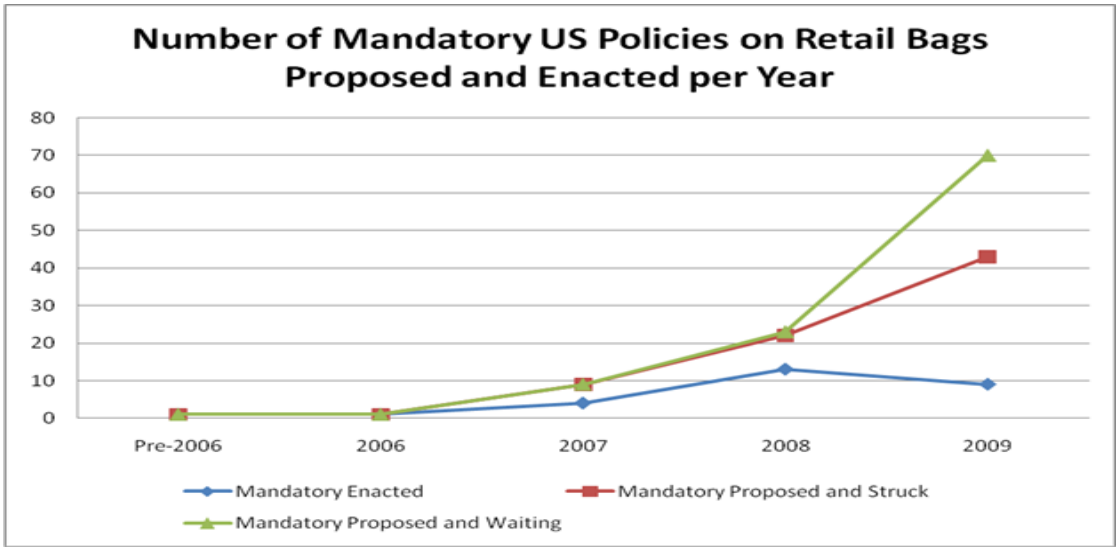
Introduction

Americans used almost 90 billion retail bags in 2003, most of which are used only once and end up in landfills or stormwater systems or littering roadsides, green spaces and beaches across Florida. As part of the Energy, Climate Change, and Economic Security Act of 2008 (Section 403.7033, Florida Statutes, see **Appendix A**), the Florida Legislature directed the Department of Environmental Protection to undertake this analysis of the need for new or different regulation of auxiliary containers, wrappings, and disposable plastic bags used by consumers to carry products from retail establishments. The following explanation of these terms is included to assist the reader. In this report, these are all generally referred to as "retail bags" or "single-use" bags:

- **Auxiliary container:** A secondary container into which a product is placed for transport by a consumer. It includes reusable bags, paper bags, gift bags, gift boxes, hat boxes, and cloth bags--everything but plastic bags.
- **Wrappings:** Includes plastic wrapping for items that are used to protect and transport the items within.
- **Disposable plastic bags:** Includes plastic bags (of any thickness) used by consumers to carry products from establishments. These bags are not necessarily meant to be re-used multiple times, but may have beneficial secondary uses.

The report examines the impact that the improper handling and disposal of retail bags has on wildlife and the environment as a whole. It also includes examples of cities, states, and countries around the world that have taken steps to decrease the use of both plastic and paper retail bags. **Figure 1** shows that the number of mandatory policies for bag reduction in the U.S. has increased steadily since 2006. These actions are considered in light of voluntary measures being taken by various retail establishments in Florida. This review has yielded twelve options to be considered by the Legislature.

Figure 1



Necessity of Regulation

There are two major areas of concern regarding retail bags. First, improper disposal of retail bags hampers recycling, waste management, stormwater management, and litter control. Second, improper disposal damages natural systems and wildlife. These concerns are not unique to Florida, and how Floridians manage retail bags has implications beyond the state's borders. Retail bags fast become pollution affecting Florida's fresh and saltwater resources, animal welfare and, on a grander scale, the health of the world's oceans. Any consideration of regulating retail bags has to account for the worthwhile efforts already underway to reduce the number of bags in circulation or recycle them.

Litter and Waste Management

Litter – Land and Marine

When examining retail bags as litter, DEP looked at previous studies in Florida and neighboring states, including studies that specifically targeted retail bag litter and auxiliary containers such as fast food bags and boxes. The most recent Florida roadside litter study was in 2002 and included plastic bags, paper bags and cardboard containers, referred to as "outer packaging." The study found:

- All types of plastic bags accounted for 1.21% of all large litter items,
- Paper bags, including those that are used specifically to hold take-out food items, accounted for 0.64% of all large litter items,

- When cardboard boxes are included, these "outer packaging items" accounted for 2.23% of all large litter, and
- Plastic film, which may be partially degraded, ripped or shredded plastic bags, accounted for 8.74% of all small liter items found.
- Overall, there was an estimated 25% increase in large item litter density from 2001 to 2002 and a 37% decrease in small item litter density[1].

The 2007 International Coastal Cleanup Report, a publication compiled by the Ocean Conservancy with reporting performed by volunteers, states that bags are the fourth most frequently found item during coastal cleanups worldwide, accounting for 8.1% of all items found[2]. The Florida-specific report from this international effort shows similar results with bags again ranking as the fourth most commonly found item[3]. Roadside litter studies from other areas have retail bags and fast food bags accounting for less than 3%[4]. Clearly, reducing plastic and paper bags will not solve the litter problem, but they are a manageable source that can make a difference.

Bag Reuse

Some people reuse their plastic and paper bags for a variety of purposes. One concern posted often on the DEP web forum is that regulation of paper or plastic bags would prevent people from reusing bags for pet waste pickup and in-home trash. Surveys performed in Australia show that 60-75% of shoppers reuse their plastic shopping bags for one additional use after bringing them home from the store, most commonly for pet waste and trash liners.[5] However, reuse and recycling rates for plastic bags in Florida are far lower, only around 12%.

That said, there are opportunities for reuse of non-retail plastic and paper bags. Frequently, grocery and drugstore products have secondary or primary containment within a plastic or paper bag. Small changes, such as using bread bags instead of plastic retail bags for pet waste pickup, can ease the perceived inconvenience of losing retail bags if regulations were to be enacted. Education is one key to helping consumers make better choices.

According to analyses, between 56.8 and 315.15 disposable plastic bags are replaced by a single reusable bag in one year.

Estimating how many disposable bags would be replaced by one reusable bag is difficult. However, many life cycle analyses and other reports have attempted to do this. The range for the number of "disposable" plastic bags that could be replaced by one reusable bag in a year's time, according to the analyses DEP reviewed, is between 56.8 to 315.15 "disposable" plastic bags replaced by a

[1] Hinkley Center for Solid and Hazardous Waste Management, 2002
[2] Ocean Conservancy, 2007
[3] Ocean Conservancy, 2008
[4] MGM Management, 2002, Southeast Environmental Association, 2009
[5] Environment Protection and Heritage Council, 2002

single reusable bag. The actual number replaced would depend on the shopping habits of the owner of the bag, the material from which the re-usable bag is made, the size of the bag itself and whether or not it is a single trip replacement or lifetime replacement. Still, even at the low end—taking nearly 60 disposable bags out of circulation for every one reusable bag—is remarkable.

Recycling and Retail Efforts

Recycling is another option available to consumers rather than reusing the bags or just throwing them away. Designated retail bag recycling containers are found at several retail stores. The city of Parkland (Broward County) works with local Publix grocery stores and holds a plastic bag recycling contest for schools and coordinates with homeowners' associations to place additional plastic bag recycling bins around the city.[6]

Besides local governments, many large retailers have shown leadership in recycling and reuse. Many have sold or given away millions of reusable shopping bags over the last few years. **Appendix B** lists a few of these retailers and includes their efforts at reducing the use of disposable retail bags. There are also a large number of organizations and grass-roots efforts around the world working to reduce the use of disposable retail bags, recycling or improved technology. **Appendix C** includes a partial list of organizations and their websites.

As noted, the U.S. Environmental Protection Agency (EPA) estimates that 12% of all plastic bags are recycled. More than 4 million tons of plastic bags, sacks and wraps were reported to be generated in the U.S. municipal solid waste (MSW) stream in 2007, with only 11.9% of the high density polyethylene (HDPE) and 12.4% of the low density polyethylene (LDPE) bags, sacks and wraps being recovered (recycled). To derive these data, the EPA used the American Chemistry Council's annual resin reports for generation amounts, and data from the American Chemistry Council and the National Association for PET Container Resources to determine recovery rates.[7]

Waste Management

Retail bags cause equipment and operational problems at recycling facilities, landfills and waste transfer stations. The machinery on trucks and separators is frequently impaired because plastic bags wrap around wheels, gears and other parts of the equipment, forcing work to stop while someone extracts the plastic and restarts the process. This happens daily at recycling facilities and employees risk injury by reaching into sharp or pinching areas to free the plastic from the machinery.

[6] Archer, 2009
[7] US EPA, 2007

At landfills retail bags also get wrapped around spreaders and other equipment as well as cause problems by becoming airborne. Some waste management professionals consider plastic retail bags to be the number one "fly away" issue at landfills. Litter flying off landfills angers nearby residents, requires extra work to pick up and return the escaped trash, and may require additional daily landfill cover.

Retail bags frequently clog stormwater pipes, clutter stormwater retention ponds, and are regularly found by crews cleaning roadways, ditches and flushing pipes. In Tallahassee (population 172,000) there are three large flush trucks with two-person crews that work every day to keep stormwater drains open.[8] There are more than ten people assigned to perform daily trash pickup from stormwater drains and ditches. The city also employs another six people to pick up roadside trash and utilizes inmates to assist with this job.[9]

In Marco Island, a flood was found to be caused by drains clogged with palm fronds, coconuts and plastic bags.

In Marco Island, an April 2008 flood was found to be caused by drains clogged with palm fronds, coconuts and plastic bags.[10] In other areas of the world, plastic bags have been directly linked to flooding and even to malaria outbreaks.[11] Plastic retail bags are not the only culprit but, again, they are a source that readily can be controlled.

Biodegradable Bags

Biodegradable and compostable bags are gaining attention as alternatives to plastic and paper bags. The technology has improved since first introduced and some manufacturers now market biodegradable bags with a "lifespan." There are multiple types of biodegradable and compostable bags. Compostable bags should meet ASTM D6400-04, the standards for plastics designed to be composted in municipal and industrial aerobic composting facilities.

Biodegradable bags now fall into the following categories:

- Photo-degradable react to ultra-violet light to break down.
- Hydro-biodegradable react to "moist biologically active" environments to break down.
- Oxo-biodegradable use additives to react with the atmosphere in order to break down.[12]

While bags that do not persist in the environment sound like a positive step, there are serious drawbacks. All types of biodegradable and compostable bags must be placed under specific conditions to degrade properly. For instance, a photo-degradable bag will not break down if it is covered by water or otherwise obscured from light and an oxo-biodegradable bag requires

[8] U.S. Census Bureau, 2009
[9] Yarborough, 2009
[10] Dillon, 2008
[11] United Nations Environment Programme (UNEP), 2005
[12] Scott, 2002

direct access to oxygen and sunlight to degrade. Any consumer who places a labeled "biodegradable" bag in the home compost pile will not see the promised degradation because the required high temperatures achieved in municipal composting facilities cannot be achieved with home composting. Additionally, some of these bags leave plastic pieces or other residues when they break down, leftovers that natural systems and wildlife cannot tolerate. Finally, biodegradable bags inadvertently lead to litter because consumers assume the bags will quickly break down or compost, whatever the conditions; they discourage environmental stewardship.

