

San Jose's Bag Ban Useless in Solving Litter Problems – Should be Rescinded

[SAN JOSE OFFICIALS DEMONSTRATE THAT YOU CAN'T BAN YOUR WAY TO A CLEAN ENVIRONMENT](#)

[SAN JOSE'S LITTER SURVEYS SHOW PLASTIC BAG BAN UNNECESSARY](#)

*By Anthony van Leeuwen
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Introduction

The City of San Jose is painfully discovering that it's much touted plastic bag ban that cost residents millions of dollars did virtually nothing to solve the city's serious litter problems. According to the Environmental Impact Report (EIR), one of the stated reasons for implementing the bag ban was to reduce litter on city streets, in creeks, and in storm drains. (City of San Jose, 2010) This article will show that two years after the plastic bag ban was implemented, that there has been no reduction of overall litter. Furthermore, this article makes the case, using San Jose's own litter surveys and claims of success, to show that the plastic bag ban was never needed but a very expensive mistake.

City of San Jose

The City of San Jose is located in Santa Clara County at the southerly end of San Francisco Bay. San Jose is the largest city in Northern California and the third largest in the state with a population of 1,000,536 people (2014). (California Department of Finance, 2014) The City of San Jose, surrounding hillsides, and local creeks and waterways comprise an area of approximately 205 square miles. (City of San Jose, 2010)

Carryout Bag Usage

Although the exact number of single-use paper and plastic carryout bags used in the city is unknown, the city estimates that 68 million paper bags and 500 million single-use plastic carryout bags are used every year. In fact the Draft EIR identifies that 1.4 plastic bags are used per day by every living person in the City of San Jose which equates to **511** plastic carryout bags per person per year. (City of San Jose, 2010) This means that a family of four would use 4 x 511 or **2044** plastic bags per year.

San Jose Single-Use Carryout Bag Ordinance

The San Jose city council approved and adopted the Single-Use Carryout Bag Ordinance on 11 January 2011. The ordinance is also known as the Bring Your Own Bag (BYOB) ordinance. (Hawkins, 2011) The ordinance is effective 1 January 2012 and is the nation's most stringent plastic bag ban applicable to all retail establishments and not just supermarkets and convenience stores. (Dubois, 2011) The ordinance bans plastic carryout bags and places a fee of 10-cents on each paper bag which after two years was to increase to 25-cents. The automatic fee increase for paper bags was later rescinded by the city council

in September 2013 because the proponents claimed that the 10 cent charge was sufficient to discourage people from using paper bags. (Taber, 2013)

Purpose of Single-Use Carryout Bag Ordinance

In a November 20, 2012 memorandum to the San Jose City Council from Kerrie Romanov (Director of Environmental Services for San Jose) the following statement was made:

“Reducing the use of single-use carryout bags ... supports the City’s Stormwater Permit requirement to reduce trash from the storm drain system from entering local creeks and enhance water quality: reduces litter in City sheets and neighborhoods: and lowers the cost of litter control.” (Romanov, 2012, p. 2)

In addition the memo also makes the following two statements:

Actions to ban single-use carryout bags ... are emerging as a best practice for cities and are key strategies for reducing litter and protecting water quality. (Romanov, 2012, p. 2)

The goal for the BYOB Ordinance was to reduce environmental and litter impacts associated with the production, use, and disposal of single-use bags by motivating shoppers to carry reusable bags. (Romanov, 2012, p. 2)

From the above statements about the purpose of the Single-Use Carryout Bag Ordinance we can take away the following points:

- To reduce trash from entering local creeks out of the storm drain system
- To protect and enhance water quality in local creeks
- To reduce litter on city streets and in neighborhoods
- To lower the cost of litter control

Litter Surveys and Survey Results

The city of San Jose, to their credit, is one of very few cities that conducted litter surveys before and after implementation of the city’s plastic bag ban. The surveys included city streets, creeks, and storm drain catch basins.

