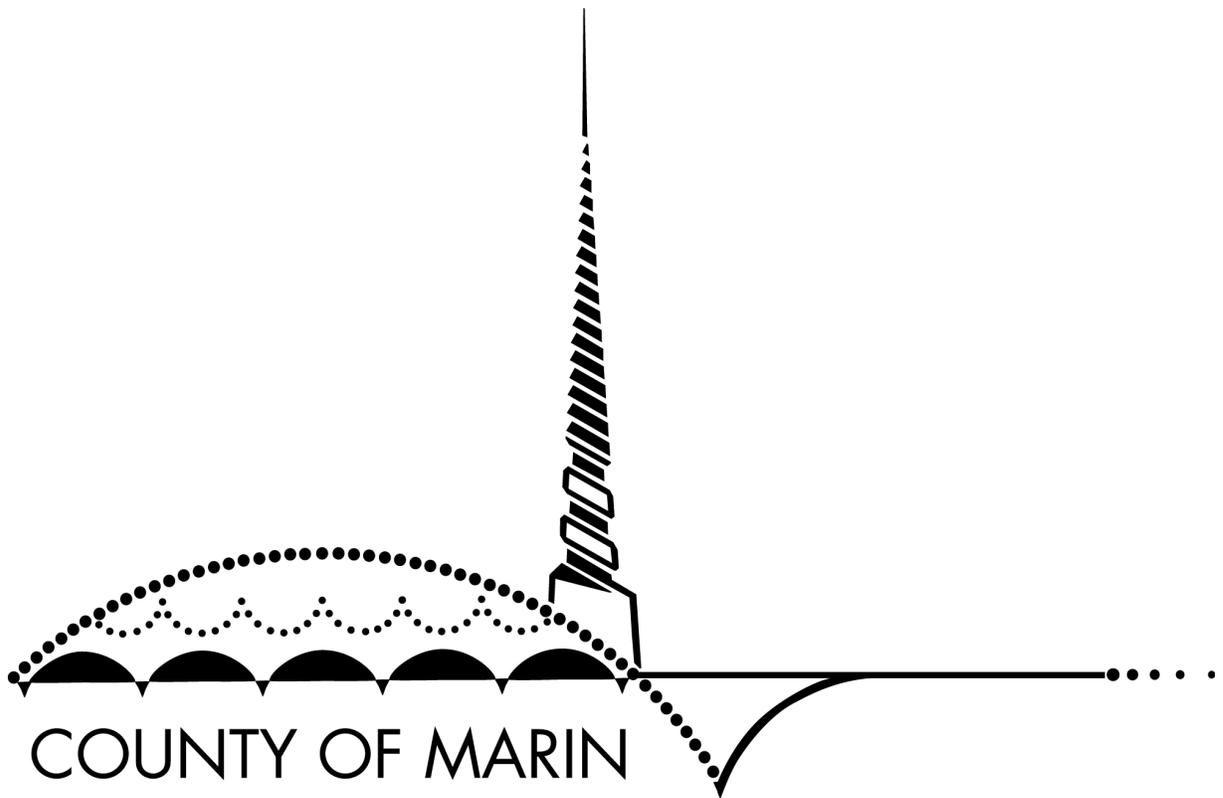


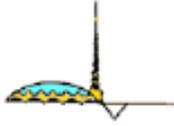
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2012/2013 MARIN COUNTY CIVIL GRAND JURY

# Holding the Bag

Report Date -May 1, 2013  
Public Release Date -May 7, 2013





## HOLDING THE BAG

### SUMMARY

As the garbage truck tipped its load, hundreds of plastic bags wafted from the opening and sailed across the flat plains of the dump. There is so much incoming plastic waste that many landfills set up trash nets and employ a fulltime person just to catch the sailing bags and papers before they escape into the surrounding environment.



**Plastic bags  
adrift at the  
Redwood  
Landfill**

A global movement to ban or discourage the use of plastic bags is growing and many communities are starting to take action. Plastic bags use up natural resources, consume energy to manufacture, create litter, choke marine life and add to landfill waste. Since plastic bags essentially never break down, once they are littered, they become a permanent environmental problem.

Scientific results from a voyage led by a group of graduate students from Scripps Institute of Oceanography at UC San Diego reveal the infiltration of human pollution in an area of the ocean commonly referred to as the "Great Pacific Garbage Patch." During their 2009 voyage aboard the Scripps research vessel, *New Horizon*, the students collected fish specimens, water samples and marine debris at depths ranging from the sea surface to thousands of feet depth. *"About nine percent of examined fishes contained plastic in their stomach. That is an underestimate of the true ingestion rate because a fish may regurgitate or pass a plastic item, or even die from eating it. We didn't measure those*

rates, so our nine percent figure is too low by an unknown amount," said Davison, one of the main Scripps researchers.<sup>1</sup>

Members of the Marin County Civil Grand Jury were aware of the potential for environmental damage from plastics, but during our field trip to the Redwood Landfill, the sight of plastic bags blowing in the wind really brought the message home. We wondered what Marin County was doing to stem the tide of plastic bags, and how serious a problem they pose.



### ***Trash-catching net in action***

We found that although the problems posed by plastic bags are only part of a much larger problem of worldwide waste and the consequent environmental damage, they are problems that we can address at our local level.

