

Mixed bag of results in banning plastic bags

By Paul Gabrielsen

SANTA CRUZ – An employee gathering carts from the sunny parking lot at a Santa Cruz Safeway said shoppers are warming up to Santa Cruz's ban on single-use plastic bags. But some still miss the bags' convenience.

"I used to be able to carry so many at a time," a senior woman remarked.

"Wrong thing to do," said a middle-aged man of the ban.

"But they're killing the innocent turtles," his wife said, adding that in Europe, reusable bags are just a way of life.

The couple's disagreement is typical of the strong feelings evoked by plastic bag bans, which seem to delight environmentalists and aggravate retailers and consumers who value the bags' convenience.

While there is some evidence for reductions on litter on city streets and beaches, ambiguities in the data seem certain to fuel further heated debate.

California cities enacting bans commonly cite two main justifications: reducing unsightly street litter and protecting marine life.

So, have the bans had the desired result? San Francisco led California's war on plastic, banning bags at large grocery stores and chain drugstores in 2007. Litter surveys in the city, covering the first two years after the ban went into effect, paint a foggy picture. These city-commissioned surveys occurred in 2007, 2008 and 2009, covering the first two years after the initial ban went into effect. The studies, said

environment department spokesman Guillermo Rodriguez, were commissioned "to see what San Franciscans are throwing away."

Surveyors assessed more than 100 randomly selected sites in the city each year, counting every piece of litter in an area half the length of a city block. In 2007, before the ban was introduced, plastic bags amounted to 0.5 percent of large litter. By 2009, the percentage climbed to around 1.5 percent.

During the same three-year period, the average amount of litter stayed about the same.

San Francisco's ban effected no measurable change in plastic bag litter, at least in the first two years.

The city hasn't collected any litter data since the 2009 survey, Rodriguez said.

But the ban expanded to all retailers in July 2012 and will continue to expand to all restaurants this year. Once the restaurant ban is a year old, San Francisco plans to commission another litter survey to see whether the new scope of the ban makes a measurable impact.

San Jose has already seen that impact. The city's 2012 bag ban immediately covered all retailers. Last December, San Jose presented results of litter surveys in city creeks, streets and storm drains. Surveys after the bag ban in 2012 found 89 percent fewer bags in storm drains, 60 percent fewer in creeks, and 59 percent fewer in San Jose streets, compared to surveys before the bag ban.

Plastic bags only comprised 8 percent of total creek litter in 2011 and 4 percent in 2012. In contrast, a 2012 survey of Bay Area storm drains found that "other plastics," not including plastic bags, constituted around 50 percent of storm drain trash. Paper, Styrofoam and drink containers together made up another 30 percent. Plastic bags are only one part of the urban litter problem.

But the bags also show up in marine litter, comprising around 15 percent of trash in the deep reaches of Monterey Bay. The Monterey Bay Aquarium Research Institute reported finding plastic bags in water nearly 2½ miles deep, according to a paper published online last month in the journal *Deep Sea Research I*.

Closer to the surface, concern for the bags' effect on marine life stems from the fact that ocean-borne plastic bags look similar to jellyfish, which sea turtles love to eat.

Are bans preventing bags from reaching the ocean? That's hard to measure, but surveys of litter on Monterey Bay beaches provide the best available picture.

Santa Cruz-based Save Our Shores promotes weekly cleanups around Santa Cruz and Monterey counties and collects trash data from many of these events. On average, volunteers pick up only six bags at each event, down from a high of 65 in 2008.

The number of bags collected per cleanup has dropped in the past two years because of four bans which took effect in 2012, said Save our Shores executive director Laura Kasa. The four bans covered unincorporated Santa Cruz County and the cities of Watsonville, Monterey and San Jose. The latter ban matters because of the volume of tourist traffic coming "over the hill" to Santa Cruz beaches. Kasa also credits the shift in public perception toward plastic bags in the region.

"In Santa Cruz it's become the trend to be green and to bring your own reusable bags and not use plastic bags," Kasa said. "I think we can attribute it to that as well."

Save Our Shores Program Manager Brad Hunt pointed out that Monterey County has not yet implemented a bag ban, which affects Save Our Shores' average cleanup numbers.

"It could go down to one bag per cleanup after Monterey County implements theirs," Hunt said, "but we won't know that until a

year or two down the road.”

Volunteers – not professional trash surveyors – collect Save our Shores’ cleanup data, and do so at targeted beaches, not in randomly selected site surveys. But the focused, local and frequent data captures the best available picture of Monterey Bay’s beaches.

Opponents of plastic bag bans point out that bags comprise a small fraction of litter. “You’re talking about such a small amount to begin with that you wouldn’t notice any change,” said Stephen Joseph of the Save the Plastic Bag Coalition.

Joseph said political leaders have exaggerated the plastic bag problem, using figures he claims are unsubstantiated. He disputes claims by Oakland-based Save the Bay that a million plastic bags enter the Bay each year. In 16 years of living in the city, Joseph said, he never saw one bag in the Bay. “It’s a hoax,” he said.

“There’s obviously plastic bag litter,” Joseph said. “Anyone who’s never seen a plastic bag flying around is blind. But that does not justify all the exaggeration.”

What form of litter will cities target next? Nearly two dozen Bay Area communities have banned Styrofoam takeout food packaging, in addition to plastic bags. And San Francisco’s Rodriguez said the city is looking at ways to reduce the use of bottled water.

Until definitive, rigorous results of bag ban effects emerge, the debate will continue, from the Senate floor in Sacramento to the Safeway parking lot in Santa Cruz.