In the November 20, 2012 memorandum to the San Jose City Council from Kerrie Romanov (Director of Environmental Services for San Jose) success of the plastic bag ban was claimed. Romanov attributed the success to the reduction in the number of plastic bags collected from certain survey locations and from the increase in the number of reusable bags used by shoppers. (Romanov, 2012)

In the memo, Romanov claimed that there was a 59% reduction in plastic bags on land, a 60% reduction in creeks, and an 89% reduction in storm drains. (Romanov, 2012) This memo has been widely used by bag ban proponents, particularly by quoting these reduction numbers as facts to demonstrate that bag bans “work.”

Survey data obtained from the City of San Jose show that the city street survey showed a reduction from 796 to 76 plastic carryout bags after the bag ban was implemented; the creek survey showed a reduction from 2,037 to 513 plastic carryout bags; and the storm drain survey shows a reduction from 80 to 9 plastic carryout bags. (City of San Jose, 2012)

Survey Results Raise Concerns

What should concern citizens is that the total number of single-use plastic carryout bags retrieved during the litter surveys, before implementation of the plastic bag ban, is only 2,913 plastic bags. To be more specific, this is the same number of plastic bags used per year by only 6 people (511 plastic carryout bags per year per person) out of a population of more than 1 million! Furthermore, the 2,913 plastic carryout bags is only 0.0005826% out of the 500 million plastic carryout bags used in the city of San Jose per year.

Since the surveys were conducted at selected locations, particularly litter hot spots, it does not necessarily represent the total number of plastic bags littered citywide. Therefore if you multiply 2,913 plastic bags found by 100 (an arbitrary but adequate multiplier) to give you 291,300 plastic bags littered per year that still only represents 0.05826%.

Clearly, the quantity of plastic bags littered is small enough to be handled by traditional litter abatement methods and do not rise to a level that requires a drastic solution such as a plastic bag ban.

San Jose Litter Survey Results Questioned

In a paper titled "[Rebuttal of the San Jose Bag Ban Results](#)" the authors contend that the litter surveys conducted by San Jose were done in an unscientific and uncontrolled manner as described in the following bullets:

- The cleanup locations measured before and after the ban were NOT the same areas. Since historical cleanup data for these sites is not known, there is no way to determine if these sites represent multi-year accumulations of litter that would skew results.
- The percentage figures cited in the memorandum do not reflect a true reduction in plastic bag litter. The figures represent a reduction in the proportion of plastic bags to other litter instead.
- Evaluating ALL of the data shows that NON-PLASTIC BAG litter was also reduced by approximately 30% to 40% in the same comparisons. This is a confirmation that the comparison locations and/or criteria is flawed, or were influenced by other unexplained factors. There was no attempt to mention or address this serious statistical error.
- The storm drain reductions are based upon too small a sample size to provide a creditable number. Twenty-three (23) storm drains catch basins outfitted with trash capture devices is an extremely small sample size for a city the size of San Jose. There was no attempt to discuss the status of storm drain trash capture devices in the City of San Jose and whether all planned devices have been installed.

In the paper, referenced above, an independent analysis of the raw litter survey data used by the city of San Jose is conducted. San Jose did multiple litter surveys before the bag ban and added the results

together. For street and creek surveys the total area surveyed before the ban was about three times as much as the area surveyed after the ban, resulting in skewed data and incorrect results. For the storm drain survey, data from 23 out of the 158 storm drain catch basins surveyed was used. We maintain that the number of storm drains surveyed is much too small a sample size for a city the size of San Jose with its extensive storm drain system to give meaningful results. (Williams & van Leeuwen, 2013)

In the paper referenced above, the authors make a very important point. The litter surveys failed to count the number of plastic bags that made it out to San Francisco Bay and the ocean. In other words the litter surveys counted bags which were picked up on land, in creeks, or storm drain catch basins. Since plastic bags, because of their large surface area, easily get caught on fences, brush, bushes, rocks, trees, the likelihood that plastic bags made it all the way to the ocean is very small. Based upon the small amount of plastic bags found in litter surveys, an even smaller amount actually made it past all containment and cleanup methods to the bay.