As a result of our research, we found a lot of local interest in banning not just plastic carry-out bags, but all single-use bags<sup>2</sup>. The Town of Fairfax, citing its "*duty to protect the natural environment, the economy, and the health of its citizens*,"<sup>3</sup> was the first town in California to enact a plastic bag ban through a community effort ballot measure. The Fairfax ordinance became effective May 2009 and amended the town code to: "*(1) require the use of recyclable paper and/or reusable checkout bags by all shops, stores, eating places, food vendors and retail food vendors located in the Town of Fairfax, and (2) provide penalties for violations.*" For Marin's unincorporated areas, Marin County banned plastic carry-out bags at grocery stores, pharmacies and convenience stores of at least 10,000 square feet and imposed a 5-cent fee on paper bags in January 2012. We have learned that most of the remaining towns and cities in Marin plan to adopt their version of a single-use bag ordinance in the near future.

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<sup>1</sup> Scripps Institute of Oceanography, Scripps News, June 30, 2011 <http://scrippsnews.ucsd.edu/Releases/?releaseID=1174>

<sup>2</sup> Single-use bags are bags of any material that are designed to be used only once and are typically not brought back to the store for re-use.

<sup>3</sup> The Town of Fairfax Code, Chapter 8.18.010 FINDINGS (u)

The Grand Jury strongly advocates the adoption of ordinances throughout Marin County to eliminate all single-use plastic carry-out bags. In addition, the Grand Jury recommends extending the ban as far as realistically possible to all commercial establishments regardless of size.

## BACKGROUND

California, through the Integrated Waste Management Act of 1989, mandated a goal of 50% diversion of its disposed waste stream by 2000 for each city and county in California. The Marin Hazardous and Solid Waste Joint Powers Authority (JPA) was formed in 1996 to ensure Marin's compliance with the California Integrated Waste Management Act and its waste reduction mandates. The JPA is comprised of 12 Member Agencies: Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito, Tiburon and unincorporated Marin County. The Regional Agency status of the JPA allows Member Agencies to report to the State as one political body instead of 12.

In 2006, the JPA began an initiative called **ZERØWASTE MARIN** with the goal of reaching zero waste disposal by 2025. (Zero waste is defined as a 94% diversion rate with only 6% remaining waste.) The JPA prepared the "Zero Waste Feasibility Study"<sup>4</sup> to establish programs and policies to strengthen the countywide framework for meeting its Zero Waste Goal. Efforts to reduce or eliminate single use bags, plastic or otherwise, will help the JPA meet that goal.

According to Californians Against Waste (CAW), Californians use approximately 14 billion plastic bags every year,<sup>5</sup> which equates to about 400 bags per second. Plastic bags are a primary source of litter because they are light and aerodynamic. Plastics, including plastic bags, essentially never biodegrade; instead, they break down into tiny particles that become part of the soil and water. Only about 3% of the plastic bags used in California are recycled.<sup>6</sup>

There has been extensive news coverage lately about plastic bags and waste reduction. Due to a growing concern over litter and marine debris, many communities are taking a stand against single-use plastic carry-out bags. To date, 72 California cities or counties have adopted ordinances to ban or restrict the use of plastic carry-out bags. The City and County of San Francisco became the first in the nation to adopt a ban on plastic shopping bags in April 2007, and in February 2012, voted to expand the ordinance to include all

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<sup>4</sup> The full study can be found on JPA ZERO WASTE MARIN website page:  
<http://zerowastemarin.org/zero-waste-101/zero-waste-feasibility-study/>

<sup>5</sup> Californians Against Waste website <http://www.cawrecycles.org/issues/plasticbagcampaign>

<sup>6</sup> CalRecycle, At-Store Recycling Program 2009 Statewide Recycling Rate for Plastic Carryout Bags  
[Calrecycle.ca.gov/plastics/atstore/default.htm](http://Calrecycle.ca.gov/plastics/atstore/default.htm)

retailers citywide. More recently, several cities, including Half Moon Bay, Menlo Park and Mountain View, have adopted ordinances, effective 4/22/13, to prohibit stores from using single-use plastic carry-out bags and allow stores to charge a small fee for paper or reusable bags. The following CAW website lists each California jurisdiction along with the synopsis of its action as every new ordinance is passed:

[http://www.cawrecycles.org/issues/plastic\\_campaign/plastic\\_bags/local](http://www.cawrecycles.org/issues/plastic_campaign/plastic_bags/local)

The Grand Jury was interested to learn what has been done and what is being considered to reduce plastic bag litter in Marin County. We wanted to know the extent of the problem and what options are available at the local level to reverse the effects of plastic bag pollution.

Although we found reason for environmental concern over the littering of all types of plastic bags and containers, this investigation is primarily concerned with the effects of single-use plastic carry-out bags. We believe that the elimination of these types of bags may open the door to broader bans in the future.



## APPROACH

The Grand Jury:

