

## The Problem

A million plastic bags are used every minute, worldwide, and the number is rising.<sup>1</sup>

In the United States, less than 5 percent of plastic bags are recycled.<sup>13</sup>



*Sea Lion caught in a plastic bag. Photo courtesy of Peter Wallerstein.*

Roughly 60–80% of all marine debris, and 90% of floating debris is plastic.<sup>2</sup>

Plastic resin polymers are so durable that it can take hundreds of years for plastics to break down at sea, and some may never truly biodegrade in the marine environment.<sup>2</sup>

Marine debris is ubiquitous and can be found from remote arctic regions to highly populated urban beaches.<sup>3</sup>

Plastic bags (which resemble jellyfish or sponges) are mistaken for food or prey by seabirds, marine mammals, fish, and sea turtles.<sup>4</sup>

More than 1 million seabirds, 100,000 marine mammals, and countless fish die annually through ingestion of and entanglement in marine debris, including plastic bags.<sup>4</sup>



*Trash piled up in Ballona Creek after a storm. Photo courtesy of the California Coastal Commission.*

References: <sup>1</sup>Williams, Caroline. Battle of the Bag, New Scientist, September 11, 2004. <sup>2</sup>California Coastal Commission, (2006) "Eliminating Land-based Discharges of Marine Debris in California: A Plan of Action from The Plastic Debris Project;" <sup>3</sup>S. Casey, (2006) "Our Oceans are Turning in to Plastic, Are we?" Best Life: 103-109; <sup>4</sup>N. Wallace. "Debris entanglement in the marine environment: A review" (1985) pp. 259-277 in: R.S. Shomura and H.O. Yoshida (eds.), Proceedings of the Workshop on the Fate and Impact of Marine Debris, U.S. Department of Commerce, NOAA Technical Memorandum NMFS, NOAA-TM-NMFS-SWFC-5. <sup>5</sup>Ocean Protection Council Resolution on Reducing and Preventing Marine Debris, adopted February 8, 2007; <sup>6</sup>2006 PPIC Poll data; <sup>7</sup>National Ocean Economics Program, *California's Ocean Economy, 2005*; <sup>8</sup>Californians Against Waste, [http://www.cawrecycles.org/plastic\\_campaign/plastic\\_bags/problem](http://www.cawrecycles.org/plastic_campaign/plastic_bags/problem?PHPSESSID=519f35bd2) <sup>9</sup>Ireland Department of the Environment, <http://www.environ.ie/en/Environment/Waste/PlasticBags/News/MainBody,3199,en.htm> <sup>10</sup>City of Oakland—Plastic Bag Ordinance <http://images/government/council/Pending/O2707.pdf>, <sup>11</sup>City of Oakland—Plastic Bag Ordinance <http://images/government/council/Pending/O2707.pdf>, <sup>12</sup>South Africa, Plastic Bag Publications, <http://www.lib.uct.ac.za/govpubs/plasticbags.htm> <sup>13</sup>US EPA 2005 Characterization of Municipal Solid Waste, Table 4. <sup>14</sup>See EG. Annapolis, Maryland Proposed Plastic Bag Ordinance—[http://www.annapolis.gov/upload/](http://www.annapolis.gov/upload/images/government/council/Pending/O2707.pdf) <sup>15</sup>Los Angeles County Board of Supervisors, Motion to Research Plastic Bag Impacts <http://lacounty.info/bos/sop/supdocs/31388.pdf>

## Plastic Bags: Sacking the Environment

*"Despite global treaties to prevent dumping at sea and minimize land-based sources, and increasing efforts worldwide to protect water quality, the quantity of marine debris in the world's oceans is increasing"*

*— California Ocean Protection Council*

### A Call for Action

9 in 10 Californians say the quality of the beach and ocean is just as important to them personally as well as for the overall quality of life and economy in the state.<sup>6</sup>

California's "ocean economy" is valued at \$43 billion.<sup>7</sup>

On February 8th, 2007 the Ocean Protection Council adopted a comprehensive resolution on marine debris that outlines specific actions for California to prevent and reduce marine debris.

The Council's resolution calls for a statewide plan, targeting the reduction of plastic single-use fast-food and convenience market packaging and containers such as plastic bags.<sup>5</sup>



*Sea Lion ingesting a plastic bag. Photo courtesy of the Whale Rescue Team.*

### Taxpayer Costs

Each year, the State of California spends approximately \$25 million to landfill discarded plastic bags.<sup>8</sup>

The City of San Francisco alone, estimates dealing with plastic bag litter costs about 17 cents per bag, totaling \$8.5 million annually.<sup>9</sup>

## Past and Current Solutions

Ireland has implemented a fee per plastic bag to discourage the excessive use of plastic bags. Since 2002, plastic bag consumption has decreased by an estimated 90%.<sup>10</sup>

South Africa has banned the production of certain varieties of plastic bags and imposed heavy fines, up to and including jail time, for the violation of the plastic bag ordinances.<sup>12</sup>

The City of San Francisco has banned the use of plastic bags in pharmacies and grocery stores which meet certain financial criteria.

The City of Oakland, adopted an ordinance that bans the use of plastic carryout bags in large retail establishments.<sup>11</sup>

Throughout the United States local governments are pursuing ways to discourage the use of plastic bags. For instance, the following cities are seriously considering fees, or outright bans of plastic bags: Austin, Texas; Bakersfield, California; Boston, Massachusetts; New Haven, Connecticut; Portland, Oregon; Phoenix, Arizona; Annapolis, Maryland.<sup>14</sup>

The Los Angeles Board of Supervisors recently passed a motion calling for staff to research the possibility of banning plastic bags in Los Angeles County. As the annual consumption in LA County is an estimated 6 billion plastic bags, this decision has major implications. A hearing for this has been scheduled for later in the summer.<sup>15</sup>