In the same paper the authors' estimated that the cost of the plastic bag ban to San Jose residents is an additional \$23 million per year. (Williams & van Leeuwen, 2013)

San Jose Received Award for Bag Ban

In September 2014, the City of San Jose was awarded the "prestigious" Helen Putnam Award for **Excellence in the Planning and Environmental Quality** category by the League of California Cities. In the Press Release, "San José recognized for improving environmental quality through pioneering plastic bag ban." (Spiegel, 2014) The following are excerpts from the press release:

"San José has an extensive network of creeks that flow into two main waterways that empty into San Francisco Bay. San José also has more than 30,000 storm drains that empty rain runoff into creeks without treatment. Like all Bay Area cities, San José must meet Stormwater permit requirements to reduce trash entering creeks from the storm drain system by 40 percent by 2014, 70 percent by 2017, and 100 percent by 2022." (Spiegel, 2014)

"San José has particular incentive to meet the permit goals. For several years, regulators have declared three of the South Bay's major waterways as severely impaired by trash; Guadalupe River, Silver Creek, and Coyote Creek. "Impaired" means the creeks can no longer adequately function to meet habitat needs or to provide community benefit." (Spiegel, 2014)

"We benchmarked on the level of plastic bag litter in our creeks before and after the ordinance went into effect," said Kerrie Romanow, director of San José Environmental Services Department. "We now have clear data that supports the effectiveness of the ordinance." (Spiegel, 2014)

"In 2011, prior to the start of the ordinance, City staff removed more than 1,300 plastic bags from 10 creek hot spots. Over the two years following the ban's enactment, cleanups at those same hot spots averaged a 71% decrease in plastic bag litter." (Spiegel, 2014)

The statement by Kerrie Romanow, director of San Jose Environmental Services Department that *“In 2011, prior to the start of the ordinance, City staff removed more than 1,300 plastic bags from 10 creek hot spots”* reveals several important points:

1. The 1,300 plastic bags retrieved from 10 hot spots averages 130 plastic bags per hot spot.
2. The 1,300 plastic bags found in 10 hot spots is less than 2044 plastic bags that one family in San Jose uses in an entire year! (City of San Jose, 2010)
3. Had the city of San Jose just paid someone \$10 for each plastic bag retrieved from those 10 hot spots, the city would have spent \$13,000 rather than the hundreds of thousands of dollars in labor and contract costs to implement a bag ban including the cost to prepare an EIR and other documentation. In other words, the City of San Jose wasted a lot of money.
4. The cost to San Jose residents from the Bring Your Own Bag (BYOB) ordinance is an additional \$23 million per year just to bring groceries home. (Williams & van Leeuwen, 2013) The increased cost was totally unnecessary, since the 1300 plastic bags could have been removed from hot spots for \$13,000 or less using traditional litter abatement and removal methods.

It is clear that 1300 plastic carryout bags out of 500 million plastic carryout bags used by shoppers in San Jose every year is NOT a problem that demands a bag ban costing residents millions of dollars per year when it is much easier to hire several people to clean up those bags at a much lower cost and with far less frustration to shoppers.

In addition, the prestigious Helen Putnam Award for **Excellence in the Planning and Environmental Quality** for “improving environmental quality through pioneering plastic bag ban” by the League of California Cities is certainly not deserved. The award is not deserved because the city failed to do due diligence such as performing a cost-benefit analysis to compare costs of the plastic bag ban with the cost of traditional litter abatement methods. (van Leeuwen & Williams, Bag Bans Officials Neglect Homework, 2013) As a result tax payers and shoppers ended up paying far more than necessary to solve a relatively minor problem with a few plastic bags in the environment.