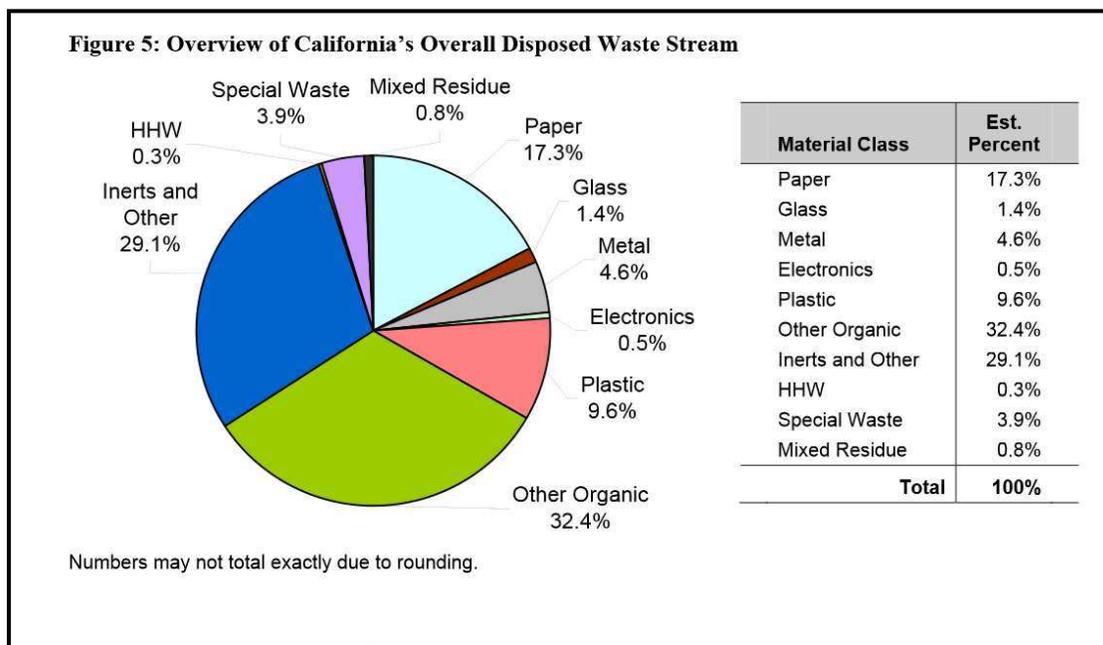
- Interviewed members of the JPA to determine not only what Marin County is doing to reduce waste, but also to determine the JPA's interest and position on the issue of plastic single use carry-out shopping bags.
- Contacted the administrative body of each City and Town in Marin County to determine what, if anything, each plans to do to reduce the use of single use carry-out plastic bags.
- Researched various websites, papers, and agencies for the history and extent of problems caused by single use bags in the world, in California, and in Marin.
- Compared the properties of various types of shopping bags.

## DISCUSSION

In 2008, California undertook a Statewide Waste Characterization Study<sup>7</sup> to determine the types and amounts of waste entering California's waste stream. Plastics make up approximately 9.6% of California's overall disposed waste stream, as indicated in Exhibit 1 below.

The 9.6% plastic waste stream was further broken down into types of plastic. Plastic bags compose approximately 1.2 % of California's total waste stream. This could be considered a small amount when compared to the overall quantity of waste. However, many properties of plastic bags make them especially harmful for the environment.

**Exhibit 1** *Figure from California 2008 Statewide Waste Characterization Study*



**Note:** *HHW under Material Class in the figure above stands for Household Hazardous Waste*

Plastic bags can be recycled for other uses, such as plastic lumber, but only a small percentage is actually recycled. Estimates of the recycle rate range from 3% (per CAW) to 9% from the US Environmental Protection Agency (EPA) of the 14 billion plastic bags distributed annually in California. The rest end up in landfills or as litter on land or in the ocean.

<sup>7</sup> California 2008 Statewide Waste Characterization Study  
<http://www.calrecycle.ca.gov/Publications/Documents/General%5C2009023.pdf>

The concerns most often cited by local governments as reasons to restrict or ban plastic bags are discussed below.

**Reasons given by governmental bodies for adopting restrictions:**

■ **Harm to wildlife**

Plastic bags are now ubiquitous in our environment, and strangle, choke and kill animals both on land and in water. Plastic bags are one of the most common debris item found on beaches, according to the Ocean Conservancy. During the 2009 International Coastal Cleanup Day, 1,126,774 plastic bags were picked up on ocean beaches worldwide.

Planet Ark, an international environmental group, estimated that worldwide, 100,000 whales, seals, turtles and other marine animals are killed each year by consuming plastic garbage. Plastic bags still containing food will attract animals, and many will eat the plastic along with the waste food. Plastics cannot be broken down by the stomach, so they can build up inside the animal and give a false sense of fullness, leading to malnutrition and death by starvation. Animals can also choke to death if the plastic blocks their airflow.

In 2011, the death of a whale in Puerto Rico was blamed on plastic bag pollution<sup>8</sup>. Biologists found over 10 pounds of plastic in the whale's stomach and believed the plastic caused the animal to die of starvation or malnutrition.

***Plastic bags are the fifth most common debris item found on beaches.***



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<sup>8</sup> News Review article dated 5/26/2011  
<http://www.newsreview.com/chico/plastic-bags-threaten-whales/content?oid=2148890>

- **Litter on land and in the ocean**

Marine litter poses environmental, economic, health, and aesthetic problems globally. Most marine litter has a very slow rate of decomposition, leading to a gradual, but significant accumulation in the coastal and marine environment.

*"Marine litter is symptomatic of a wider malaise: namely, the wasteful use and persistent poor management of natural resources. The plastic bags, bottles, and other debris piling up in the oceans and seas could be dramatically reduced by improved waste reduction, waste management and recycling initiatives,"* said Achim Steiner, Executive Director of the United Nations Environment Programme. *"Some of the litter, like thin film single-use plastic bags, which choke marine life, should be banned or phased out rapidly everywhere—there is simply zero justification for manufacturing them anymore, anywhere."*

According to information provided by the National Oceanic and Atmospheric Administration (NOAA), plastic comprises the vast majority of marine debris. Scientists have collected up to 1.9 million bits of plastic per square mile of the Great Pacific Garbage Patch. (The Great Pacific Garbage Patch, also known as the North Pacific Gyre, is a swirling sea of plastic bags, bottles and other debris that is trapped in the central North Pacific Ocean by the vortex of ocean currents.)