Wildlife and the Environment

The problems caused by throw-away bags do not affect humans alone. Auxiliary containers, retail bags and wrappings can change the ecosystems of rivers, streams, lakes, ponds, estuaries, and oceans. The bags block sunlight from reaching into the depths of the water, leading to stress on aquatic vegetation, plant death and a reduction in the oxygen level of the water. Unnaturally low oxygen levels kill fish and other animals. In addition, filter feeders ingest the plastic particulates that are produced by the degradation of plastic in the water. The effect of this latter phenomenon on the rest of the food chain over the long term is not currently known.[13]

Marine and Land Animals

A major concern about plastic bags is their role in the death of marine animals. Research shows that frequently this number is exaggerated or simply misstated. A commonly stated "fact" that is widespread on the internet is that 100,000 animals are killed annually by plastic bags. The citation for this number is from a Canadian study which did *not* point to plastic bags as the cause of death but instead attributed these deaths to discarded fishing nets.[14]

However, it is true that researchers are finding some animals that have ingested or become entangled in plastic bags, although rigorous scientific research is just beginning. Testimonials from beach cleanups and other litter cleanup efforts, sometimes supplemented with photos or videos, show the suffering and deaths of animals caused by plastic containers—a consequence, however anecdotal at this point, that is difficult to rationalize when solutions are within reach. Many marine animals including sea turtles and the larger predators (whales, seals, sea lions, etc.) are already classified as endangered or protected. A variety of research has shown that turtles and other sea dwelling creatures ingest plastic and plastic bags. One study found plastic in the stomach of 15% of the 66 post-hatchling loggerhead sea turtles surveyed.[15]

There is some evidence that land animals can also be harmed by retail bags and auxiliary containers. Vehicular deaths of scavenging animals, including birds and raccoons, are

[13] Thompson, et al., 2004
[14] Piatt & Nettleship, 1987
[15] Witherington, 2002,Thompson, et al., 2004, Mato, Isobe, Takada, Kanehiro, Ohtake, & Kaminuma, 2001

frequently attributed to the litter thrown out of cars. The accompanying food waste attracts the animals to the road or roadside and they are struck while trying to feed.[16]

In India, plastic bag regulations were enacted in part to preserve the health of cows. The cattle, considered sacred, were similarly attracted to the food waste found inside discarded bags and were consuming the food waste and bag as one. As more cows died, measures were taken to reduce suffering and deaths of animals with stomachs full of plastic bags.[17] Animals that scavenge at landfills are also injured or killed because of the availability of auxiliary containers, plastic bags and wrappings. Scavenging birds and birds of prey hunting rodents can become entangled in the wrappings or bags or ingest large amounts of plastic.[18] Deer, raccoons, possums, bears and other garbage and landfill scavengers have also been found with retail bags within their guts or have been seen eating such items. Retail bags, plastic in particular, can cause digestive system obstruction and lead to a variety of deaths, including starvation.[19]

Plastic Bag Degradation

The effect of plastic upon the oceans is not limited to the ingestion of plastics by marine animals. As plastic degrades, it flakes and breaks into small, fairly flat particles. These particles are not unlike plankton in size and appearance and have been found floating in the open ocean. In some places these particles are estimated to outnumber actual plankton. A research ship from the Algalita Marine Research Foundation has preliminary data from 2008 showing a total ratio of plastic to zooplankton for all samples of 8 to 1. In one sample, the ratio was 46:1, plastic to plankton.[20]

A National Oceanic and Atmospheric Administration (NOAA) study in 2008 determined a lower ratio.[21] However these two studies were performed in different areas at different times of the year. As with the filter feeders in brackish and fresh waters, the effect of plastics ingestion on the food chain is unclear. The world's largest marine mammals, blue whales, are filter feeders that eat an estimated 2,000 to 9,000 lbs of plankton and krill—or other things that cross their filters—every day.

Plastic Pellets

In addition to the bags, wrappings and containers that go out as litter or waste and degrade from their useful stage into small plastic particulates, there is another plastic problem in the oceans. The raw materials used in manufacturing can also escape from the manufacturing plant and degrade in the environment. When plastic is created, it starts as large amounts of very small, spherical pellets called "nurdles." Since nurdles are small and light, and therefore

[16] Harris & Scheck, 1991
[17] Edwards, 2000
[18] Molina & Garrett, 1998, Elliott, Duffe, Lee, Mineau, & Elliott, 2006
[19] Drever, 1997, Stone, Okoniewski, & Stedelin, 1999, Jonkel, 1994, Totton, 1997
[20] Algalita Marine Research Foundation, 2009
[21] Doyle, 2008

highly mobile, a large amount is lost in transport and manufacturing and ultimately washed into stormwater drains or sewers.[22]

When these nurdles reach waterways they degrade similarly to plastic bags but instead of flaking off in small layers they lose small amounts of plastic and gradually become smaller and smaller plastic balls. Nurdles can look like a number of oceanic food items, not the least of which is fish eggs. One study performed on seabirds showed 55% of the bird species studied had ingested plastic particles.[23] It is unknown if any chemicals from the plastic can be absorbed by the bird's body, but it is known that ingestion of large amounts of non-food items can cause gut obstruction and ultimately death by starvation or nutrient deprivation.

The actual number of nurdles released to the environment each year is unknown, but they have been found in the oceans and seas for decades. Researchers began studying nurdles and their effects on the oceans in the 1970s.[24] In 1993, the U.S. EPA Office of Water published a report on plastic pellets that identified them as being of particular concern.[25]

Water Pollution/Chemical Leaching

Plastic bags are made from natural gas or petroleum. Plastic bags made in the U.S. are usually made from natural gas while imported bags are more likely to be made directly from petroleum.[26] In 2004, the U.S. International Trade Commission reported that the trend in plastic bag use in the U.S. was an increase in imported bags and a decrease in domestically produced bags, but an overall increase in bag consumption. Assuming the trend has continued, most bags consumed in the U.S. are made from petroleum.[27]

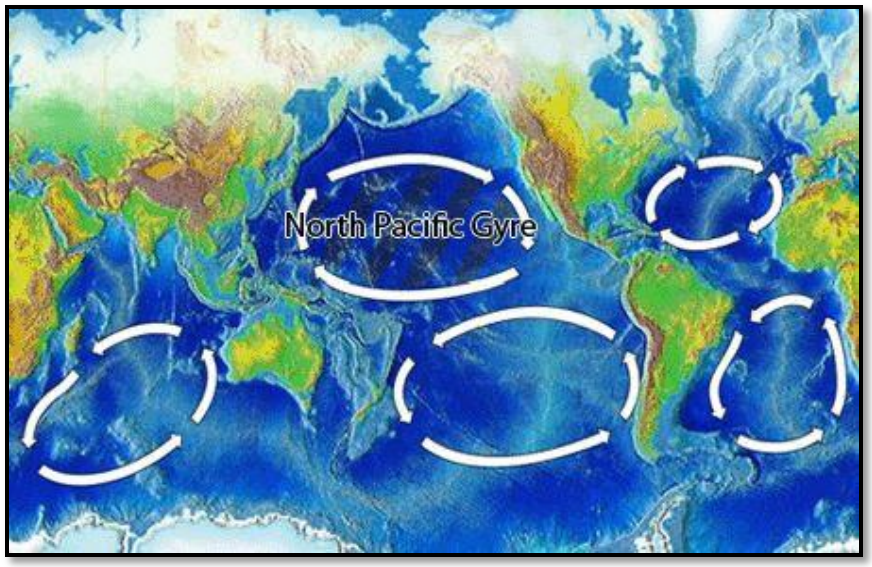
There are many other chemicals and slight impurities in the composition of plastic bags. As the bags degrade, some of these chemicals are released into the water or atmosphere. It is likely that degradation of plastic bags releases greenhouse gases although estimates as to the amount that may be released could not be found. In addition, the plastic nurdles or pellets have actually been found to absorb and become a transport medium for toxic chemicals, including PCB (polychlorinated biphenyl) and DDE (Dichlorodiphenyldichloroethylene, a DDT breakdown product).[28]

North Pacific Gyre

Plastic-filled "garbage patches" and "plastic gyres" in the oceans have been media topics in recent years and the subject of much discussion. An ocean gyre is a circular ocean current created by the winds. There are five major ocean-wide gyres, the North Atlantic, South

[22] Redford, Trulli, & Trulli, 1997
[23] Lee & Moser, 1992
[24] Carpenter & Smith, 1972
[25] U.S. EPA Office of Water, 1993
[26] U.S. International Trade Commission, 2004, American Chemistry Council, 2007
[27] American Chemistry Council, 2007
[28] Mato, Isobe, Takada, Kanehiro, Ohtake, & Kaminuma, 2001

Atlantic, North Pacific, South Pacific and the Indian Ocean gyres. Drifting items can become a part of the gyre and in some places large amounts of floating debris held within the gyre by currents have been named garbage patches and plastic gyres.



Research from many sources, including the NOAA and an independent research team from Algalita, shows that there are current-produced gyres in the oceans and most of them hold large amounts of marine debris. The most publicized gyre is a North Pacific Gyre, an area roughly twice the size of the U.S. stretching between the coasts of western North America and eastern Asia. Initially it was thought that within the North Pacific Gyre there were smaller gyres, patches about the size of Texas, filled with garbage. Research now shows that the marine debris is not limited to these patches and higher levels of debris density have been found outside these areas.[29]

Life Cycle Analyses

This analysis has primarily focused on the plastic auxiliary containers, wrappings and bags because paper bags and containers more readily degrade, are more readily recyclable, and are less likely to be the cause of death in animals because they can be digested more easily. In 2007 the EPA estimated that 36.8% of all paper bags and sacks generated were recycled, about three times the rate for plastic.[30] The higher rate of recycling for paper bags indicated in **Figure 2** versus the 12% recycling rate for plastic bags shown in **Figure 3** is often attributed to the fact that most local recycling programs will accept paper bags but not plastic bags.

[29] Algalita Marine Research Foundation, 2009
[30] U.S. EPA, 2007

Figure 2

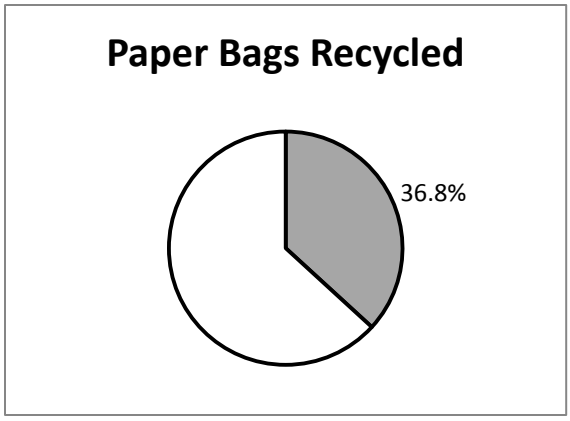


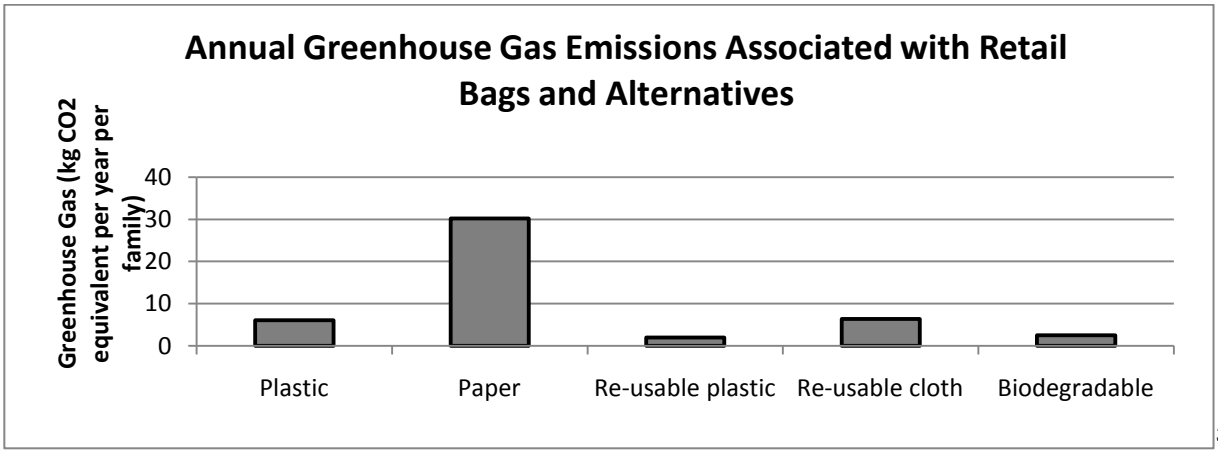
Figure 3

Paper bags are often not considered a problem or, indeed, are sometimes seen as the solution to the plastic problem. Conventional wisdom is wrong. When reviewing life cycle analyses of paper bags and plastic bags, it is evident that there are more negative overall environmental impacts attributed to the transport and production of paper bags. **Figure 4** shows a comparison of the annual greenhouse emissions associated with retail bags. This evidence, and more likely the fact that paper bags are more costly than plastic bags, explain—and even support—the preference of plastic over paper.[31]

Both types of bags comprise approximately the same amount of recycled content. The manufacturing industries for both paper and plastic claim an average recycled content of 30% for the typical bag produced. The life cycle analyses reviewed for this report indicate that increased recycled content does reduce greenhouse gas emissions and related environmental impacts when compared to bags made with virgin materials. However, recycled content is only a step in the right direction—protecting Florida's wildlife and the environment is contingent on better handling and a reduced demand for the manufacture of paper and plastic bags.