California Fish & Wildlife Environmental Complaint

In March 2014, State wildlife officials filed an environmental complaint against the City of San Jose for violating pollution laws for failing to clean up and prevent homeless encampments along Coyote Creek. According to Fish and Wildlife Lt. Byron Jones, who filed the complaint with the San Francisco Bay Regional Water Quality Control Board, "is they accept the encampments, they feel no sense of urgency to remove them, nor have they ever. It's always been about the next cleanup. It's never been about ending the practice of illegally camping and being in proximity to water." (Newman & Rogers, 2014)

The environmental complaint could cost the City of San Jose thousands of dollars in fines for violating pollution laws by failing to cleanup and remove homeless encampments. Coyote Creek, which is the largest homeless encampment and which has the most campers, is the most trash-blighted waterway in San Jose and probably the Bay Area. In 2012, Save the Bay singled out Coyote Creek as possibly the worst of five "trash hot spots" that is in violation of the federal Clean Water Act. (Jones, 2012) The creek

is choked with "trash dams" of plastic, Styrofoam food packages, and other debris. The water is so polluted and hazardous to your health that it cannot be touched without special precautions. (Bridegam, 2014)

California Fish & Wildlife also blamed the Santa Clara Valley Water District for failing to fulfill its obligations as a custodian of the creeks and streams they are responsible for. In January 2014, the water district reported that it had spent \$275,542 to remove 2,011 cubic yards of trash and debris from homeless encampments along creeks and rivers in Santa Clara County. (Newman & Rogers, 2014)

The city of San Jose, with sky-high housing prices also has the fifth-largest number of homeless people of any city in the U.S. (Newman & Rogers, 2014)

In December, 2014, the City of San Jose embarked on a massive project to eliminate the homeless encampments along the Coyote Creek. Typically, Inhabitants are told to leave, workers clean up the site, and the homeless return. The cycle is then repeated. But this time it will be different, so say city officials. The encampment alongside Coyote Creek, where between 200 and 300 people live in a trash-strewn tent city, is scheduled to be closed - once and for all. (Emmons, 2014)

Since the city never identified the source of plastic bags in creeks, which could have originated from homeless encampments and recreational use of creeks and/or could have been flushed out of the storm drain system. Since California has been in a drought, and storm drains are only flushed when it rains, it is very possible that the homeless encampments are the primary source of plastic bag litter in creeks. With the elimination of homeless encampments in creeks and riverbeds, it is very possible that the major source of plastic bags in the creeks is now solved and that a bag ban is no longer justified?

San Francisco Baykeeper Lawsuit

In November 2014, an environmental group, San Francisco Baykeeper, notified the City of San Jose that it intends to file a lawsuit because of the city's failure to prevent trash and sewage from flowing into the Guadalupe River and Coyote Creek through its storm drain system and into San Francisco Bay. The lawsuit is being filed because of violations of the Federal Clean Water Act. (Rogers, 2014)

"San Jose is a hot spot for trash pollution and bacterial pollution into the bay," said attorney Sejal Choksi, program director for Baykeeper. "Its leaders have not taken care of the problem or prioritized the issue. We've seen the trash, we've measured the bacterial pollution. What they are doing is not sufficient." (Rogers, 2014)

In response, Kerrie Romanow, director of environmental services for the City of San Jose, stated that nine catch basins have already been installed in the storm drain system to trap trash and plans are to install 20 more in the next three years. She also stated that the city has increased street sweeping and banned plastic bags. (Rogers, 2014)

San Francisco Baykeeper is a non-profit corporation whose purpose is “... *to preserve, protect, and defend the environment, wildlife, and natural resources of San Francisco Bay, its tributaries, and other waters in the Bay Area.*” (San Francisco Baykeeper, 2014)

After conducting a two-year investigation showing that San Jose has some of the most polluted storm water runoff of any city in the bay area, Baykeeper sent the City of San Jose a notice of intent to sue the city for failing to keep trash, fecal bacteria, and other pollution from washing into major creeks and tributaries to San Francisco Bay. (San Francisco Baykeeper, 2014)