Plastic debris in the Great Pacific Garbage Patch has increased 100 times over in the past 40 years. Two graduate students with the Scripps Environmental Accumulation of Plastic Expedition (SEAPLEX) found evidence of plastic waste in more than 9% of the stomachs of fish collected during their scientific voyage to study garbage accumulation in the North Pacific Gyre.<sup>9,10</sup>

<sup>9</sup> Scripps Institute of Oceanography, Scripps News, June 30, 2011 <http://scrippsnews.ucsd.edu/Releases/?releaseID=1174>

<sup>10</sup> For information about the North Pacific Gyre, see Charles Moore article titled "Trashed - Across the Pacific Ocean, Plastics, Plastics, Everywhere" in Natural History v.112, n.9, Nov03 <http://www.mindfully.org/Plastic/Ocean/Moore-Trashed-PacificNov03.htm>

In a November 2008 report,<sup>11</sup> the California Ocean Protection Council (OPC) stated that 80% of the ocean litter problem comes from land based sources and that the majority of ocean litter is composed of plastic. OPC calls for actions to prevent and control ocean litter. One of the four Priority Actions in the report, Priority Action #2, calls for a fee on or the prohibition of single-use products such as single-use plastic bags and other packaging where a more feasible and less damaging alternative is available.

Plastic bag use is now so prolific around the world that the bags have become a major source of litter. Plastic bags blowing around streets in China were so common they earned the name "white pollution."<sup>12</sup> And in South Africa, the bags littering the countryside are called "national flowers." In some African areas, people are even "harvesting" the plastic bags to make bags, hats and other crafts.



***Plastic bags have been one of the top items collected on California Coastal Cleanup Day.***

- **High costs to clean up**

The EPA estimates that West Coast cities spend \$13 per resident to combat and clean up trash, much of which would otherwise end up as marine debris.<sup>13</sup> For California, the overall cost to protect our waters from litter is over \$412 million each year.<sup>14</sup>

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<sup>11</sup> An Implementation Strategy for the California Ocean Protection Council Resolution to Reduce and Prevent Ocean Litter [http://www.opc.ca.gov/webmaster/ftp/pdf/opc\\_ocean\\_litter\\_final\\_strategy.pdf](http://www.opc.ca.gov/webmaster/ftp/pdf/opc_ocean_litter_final_strategy.pdf)

<sup>12</sup> China banned free plastic shopping bags and called for a return to cloth bags two months before the 2008 Beijing Summer Olympic Games. According to a government official with the China's National Development and Reform Commission, after four years of the ban, the nation had saved 4.8 million tons of oil.

<sup>13</sup> "The Cost to West Coast Communities of Dealing with Trash, Reducing Marine Debris," prepared for the US EPA, September 2012

<sup>14</sup> CAW, The Problem of Plastic Bags [http://www.cawrecycles.org/issues/plastic\\_campaign/plastic\\_bags/problem](http://www.cawrecycles.org/issues/plastic_campaign/plastic_bags/problem)

Between 8% and 25% of the litter is attributable to plastic bags alone, according to clean up data from San Jose and Los Angeles County. Based on this information, an estimated \$33 million to \$103 million is spent each year to manage plastic bag litter in our state.

Moreover, cities and other recyclers spend an exorbitant amount of time and money removing plastic bags from their recyclables stream. Plastic bags often jam recycling machinery, thus adding to the manual labor costs of recycling. After estimated losses of \$1 million each year for plastic-bag related repairs to machinery in their recycling facility, the City of San Jose no longer collects single-use plastic bags at curbside. And in early 2013, it was reported that workers in Sacramento's waste transfer station shut down their machinery multiple times a day to remove bags clogging the conveyors.<sup>15</sup>

- **Depletion of natural resources**

The most common plastic bags are made from polyethylene. This material is made from crude oil and natural gas, both non-renewable resources. The manufacture of plastic bags contributes to our consumption of diminishing natural resources and to ongoing damage to the environment from petroleum extraction.

It takes the equivalent of 12 million barrels of oil to produce the estimated 100 billion plastic shopping bags the US uses per year.<sup>16</sup> Reducing plastic bag production means reducing our dependence on petroleum.

### **The free rider problem**

A free rider is a party who enjoys a benefit earned from a collective effort, but who contributes little or nothing to the effort. A ban enacted by one local government but not enacted by surrounding areas can attract lawsuits and negative publicity to that community. And if surrounding areas keep a stream of plastic flowing, a free-rider problem is created in which the community enacting the ban pays for the environmental benefits while other neighboring communities enjoy the benefits at no cost.

The California Grocers Association cautions that some cities with bans have experienced a loss of grocery business when neighboring communities do not have bans. *"When we do see stores that are close to these jurisdictional lines, we are seeing consumers flock to the non-regulated stores,"* said Tim James, the association's manager of local government relations. The president and chief executive of the California Grocers Association, Ron

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<sup>15</sup> The Sacramento Bee article, "Plastic bag ban could be in Sacramento's future," dated February 9, 2013

<sup>16</sup> These figures are widely quoted and can be found on many websites. Two examples are: (1) Facts About the Plastic Bag Pandemic at <http://www.reuseit.com/learn-more/top-facts/plastic-bag-facts> and (2) The Energy Consumed to Use Paper and Plastic Bags at <http://ezinearticles.com/?The-Energy-Consumed-to-Use-Paper-and-Plastic-Bags&id=1601578>

Fong, was quoted in a 2/22/13 Los Angeles Times article as supporting statewide regulation of carry-out bags. *“Our industry supports efforts to achieve a statewide solution to single-use carry-out bag regulation in California,”* Fong said. *“With a patchwork of more than 60 local ordinances, compliance becomes a challenge for grocery retailers, and consumers become confused about their options at the check stand.”*

Many local governments would like a unified regulation of plastic carry-out bags that applies the same rules to all of California. However, attempts to ban or reduce plastic bags on a statewide level have been met with opposition from the Save the Plastic Bag Coalition and the American Chemistry Council (ACC). Despairing of a solution, many local communities are acting independently.

