City of Salinas Reusable Bag Ordinance

Categorical Exemption Report

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CATEGORICAL EXEMPTION REPORT

This report serves as the technical documentation of environmental analysis performed by Rincon Consultants, Inc., for the proposed City of Salinas Reusable Bag Ordinance (the "Proposed Ordinance"). The intent of the analysis is to confirm that the Proposed Ordinance is eligible for a Class 7 and Class 8 Categorical Exemption (CE) under the California Environmental Quality Act (CEQA). The following report provides an introduction, project description, and evaluation of the project's consistency with the requirements for Class 7 and 8 exemptions. This includes an analysis of the project's potential impacts in the areas of biological resources, hydrology and water quality, air quality, greenhouse gas emissions, and utilities. The report concludes that the project is eligible for the Class 7 and 8 Categorical Exemption, as it would protect natural resources and protect the environment.

1. INTRODUCTION

The City of Salinas proposes to adopt a Class 7 and 8 Categorical Exemption (CE) for the proposed Reusable Bag Ordinance. The State CEQA Guidelines Section 15307 (Class 7) and 15308 (Class 8) state that a CE is allowed when:

15307: Actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment. Examples include but are not limited to wildlife preservation activities of the State Department of Fish and Game. Construction activities are not included in this exemption.

15308: Actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption.

Rincon Consultants, Inc. evaluated the project's consistency with the above requirements, including its potential impacts in the areas of biological resources, hydrology and water quality, air quality, greenhouse gas emissions, and utilities to confirm the project's eligibility for the Class 7 and 8 exemptions.

2. PROJECT DESCRIPTION

Surrounding Land Uses and Setting

The City of Salinas is situated near the north end of the Salinas Valley and is surrounded by agricultural fields growing lettuce, broccoli, strawberries and other crops. The City covers over 23 square miles and is home to approximately 155,205 people (California Department of Finance, 2014). The City of Salinas is primarily developed with agricultural, residential, commercial, and parkland occurring within its borders. The city contains several major water courses including Gabilan Creek and Natividad Creek. The city is also situated near the Salinas River. Streams and drainage way areas provide habitat corridors for fish and wildlife, preserve riparian vegetation such as woodlands and marshland vegetation, and carry storm water runoff

(Salinas General Plan, 2002). These drainages ultimately flow into the Pacific Ocean and the Monterey Bay National Marine Sanctuary (MBNMS). The MBNMS stretches from Cambria in San Luis Obispo County to Rocky Point in Marin County, seven miles north of the Golden Gate Bridge. The MBNMS is home to 34 marine mammals, 180 bird species, and 525 different kinds of fish (Center for Ecosystem Management and Restoration, 2008). The Salinas River also flows through the Salinas River National Wildlife Refuge which is home to species such as the Black Legless Lizard, Caspian Terns, and the threatened Snowy Plover (US Fish and Wildlife Service, 2013).

Project Overview

The Proposed Ordinance would prohibit certain types of retail establishments within the City of Salinas from providing plastic single-use carryout bags, free recycled paper bags, or free reusable bags to customers. Under the ordinance, retail establishments would be required to charge ten cents (\$0.10) to provide a recycled paper bag or reusable bag to a customer, with exceptions made for customers who participate in certain governmental or non-profit programs. These regulations would apply to retail establishments that sell perishable or nonperishable goods including clothing, food, and personal items, and would not apply to restaurants and take-out food establishments. The Proposed Ordinance would also apply to "farmers' markets" (as defined). A six month "grace period" is incorporated into the ordinance to allow retail establishments time to make necessary arrangements for compliance and to expend current stocks of plastic single-use carryout bags. The regulations would be enforced under the Salinas Municipal Code. The purpose of the Proposed Ordinance is to reduce litter and protect the natural resources of Salinas.

"Single-use carryout bags" are defined in the Proposed Ordinance as a bag, other than a reusable bag or recycled paper bag, provided at the check stand, cash register, point of sale, or other point of departure for the purpose of transporting food or merchandise out of the Retail Establishment. Single-use carryout bags do not include bags, a maximum of 11" x 17", without handles provided to the customer for the following purposes: (1) to transport produce, bulk food or meat from a product, bulk food or meat department within a store to the point of sale; (2) to transport produce, bulk food, or other items to the point of sale at a farmers' market; (3) to hold prescription medication dispensed from a pharmacy; (4) to segregate food or merchandise that could damage or contaminate other food or merchandise when placed together in a bag; or (5) a Garment Bag regardless of size.

A "reusable bag" is defined as a bag with handles that is specifically designed and manufactured to be reused at least 125 times and that is either (1) made of cloth or other washable natural or synthetic fibers that can be cleaned and disinfected, or (2) made from plastic film that shall be at least four (4.0) mils thick and capable of being cleaned and disinfected.