Baykeeper claims that their intent is to force the City of San Jose to install trash capture devices and other infrastructure measures to significantly reduce polluted storm water runoff. (San Francisco Baykeeper, 2014)

Urban storm water runoff washes trash and other pollutants into gutters and storm drains that empty in rivers and creeks and find their way to the ocean without filtration or treatment. (San Francisco Baykeeper, 2014)

Plastic Bag Bans Do Not Solve Litter Problems

It should be obvious that the complaint filed by California Fish & Wildlife and the potential lawsuit by San Francisco Baykeeper are proof that the San Jose’s Single-Use Carryout Bag ordinance, while obviously reducing the number of plastic carryout bags in the litter stream by completely banning them citywide, had no real effect on total litter reduction and the cost to control litter. This is the same conclusion that is reached in the article “[Bag Bans Wrong Way to Control Litter](#)”. (van Leeuwen, Bag Bans: Wrong Way To Control Litter, 2013)

It should be obvious to the reader that despite the litter surveys conducted by the City of San Jose, that the city failed to put the problem with plastic bags in proper perspective and as part of a larger and broader problem with litter prevention and abatement. In addition, the city failed to analyze the magnitude of the plastic bag litter compared to the total quantity of plastic bags used in the City of San Jose. It appears that the city did not analyze the source of litter in creeks, some of which comes from storm drains (which are flushed out only if it rains) and some of which comes from homeless encampments along the riverbed.

Had the city done a proper cost benefit analysis they should have rejected a bag ban in favor of comprehensive solutions such as installing trash capture devices in storm drain catch basins and removing homeless encampments in the riverbed. These are solutions that the city ended up having to do anyway and which would have eliminated plastic bags and other litter from the riverbed all at the same time. In addition, the city could have considered hiring dedicated staff to work full time on cleaning up plastic bags (and other litter) at a tiny fraction of the cost that now burdens San Jose citizens who are forced to comply with the city’s bag ban. In other words, **the plastic bag ban was totally unnecessary and wasteful.**

Conclusion

The environmental complaint against the City of San Jose by California State wildlife officials and the potential San Francisco Baykeeper lawsuit are proof positive that the San Jose plastic bag ban did little to reduce litter on city streets, creeks, and in storm drains.

The City of San Jose failed to put the problem with plastic bag litter in proper perspective as part of a larger and broader issue of litter prevention and abatement. By so doing, and focusing on removing a single item from the litter stream instead of comprehensive solutions such as installation of trash capture devices in storm drains and removing homeless encampments from the riverbed, residents of San Jose were saddled with the Bring Your Own Bag (BYOB) ordinance, costing residents millions of dollars more per year just to bring their purchases home while doing nothing to solve the city's litter problems.

While litter surveys did show an expected decrease in plastic bags in the environment (as would anything that is banned), the bigger problem with litter including plastic debris in creeks and waterways was not solved.

Had the City of San Jose just compared the number of plastic bags found in litter surveys to the total number of plastic bags used in the city, they should have realized that a bag ban was unnecessary and would not solve the bigger problem of litter in water ways. Furthermore, residents are spending money to comply with the ordinance but there is no bang for the buck.

Municipalities and the State of California should take note of the painful and expensive lessons being learned by the City of San Jose. Jumping on the plastic bag ban bandwagon does not solve the litter problem. We need to remember that litter is a fact of life, where there are people there is litter. You can prevent some of it, but not all of it. And what can't be prevented will take work to cleanup.

It is much more efficient to spend a fraction of the money on direct resources to address litter, than expensive bag bans on all businesses and individuals. Bag bans are an unjustified waste of time, resources, and money that could be much better used addressing the real problems.

These results show that the city of San Jose should immediately repeal the Bring Your Own Bag ordinance and the State Legislature should repeal the statewide bag ban.

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