### **Comparison of bag alternatives**

There are alternatives to single-use plastic bags. This section of the report compares the pros and cons of single-use plastic bags with these alternatives.

*Single-use plastic bags* are made from nonrenewable resources such as petroleum and natural gas, and provide an inexpensive, lightweight, and convenient way to carry goods.

Plastic bags do not biodegrade, but photodegrade into microscopic granules when exposed to ultraviolet radiation from the sun. Scientists are not sure if these granules ever degrade fully into carbon dioxide, water and inorganic molecules (a process called mineralization). Based on research to date, plastic bags do not mineralize in the ocean but instead break down into smaller and smaller pieces. Some scientists fear that the buildup of such particles in marine and terrestrials environments will lead to an infiltration of toxic plastic particles into every step of the food chain.

Plastic bags can be recycled, and materials from post-consumer plastic bags and product

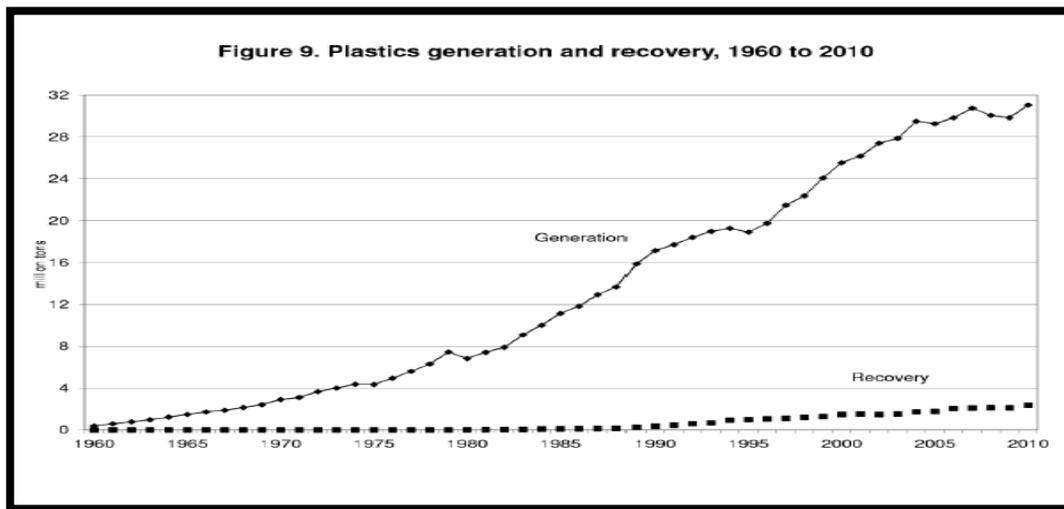
***Many plastic bags become litter. Their light weight makes them often land in trees or waterways.***



wraps are used to make lumber for backyard decks and fences, lawn and garden products, pallets, crates, containers, piping, automotive applications and new plastic bags. The recycling process mandates the exclusive use of dry, clean, and empty bags, and any bag exposed to food cannot be recycled. Some plastic bags are recycled, but most ultimately end up in landfills or as litter on land and waterways.

The ACC, one of the major proponents of plastic bag manufacture and use, recently reported an increase in plastic bag recycling of 27% in 2010 over 2009.<sup>17</sup> But this figure is dwarfed by the EPA's reported 220 million pound growth in plastic bag generation during the same period.<sup>18</sup>

**Exhibit 2 RATE OF PLASTICS GENERATION EXCEEDS RATE OF RECOVERY**



*From Municipal Solid Waste Generation, Recycling, and Disposal in the United States (Tables and Figures for 2010)*

The cost of energy to recycle plastic bags is more than the value of the recycled bag and is also more than the cost of making new bags. It costs roughly \$4,000 to process and recycle one ton of plastic bags, which can then be sold for only \$32 on the commodities market.<sup>19</sup> Also, as plastic bags are melted down for re-casting, the polymer chains often break, leading to a lower quality plastic. When high cost and low quality outcomes are

<sup>17</sup> 2010 National Postconsumer Plastic Bag and Film Recycling Report, prepared by Moore Recycling Associates Inc. for the American Chemistry Council January 2012.

<sup>18</sup> EPA Municipal Solid Waste Generation, Recycling, and Disposal in the United States, Tables and Figures for 2010 Office of Resource Conservation and Recovery, November 2011

<sup>19</sup> Clean Air Council, Waste and Recycling Facts <http://www.cleanair.org/Waste/wasteFacts.html>

added to other problems associated with the recycling process, such as the tendency of plastic bags to jam machinery, recycling plastic bags becomes even less desirable.

***Biodegradable plastic bags*** are often made from farm products like cornstarch, which will break down relatively quickly under the right conditions,. To meet international standards, bags must compost within 12 weeks and fully biodegrade within 6 months. According to the Biodegradable Plastics Society, when these plastics are composted, they break down into water and carbon dioxide. However, independent research is needed to confirm whether this is true under all environmental conditions.

It is possible that biodegradable plastics do not break down fully, especially under conditions that are not ideal for composting and leave non-degradable constituents, some of which may be equally, if not more, hazardous.<sup>20</sup> And, as noted in a study sponsored by the United Nations Environment Programme (UNEP), developing "litter-friendly" materials will send the wrong signal to people, and go against efforts to change behaviors. *"If contaminating the environment with 'litter-friendly' waste is considered acceptable, it will be difficult to draw the line and accomplish any consistent change in attitude and behavior."*<sup>21</sup> Biodegradable bags are costly to produce and are not suitable for recycling.

