

3



**SIERRA
CLUB**

FOUNDED 1892

**MASSACHUSETTS
CHAPTER**

Massachusetts Sierra Club
10 Milk Street, Suite 417
Boston MA 02108-4600
(617) 423-5775
www.sierraclubmass.org
office@sierraclubmass.org

May 19, 2014

Mayor David P. Maher
Vice Mayor Dennis A. Benzan
Councillor Dennis Carlone
Councillor Leland Cheung
Councillor Craig Kelley
Councillor Nadeem Mazen
Councillor Marc McGovern
Councillor Denise Simmons
Councillor Timothy Toomey
Cambridge City Hall
Cambridge, Massachusetts

Dear Mayor Maher and Honorable Members of the Cambridge City Council,

The issue of plastic bag pollution is a matter of concern far beyond the city limits of Cambridge; it is a matter of international concern attracting attention from agencies such as the United States Environmental Protection Agency (EPA), the Ocean Conservancy, the United Nations Environmental Programme (UNEP), as well as the Sierra Club. Plastic bags are the third largest form of litter from land-based sources found on US coasts.¹ According to UNEP, “The seabed, especially near to coastal regions, is also contaminated – predominantly with plastic bags.”² The volume and the impact of the pollution cannot be overstated. “The City of Los Angeles found that plastic bags made up 25% of litter in storm drains.”³

These bags pose a hazard to land and sea based mammals as well as birds and other aquatic species some of which are already at risk or endangered. The EPA asserts that aquatic animals often mistake plastic bags and other forms of plastic for food sources. The resulting ingestion of plastic is hazardous to marine wildlife due to the potential for choking and starvation as plastic displaces food in the digestive tracts of these animals. “It has been estimated that plastic marine debris adversely affects 267 species globally, including 86% of sea turtles, 44% of seabirds, and 43% of marine mammals.”⁴

In addition to being harmful to wildlife, plastic bags do not biodegrade. They fragment into smaller and smaller plastics through mechanical action and photo degradation in a process that can take hundreds of years to complete. The resulting microplastics displace food supplies in the world oceans. Both contaminants and invasive species are transported by plastics further endangering wildlife. As Cambridge’s stormwater runoff flows, untreated, directly into the Charles River or Alewife Brook,⁵ plastic bags quickly find their way into the ocean.

Regarding whether it is the “improper discarding” rather than the “production and use” of plastic bags that is the problem, many locations and opportunities are provided for recycling of these bags. The assumption that providing more opportunities to recycle will resolve the issue

is false. Due to the low value of plastic bags, only 5.2% of our plastic bags are recycled.⁶ But even if the recycling rate were significantly increased, the end result would still have an unacceptable negative impact. In sharp contrast, while paper bags may not be the optimal solution for shopping, the EPA indicates that paper and paperboard were recycled at a rate of 65% in 2008, and recent studies indicate that this has increased further.

The convenience of plastic bags does not outweigh the consequences. While plastic bags are heralded as economical and convenient, in the U.S. alone, billions of bags end up yearly as litter and cause a visible blight in our communities. This is partly due to the fact that plastic bags are aerodynamic and easily transported by wind and water. Even when properly disposed of, they often blow away and become litter.

Globally, there are many countries like Rwanda, Canada, Israel, and Ireland that have placed bans on plastic carryout bags. Local communities such as Nantucket, Brookline, Manchester-by-the-Sea, Marblehead, and Great Barrington have also passed plastic bag bans. Nantucket's ban, passed over 20 years ago, is solid proof that a ban on plastic carryout bags has no effect on the economy. None of these countries or communities is suffering economic hardship due to this decision.

It is perfectly clear that a reduction of plastic bag use will have a substantial positive impact on our environment and better our quality of life. While plastic bag litter is a serious problem and poses a threat to our environment, there is an easy solution. Eliminating plastic is one of the greenest actions a community can do to lower its ecological footprint. Encouraging the use of reusable bags can replace thousands of single-use plastic bags. Passing a plastic bag ordinance will help save countless endangered species, reduce pollution, and diminish litter that inundates our oceans, landfills, and streets. There are many environmental issues that we face, but few have such a simple answer.

The proposed ban before the Council, carefully researched and written by our City's Department of Public Works in coordination with many other City Departments, represents a laudable effort. The Sierra Club respectfully urges the members of the Cambridge City Council to pass the ban as proposed, resist any attempts to amend it that would diminish its effectiveness, and assert its leadership in environmental protection.

Respectfully,



Phillip Sego

Legislative Advocate

phil@sierraclubmass.org

617-807-0311

Home Address: 221 Norfolk St. Cambridge MA 02139

¹ Ocean Conservancy, "Tracking Trash", 2011 report, p. 66

² Allsopp, M., A. Walters, and D. Santillo. "Plastic Debris in the World's Oceans." United Nations Environmental Programme. N.p., n.d. Web. 21 Apr. 2014.

³ Marine Debris in the North Pacific A Summary of Existing Information and Identification of Data Gaps." U.S. Environmental Protection Agency, 2011. Web. 21 Apr. 2014.

⁴ EPA; above

⁵ City of Cambridge Stormwater Management FAQ's, retrieved 3/7/2014

⁶ US Environmental Protection Agency (EPA), Wastes, Non-Hazardous Waste, Municipal Solid Waste. November, 2008.