[31] Hyder Consulting Pty Ltd., 2007, Herrera Environmental Consultants, Inc., 2008

Figure 4



[32]

Conclusions on the Necessity of Regulation

While evaluating the necessity of bag regulations, the good practices that citizens and retail establishments are already undertaking to reduce the number of retail bags in circulation must be recognized. As previously noted, current efforts among grocery stores, such as Food Lion, Publix, Albertsons and Winn Dixie to offer the opportunity to recycle and use reusable bags help change the mind-set of a throw-away society. Large retailers such as Target and Walmart employ similar practices and help increase the number of shoppers exposed to this way of thinking and acting. Nationwide, Walmart has committed to reducing plastic bag usage in their stores by 25% per store by 2013.

Walmart has committed to reducing plastic bag usage in its stores by 25% per store by 2013.

The question then becomes—will these actions be enough to rule out the need for any retail bag regulation? About thirty states have enacted or proposed regulations statewide or at the local level. In April 2009, Congress introduced the "Plastic Bag Reduction Act of 2009" (H.R. 2091). Retail bag regulations are also found on all six populated continents. Worldwide, the number of countries with retail bag regulations has been steadily increasing since the early 1990's. There are 41 locations with bans, 16 with taxes or fees, 28 with other restrictions or regulations, and 52 that currently have one or more proposed regulations.

Of the eight states in Environmental Protection Agency (EPA) Region IV, including Florida, there is one that has enacted retail bag regulation. In June 2009 the North Carolina General Assembly passed Senate Bill 1018, which bans retail stores in the Outer Banks from distributing plastic bags to customers and allows paper bags to be given away only if the bag is made of recycled content.

[32] James & Grant, 2005, Environment Protection and Heritage Council, May 2008

Of the nation's ten most populous states (Florida is #4), eight have proposed or enacted retail bag regulations at either the state or local level: California (#1), Texas (#2), New York (#3), Illinois (#5), Pennsylvania (#6), Ohio (#7), Michigan (#8) and North Carolina (#10). There has been some interest in regulating retail bags at the local level in Florida. Bonita Springs (Lee County) considered including retail bag bans as a legislative priority in 2009. Additionally, the cities of Sarasota (Sarasota County), Parkland (Broward County), Miami (Miami-Dade County) and Key West (Monroe County) all considered regulations on retail bags before the Legislature enacted a stay on local government regulations in 2008 and directed DEP to prepare this report.

Efficacy of Regulation

Many citizens, businesses and governments across the U.S. and the world have already decided that retail bags have to be better managed. What, then, are the most efficient and effective ways to do so? Regulatory and non-regulatory options, and the ways they can be integrated, have to be examined to answer the question. So do the incentives and disincentives that could be applied at the retail and consumer levels.

There are several things to consider when assessing the efficacy of statewide and local regulation of retail bags. Clearly the effectiveness of regulations would be measured by the reduction of single-use retail bags. Perhaps efficacy could also be measured by behavior change. If consumers simply no longer have the option of receiving a single-use bag, is the effort effective? Without behavior change and education, it is possible that consumers may make choices that are equal to if not worse than the current situation. To avoid this, consumers must have sustainable options to compensate for single-use retail bags. It would also be helpful to have a combination of incentives and disincentives supported by the retail industry to increase the use of reusable bags.

The following sections discuss various regulatory and non-regulatory approaches used by other cities, states and countries, including twelve options posed for consideration in Florida.

Regulatory and Non-Regulatory Options

Bans

Banning auxiliary containers, wrappings or plastic bags has rarely been enacted into law at higher than local levels. In the U.S., with one notable exception, only a few small villages in Alaska, a small town and a county in Hawaii, a county in Iowa, four cities in California, and one other town in Washington have enacted bans on retail bags. Many other places have proposed or considered bans. A few communities in Florida, including Parkland in Broward County, considered a ban before the stay on retail bag legislation was enacted by the 2008 Legislature.

The most publicized location in the U.S. with a ban is San Francisco, California. The city passed an ordinance in April 2007 that requires pharmacies and supermarkets with gross annual sales of $2 million or more to provide only paper, compostable bags or reusable bags. Proponents of the ban assert that there has been a 5% to 10% reduction in the amount of plastic bags reaching the landfill. Ross Mirkarimi, the City Supervisor and primary author of the ban, has been quoted to say that up to 127 million fewer plastic bags have been distributed in San Francisco just one year after the ban went into effect. [33]

[33] Eskenazi, 2009

More recently, as noted earlier, the North Carolina Legislature passed a ban for the Outer Banks. The ban prohibits retail stores having more than 5,000 square feet of retail space or that are part of a retail chain from distributing plastic bags to consumers and allows paper bags to be given away only if the bag is made of 100% recycled content. Because the ban only went into effect September 1, 2009, data on its impact is not yet available.

Fees and Taxes

Several places worldwide have passed fees or taxes on auxiliary containers, wrappings, or plastic bags. There are no locations in the United States that have enacted a fee or a tax on retail bags, but several locations have proposed or considered a retail bag tax. In all cases the proposal was dropped or voted down.

There have been some successes and some unintended consequences that merit examination.

- The Seattle, Washington City Council passed a twenty cent "green fee" on all disposable shopping bags in July 2008, but the fee would not become effective until approved by voters. On August 18, 2009 the citizens of Seattle voted against the "green fee" by a margin of 58% to 42%.
- Perhaps the most notable plastic bag tax was enacted in Ireland in 2002. The first year of the tax saw a 90% or greater reduction in plastic bag usage but an increase in the purchase of trash bags and dog waste pickup bags. Additionally, each successive year saw increased plastic bag usage. Because of this, the government increased the tax in 2007. After that, plastic bag litter was reduced from 5% of all litter to less than 0.3% percent the first year and to less than 0.25% in successive years.
    - Despite the initial setback, the levy was very popular. A 2003 national survey found that 91% of those surveyed were in support of the tax. A previous study performed in 1999 showed that 40% of survey respondents would have been willing to pay such a tax.[34]
    - All the funds from the Irish levy, in an effort to make the tax more acceptable to consumers, were placed in the "Environment Fund" and are used solely for environmentally related purposes. As reported in 2007, the levy has raised more than €85 million ($120 million) and has been used for many projects ranging from creating recycling facilities and return centers to educational campaigns. The revenues have also been used to help fund recycling facility operational costs and enforcement of waste management laws.[35]
- More recently, the City Council of the District of Columbia voted to create a five cent tax on both paper and plastic bags. The bill was signed by the mayor in July 2009 and will go into effect on January 1, 2010. The purpose of the bill is two-fold: to promote the use of reusable shopping bags and to add funding to the Anacostia River Cleanup and Protection Fund. One cent per bag is to stay with businesses and four cents is to go to the fund to help clean up the Anacostia River.

[34] Kildare County Council, 2008

[35] McDonnell, Convery, & Ferreira, 2007

Voluntary Measures

Target gives customers a five-cent discount for every reusable bag used at checkout.

Voluntary measures are important but difficult to quantify. Many retailers in Florida have enacted campaigns to reduce plastic bag usage. Reusable bags are available for purchase at nearly all the major chain retailers and a number of retailers have given reusable bags as promotional items. Albertsons gives customers five cents back on their purchase for every non-plastic bag used. Target and CVS have also recently implemented programs to give cash back to customers who bring in their own bags. Started in November 2009, the Target program gives customers a five-cent discount for every reusable bag used at checkout. In October 2009, CVS customers began to receive a one dollar bonus on their CVS cards for every four times a reusable bag is used. Publix, Food Lion, and Walmart all offer in-store or on-premises plastic bag recycling receptacles for customers. **Appendix B** is a list from the Florida Retail Federation describing current efforts of retailers in Florida.

In Austin, Texas there is a voluntary plastic bag use reduction and recycling program developed in partnership with Keep Austin Beautiful, The Texas Retailers Association, the Progressive Bag Affiliates, local retailers and the city of Austin. According to the city, Austin shoppers at participating retailers increased plastic bag recycling by more than 20% from 2006 to 2008 and stores gave out 40% fewer plastic bags at checkout. The program utilized an awareness campaign that included a campaign logo and reusable bag design contest, a kick-off event, a youth art contest, reusable bag day promotion, and a campaign website.[36]

Phase-Out

Phasing out retail bags is another method used to reduce the number of single-use retail bags and to help increase awareness. Typically, a phase-out is a multi-part approach often combining fees and bans progressively. There are no locations in the U.S. that have enacted a phase-out but several have proposed language with increasing fees or yearly requirements for decreasing retail bag usage.

The Ministers of the Environment Protection and Heritage Council (EPHC) in Australia agreed in October 2002 to pursue a number of actions relating to reducing the adverse impacts of plastic bags on the Australian environment. A number of work groups were put together to address different aspects of the issue. On July 1, 2005, after reviewing the research and report on the issue, the EPHC agreed to a phase-out of lightweight plastic shopping bags by the end of 2008. All shoppers and retailers were expected to have alternatives in place by December 31, 2008. However, after an analysis in April 2008 showed the economic costs of a regulatory

[36] Austin City Connection, 2008

phase out would significantly outweigh the environmental benefits, the EPHC resolved not to endorse uniform regulatory action at this time.

Local Government Regulations

As previously stated, there are no local regulations enacted in Florida due to the legislative preemption enacted in 2008. But there are local efforts outside the state, the majority being less than two years old. **Appendix D** lists all known locations with local regulations.

Since there are so many types of local regulations that affect varying populations and varying numbers of retailers and the regulations are so new, there is little data regarding their efficacy. However, there are some effects common to all local regulations. Differing local regulations are more difficult for chain retail stores to implement because they are regionally managed covering many communities or even states. Additionally, it is more difficult to realize widespread environmental benefits from local regulations if the affected areas are small. Enacting retail bag policies at the state level is easier for retailers to implement and can have broader environmental benefits. However, these considerations have to be balanced with the needs and demands of local citizens, and the expertise of local governments in preserving their local environment. The approaches are not mutually exclusive.

Other National and International Regulations

DEP has researched and compiled a summary of retail bag regulations throughout the United States and other countries. There are 33 countries worldwide that have enacted or proposed retail bag regulations. This information can be found in **Appendix E** and more information, with interactive maps is available on the DEP Retail Bag Report website at: www.dep.state.fl.us/waste/retailbags. These maps are regularly updated as DEP receives information regarding retail bag policies worldwide.

Conclusions on Efficacy of Regulations

The pros and cons associated with each option in the report are included to provide policymakers with the information needed to balance the effect of any actions taken in the future.

While all mechanisms to reduce retail bag usage have merit, some are more effective than others. Bans produce the fastest results in reducing plastic bag use; fees or taxes follow closely behind. Governments with fees or taxes usually devote at least some of the revenue to environmentally-related funds, although some allow retail stores to keep a portion of the proceeds. Many people and retailers prefer voluntary efforts simply because they are voluntary and because no new fees or administrative costs are required.

An effective educational campaign promoting reusable bag use and educating the public about the problems caused by single-use plastic and paper bags cannot be underestimated. Appropriately accounting for the legitimate concerns and entrepreneurial creativity of the retail sector is also essential to any successful campaign. The following table summarizes twelve options for reducing the use of single-use paper and plastic retail bags. The options should be considered both on their own merits and as they integrate well with other options to reverse the current practice of widespread use of disposable retail bags.

Finally, an assessment of the efficacy and consequences (pros and cons) associated with each option is included to provide policymakers the information needed to weigh and balance the effect of any potential actions on the environment, regulated community and the consumer.