***Compostable bags*** are very similar to biodegradable bags but "greener." For plastic to be considered compostable, it must be able to break down into carbon dioxide, water and biomass at the same rate as paper. It should look like compost, should not produce any toxic material and should be able to support plant life. Compostable plastic (also called "bioplastic") is made from plant materials such as corn, potato, cellulose, soy and sugar. One of the problems involved with creating bioplastics is the amount of energy needed in production, which is more than what is necessary to create an equivalent petroleum based plastic product. Compostable bags cost three to six time more than "traditional" plastic bags. Three times the raw materials are used to produce a truly compostable bag (one that biodegrades in compost).<sup>22</sup> Also, the rate at which bioplastics break down is too fast to be included with the plastics sold to the recycling market, and too slow to be considered suitable for composting.

***Reusable bags*** are made from renewable materials, and conserve resources by replacing paper and plastic bags. Such reusable bags are convenient and come in a variety of sizes, styles and materials. The average reusable bag has a lifespan equivalent to using seven hundred disposable plastic bags. Over an average lifetime, use of reusable bags by just one person would save over 22,000 plastic bags.

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<sup>20</sup> Plastic Debris in the World's Oceans GREENPEACE

<sup>21</sup> Page 8 Marine Litter An Analytical Overview, 2005 2005 United Nations Environment Programme

<sup>22</sup> Biodegradable Bags Confuse the Public, February 2008 at <http://www.icis.com/Articles/2008/02/11/9099296/biodegradable-plastics-confuse-the-public.html>

Paper bags, which many people consider a better alternative to plastic bags, result in their own set of environmental problems. For example, according to the American Forest & Paper Association, the U.S. alone uses around 10 billion paper grocery bags each year, representing a lot of trees.<sup>23</sup>

The plastic industry maintains that plastic bags are better for the environment than paper bags. And this appears to be partly true. We are no better off (and may actually be worse off) using paper bags rather than plastic ones. According to the EPA, (1) paper bags are more likely to be recycled (nationwide, about 20% of paper bags are recycled, compared to about 9% of plastic bags<sup>24</sup>), and (2) the trees from which paper bags are made are a renewable resource, whereas plastic bags are made from non-renewable resources. However,

- Paper bags take up more landfill space (2,000 plastic bags weigh just 30 pounds, whereas 2,000 paper bags weight 280 pounds).
- Paper bags in landfills do not break down much faster than plastic bags (because they're not exposed to water, light, oxygen and other elements that they need to biodegrade).<sup>25</sup>
- It takes more than 4 times as much energy to manufacture a paper bag as it does a plastic bag.<sup>26</sup>
- It takes 98 percent less energy to recycle a pound of plastic than it takes to recycle a pound of paper.<sup>27</sup>
- The manufacture and distribution of paper bags generate 70 percent more air pollution and 50 times more water pollutants than plastic bags.<sup>28</sup>

Therefore, it is not necessarily better to switch from plastic bags to paper ones. Paper bags still account for a huge amount of wasted energy and excess refuse.



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<sup>23</sup> This figure is attributed to the American Forest & Paper Association (AF&PA). Current data from the AF&PA is difficult to find, as the AF&PA is interested in promoting its recycling success to the public over its production figures.

<sup>24</sup> EPA data from article "Paper Grocery Bags Require More Energy Than Plastic Bags", The Reason Foundation 2008

<sup>25</sup> Paper or Plastic? More than Meets the Eye, Washington Post 2007

<sup>26</sup> Ibid

<sup>27</sup> Ibid

<sup>28</sup> Comparison of the Effects on the Environment of Polyethylene and Paper Carrier Bags," Federal Office of the Environment, August 1988

## Neither paper nor plastic

Is it better to use paper or plastic? The best answer is neither. Both paper and plastic bags come at a cost to the environment. The production, shipping and disposal of both kinds of bags contribute to resource depletion and the pollution of land and water. Both paper and plastic bags use up a lot of energy and a lot of natural resources. Proper recycling of both requires attention and diligence from consumers, waste collectors, and recycling companies. The potential for lack of interest, knowledge, or attention by any party along the recycling route, creates many potential barriers that can lead to low recycling rates.

In our opinion, the best alternative is the combination of reusable bags and education. Many organizations have created educational materials about the problems created by plastic bags as well as possible solutions. Just a few examples are websites and publications by the Smithsonian,<sup>29</sup> UNEP,<sup>30</sup> and JPA.<sup>31</sup> Marin governmental agencies can find solid, reliable information to assist them to educate and encourage the public to stop using carry-out plastic bags and start using cloth or other reusable bags. Most of the recent bag ban ordinances in California ban carry-out plastic bags and charge a fee for paper bags. This encourages reusable bags and reduces the total number of single-use carry-out bags provided. By choosing reusable bags, consumers can save thousands of plastic or paper bags. Education is vital. In 2011, the City of San Rafael conducted a survey of local merchants to obtain feedback on a potential citywide ban on single-use carry-out bags. Opinions were mixed, with slightly more in support than in opposition toward the idea of the ban. Some objections against a ban were actually objections against governmental regulations: *"Too much 'Big Brother'."* *"...How can the city tell you what to charge for?"* *"Too much government intervention on trivial things."*<sup>32</sup>

## A part of the solution to a global problem

Plastic bags are just one part of a larger problem. A very low percentage of the products we buy are still in use 6 months after purchase. Even though California's local governments have made extensive recycling efforts to reach our current 58% diversion rate, state residents still sent about the same amount of waste to the landfill in 2009 as they did in 1990 - 40 million tons.