A "recycled paper bag" is defined as a bag that contains no old growth fiber and a minimum of 40 percent post-consumer recycled content, is 100 percent recyclable, and has printed in a highly visible manner on the outside of the bag the words "Reusable" and "Recyclable", the name and location of the manufacturer, and the percentage of post-consumer recycled content.

The Proposed Ordinance would include a public education and outreach campaign aimed at promoting reusable bags to further reduce impacts from paper bags or single-use carryout bags to both retailers and customers.

As shown in Table 1, based on the current statewide data which estimates that approximately 13 billion single-use carryout bags (or approximately 339 bags per person) are consumed annually in California (CalRecycle, 2014), retail customers within the City of Salinas use about 52.6 million single-use carryout plastic bags per year.

 Table 1

 Estimated Single-Use Carryout Bag Use in Salinas

	Population*	Number of single-use carryout bags Used per Person**	Total Bags Used Annually
City of Salinas	155,205	339	52,614,495

* California Department of Finance, E-5, May 2014.

** Based on annual statewide estimates of plastic bag use from the CalRecycle 2014) - 339 bags per person = 13 billion bags used statewide per year (Calrecycle 2013) / 38,340,074 people statewide (California's current population according to the State Department of Finance, 2014).

A discussion of bag use following implementation of the Proposed Ordinance is discussed further below in *"Effect of Charging for Checkout Bags"* and in Appendix A.

3. EXISTING CONDITIONS

Background on Checkout Bags

Single-use carryout bags are typically made of thin, lightweight high density polyethylene (HDPE) (Hyder Consulting, 2007). For consumers, they offer a hygienic, odorless, water resistant and sturdy carrying sack, but are generally intended for one use before disposal. Currently, 13 billion of these single-use carryout bags are consumed annually in California (CalRecycle, 2013). Studies suggest that conventional single-use carryout bags are manufactured by independent manufacturers who purchase virgin resin from petrochemical companies or obtain non-virgin resin from recyclers or other sources and that 69.3% of single-use carryout bags used in the United States are made in the United States (Stephen L. Joseph, May 17, 2013).

According to the 2008 CalRecycle waste characterization report, approximately 0.3% (or 123 tons) of California's waste stream is made up of plastic grocery and other merchandise bags. Typical single-use carryout bags weigh approximately five to nine grams and are made of thin (less than 2.25 mils thick (0.00225 inches)) HDPE (Hyder Consulting, 2007). Post-use from a retail store, a customer may reuse a single-use carryout bag at home, but eventually the bags are disposed in the landfill or recycling facility or discarded as litter. Although some recycling facilities handle plastic bags, most reject them because they get caught in the machinery and cause malfunctioning, or are contaminated after use. Only about 12% of the plastic bags in California and nationwide are currently recycled (US EPA, 2012). The majority of single-use carryout bags end up as litter or in the landfill. Even those collected by recycling and solid waste trucks and handled at transfer stations and landfills may blow away as litter due to their light weight (Green Cities California MEA, 2010). Single-use carryout bags that become litter

can enter storm drains and may clog catch basins or be transported to the rivers, streams, and eventually the Pacific Ocean.

Improperly disposed of plastic waste has become a major problem for marine animals. According to the Center for Biological Diversity, fish in the North Pacific ingest an estimated 12,000 to 24,000 tons of plastic each year, which can cause injury and death as well as concentrate plastic contamination higher up the food chain. Plastic pollution in the oceans also has negative effects on seabirds and marine mammals (Center for Biological Diversity, 2014). In addition to being consumed directly by wildlife, plastic in the marine environment absorbs and releases chemicals. Plastics contain organic contaminants including polychlorinated biphenyls, polycyclic aromatic hydrocarbons, petroleum hydrocarbons and others. Experimental data have demonstrated the transfer of these pollutants from plastics to organisms (Teuten et al, 2009).

Existing Single-Use Bag Ordinances

Various California cities, towns and counties (and more being added currently) have adopted, proposed or pending carryout bag ordinances (including the Proposed Reusable Bag Ordinance) located throughout California (see the table in Appendix B of a list of California cities, towns and counties that have recently adopted a carryout bag ordinance). Approximately 110 jurisdictions in California have adopted a bag ordinance as of July 2014 (Californians Against Wastes, July 2014). Monterey County and several cities within the County have either already adopted ordinance or are/will be considering single-use carryout bag ordinances of their own. The City of Monterey has had a bag ordinance effective since January 2013. Furthermore, the State of California has currently proposed Senate Bill 270 (SB 270) which would ban plastic bags throughout the State at specified retailers beginning July 2015. SB 270 is currently progressing through the State legislature.

Effect of Charging for Checkout Bags

As summarized in Appendix A, multiple studies have documented a decrease in single-use bag usage after a charge for carryout bags was implemented. In Australia, a study was conducted in November 2007 which included bag use observations at 800 retail stores. Customers of stores which charged a fee for single-use carryout bags used approximately one third less bags than customers of stores which did not have a fee (Hyder Consulting, 2007).