Options for Discouraging and Reducing the Use of Single-Use Retail Bags

Option	Pros	Cons	Additional Comments
1. Enact an educational campaign	• Easy to implement	• Limited impact unless coupled with other option(s)	
2. Encourage In-Store Recycling	• Utilizes infrastructure that already exists in many stores • Increases recycling • Produces moderate quality feedstock • Material is in demand	• May be costly to stores • Does not accommodate compostable /biodegradable alternatives • Low to moderate participation in existing programs	
3. Retail Stores offer Reusable Bag Credit	• Allows retailers to be proactive • Gives retailers flexibility • Attractive to customers • Incentive aimed at changing behavior – reducing consumption	• Not attractive to all retailers • Credit is usually small (1 to 5 cents) and therefore undervalued by consumers	• Target performed a pilot study of a reusable bag policy at 100 stores and found a 58% reduction in the number of plastic bags used
4. Require biodegradable bags as an option at checkout	• Bags are easy for stores to purchase • Customers feel "greener"	• Bags are expensive, cost will be passed on to customers • Confusing for consumers who don't realize that the bags will not biodegrade in backyard composters • Can contaminate plastic recycling	

Option	Pros	Cons	Additional Comments
5. Require a certain additional amount of recycled content in bags	• Easy to accomplish for paper bags • Reduces some environmental concerns from manufacturing	• More difficult for plastic bags • Increased recycled content bags are more expensive • Does not address end-of-life concerns • Minimally addresses environmental concerns from manufacturing	• Current average recycled content for paper bags is 30% • Current average recycled content for plastic bags is 30%
6. Implement pilot program(s) of any of these options in a few key communities that have already expressed interest	• There are some communities in Florida that have already expressed interest	• Difficult for retail chains to implement something in just a small area	
7. Set a recycling rate goal (number of bags recycled per year)	• Increases recycling • Material is in demand	• Hard to track • Does not reduce the number of bags consumed • Does not address environmental concerns from manufacturing	
8. Require bag consumption reduction with plan to enact ban or fees if not reached	• Reduces bag consumption • Gives retailers flexibility	• Hard to establish a baseline • Very difficult for smaller stores to track	
9. Deposit System	• Customer gets amount of deposit back when bags are turned in for recycling • Increases recycling	• Requires stores to take bags back for recycling • Doesn't reduce the number of bags consumed	• No successful examples

10. Increasing fee over time	• Incentive to reduce consumption • Could provide funding for recycling programs and educational campaigns • Reduces litter • Reduces costs associated with clogged storm and sewer drains	• Fees may be perceived as a tax • May transfer business to surrounding locations • Potential job losses in plastic bag manufacturing and plastic recycling industries	
11. Flat fee *(no increase over time)*	• Reduces consumption • Reduces litter • Reduces costs associated with clogged storm and sewer drains	• Consumers get used to paying and consumption creeps back up, especially if inflation reduces the value of the fee • Fees may be perceived as a tax • May transfer business to surrounding locations • Potential job losses in plastic bag manufacturing and plastic recycling industries	
12. Ban	• Reduces consumption • Reduces amount of demand so amount of supply and resulting environmental damages should be reduced • Reduces litter • Reduced costs associated with clogged storm and sewer drains	• Some consumers like the convenience of store-provided bags • May promote shift to other disposable alternatives • Potential job losses in plastic bag manufacturing and plastic recycling industries	

Appendices

Appendix A: Energy, Climate Change, and Economic Security Act of 2008

Section 403.7033, Florida Statutes:
Departmental analysis of particular recyclable materials -- The Legislature finds that prudent regulation of recyclable materials is crucial to the ongoing welfare of Florida's ecology and economy. As such, the Department of Environmental Protection shall undertake an analysis of the need for new or different regulation of auxiliary containers, wrappings, or disposable plastic bags used by consumers to carry products from retail establishments. The analysis shall include input from state and local government agencies, stakeholders, private businesses, and citizens, and shall evaluate the efficacy and necessity of both statewide and local regulation of these materials. To ensure consistent and effective implementation, the department shall submit a report with conclusions and recommendations to the Legislature no later than February 1, 2010. Until such time that the Legislature adopts the recommendations of the department, no local government, local governmental agency, or state government agency may enact any rule, regulation, or ordinance regarding use, disposition, sale, prohibition, restriction, or tax of such auxiliary containers, wrappings, or disposable plastic bags.

Appendix B: Current Efforts of Retailers in Regards to Bags

This list of the current efforts conducted by retailers with stores in Florida was provided to DEP by the Florida Retail Federation. The numbers and data are listed as reported. DEP notes that many of the numbers may not be Florida-specific but may reflect regional or national results.

A. Albertsons:

- Sells or gives away reusable bags (42,405 bags since January 1, 2009).
- Offers a free promotion every week – buy X item and get a free reusable bag.
- Instituted a Bag Reuse Program:
    - Since January 1, 2009 324,760 bags have been reused.
    - Gives the customer 5 cents for every paper bag or reusable bag they use.
    - Has saved 649,520 bags so far this year.
    - Top areas in Florida for bag reuse in Albertsons stores: Sarasota/Bradenton, Venice Beach, Vero Beach and Gainesville.
- Uses Paper Handle Bags made with 45% recycled material and certified by the Sustainable Forest Industry in seven stores (cost is higher than traditional paper and plastic).
- Working with plastic bag manufacturer to source a stronger plastic bag made of at least 25% recycled plastic material. This bag is stronger and can hold more items. It is predicted that this bag will soon be made of 45% recycled plastic material.

B. Food Lion:

- Began selling reusable shopping bags on April 22, 2008, Earth Day.
- Has a current promotion for reusable bags being given away when a customer buys one of the following three products: Brita®, Greenworks®, or Scotts® towels. This promotion was ongoing until the end of June 2009 and put 17,000 free bags in the hands of consumers since April 22, 2009.
- Currently recycles all corrugated cardboard and plastic that can be recycled at the store.
- Offers in-store recycling of plastic bags, and a recycling message on the store's plastic bags. On the front of the bag on the bottom left hand corner is a "consider reusable bags" message and on the back is "please bring your plastic bags back to Food Lion for recycling."
- In 2007, recycled 7,730,869 pounds of plastic.

C. Publix:

- Offers in-store recycling of paper and plastic bags at all retail locations. Not only can customers drop off any brand plastic shopping bag for recycling, they can recycle plastic sleeves from dry cleaning and newspapers.
- Recycled 6,700 tons of plastic in 2008.

- Has sold reusable shopping bags made of canvas for many years. Since first offering the 99-cent reusable bag in mid-2007, Publix has sold over 7.5 million and given away many more.
- Initiatives to reduce the use of plastic bags include improved training for front service clerks; bag reduction goals for every store; monthly progress reporting; communication campaigns to encourage the use of reusable bags; and the distribution of free reusable bags through various partnerships.
- These initiatives have helped reduce Publix's use of plastic bags by over two-hundred million per year.

D. Target:

- Has given away or sold over 8.5 million reusable bags.
- Does participate in recycling programs in certain markets, but none currently in Florida.
- Currently reviewing its bag program to determine future plans.

E. Walgreens:

- Supports goal adopted by Progressive Bag Affiliates to increase recycled content of plastic bags supplied in stores to 40% by 2015 and make in-store recycling available to customers.

F. Walmart:

- Sells reusable bags (Walmart estimates it has sold enough reusable bags to eliminate the need for more than one billion plastic shopping bags.) Sells bags at two price points: one for $1.00 and a second for $0.50.
- Offers in-store recycling of plastic bags.
- Recycles shrink wrap, garment bags, and other loose plastic.
- All plastic and plastic bags collected for recycling are pressed between cardboard stacks in Walmart's "sandwich baler" process and sent to certified recyclers for processing. It is estimated this has eliminated more than 44 million pounds of plastic from landfills since 2006.
- Committed to reducing plastic bag usage in U.S. stores by 25% per store by 2013.
- Using a comprehensive approach to reduce plastic bag usage, including training associates regarding bagging efficiency and reduction of bag use.
- Has a company-wide sustainability goal to generate zero-net waste.

G. Winn Dixie:

- Sells reusable bags.
- Offers in-store recycling of plastic bags.
- Adopted use of Junior Bag in express and self checkout, which uses 20% less resin. (This is equivalent to a reduction of 308,000 pounds used on an annual basis.)

Appendix C: List of Groups, Organizations and Grass-Roots Efforts

Groups Interested in Reducing the Use of Disposable Retail Bags:

- Sierra Club Florida (Waste Minimization) www.florida.sierraclub.org
- www.reusablebags.com (Sells Reusable Bags)
- ChicoBag www.chicobag.com (Sells Reusable Bags)
- Audubon Society (Support Waste Minimization/Litter Reduction for Land Conservation Purposes) www.audubon.org
- Californians Against Waste www.cawrecycles.org (Non-profit environmental research and advocacy organization)
- Heal the Bay www.healthebay.org (Non-profit organization)
- Blogs/Grassroots
    - Group on Facebook "Reduce the Use of Plastic Bags"
    - www.natural-environment.com
    - 64 petitions on www.thepetitionsite.com that relate to plastic bag use reduction
    - http://noplasticbags.blogspot.com
    - www.bringyourown.org
    - www.squidoo.com/noplasticbags
    - www.conserveplasticbags.blogspot.com

Groups Interested in Increasing Bag Recycling:

- American Chemistry Council (www.plasticbagrecycling.org, www.americanchemistry.com, www.plasticsmythbuster.org, www.plasticbagfacts.org)
    - Operation Clean Sweep www.opcleansweep.org Plastics Industry initiative to help prevent the release of plastic resin pellets (nurdles) into the environment
- Hilex Poly (Plastic Bag Manufacturer) www.hilexpoly.com
- Raymond Communications www.raymond.com Recycling Policy Consultant firm
- American Forest & Paper Association (Paper Bag Manufacturers) www.afandpa.org - generally support bans that only relate to plastic because then paper bag use goes up
- NAPCOR (National Association for PET Container Recyclers) www.napcor.com support plastic recycling
- Save the Plastic Bag www.savetheplasticbag.com group of businesses and citizens opposed to plastic bag bans
- SPI (The Society of the Plastics Industry)/Film and Bag Federation – www.plasticbag.com Plastics Manufacturing Industry
- www.myrecycledbags.com – blog about crocheting plastic bags into other products

Groups Interested in Improving Bag Technology:

- American Chemistry Council (www.plasticbagrecycling.org, www.americanchemistry.com, www.plasticsmythbuster.org, www.plasticbagfacts.org)
- Hilex Poly (Plastic Bag Manufacturer) www.hilexpoly.com
- Raymond Communications www.raymond.com Recycling Policy Consultant firm

- American Forest & Paper Association (Paper Bag Manufacturers) www.afandpa.org
- NAPCOR (National Association for PET Container Recyclers) www.napcor.com support plastic recycling
- Save the Plastic Bag www.savetheplasticbag.com group of businesses and citizens opposed to plastic bag bans
- SPI (The Society of the Plastics Industry)/Film and Bag Federation – www.plasticbag.com Plastics Manufacturing Industry
- BASF www.basf.com - makes "Performance Polymers" aka biodegradable plastics
- Symphony Environmental www.degradable.net - makes degradable plastics
- BPI (Biodegradable Products Institute) www.bpiworld.org – professional association promoting biodegradable plastics

Appendix D: Local Enacted Regulations in the United States

Location Name	Estimated Population	Year Effective	Ban	Fee	Recycling Requirement	Voluntary	Provide alternatives*
30 small communities, AK	16,500	1998	X				
Albany County, NY	298,130	2008			X		
Austin, TX	656,562	2007				X	
Chicago, IL	2,853,114	2008			X		
Edmonds, WA	40,158	2009	X				
Fairbanks, AK	35,132	2010		X			
Fairfax, CA	7,066	2008	X				
Kauai County, HI	63,689	2011	X				
Lake County, IL	712,453	2007			X		
Los Angeles, CA	3,833,995	2008				X	
Madison, WI	231,916	2009			X		
Malibu, CA	13,009	2008	X				
Manhattan Beach, CA**	36,605	2008	X				
Marshall County, IA	39,523	2009					X
Maui County, HI	143,574	2011	X				
Nassau County, NY	1,351,652	2008			X		
New York City, NY	8,363,710	2008			X		
Oakland, CA**	404,155	2007	X				
Outer Banks, NC	33,518	2009	X				
Paia, HI	2,752	2008	X				
Palo Alto, CA	59,395	2009	X				
Phoenix, AZ	1,567,924	2007				X	
Rockland County, NY	298,545	2008			X		
San Francisco, CA	808,976	2007					X
Solana Beach, CA	12,825	2008				X	
Suffolk County, NY	1,512,224	2007			X		
Tempe, AZ	175,523	2008				X	
Tucson, AZ	541,811	2009			X		
Washington, DC	591,833	2010	X	X			
Westchester County, NY	953,943	2008			X		
Westport, CT	26,051	2009	X				
Total***			13	2	10	5	2

*Provide alternatives means to provide alternative bags such as compostable or reusable bags

** Under lawsuit, not in effect

***Washington DC has both a ban and a fee

Appendix E: National and International Bag Regulations

The following is the detailed information that is available to the public on DEP's dedicated Retail Bag Report website. These lists are associated with the maps and can be accessed in two ways—the user can directly go to the lists, or can click on the country, state or city of interest on the map and go directly to that location's information. This information is updated regularly as DEP receives information about retail bag policies worldwide.

