## **Public Works Perspective:** *Why should public agencies limit single use plastic bags?*



Department of Public Works December 15, 2010

#### Background

- Plastic carryout bags were first introduced around 1975
- 80% of all grocery stores in the U.S. currently use plastic bags
- 19 billion plastic bags are consumed in California each year
  - 6 billion plastic bags in LA County
    - 45,000 tons of plastic bags are landfilled annually (0.4% of the disposal waste stream)
    - 117,000 tons of paper bags are landfilled in LA County annually (1% of the disposal waste stream, due to greater weight/bag)

#### Why Are Plastic Bags Problematic?

Plastic Carryout Bags
 ✓ 0.4% of the waste stream
 ✓ Up to 25% of the litter stream

 Materials are lightweight, easily windblown, and last indefinitely resulting in a *disproportionate impact* on the environment and public infrastructure

## **Economic Impacts** of Plastic Bag Litter

- According to the State of CA, public agencies in CA spend over \$375 million for litter prevention, cleanup, and disposal.
- The L.A. County Flood Control District spends more than \$24 million on litter prevention, cleanup, and enforcement efforts.
- Caltrans District 7, which covers LA and Ventura Counties, collected 50,000 CY of litter and debris at a cost of \$12 million/yr.



## San Francisco Study

- San Francisco supermarket passed out 50 million bags a year - 90% plastic and 10% paper
  - Removal of bags from the recycling and compost streams, clearing machinery jams, and contamination of recycled and composted material results in \$1.09 million in added cost or lost sales - 2.2 cents per bag
  - Collection and disposal. Collecting and disposing of bags costs
    \$3.6 million annually 7.2 cents per bag
  - Removing bags from city streets costs \$2.6 million a year - 5.2 cents per bag
  - Potential remediation and processing costs of bags in city landfills is \$1.2 million annually - 2.4 cents per bag

#### > TOTAL COST: 17 cents per bag

April 2007 - Board of Supervisors instruction

- Investigate the issue of polyethylene plastic and paper sack consumption in the County, including the pros and cons of adopting a policy similar to that of San Francisco
- August 2007 "An Overview of Carryout Bags in Los Angeles County"
  - Manufacture, distribution, and use of plastic carryout bags in Los Angeles County
  - Fiscal, environmental, and public health impacts created by the consumption of plastic bags
  - Alternatives to plastic bag consumption

#### **D** Established Stakeholder Working Group:

- Including representatives of supermarkets, retailers, environmental groups, the plastic bag industry, the public, and local government
- Investigate measures to reduce the consumption of plastic and paper carryout bags at retail establishments throughout the County

#### January 22, 2008 – Board of Supervisors adopted Alternative 5

Voluntary Single Use Bag Reduction and Recycling Program, educated businesses and shoppers alike about ways to reduce the impacts of litter from single use bags on the environment; encourage shoppers to utilize reusable bags; and enhance the recycling of single use plastic bags and paper bags.

- July 1, 2008 Launch of Single Use Bag Reduction and Recycling Program
  - Included Board-established benchmarks for rate of plastic bag disposal reduction:
  - 30% by July 1, 2010
  - 65% by July 1, 2013
- Brag About Your Bag<sup>®</sup> Reusable Bag Giveaway and Plastic Bag Recycling Campaign
  - November 15, 2009 to December 17, 2009
    - Approximately 60,000 reusable bags distributed
    - Approximately 45,000 plastic bags collected for recycling
- July 17, 2008 Legal Challenge

- Single Use Bag Reduction and Recycling
  Program was not successful in meeting goals:
  - > Over a 2-year period and despite State law requirements under AB 2449, stores did not provide data that would enable staff to determine if the first voluntary Program benchmark of 30% was met
  - No more than 8 stores at any given time had met the *minimum* participation levels
- 2008 Board action included instructions to draft an Ordinance banning plastic carryout bags and complete any review required by CEQA

- County also sponsored and/or supported legislation to establish a fee or ban single use plastic carryout bags, beginning with Assembly Bill 2829 (2008, Davis) up to the most recent legislation - Assembly Bill 1998 (2010, Julia Brownley)
- These legislative efforts were supported by a diverse coalition:
  - ✓ Local governments
    ✓ Environmental organizations
     ✓ Grocers
     ✓ Industry
- ✓L.A. County Integrated Waste Management Task Force
- ✓LA County Board of Supervisors
- ✓145 other organizations including stores, labor unions, and government officials

### Economic Impacts of Plastic Bag Ordinance

- County conducted an independent study of the potential socio-economic impacts of the Ordinance
  - Major finding: average expected cost to residents is \$5.72 per year
- > Likely a positive impact for stores:
  - Reduced transportation and warehousing costs
  - No longer need to provide "free" bags
  - Cost savings can be passed on to consumers

### **Economic Impacts** of Plastic Bag Ordinance

#### > Additional Key Findings:

- The inclusion of the 10 cent fee on paper bags is expected to have a measurable impact on consumer behavior and encourage most customers use reusable bags or to avoid using any bags.
- As a result, the impact of the proposed ordinance on lower-income residents of the County is expected to be negligible, since most of these customers will avoid the 10 cent charge by bringing their own bag or avoiding a bag.

## Findings

Reducing bag litter can result in significant cost savings to taxpayers

The RWQCB imposed a zero trash TMDL

- Ballona Creek watershed
- LA River watershed
- O & M costs to the County and other agencies is expected to substantially increase in coming years
  - The RWQCB has recognized that ordinances restricting single use plastic bags can help achieve these goals.

### Findings

- Accelerating the use of reusable bags has multiple opportunities to add value:
  - Reducing litter
    - Improve recreational experiences and quality of life
    - Reduce negative impacts on wildlife
    - Improve tourism
  - Reducing hidden costs to consumers
    - Up to \$18/yr for plastic bags vs.
      \$4/yr for reusable bags
  - Encouraging green jobs manufacturing reusable bags



## Findings

- Conserve energy and natural resources
  - Generates less waste
  - Consumes fewer natural resources
  - Generates less air/water pollution from:
    - Manufacturing
    - Transportation
    - Recycling/disposal processes
- Invite citizens to actively participate in practices that promote a clean and sustainable environment

## Conclusions

- Ban provides a net benefit economically and environmentally, saving taxpayer funds
- Fee on paper bags provides choice to customer, results in negligible impact to most customers while mitigating potential for increased environmental impacts from single use paper bags
- Regional consistency is vital to enhancing effectiveness and minimizing confusion among residents
  - We encourage you to become a participant in this effort, through <u>AboutTheBag.com</u>