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<sup>29</sup> Smithsonian National Museum of Natural History <http://ocean.si.edu/conservation/pollution>

<sup>30</sup> United Nations Environment Programme  
<http://www.unep.org/regionalseas/marinelitter/publications/default.asp>

<sup>31</sup> Marin JPA, ZEROWASTEMARIN <http://zerowastemarin.org/take-a-challenge/>

<sup>32</sup> City of San Rafael Staff Report for March 5, 2012 Study Session on Single-Use Plastics: Analysis of Alternative Approaches to Eliminating Single-use Plastics

The Grand Jury recognizes that action is required at the local level through the adoption of a Zero Waste Strategy that aims to progressively reduce all waste streams. The ultimate end goal of such a strategy is to have no material discarded. Fundamental components would include a program of waste reduction, reuse and recycling as well as a call for producer responsibility. The best solution is to prevent waste from being generated in the first place unless it can be reused or recycled. Widespread adoption of the Zero Waste Strategy would contribute to ongoing reductions of all garbage, including plastics.

Hawaii is the first state in the nation to have a statewide ban on plastic bags at checkout. When the Honolulu County Council approved a ban in 2011, it joined its neighbor island counties, and made Hawaii the only state where every county has plastic bag legislation. Supporters of the Hawaiian ban believe that Hawaii may be more directly exposed to the impacts of plastic pollution and the damage it does to the environment, as the islands are in an accumulation area for marine debris from sources across the greater Pacific Ocean.

### **What is happening in California?**

Virtually every California municipality adopting a bag ban was sued or threatened with litigation by groups related to the plastic bag industry (primarily, the Save the Plastic Bag Coalition). The lawsuits were brought by the groups in the "public interest" - arguing that the municipality is required to complete an EIR under the California Environmental Quality Act (CEQA) before a plastic bag ban can be enacted. These suits delayed the enactment of bans as well as intimidated local municipalities. Because EIRs are often prohibitively expensive, the suits effectively eliminated many local plastic bag bans.

***San Francisco*** In 2007, San Francisco enacted the Plastic Bag Reduction Ordinance (Ordinance), which became the nation's first ban on non-compostable carry-out plastic bags in large supermarkets and pharmacies.<sup>33</sup> The Ordinance was expanded in October 2012 to ban plastic bags at all retail stores and impose a 10-cent fee for each bag provided to customers. (Restaurants, bakeries, and take-out establishments are included in the Ordinance beginning October 2013.) The Ordinance is citywide and covers any retail establishment located within the geographical limits of the City and County of San Francisco.

Adoption of the Ordinance expansion followed close on the heels of a September 2012 ruling by Superior Court Judge Teri Jackson upholding it. Judge Jackson rejected the Save the Plastic Bag Coalition's argument that a full EIR was required prior to adoption of the Ordinance. There are ongoing issues concerning the Ordinance, including a lack of uniformity with the law due to permissible exceptions such as packaging for dry cleaning, bulk candy and "doggy bags" used to take home leftover food at restaurants.

***State*** California state law preempts municipalities from charging a fee for plastic bags at checkout, leaving local governments attempting to stop the overflow of plastic bags no

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<sup>33</sup> San Francisco Environment Code, Chapter 17: Plastic Bag Reduction Ordinance, Sections 1701-1709

alternative other than to ban the bags outright. Most governmental agencies within California express a preference for a statewide ban over enacting separate local legislation. California has backed away from taking the lead in this issue, but there are several current proposals before the legislature that may help lead to a statewide reduction in plastic bag use. In January 2013, Assemblyman Marc Levine, D-San Rafael, announced a proposal to ban all single-use plastic bags in California grocery stores. Levine's proposal, AB 158, revives a similar proposal that passed the Assembly in 2010 but failed in the Senate.

State Senator Alex Padilla, D-Pacoima, has introduced legislation that would prohibit large retail stores throughout California from providing single-use carry-out bags to customers, starting in 2015. Starting in July 2016, the ban would extend to convenience food stores, food marts and other smaller businesses under SB 405. Another legislative proposal, SB 529, introduced in February 2013 by State Senator Mark Leno, D-San Francisco, would prohibit fast food facilities from distributing disposable food packaging or single-use bags to customers on and after July 1, 2016.

### **What is happening in Marin?**

Both Fairfax and the unincorporated area of Marin County have approved plastic bag bans. Other cities and towns are exploring their options.

***Fairfax*** The Town of Fairfax adopted a plastic bag ban in August 2007. A group that called itself the North Bay Coalition to Support Plastic Bag Recycling (NBCSPR) sued the town. Fairfax circumvented CEQA requirements by adopting a ban via voter initiative in November 2008.

***Marin County*** On January 25, 2011, the Board of Supervisors (BOS) approved an ordinance banning plastic bag distribution in the unincorporated areas of the County. The ban applies to most grocery stores, pharmacies and convenience stores and requires a fee of five cents for paper bags. The County's ordinance was adopted with a categorical exemption under CEQA, finding that it would have no environmental impact. Litigation was filed against the County's action, with the County prevailing in Superior Court, but the case is currently under appeal.

***JPA*** In an effort to promote consistency countywide, the Joint Powers Agency (JPA) is developing a model ordinance for single use bags that can be used (and modified to fit, if desired) by each city and town in Marin. The current schedule indicates that the Ordinance will be available in late 2013. Adoption of the Ordinance opens the possibility for the entire County to be on the same playing field. The JPA will also prepare a California Environmental Quality Act (CEQA) document to address the impacts of the Ordinance. *The JPA anticipates that the Ordinance will:*

- Apply to all retail establishments, including grocery stores, department stores, retail businesses and convenience stores, but not to restaurants.