North America

UNITED STATES OF AMERICA

- United States – H. R. 2091, the "Plastic Bag Reduction Act of 2009" was introduced in the U.S. Congress on April 22, 2009 and is still in committee. This act would place a five cent fee on "single-use" bags from grocery stores and other retail outlets. The act goes on to increase the fee in 2015 to twenty-five cents. Some of the money from the fee would go to the Land and Water Conservation Fund, some to state and local programs and some to reduce national debt.
  http://moran.house.gov/apps/list/press/va08_moran/Plastic.shtml

Alaska

- Alaska – In 2009, Senate Bill 22 was introduced to the Alaskan Legislature. This bill would charge a fifteen cent fee for disposable plastic bags given out by retailers. The fee would fund the "Alaska litter and marine debris reduction and recycling fund." This bill was referred to the Resources and Finance Committees as of January 21, 2009. The bill remained in this committee at session adjournment.
  - 30 villages/communities in Alaska, US - In Western Alaska, at least 30 communities have banned plastic bags since 1998. The ban was in response to plastic bag litter from dumps and ill-effects on Alaskan wildlife including salmon and seals.
  - Fairbanks, Alaska – On September 10, 2009 the Fairbanks North Star Borough Assembly voted to enact a five cent tax upon each plastic bag given out by all retail sellers in the community of Fairbanks. The tax will be effective January 1, 2010. The retail sellers are allowed to keep three percent of the total amount collected while the rest of the money will go to a local recycling program special revenue fund. The ordinance cites that some municipalities have estimated a collection and disposal cost of seventeen cents per plastic bag.

Arizona

- Arizona - In 2008, bills were introduced in the Arizona state government for review that proposed to place a surcharge on plastic and paper bags and asking retailers to offer recycling collection of the bags. These bills did not pass during the 2008 legislative session.
  - Phoenix, Arizona – In Phoenix, the city and the Arizona Food Marketing Alliance worked together with stores to create Bag Central Station. This program, started in

2007, is a voluntary program in which stores encourage reusable bags and must accept plastic bags for recycling.

- Tempe Arizona – In Tempe, the Bag Central Station program has been expanded from its start in Phoenix. The program started in Tempe in 2008 and is a voluntary program in which stores encourage reusable bags and must accept plastic bags for recycling.
- Tucson, AZ - In Tucson, the Bag Central Station program was codified in March 2009. The city council adopted a new city code requiring retail establishments of over 10,000 square feet to provide recycling bins for plastic bags.

California

- California – In 2006, the state of California passed a law, effective July 1, 2007, mandating that all retail establishments of a certain size or larger label their bags for return to the store for recycling, have recycling bins available to customers and to provide reusable bags for customers to purchase.
- California - In 2009, Assembly Bill 1141 was introduced in the California Legislature. The bill would require that all plastic carryout bags contain a specified percentage of recycled plastic. Plastic bag producers would be charged a producer's responsibility fee of one-half cent per bag. The bill was held without recommendation by the Assembly Committee on Natural Resources (April 27, 2009).
- California - In 2009, Senate Bill 228 was introduced in the California Legislature. The bill would require all marine degradable or compostable plastic bags to be readily distinguishable from non-biodegradable plastic bags. The bill remains in the Senate Appropriations Committee (May 28, 2009).
- California - In February 2009, Senate Bill 531 was introduced in the California Legislature. Initially, the bill would have required suppliers of paper or plastic single-use carryout bags to pay a fee of one cent per bag to the State Board of Equalization. Monies generated would fund grants for litter reduction education. The bill was amended in April 2009 to only add details to existing plastic bag manufacturer obligations regarding recycling education. The bill was referred to the Committee on Natural Resources on June 15, 2009.
    - Fairfax, California – The City Council of Fairfax, California passed a ban on plastic bags in 2007 only to withdraw the ban because of a threatened lawsuit regarding the environmental benefit of such a ban. Subsequently, the Council asked stores to voluntarily stop giving out plastic bags. In response, citizens of Fairfax made the issue a ballot initiative. In November 2008, voters passed the initiative.
    - Los Angeles, California – In 2008, the LA County Supervisors initially proposed a ban on plastic bags. After discussion the ban was supplanted by a voluntary program asking retailers to encourage consumers to use reusable bags. The ban will be revisited if the use of bags in LA County does not decrease by 30% by July 2010 and by 65% by July 2013.
    - Manhattan Beach, California – In July 2008, the City Council of Manhattan Beach passed a ban on all plastic bags used for carrying purchased goods. Currently, the

ban is on hold due to a lawsuit. One clause of the suit states that the city did not perform an Environmental Impact Report (EIR) and the second states that the city does not have the power to ban plastic bags.

- Oakland, California - In June 2007, the city of Oakland passed an ordinance banning non-biodegradable plastic take-away bags. This ban applied only to retail establishments that gross $1 million in annual sales. The ordinance allows paper bags provided that they meet recycled content requirements. The ordinance has been rescinded after a lawsuit against the city was upheld in April 2008. The suit cites that the city had not performed adequate environmental study regarding the possible adverse effects of a ban.
- San Francisco, California – The city of San Francisco passed an ordinance in April 2007 requiring retail stores (pharmacies and supermarkets) that gross annual sales of $2 million to provide paper bags, compostable bags and/or reusable bags.
- Malibu, California – In May 2008 the Malibu City Council approved a ban on all non-reusable plastic bags excluding produce bags. The ban went into effect in November 2008.
- Solana Beach, California – In August 2008, the city of Solana Beach began a voluntary recycling program for plastic bags. The program utilizes three collection bins in public buildings and sends the clean plastic bags directly to Trex Co. Inc. Trex makes deck boards and fencing from wood and recycled plastic fibers. Previously, in December 2007, the city enacted a law prohibiting plastic bags used for advertising that are thrown onto driveways and yards or hung on doorknobs.

Connecticut

- Connecticut – In 2009, House Bill 5466 was introduced in the Connecticut General Assembly. The bill would require all retailers that give out plastic shopping bags to also accept the bags back and have those bags recycled.
- Connecticut – In 2009, House Bill 5273 was introduced in the Connecticut General Assembly. The bill would ban all retailers from using non-biodegradable bags starting January 1, 2011.
- Connecticut – In 2009, House Bill 5207 was introduced in the Connecticut General Assembly. The bill would require a tax to be paid on all paper and plastic bags. The purpose of this bill is to help reduce waste, litter, dependence on foreign oil and to help foster sustainability and environmental responsibility.
- Connecticut – In 2009, House Bill 5107 was introduced in the Connecticut General Assembly. The bill would require retail stores to charge a tax of five cents per plastic bag. Money from this tax would be used for the renewable energy fund.
- Connecticut – In 2009, House Bill 5479 was introduced in the Connecticut General Assembly. The bill would also require a five cent fee per plastic bag. This is intended to encourage the use of reusable bags and to reduce plastic waste.

- Connecticut – In 2009, House Bill 5492 was introduced in the Connecticut General Assembly. The bill would require the recycling of plastic shopping bags and charge a fee on each plastic or paper shopping bag.
- Connecticut – In 2009, House Bill 6314 was introduced in the Connecticut General Assembly. The bill would require a five cent fee per bag given out at grocery stores. This is intended to reduce the amount of plastic waste that enters landfills.
- Connecticut – In January 2009, House Bill 5005 was introduced in the Connecticut General Assembly. If enacted, this bill would prohibit retail establishments from providing plastic bags for purchased goods at the point of sale. This bill was referred to the Joint Committee on Environment and stayed there until adjournment of the Assembly.
- Connecticut – In January 2009, House Bill 5215 was introduced in the Connecticut General Assembly. The bill would require a five cent fee per bag given out at grocery stores. Monies generated from the tax would be transferred to the Department of Environmental Protection. It remains "Tabled for the Calendar" in the Committee on Finance, Revenue, and Bonding (May 2009).
    - Westport, Connecticut – In 2008, Westport Connecticut passed a ban on most plastic shopping bags beginning in 2009. Bags used for produce are exempted.

Colorado

- Colorado – In 2009, Senate Bill 156 was introduced in the Colorado General Assembly. This bill would ban retail stores of a certain size from providing free plastic bags. The bill would also charge a fee of six cents per plastic bag of which the store would keep half the money and the state would receive the other half for use in plastic bag use reduction education.

Delaware

- Delaware - In March 2009, the Delaware House of Representatives passed House Bill 15, requiring stores exceeding 7,000 square feet to establish an at-store recycling program for plastic bags. The governor signed the bill into law on August 17, 2009.

Florida

- Florida - The Energy, Climate Change, and Economic Security Act of 2008 (House Bill 7135) signed into law by Governor Crist created Section 403.7033, Florida Statutes. This section requires the DEP to perform an analysis and submit a report to the Legislature by February 1, 2010 regarding the necessity and efficacy of both statewide and local regulation of bags used by consumers to carry products from retail establishments. Until such time that the Legislature adopts the recommendations of DEP, no local or state government may enact any regulation or tax on the use of such retail bags.

Hawaii

- Hawaii - In 2009, House Bill 1357 (same as Senate Bill 1292) was introduced in the Hawaii Legislature proposing a ban on all non-biodegradable/compostable plastic bags and

requiring retailers to provide either recyclable paper bags, compostable plastic bags or reusable bags. If enacted this ban would apply only to stores that gross at least $250,000 in revenue annually. This bill remained in the House Energy and Environment Committee at Legislative adjournment.

- Hawaii - In January 2009, House Concurrent Resolution 43 was offered to the Hawaii House of Representatives. This resolution requires the Hawaii Food Industry Association to form a working group with a representative from each County, the Department of Health, producers of polystyrene and plastic bags made in Hawaii, affected trade organizations and environmental organizations. The working group would establish minimum statewide standards for biodegradability of plastic grocery bags and food containers. This resolution remained in the Senate Committee on Health at Legislative adjournment.
- Hawaii - In February 2009, House Concurrent Resolution 61 was offered to the Hawaii House of Representatives. House Concurrent Resolution 61 (same as House Resolution 49) urges Honolulu and Kauai Counties to reduce the use, sale, and environmental degradation caused by non-compostable plastic bags. This resolution remained in the House Energy and Environment Committee at Legislative adjournment.
- Hawaii - In January 2009, Senate Bill 244 was introduced in the Hawaii Legislature. If enacted this bill would have required each retail establishment to provide the consumer with either a refund or a store credit if the consumer purchased goods or products and declined to use a plastic shopping bag that the retail establishment offers at no additional charge. In February, the Senate Committee on Energy and Environment deferred the measure.
- Hawaii - In January 2009, Senate Bill 245 was introduced in the Hawaii Legislature. This bill would have established a statewide at-store plastic carryout bag recycling program. The program would have been implemented at stores with over 10,000 square feet of retail space and a licensed pharmacy or a store with annual sales of $2,000,000 or more. This bill was deferred by the committee on Energy and Environment.
- Hawaii - In January 2009, Senate Bill 584 was introduced in the Hawaii Legislature. This bill would have prohibited retail stores and supermarkets from distributing plastic shopping bags. The bill was referred to the Energy and Environment Committee where the measure was recommended to be passed with amendments. From the Energy and Environment Committee, the measure was sent to the Judiciary and Government Operations Committee where it remained at Legislative adjournment.
- Hawaii - In January 2009, Senate Bill 1163 was introduced in the Hawaii Legislature. This bill would have required distributors that sell and distribute plastic shopping bags to stores for the stores to give to consumers to pay a fee of five cents per bag. This fee would be payable to the Department of Health and would be remitted to the "keiki first steps trust fund." This bill was referred to the Energy and Environment Committee and the Human Services Committee. Both committees deferred the measure in February.
- Hawaii - In January 2009, Senate Bill 1292 (same as House Bill 1357) was introduced in the Hawaii Legislature. This bill would have required all businesses that gross over $250,000

annually to cease distributing non-biodegradable plastic shopping bags and only distribute recyclable paper bags, compostable plastic bags or reusable bags. This bill was referred to the Energy and Environment Committee and the Judiciary and Government Operations Committee where the measure remained at Legislative adjournment.

- Paia, Hawaii – In 2008, the town of Paia became "plastic bag free" when all of the town traders agreed to cease handing out plastic takeaway bags.
- Maui County, Hawaii – In 2008, Maui County voted to ban plastic bags by 2011.
- Hawaii County, Hawaii – In August 2008, the Hawaii County Council voted to ban businesses from offering plastic checkout bags. The ban needed the signature of the mayor to go into effect but the mayor opposed the ban and vetoed it. The County Council then voted again in October 2008 but there were not enough votes to override the mayor's veto.
- Kauai County, Hawaii - In October 2009, the Kauai County Council voted to ban plastic carryout bags. Stores must now offer only biodegradable, 100% recyclable paper or reusable tote bags at checkout. The stores are allowed to charge for the bags. The ban will go into effect on January 11, 2011.

