Reusable Bag Educational and Business Outreach Campaign
Town of Falmouth

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Background

Why are plastic bags bad?

1. Litter problem for plastic bags is more profound that paper bags as paper decomposes over time, plastic does not.
2. Plastic bag litter causes flooding as it clogs drainage systems.
3. Plastic bag litter poses a danger to land and even more to marine wildlife. As a coastal community, Falmouth has a bigger obligation to prevent plastic bag litter.
4. Plastic bags are made from natural gas, a non-renewable resource.
5. Long-term degrading time frame for plastic makes plastic bags a bad candidate for landfill waste. Here in Falmouth, solid waste is burned for energy at ecomaine's waste-to-energy plant. While this option removes plastic from landfill disposal, it presents higher environmental concerns by causing more toxic emissions to the air and ash waste than burning paper. Keep in mind that extensive environmental air regulations exist to properly regulate environmental emissions for incinerators.

Purpose

To prepare Falmouth for implementing the single use shopping bag ordinance
To educate the public about single use shopping bags
To improve existing plastic recycling programs
To communicate with businesses and involve them in the campaign

Paper versus Plastic

Manufacturing Costs

Manufacturing costs depend on the thickness and design of a bag. A typical thin film plastic shopping bag with stamped (not separately fabricated) handles costs around one cent. These "single use" bags are the primary target of the ordinance. A typical paper bag with handles provided by grocery stores can cost 15 cents. The cost for purchasing these bags are built into the cost of the products purchased and passed on to the consumer.

Energy Usage and Environmental Costs

The data for paper versus plastic is as varied as the types of paper and plastic bags manufactured. Below are a few sources but they do not use the same units or share much information about the method used to collect the data.

> Paper bags use 2.7 times as much energy to manufacture as plastic bags, generate 1.6 times as much greenhouse gas emissions, and use 17 times as much water.
> Source: www.letstalkplastic.com

> 85% of the raw material to make plastic bags is from natural gas
> Source: Analysis by Chemical Market Association, Inc. 2/2011

The overall assessment is that plastic bags require less energy, less water, and generate fewer air emissions to manufacture and to recycle than paper bags. Plastic bags require much less energy to transport as they weigh about one tenth of the weight of paper bags. 2000 plastic bags weigh 26 pounds, whereas 2000 paper bags weigh 228 pounds (banthebag.com). The argument supporting paper bags over plastic in that they decompose is valid, providing they are not landfilled, and are sent for composting, provided they do not have a lot of print on them, or the print is vegetable-based.

Recycling opportunities

Falmouth provides a single-sort recycling program for residents where they can place all recyclables in one container for curbside pick up. Both paper and plastic bags are accepted provided they are not excessively soiled. (?) The sorting facility operated by ecomaine segregates, bales and sells the recyclable material to various brokers, who then sell the material to domestic or foreign recycling facilities. Plastic bags pose a problem as the sorting system is not adequately designed to pull the lightweight plastic from the waste stream. Consequently the bags become entwined in the rotating parts of the conveyor belt, and cause other recyclables to become improperly sorted.

Alternative recycling programs for thin film plastic are actually required by state law,

> Legislature 1166:
> "Retailers may only provide customers with plastic bags if there is a receptacle to collect the…m… (?) within 20 feet of the entrance and all …are then recycled."

Shaw's, Hannaford and Walmart all have recycling receptacles. However, the plastic must be dry and clean in order for it to be properly recycled.

Events

School bag design contest

Take the 30-day no plastic bag trial

Public Survey "Your Bag Destinations"
Determine where everyone puts their plastic and paper shopping bags.
Reused? Disposed?
Recycled? Where?

Farmers Market Outreach
Coordinate with existing non-for profit organizations to distribute free reusable bags and information to the public.

Styrene collection event

Reusable Bags

Where to get
Provide list of local businesses that provide free or low cost reusable bags.
Investigate where these bags are purchased to determine if local manufacturers are preferred over foreign manufacturers.

Energy comparisons and recycling opportunities
Verify that reusable plastic bags are completely recyclable.
Develop spreadsheet listing suppliers of reusable bags, contact information, and bag type. (See San Francisco's)
Find valid data on the number of uses each bag should have to cover the environmental costs and carbon foot print of manufacturing it.

Incentives

Reminders and cleaning
Develop small signs and stickers.
Instructions for cleaning
Recommendations to not leave soiled bags in warm places where bacteria can multiply.

Business Outreach

Survey
What could be the economic ramifications of a fee and a ban?

Fee appropriation possibilities
Can part of the fee go toward an environmental cause?

Potential effects of Plastic Bag Ban

Improving existing Plastic Bag Recycling Programs
Bigger receptacles, more visible signs and locations

Dry Cleaner plastic recycling
Reach out to all dry cleaning companies and determine if they would consider collecting plastic film from their customers.
Determine best method to collect this material, while keeping it clean and dry for pick up by Trex or other brokers.

The purpose of these questions would be to gauge the interest and readiness of Falmouth businesses for a potential bag fee and plastic bag ban, and record concerns and obstacles they might experience.

1. In what instances do you provide bags for your customers? Hot foods, wet foods? Only when asked?
2. How would a plastic bag ban affect you?
3. What exemptions do you believe are necessary to ensure safety and quality for your store?
4. Could your cashiers begin to hand out bags only when asked to by their customers rather than automatically?
5. Do you believe a 5 cent fee on paper and plastic bags is fair to impose on your customers?
6. Could your store manage a fee system where a portion of the fee is given to outside sources, such as a fund for environmental or education purposes?
7. If a bag fee is implemented, could your store manage a compensation program where a customer would get 5 cents off their purchase for every bag they bring in?
8. If you provide styrene (Styrofoam) to customer, would it be feasible to phase it out? How much would this affect your prices?

Acting Globally

Styrene ban possibility
What does the public think?
Environmental packaging choices
Offer letter suggestions and contact personnel for residents to request better packaging solutions when purchasing products.
On line purchases as well as local purchases

Further Information Sources
www.treehugger.com/culture/paper-bags-or-plastic-bags-everything-you-need-to-know/
www.science.howstuffworks.com/environmental/green-science/paper-plastic1.htm