- Prohibit the distribution of single-use carry-out plastic bags.
- Place a fee on carry-out paper bags to be charged to the customer.
- Allow for some variation in local interpretation, since each member agency may wish to customize the Ordinance for its community.
- Be considered by 10 of the 12 members of the JPA (excluding Marin County and the City of Fairfax as these members have existing bag ordinances in effect).

***Other Marin Cities and Towns*** The Grand Jury contacted all JPA members to find out what each was doing or planned to do regarding reduction of waste due to single use or throw-away bags. A majority responded that they will consider and probably enact a single-use bag ordinance based on the JPA Ordinance. Exhibit 3 below lists each Marin County agency and briefly shows what action each plans for adoption of a ban on single-use carry-out bag.

**Exhibit 3 CURRENT AND FUTURE BAG ORDINANCES IN MARIN COUNTY**

<b>AGENCY</b>	<b>ORDINANCE IN PLACE?</b>	<b>FUTURE PLANS REGARDING SINGLE-USE BAGS</b>
<b><i>Unincorporated MARIN COUNTY</i></b>	YES	Helping fund the JPA Ordinance Has had plastic bag ban since January 2012
<b><i>FAIRFAX</i></b>	YES	Has had plastic bag ban since May 2009
<b><i>BELVEDERE</i></b>	NO	None
<b><i>CORTE MADERA</i></b>	NO	JPA model once completed
<b><i>LARKSPUR</i></b>	NO	Staff "anticipate presenting an ordinance to the Larkspur Council that is similar to the one adopted by the County"
<b><i>MILL VALLEY</i></b>	NO	Ban AFTER lawsuit is resolved; working with JPA on model; watching Levine's State efforts
<b><i>NOVATO</i></b>	NO	Will participate in JPA Model Ban
<b><i>ROSS</i></b>	NO	Has only one store in Ross and plans no plastic bags policy
<b><i>SAN ANSELMO</i></b>	NO	Expects to participate in JPA's model single use bag project
<b><i>SAN RAFAEL</i></b>	NO	Will adopt ordinance similar or same as JPA Ordinance WOULD LIKE A STATEWIDE SOLUTION
<b><i>SAUSALITO</i></b>	NO	Expects to participate in the JPA Ordinance
<b><i>TIBURON</i></b>	NO	Town Council may revisit the issue once JPA Ordinance is available

The Grand Jury strongly supports the adoption of an ordinance to ban single-use plastic carry-out bags that will apply to all establishments of all sizes across all areas of Marin County.

## **FINDINGS**

- F1. Single-use plastic carry-out bags cause harm to the environment and wildlife.
- F2. Reduction or ban of single-use plastic carry-out bags will help Marin County reach its zero waste goal.
- F3. Reduction or ban of single-use plastic carry-out bags will help keep the land and waters of the County cleaner.
- F4. Most Marin County governments do not currently have bans against single-use plastic carry-out bags. However, most are responsive to enacting policies against single-use plastic carry-out bags.

## **RECOMMENDATIONS**

The Grand Jury recommends that:

- R1. The Marin Hazardous and Solid Waste Joint Powers Authority (JPA) prepare the Model Single-Use Bag Ordinance to implement the strictest rules possible and encourage all agencies to adopt the Ordinance with minimal changes. A ban on single-use plastic carry-out bags should be imposed in all grocery stores, convenience stores, pharmacies and restaurants within the County and apply to all establishments, no matter how large or small.
- R2. Marin County and The Marin Hazardous and Solid Waste Joint Powers Authority (JPA) Members educate the public on the benefits of reusable bags. Marin County and Marin County and The Marin Hazardous and Solid Waste Joint Powers Authority (JPA) Members develop standardized educational guides for all public schools showing the environmental harm done by plastic single-use carry-out bags. Marin County and The Marin Hazardous and Solid Waste Joint Powers Authority (JPA) Members develop educational materials and distribute them at public events such as farmers' markets and street fairs.
- R3. Marin Towns and Cities adopt an ordinance to ban all single-use plastic carry-out bags using the Model Single-Use Bag Ordinance with minimal, or no, changes, in order to create a true County-wide ordinance.

## **REQUEST FOR RESPONSES**

Pursuant to Penal code section 933.05, the grand jury requests responses as follows:

From the following individuals:

- Deputy Director, Department of Public Works-Waste Management Division to All Findings and Recommendations

- Program Manager Department of Public Works-Waste Management Division to All Findings and Recommendations

From the following governing bodies:

- Marin County Environmental Health Services to all Findings and Recommendations
- Marin County Board of Supervisors to all Findings and Recommendations
- The Marin Hazardous and Solid Waste Joint Powers Authority (JPA) to all Findings and Recommendations
- City of San Rafael to all Findings and Recommendations
- Town of Ross to all Findings and Recommendations
- City of Larkspur to all Findings and Recommendations
- City of Sausalito to all Findings and Recommendations
- Town of Tiburon to all Findings and Recommendations
- City of Belvedere to all Findings and Recommendations
- City of Novato to all Findings and Recommendations
- Town of Corte Madera to all Findings and Recommendations
- City of Mill Valley to all Findings and Recommendations
- Town of San Anselmo to all Findings and Recommendations

The governing bodies indicated above should be aware that the comment or response of the governing body must be conducted subject to the notice, agenda and open meeting requirements of the Brown Act.

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Reports issued by the Civil Grand Jury do not identify individuals interviewed. Penal Code Section 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Civil Grand Jury.
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