Illinois

- Illinois – House Bill 0334 was introduced in the Illinois Legislature in January 2009. The bill was referred to the Rules Committee, then assigned to the Environmental Health Committee and then Re-referred to the Rules Committee in March 2009. If enacted, this bill would create the "Grocers' Mandatory Plastic Bag Recycling Act," which would require grocery stores to implement recycling programs for plastic bags. The bill remained in committee at session adjournment.
    - Chicago, Illinois – In May 2008, the City Council of Chicago enacted an ordinance requiring certain retail establishments to establish an in-store plastic bag recycling program. The program must include specific labeling on the bags, recycling bins available to customers for bag drop-off and provide reusable bags for customers to purchase.
    - Lake County, Illinois - In August 2007, the Governor of Illinois signed the Plastic Bag Bill creating a pilot program in Lake County requiring retailers over a certain size that give out plastic bags to take the bags back for recycling.

Iowa

- Marshall County, Iowa - On September 16, 2008, the Marshall County Board of Supervisors voted to require the use of compostable plastic, recyclable paper and/or reusable checkout bags by all retail stores in unincorporated areas of the county. This requirement went into effect on April 9, 2009.

Maine

- Maine – In 2009, Legislative Document 367, An Act to Reduce the Amount of Plastic Introduced into the Waste Stream, was introduced. This bill would require retailers to

charge ten cents for each plastic bag given to a customer. The money would be deposited into the Waste Reduction and Recycling Loan Fund. This bill was revised to resolve that the Executive Department, State Planning Office should create a work group, through a partnership with state agencies and other appropriate entities to work to create an overall reduction of disposable checkout bag distribution and waste. This resolution was signed by the governor on May 19, 2009. (Resolve Chapter 54)

- Maine – In 2009, Legislative Document 622 (equivalent to HP 436) was introduced in the Maine Legislature. This bill would require retailers with more than 30,000 square feet of retail sales area to provide a cloth or durable fabric bag to customers at least twice a year. This bill went to committee and was unanimously voted "ought not to pass."

Maryland

- Maryland - In 2009, House Bill 1210 was introduced in the Maryland Legislature. If enacted, this bill would have required stores to charge and collect a five cent fee for each carryout bag (paper or plastic) provided to a customer. Of this fee, one cent would be retained by the store if the store did not have a Customer Bag Credit Program or if the store did have such a program then the store could retain two cents. The remaining amount would be remitted to the Chesapeake and Atlantic Coastal Bays 2010 Trust Fund. The Customer Bag Credit Program is a voluntary program for stores in which the store would pay a customer at least five cents for each bag that is provided by the customer. This bill was read in the Environmental Matters Committee but was never moved out of committee.
    - Annapolis, Maryland – In 2007, Annapolis Maryland lawmakers proposed a plastic bag ban. The ban did not pass but an alternative plan passed involving an expanded recycling campaign, encouraging use reduction and free reusable bag giveaways.
    - Baltimore, Maryland - In 2008, two bills were introduced to the Baltimore City Council in order to regulate plastic bag use. Bill 08-0208 proposes levying a twenty-five cent tax per plastic bag distributed by any retail establishment. Monies collected from the tax would go into the general fund. Bill 08-0205 would prohibit all stores from distributing plastic bags. Both bills are now in committee and were scheduled for a public hearing to the Judiciary and Legislative Investigations Committee on January 5, 2010.

Massachusetts

- Massachusetts – On March 12, 2009, the Massachusetts Department of Environmental Protection signed a Memorandum of Understanding (MOU) with the Massachusetts Food Association. The Massachusetts Food Association is an industry organization that represents more than 500 individual grocery stores. The MOU sets a goal to see a 33% reduction in the distribution of paper and plastic disposable grocery bags by 2013. This reduction is to be achieved through incentives to customers to reduce demand and increased reusable bag usage, improved recycling of bags at stores, and increased recycled

content or use of biodegradable bags offered for distribution. This effort is voluntary for all stores that are members of the Massachusetts Food Association.

- Massachusetts – In January 2009, House Bill 719, "An Act Relative to Plastic Bag Reduction," was introduced in the Massachusetts Legislature. If enacted this bill would have required stores grossing more than $2,000,000 annually to provide only recyclable paper bags, compostable plastic bags or reusable bags to customer. This bill has been referred to the Joint Committee on Environment, Natural Resources and Agriculture. A public hearing was held on this bill on May 14, 2009.
- Massachusetts – In January 2009, House Bill 798, "An Act relative to decreasing environmental hazards, toxins and litter," was introduced in the Massachusetts Legislature. This bill calls for the responsible reduction of plastic carryout bags by prohibiting any store with a gross income of more than $500,000 in the previous tax year from providing plastic carryout bags to consumers. This bill has been referred to the Joint Committee on Environment, Natural Resources and Agriculture. A public hearing was held on this bill on May 14, 2009.
- Massachusetts – In January 2009, House Bill 2686, "An Act relative to an excise on plastic carryout bags in supermarkets," was introduced in the Massachusetts Legislature. This bill would excise five cents per plastic carryout bag provided to customers, from any supermarket with a gross income of more than $1,000,000 in the previous tax year. The funds excised would be credited to the General Fund. This bill has been referred to the Joint Committee on Revenue. A public hearing was held on this bill on April 12, 2009.
- Massachusetts – In January 2009, Senate Bill 395, "An Act relative to the responsible reduction in the use of plastic bags," was introduced in the Massachusetts Legislature. This bill would prohibit any store located or doing business in Massachusetts from giving, providing or making available plastic carryout bags to consumers. This bill has been referred to the Joint Committee on Environment, Natural Resources and Agriculture. A public hearing was held on this bill on May 14, 2009.
- Massachusetts – In January 2009, Senate Bill 1284, "An Act relative to the selection and use of plastic bags in certain stores," was introduced in the Massachusetts Legislature. This bill would require every store to pay to the commissioner an excise equal to two cents per plastic carryout bag provided to customers. This bill has been referred to the Joint Committee on Revenue. A public hearing was held on this bill on April 12, 2009.
    - Plymouth, Massachusetts – The Board of Health in Plymouth Massachusetts reviewed a ban on plastic bags in late 2008. The board ultimately decided not to pass the ban.
    - Sturbridge, Massachusetts – In 2008, the Board of Selectmen, in Sturbridge Massachusetts, sponsored an article to ban the use of plastic bags in stores of or larger than 35,000 square feet within the city limits. At a town meeting in April 2008, the article was voted down.
    - Boston, Massachusetts - In late 2007, Boston Massachusetts lawmakers proposed both a ban and a required collection and recycling plan. None of the proposals passed but most grocery stores accept plastic bags for recycling.

Michigan

- Michigan – In December 2008, bill number SB 1611 was introduced in the Michigan Legislature. If enacted the bill would phase out the retail distribution of "noncompostable plastic carryout bags" by 2012. This bill was referred to the Committee on Natural Resources and Environmental Affairs on November 6, 2008. The bill remained in committee at session adjournment.

Minnesota

- Minnesota - HF0041 was introduced in the Minnesota State Legislature in January 2009. If enacted, this bill would require in-store recycling programs for plastic carryout bags. Additionally, manufacturers of plastic carryout bags would be required, if requested by store operators, to make arrangements for collection, transport, and recycling of all plastic carryout bags and other film plastic that is collected as part of the in-store recycling program. This bill was referred to the Environment Policy and Oversight Committee where it stayed until legislative adjournment.
- Minnesota - HF403 (companion SF0383) was introduced in the Minnesota State Legislature in January 2009. If enacted, this bill would not only require that any bag or container used to deliver yard waste to a yard waste compost facility be compostable but also require specific labeling for all compostable, biodegradable, and degradable plastic bags, including those used in retail stores. The bill was referred to a number of committees and ended up in the Environment and Natural Resources Finance Division Committee at legislative adjournment.
- Minnesota - HF576 (companion SF267) was introduced in the Minnesota State Legislature in January 2009. If enacted this bill would have required in-store recycling programs for all plastic carryout bags and have required labeling of plastic carryout bags to say "Please Reuse or Recycle at a Participating Store." This bill was referred to the Environment Policy and Oversight Committee where it remained at legislative adjournment.
- Minnesota - SF383 was introduced in the Minnesota State Legislature in 2009. This bill requires that plastic bags used for yard waste or source-separated compostable materials meet ASTM Standard Specification for Compostable Plastics. Additionally, this bill requires that until standards are created, plastic bags sold in the state of Minnesota may not be labeled as biodegradable or degradable. Any bags labeled as compostable must meet the ASTM Standard Specification for Compostable Plastics and labeled to reflect that the bag meets the standard. This bill was added to HF2123 and was signed by the governor in May 2009.

Missouri

- Missouri – In 2009, Senate Bill 340 was introduced to the Missouri General Assembly. If enacted this bill would require stores to only provide recyclable paper bags, compostable plastic bags, reusable bags or any combination of the three. This bill was referred to the

Commerce, Consumer Protection, Energy and the Environment Committee on February 11, 2009. The bill remained in committee at session adjournment.

Nevada

- Nevada – In 2009, Senate Bill 397 was introduced in the Nevada State Legislature. This bill, if passed, would establish a Plastic Bag Environmental Cleanup Fund and impose both a fee and a ban on certain types of bags. Customers would pay a fee on non-biodegradable and on non-compostable plastic bags from October 1, 2009 through June 30, 2011. Beginning July 1, 2011, all non-biodegradable and non-compostable plastic bags would be banned from distribution. This bill was referred to the Commerce and Labor Committee and was not heard again as of session adjournment.

New Hampshire

- New Hampshire – In 2008, both the House and the Senate of New Hampshire passed "A Resolution Encouraging the Use of Reusable Shopping Bags." This resolution encourages both consumers and retailers alike to switch to reusable bags. The resolution was promoted by a group of teenagers from Hanover, New Hampshire as part of the group "Kids for a Cooler Planet."

New Jersey

- New Jersey – In 2007, New Jersey lawmakers proposed a ban on retail bags. The ban was not passed during the 2008 session.

New York

- New York – In 2009, Senate Bill 544 was introduced in the New York State Legislature. This bill would require retail businesses to restrict the use of non-compostable plastic bags by 50% of their current use volume by 2012. The bill goes on to completely ban non-compostable plastic bags by 2014.
- New York – In 2009, Assembly Bill 6537 was introduced in the New York State Legislature. This bill would enact a tax on plastic shopping bags that are used to transport every sale of tangible personal property by consumers. The tax would be fifteen cents per plastic bag.
- New York – In 2009, Assembly Bill 6070 was introduced in the New York State Legislature. This bill would effectively ban plastic bags at retail stores by requiring that all stores provide only paper, compostable plastic and/or reusable bags as checkout bags.
- New York - In 2009, Assembly Bill 6937 was introduced in the New York State Assembly. If passed, this bill would establish a state commission to evaluate and make recommendations regarding the reduction of improper disposal of plastic and paper merchandise bags.
- New York -In April 2009, a bill (AB7844/SB4866) was introduced in the Assembly and Senate proposing a five cent tax on plastic carryout bags. The tax would apply to all stores located within cities with populations exceeding 1 million. The bill has been forwarded to the Committee on Cities.

- New York- In April 2009, Senate Bill 5067 was introduced in the New York State Legislature. This bill would enact a five cent sales tax on all plastic shopping bags. The first $75 million generated from the tax would be deposited in an environmental fund. The remaining monies would be deposited into the NY State General Fund. This bill has been referred to the Investigations and Government Operations Committee.
- New York - In 2009, Senate Bill 4595 was introduced in the New York State Legislature. If passed this bill would amend the 2008 law that requires all large grocery store chains and retailers to implement recycling of plastic bags. The amendment would, among other things, remove preemption for local laws enacted by a city of one million or more. In April 2009 the bill was referred to the Environmental Conservation Committee.
- New York - Assembly Bill 6144 was introduced in the New York State Legislature in 2009. If passed, this bill would require store operators to pay customers at least two cents per carry-out bag brought in by the customer to carry out goods purchased. This bill was referred to the Environmental Conservation Committee in February 2009.
    - Albany County, New York – Albany County, in New York State passed an in-store recycling program for plastic bags in March of 2008. This program requires stores to have collection bins and to recycle the bags.
    - Nassau County, New York – In Nassau County, a county on Long Island in New York, a local plastic bag reduction and recycling law was passed in June 2008. This law requires that plastic bags be labeled with specific language, requires stores to have a bin for collection and to recycle the bags.
    - New York City, New York – In 2008, the New York City Council passed a bill requiring retail chains and large stores to collect and recycle plastic retail bags.
    - Rockland County, New York – In May 2008, the County Legislature in Rockland County, New York passed a law requiring stores to recycle plastic bags and plastic film, have collection bins available for customer use and make reusable bags available for purchase.
    - Suffolk County, New York – Suffolk County, in New York State passed a carryout bag reduction and recycling initiative in 2007.
    - Westchester County, New York – In October 2008, a law went into effect in Westchester County, New York that requires all retailers that provide plastic carry-out bags to customers to have a collection bin and to recycle the bags.
    - Ulster County, New York – Local Law No. 3 of 2009 was introduced to the Legislature of the County of Ulster to impose a minimum fee of ten cents for each plastic bag provided to customers at the point of sale. The measure was referred to the Environmental Committee and a public hearing was held May 6, 2009. A number of proposed changes were offered at the public meeting and the proposed law was sent back to the Environmental Committee for reconsideration.

North Carolina

- North Carolina – In 2009, Senate Bill 1018 (equivalent to House Bill 810) was introduced in the North Carolina General Assembly. This bill, if passed, would ban retail stores from

providing plastic bags to customers and would allow paper bags to be given away only if the paper bag is recyclable. This bill was revised to ban retail stores in the Outer Banks of North Carolina from distributing plastic bags to customers and allows paper bags to be given away only if the bag is made of recycled content.

- North Carolina - In 2009, House Bill 1288 was introduced in the North Carolina General Assembly. If enacted, this bill would increase the state goal for plastic bag recycling from 25% to 75% and require retailers to provide in-store recycling. This bill has been referred to the Committee on Commerce, Small Business and Entrepreneurships as of April 9, 2009.

Ohio

- Ohio – For Earth Day 2009, the Ohio Department of Natural Resources (DNR) and Ohio Grocers Association (OGA) announced the cooperative Plastic Bag Recycling Program. The OGA will provide recycling bins to its retail members in order to collect plastic from consumers and to recycle pallet and shrink wrap.

Oregon

- Portland, Oregon – In 2007, a ban on plastic bags was proposed in Portland, Oregon. The ban did not pass and neither did the alternative plan of a tax on plastic bags.

Pennsylvania

- Pennsylvania - In May 2009, Senate Bill 864 was introduced in the state legislature. The bill proposes a two cent tax on all plastic retail bags from retail establishments that gross over $1,000,000 in sales per year. Proceeds from this tax would be divided equally between the State and the retail establishments in order for each to fund programs that would improve recycling practices and education. This bill has been forwarded to the Committee on Finances.
- Pennsylvania - Senate Bill 609 was introduced to the Pennsylvania Legislature in 2009. This bill, if enacted, would prohibit grocery stores from providing consumers with paper and plastic bags. The bill was referred to the Environmental Resources and Energy Committee on March 19, 2009.
    - Philadelphia, Pennsylvania – In 2009, bill 090075 was presented to the City Council of Philadelphia that would enact a twenty-five cent fee on all plastic bags received by a customer at retail stores within the city. Large businesses, with more than $1 million in annual sales, would send 75% of the fees back to the city while smaller businesses would be able to keep the money. This bill was referred to the Committee on the Environment and a public hearing was held on June 10, 2009. It is in council for a second reading.
    - Philadelphia, Pennsylvania – In February 2009, Bill 090074 was introduced in the City of Philadelphia Council. This bill if it had been enacted would have banned supermarkets and pharmacies from providing bags other than recyclable paper bags, compostable plastic bags or reusable bags. This bill was referred to the

Committee on the Environment and two hearings were held. The bill was read but did not pass the Council vote on June 18, 2009.

- Philadelphia, Pennsylvania - On November 19, 2009 a resolution titled "Calling on All Philadelphia Retail Stores to Implement Plastic Bag Recycling" was introduced to the City Council of Philadelphia. This resolution is currently "in council" or ready for consideration by the council.

Rhode Island

- Rhode Island – In 2004, the state of Rhode Island established a statewide voluntary recycling program for plastic bags. This program utilized an anti-litter campaign called "Why Knot." This campaign encouraged residents to tie plastic bags into knots to reduce the likelihood that the bags would become litter. In 2008 the legislation was amended to expand the program to all large retailers, require reporting and to expand the products accepted for recycling.
- Rhode Island - Senate Bill 804 was introduced in the Rhode Island Legislature in January 2009. If enacted, this bill would require retail establishments to provide a five cent per bag rebate for every reusable bag a customer provides in order to carry purchases from the establishment. Additionally, retailers would be required to charge a fifteen cent fee per plastic bag provided to customers in order to carry purchases from the establishment. This bill was referred to the Senate Environment and Agriculture Committee on March 24, 2009.
- Rhode Island - In 2008, House Bill 7630 was introduced in the Rhode Island Legislature. The bill would have promoted paper bag usage by imposing a tax equal to one cent per plastic bag used by consumers for grocery or other purchases. This bill was referred to the House Finance Committee and in May 2008 the committee recommended the measure be held for further study.

Texas

- Texas – In February 2009, House Bill 1361 was filed in the Texas Legislature. This bill, if enacted would impose a seven cent fee for certain plastic bags provided to customers by retailers. Retailers would retain part of the money and the rest would go to fund a Local Recycling Program Assistance Account. In March 2009, the bill was referred to the "Ways & Means" committee where the bill was left pending as of April 22, 2009.
- Texas – Senate Bill 338 was filed in late 2008 with the Texas Legislature. If enacted, this bill would place requirements upon businesses with more than 51 employees that offer plastic checkout bags to customers. These requirements would include offering a reusable bag for sale at a reasonable price, asking customers if they would like to purchase a reusable bag before offering the customer a plastic checkout bag and having a recycling program for those plastic checkout bags. The bill also provides for civil and administrative penalties for those businesses that do not comply with the requirements. In April 2009, the bill went to the Business and Commerce Committee and was passed and then referred to the Environmental Regulation Committee. In May 2009, the bill was left pending in that committee.

- Texas - House Bill 3427, introduced in the Texas Legislature in 2009, would have required businesses or shopping malls that offer plastic checkout bags to customers to offer reusable bags at a reasonable price for sale to customer and establish in-store checkout bag recycling programs. The bill also required the Texas Commission on Environmental Quality to establish an online clearinghouse of information relating to the use and recycling of plastic checkout bags. Lastly, the bill required a study to (1) examine the bill's impact on businesses and the environment, (2) determine what happens to plastic checkout bags after they are collected in bins at the in-store recycling programs, (3) determine how many businesses are collecting the plastic checkout bags and recycling them, and (4) determine the feasibility and costs to businesses of using alternative material checkout bags. This bill was left pending in the House Environmental Regulation Committee at Legislative adjournment.
    - Austin, Texas – In 2007, the city of Austin passed a voluntary use reduction and recycling of plastic bags program. Since that time, the retailers have reported a 40% reduction in the use of plastic bags as well as a 20% increase in recycling of plastic bags at the stores participating.

Vermont

- Vermont – In 2009, House Bill 262 was introduced in the General Assembly. This bill would enact a seventeen-cents tax on each plastic bag purchased or received during a retail transaction in Vermont. If passed, the tax will go into effect on January 1, 2010.
- Vermont – In 2009, Senate Bill 33 was introduced in the General Assembly. This bill would enact a three cent tax on each plastic bag purchased or received during a retail transaction in Vermont. If passed, the tax will go into effect on January 1, 2010.
- Vermont – In 2008, both the House and the Senate of Vermont passed a joint resolution that supported the Hanover High School Kids for a Cooler Planet reusable shopping bag campaign. This resolution encourages both consumers and retailers alike to switch to reusable bags. The resolution was promoted by a group of teenagers from Hanover, New Hampshire as part of the group "Kids for a Cooler Planet."

Virginia

- Virginia – In 2009, bills that would have banned disposable plastic bags from being distributed to customers or that placed a fee on the bags were both pulled by their sponsors.
- Virginia – House Bill 1814 (same as SB873) was filed with the Virginia Legislature in January 2009. If enacted the bill would have banned the use of plastic carryout bags by retailers at the point of sale unless the bags were durable plastic bags with handles, at least 2.25 mils thick and were specifically designed and manufactured for multiple reuse. This bill was referred to the Committee on Agriculture, Chesapeake and Natural Resources where it remained at Legislative adjournment.
- Virginia – House Bill 2010 was filed with the Virginia Legislature in January 2009. If enacted the bill would have imposed a five cent fee on paper and plastic bags used by

customers to carry items from the place of purchase. Durable, reusable plastic bags and bags used for ice cream, meat, fish, and poultry would have been exempt from the fee. The revenues raised by the fee would have been deposited in the Water Quality Improvement Fund. This bill was referred to the Committee Finance where it remained at Legislative adjournment.

- Virginia – Senate Bill 971 was filed with the Virginia Legislature in January 2009. If enacted the bill would have required on-premises recycling for plastic bags be available at stores that are part of a chain or occupy more than 5,000 square feet and distribute plastic bags to consumers. This bill was referred to the Committee on Agriculture, Chesapeake and Natural Resources where it was stricken at the request of a Patron in Agriculture, Chesapeake and Natural Resources.
- Virginia – Senate Joint Resolution 445 was offered February 13, 2009. This resolution commended Farm Fresh Food and Pharmacy for its exceptional environmental leadership and its commitment to reducing plastic bag use by encouraging customers to switch to reusable bags.

Washington

- Washington – House Bill 1189 was introduced in the Washington Legislature in January 2009. The bill, if it had been enacted, would have banned retail stores from providing free carryout bags unless the carryout bags were compostable plastic, recyclable paper or reusable. This bill would also have pre-empted any local city, town, county or municipality within the state from enacting more restrictive laws on retail bags. This bill was referred to the House Committee on Environmental Health where it failed to receive action at a final public hearing.
    - Seattle, Washington – In July 2008, the City Council of Seattle passed a twenty cent "green fee" on all disposable shopping bags starting in 2009. This fee has been placed on hold until August 2009, when a city-wide vote allowed Seattle voters to vote for or against the "green fee." On August 18, 2009 the "green fee" was voted down 58% to 42%.
    - Edmonds, Washington - In July 2009, the City Council of Edmonds, Washington voted unanimously to ban retail establishments from distributing single use plastic bags. The ordinance was effective August 27, 2009.

West Virginia

- West Virginia – In 2008, a ban on plastic bags from retail establishments was proposed in the state of West Virginia. The bill was not passed during the 2008 session.
- West Virginia - In March 2009, House Bill 3058 was introduced in the West Virginia Legislature. If enacted this bill would phase out the use of light plastic bags by July 1, 2012. Retailers would be required to provide customers with compostable bags, label bags to return to the store for recycling and place recycling bins for customer use or make reusable bags available for purchase. This bill was referred to the Energy, Industry and Labor, Economic Development and Small Business Committee.

Washington, DC

- Washington, DC – In 2009, the "Anacostia River Clean Up and Protection Act of 2009," was introduced in the Council of the District of Columbia. This act would ban the use of disposable, non-recyclable plastic retail bags as well as establish a five cent fee for all other disposable bags, including but not limited to paper and plastic retail bags. If passed, part of the money would be placed in the Anacostia River Cleanup and Protection Fund. On June 2, 2009, the City Council of Washington DC voted unanimously to create a five cent tax on both paper and plastic bags in order to promote the use of reusable shopping bags. One cent per bag would stay with the business which sold the bag and four cents would go to fund a cleanup of the Anacostia River. In order to become law the bill was again voted upon in late June when the DC Council unanimously voted to pass the bill. The Mayor of DC signed the bill on July 7, 2009. The fee went into effect January 1, 2010.

Wisconsin

- Wisconsin - In March 2009, Assembly Bill 170 was introduced to the Wisconsin Legislature. If enacted this bill would ban retail stores from providing any bag for a customer's purchase unless that bag is a compostable plastic bag, a cloth or plastic bag intended for multiple reuses or a recyclable paper bag. This bill was referred to the Committee on Jobs, the Economy and Small Business.

CANADA

British Columbia

- Vancouver, British Columbia, Canada – In 2008, the city of Vancouver proposed a ban on plastic disposable shopping bags. Currently, the proposal is under review by the British Columbia government in the legal department. In addition, the Retail Council of Canada, the Canadian Grocery Distributors, the Canadian Federation of Independent Grocers and the Canadian Association of Chain Drug Stores have submitted a plan to reduce plastic bag distribution by 50% over a five year period.

Manitoba

- Leaf Rapids, Manitoba, Canada – In April 2007, the municipality of Leaf Rapids in Manitoba, Canada banned plastic shopping bags. Initially, the town started with a levy on the bags and then moved to an outright ban.

Nova Scotia

- Nova Scotia, Canada – All liquor stores in Nova Scotia, Canada agreed to cease giving out plastic bags as of fall 2008.

Ontario

- Toronto, Canada – The Toronto City Council has approved a charge on plastic shopping bags that took effect on June 1, 2009.

Quebec

- Quebec, Canada – All liquor stores in Quebec, Canada agreed to ban plastic bags by 2009.
    - Montreal, Quebec, Canada – Montreal Canada planned to ban plastic shopping bags some time in 2009. Additionally, a popular liquor store, SAQ, instituted a surcharge policy on plastic and paper bags as of September 2008. This surcharge is expected to reduce the use of such bags by 4%. The policy goes on to ban plastic and paper bags from stores by January 2009.
    - Huntingdon, Quebec, Canada – In January 2008, the small town of Huntingdon Quebec passed a bylaw that bans plastic bags.
    - Amqui, Quebec, Canada – In 2008, the town of Amqui, in Quebec, Canada had a voluntary plastic bag use reduction pact with merchants and instituted a small tax on the bags.

MEXICO

- Mexico City, Mexico - On August 19, 2009, a new ordinance was enacted that prohibits businesses from giving out thin plastic bags that are not biodegradable. The law affects all stores, production facilities and service providers within the city limits.

Africa

Eritrea

- Eritrea – In 2005, the Eritrean government banned plastic bags outright.

Ethiopia

- Ethiopia - In 2008, the Ethiopian government passed a new law (Proclamation 513) that bans the manufacture and import of plastic bags less than 0.33mm in thickness.

Ghana

- Ghana - In July 2004 the Ghanaian government created a Recycling Taskforce to hire waste collectors to collect and deliver plastic bags to warehouses for recycling. The plastic producers are required to help fund the project. One quote regarding plastic bags in Ghana: "Plastic waste has had a terrible impact on tourism, particularly on the beaches east of Accra, where rain water carries the waste," Ghana's Tourism Minister Jake Obetsebi Lamptey told the IRIN News Service. "And the visible mountains of refuse in Accra give foreign tourists the impression that Ghana is a filthy country."

Kenya

- Kenya – In January 2008, the country of Kenya applied a thickness rule to plastic bags.

Lesotho

- Lesotho - Lesotho has proposed a thickness rule on plastic bags. The outcome of this proposal is not known at this time.

Rwanda

- Rwanda – In 2005 the Rwandan government banned plastic bags outright.

Somaliland

- Somaliland, an autonomous region of Somalia banned plastic bags completely as of March 2005.

South Africa

- South Africa – In 2003, the country of South Africa applied a thickness rule to plastic bags.

Tanzania

- Tanzania – In 2006, Tanzania banned plastic bags.
    - Zanzibar – Zanzibar, a city within Tanzania, banned plastic bags in 2006.

Uganda

- Uganda – In June 2007, Uganda imposed a thickness rule on plastic bags.

Asia

Bangladesh

- Bangladesh – The country of Bangladesh banned plastic bags in March 2002.
    - Dhaka, Bangladesh banned plastic bags in January 2002.

Bhutan

- Bhutan – The country of Bhutan banned plastic bags in June 2005. They did this to help reduce litter and thus raise the national happiness quotient.

China

- China – In January 2008, the country of China imposed a ban on specific plastic bags and also imposed a minimum thickness rule.
    - In Hong Kong, China a tax or charge is levied on plastic bags.

India

- India – In 2002, the Indian government mandated a thickness rule on plastic bags. All bags must be greater than 20 microns in thickness. This rule was implemented to reduce malaria outbreaks, aid in storm water runoff management and also to prevent the sacred cows of India from inadvertently ingesting plastic bags.
    - Maharashtra, India – In June 2005, the government in the state of Maharashtra enacted a plastic bag ban. This was done in response to localized flooding that was caused by plastic bags clogging waterways.
    - Delhi, India – In January 2009, the city of Delhi, India announced a ban on the use, storage and sale of all plastic bags. There are heavy fines for violators while citizens

and visitors are encouraged to use alternative material bags such as jute, cotton, recycled-paper and compostable bags.

Israel

- Israel – In June 2008, the Israeli government enacted a tax or charge upon plastic bags.

Maldives

- Baa Atoll - In 2009, Baa Atoll initiated "Say no to plastic bags", a campaign that distributes cloth bags to all residents.

Philippines

- Philippines - In 2008, bill 4134 was introduced to House legislature that would place an excise tax on non-biodegradable plastic bags. All money generated from the tax would be used to support government initiated environmental protection programs. This bill was referred to committees and is pending there as of June 2009.
- Philippines - In 2007 SB1443 was introduced to the Senate that would have created the Plastic Bag Recycling Act. This bill was left pending in committee.

Taiwan

- Taiwan – In Taiwan, a plastic bag ban and tax or charge was enacted in January 2003.

Australia

- Australia (whole country) – In December 2002, the country of Australia enacted a reduction and phase out plan for plastic retail bags.
    - Victoria – In 2006, the state of Victoria opted to charge consumers for each plastic bag used at a store. The fee went into place as a trial in 2008 in a few locations.
    - South Australia – In 2008 South Australian government considered a proposal to ban polyethylene plastic bags that are 35 microns or less thick. Compostable and biodegradable bags would be exempted from the ban. The ban was passed and went into effect May 2009.
    - Coles Bay, Tasmania – Coles Bay, Tasmania is a tourist town, famous for the close proximity to whale migration. The town opted to go "plastic bag free" in April 2003. This move effectively banned plastic takeaway bags. Retailers offer reusable paper bags for a fee and also sell fabric bags.
    - Huskisson – A seaside location and whale watching tourism helped prompt the town of Huskisson to ban plastic bags in November 2003.
    - Kangaroo Valley – In November 2003, all retailers in the town committed to banning plastic bags. Reusable cloth bags are available for purchase at all shops.
    - Mogo – In September 2003, local retailers and the Mogo Progress Association worked together to go "plastic bag free."

- Loddon Shire – In December 2005, Loddon Shire became "plastic bag free". Effectively, a ban on take away plastic bags, the Loddon Shire Council purchased reusable shopping bags and distributed these bags free to retailers to kick start the program.

Europe

Belgium

- Belgium – The country of Belgium passed a tax on plastic bags in 2007 along with a tax on plastic films (like dry cleaning bags), aluminum foil, and disposable cutlery. The tax went into effect July 1, 2007.

Denmark

- Denmark – In Denmark, there is a tax on plastic bags. Starting in 1994 with a tax on packaging materials that was charged to retailers, it progressed to a tax in 2005 on waste. This waste tax makes it more expensive to send waste to a landfill or to incinerate it.

England

- London, England – In 2007, a proposed ban on plastic bags was introduced in London. By November 2008, the proposal was withdrawn. This ban withdrawal came after the ministers of the London Councils supported the implementation of a minimum charge on plastic bags. The government pledged that it would impose a minimum charge on shopping bags should retailers fail to make a voluntary and significant cut in the number of bags they give out. If the retailers fail to comply, the minimum charge will be imposed across England and Wales – this should bring about an even greater reduction in bag usage than London Councils' Bill, which would only have affected London.
- Modbury, England – On May 1, 2007, the small town of Modbury and the resident shops and businesses enacted a ban on plastic bags (self-regulated). Shops offer reusable bags as well as compostable bags for items like fruit and meats.
- Girton, England- The shops in the village of Girton have stopped giving out free plastic bags as of January 2008. Reusable cotton bags were handed out to residents and shops will have cotton bags in stock to offer in place of plastic.
- Kew, England – In July 2008, the town of Kew began a plastic bag free campaign that encourages shops to forgo free giveaway bags and asks residents to bring their own reusable bags.
- Aylsham, England – On May 3, 2008, the historic market town of Aylsham went plastic bag free. The shops charge a fee for disposable bags including plastic, cornstarch and paper (shop determined fee and type of bag).
- Henfield, England – In May of 2008, the town of Henfield gave a free cotton bag to each household and all shops went "plastic bag free". Shops charge for the use of paper or cornstarch bags and also have reusable cotton and canvas bags for sale.

- Hebden Bridge, England – This historic market town went "plastic bag free" in December 2007 using a campaign encouraging reusable bags. Residents were also given a free cotton bag as a kickoff for the program.
- Tisbury, England – In January 2008, the village of Tisbury went "plastic bag free;" shops encourage reusable bags and residents were charged with making the change from getting free bags at the store to bringing their own bags.
- Overton, England – Shopkeepers in the village of Overton switched from plastic bags to biodegradable cornstarch bags in October 2007.

France

- France – By 2010, plastic bags will be completely outlawed in France.
    - Corisca, France – The French island, Corsica, banned plastic bags in large stores in 1999.
    - Paris, France – In January 2007, the city of Paris banned non-biodegradable plastic bags in large stores. This was done in order to help reduce pollution in the city.

Germany

- Germany – In Germany, all stores that provide plastic takeaway bags must pay a recycling fee to the government to help enhance recycling programs.

Ireland

- Ireland – In March 2002, the Republic of Ireland passed a law enacting a tax on plastic bags. This tax, known widely as the "PlasTax," caused a reduction in plastic bag use of 90%. Since 2002, the reduction has become markedly less (meaning that consumers are using more plastic bags) and so in 2007, the government opted to increase the tax.

Italy

- Italy – In May 2007, Italy passed a law banning non-biodegradable plastic bags starting in 2010. Previously, the country had a plastic bag tax from 1989 to 1992.

Macedonia

- Macedonia – Beginning in January 2009, plastic bags were banned by the Environmental Ministry from the retail and food sectors as well as at markets. For heavier items, plastic bags of a 14 micron thickness with a carrying capacity of at least 5kg (about 11 lbs) can be purchased by customers. A review of this order in early 2009 showed a reduction of the use of plastic bags by retailers of up to 82% as compared to numbers from November 2008. The review also showed that there was a need to increase the minimum thickness for the bags used to carry heavier items and so starting in May 2009, the thickness for such bags is 21 microns.

Scotland

- Scotland – In 2006, the Plastic Bag Levy Bill was introduced in the Scottish Executive. The bill would have required supermarkets and other retailers to charge a fee for every plastic bag supplied to a customer. The bill was withdrawn before it could be voted upon.
    - Banchory, Scotland – In January 2008, the town of Banchory started a campaign to encourage consumers to bring reusable bags to shops and also asked shop owners to cease carrying free plastic bags.
    - Selkirk, Scotland – On April 4, 2008, this town became plastic bag free. The town encourages the use of reusable bags and funded local shops to buy paper bags made with recycled content for general shopping bag use and compostable cornstarch bags for food, meat and fish.

Spain

- Spain - Spain has enacted a law to halve the country's consumption of plastic bags by the end of 2009.

Wales

- Wales - The Environmental Minister of Wales proposed a plastic bag charge between 5-15pence at all retail establishments. Revenues generated from the tax would be used to fund environmental programs. Currently, supermarkets are working on a voluntary basis to reduce the amount of distributed plastic bags by 50%. It is estimated that Wales uses 480 million plastic bags per year. On November 3, 2009 the Environmental Minister confirmed that by May 2011, shoppers will be charged up to 15pence each for single-use plastic bags.
    - Hay-On-Wye, Wales – In December 2007, the Chamber of Commerce and citizens of Hay-On-Wye decided to go plastic bag free. The shops charge for cornstarch takeaway bags and the town is encouraging the use of reusable bags.
    - Llandysilio, Wales - In 2007, the small village of Llandysilio in Pembrokeshire Wales banned plastic bags from being given out at all shops including the post office.

South America

Argentina

- Buenos Aires province, Argentina – The government of Buenos Aires province mandated biodegradable bags and banned give away polyethylene plastic bags in September 2008.

Brazil

- Brazil – A bill (PL 612/2007) was introduced in the Brazilian Chamber of Deputies in March 2007. The bill promoted the replacement of conventional bags with biodegradable bags in retail outlets throughout Brazil. This bill was not passed.
- Brazil - In March 2008 an agreement was signed between the Government of the State of São Paulo and the São Paulo Association of Supermarkets (APAS), which provides for joint environmental awareness campaigns promoted by the Environment Ministry of St. Paul and retail entities. Also in March 2008 the Ministry of Environment launched the campaign

"Conscious Consumption of packaging", with the exhibition "Best practices and innovations in packaging," organized as a starting point of educational work that will spread across Brazil.

Chile

- Chile – In 2008, Senators in the Chilean government proposed a bill that prohibits the distribution of non-degradable plastic bags and a tax or fee on non-degradable bag producers that cannot be passed onto customers.

Uruguay

- Uruguay – In 2008, Uruguayan lawmakers proposed a tax on plastic bags and a transition from plastic bags to biodegradable bags in a two-year period. The bill was passed by the House of Representatives on September 17, 2009 and was transferred to the Senate for review. In addition, on September 2, 2009 the Ministry of Housing and Environment launched a campaign called "Get Bags Out of the Environment" ("Sacá la Bolsa del Medio").
- Uruguay - In 2007, Ordinance No. 260/2007 was adopted which required merchants to implement actions to minimize waste, generation of plastic bags, and to develop management plants for their rational use, reuse and recycling.

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