Washington D.C enacted a \$0.05 single-use plastic and paper bag fee in January 2010. In 2009, the city was using approximately 270 million single-use bags. Early estimates by city officials projected that residents were on pace to use approximately 55 million single-use bags, an approximate 81% decrease (Washington Post, 2011). According to a public outreach questionnaire completed by a non-profit, OpinionWorks, 75% of individuals responding to the survey noted a decrease in their plastic bag usage. 21% said they have not reduced their usage, and the rest did not use bags or were not sure. A majority of the businesses surveyed reported an estimated reduction in single-use bag usage of at least 50% (OpinionWorks, 2011).

Ireland enacted a similar bag ordinance in 2002, levying a 15 Euro cent environmental tax on all shopping plastic bags, which were previously provided free of charge. The result was a reduction in bag use in excess of 90%. Furthermore, the number of "clear" areas, or areas without plastic bag litter increased by 21% within the first year of the program (P. Kavanagh 2008).

A review of similar single-use carryout bag ordinances in comparable California locations was compiled by the Equinox Center (2013). The review covered three California study areas that have enacted similar ordinances including the City of San Jose, City of Santa Monica, and the County of Los Angeles. In these areas, single-use carryout bag use dropped from 75% of total bag use to 0%, reusable bag use increased from 5% to 45%, and recycled paper bag use increased from 3% to 16%. All three single-use carryout bag ordinances eliminated single-use carryout bag use and increased the use of reusable bags. This resulted in an overall decrease in total bag use.

4. CONSISTENCY ANALYSIS

The following provides an evaluation of the project's consistency with the requirements for Class 7 and 8 exemptions. This includes an analysis of the project's potential impacts in the areas of biological resources, hydrology and water quality, air quality, greenhouse gas emissions, and utilities.

Biological Resources

<u>Habitat.</u> Although Salinas is mostly urban and agriculturally developed, the City includes important natural resources. The Salinas General Plan outlines several important habitats including:

- Salinas River
- Carr Lake and its tributaries
- Sloughs and reclamation ditches

Many of these features also drain to the Pacific Ocean and the Monterey Bay National Marine Sanctuary which is home to multiple protected species.

<u>Special Status Species</u>. More than 70,000 acres in Monterey County are designated as critical habitat by the U.S. Fish and Wildlife Service. Fish and wildlife resources are numerous and diverse due to the wide variety of habitats contained in Salinas including drainages, the Pacific Ocean and Monterey Bay. These habitats support a variety of plant and animal species, some of which are threatened or endangered by extinction. Several special status plant and animal species are known to occur within the City of Salinas and have the potential to occur if suitable habitat is present as listed below (and as shown in Figures contained in Appendix C for CNDDB Maps):

- California tiger salamander (*Ambystoma californiense*)
- burrowing owl (*Athene cunicularia*)
- western pond turtle (*Emys marmorata*)
- yellow-flowered eriastrum (*Eriastrum luteum*)
- Congdon's tarplant (Centromadia parryi)

The locations of special-status species and natural communities documented in Monterey County, including within the City of Salinas, as listed on the California Natural Diversity Database (CNDDB), are mapped on Figures 1, 2, and 3 which are also contained in Appendix C. <u>*Carryout Bags and Biological Resources.*</u> Carryout bags can affect biological resources as a result of litter that enters the storm drain system and ultimately coastal and marine environments.

Single-use carryout bags enter the biological environment primarily as litter. This can adversely affect terrestrial animal species, and marine species that ingest the plastic bags (or the residue of plastic bags) or become tangled in the bag (Green Cities California MEA, 2010). Based on the data collected for the Ocean Conservancy's Report from September 2009 Ocean Conservancy's International Coastal Cleanup Day, approximately 11% of total debris items collected were plastic bags (Ocean Conservancy, April 2010). Over 260 species of wildlife, including invertebrates, turtles, fish, seabirds and mammals, have been reported to ingest or become entangled in plastic debris. Ingestion or entanglement may result in impaired movement and feeding, reduced productivity, lacerations, ulcers, and death (Laist, 1997; Derraik and Gregory, 2009). Ingested plastic bags affect wildlife by clogging animal throats and causing choking, filling animal stomachs so that they cannot consume real food, and infecting animals with toxins from the plastic (Green Cities California MEA, 2010). In addition to affecting wildlife through physical entanglement and ingestion, plastic debris in the marine environment has been known to absorb and transport polychlorinated biphenyls (PCBs), phthalates, and certain classes of persistent organic pollutants (POPs) (Mato, Y., Isobe, T., Takada, H., et al., 2001; and, Moore, C.J.; Lattin, G.L., A.F. Zellers., 2005).

Recycled carryout bags are also released into the environment as litter. However, they generally have less impact on wildlife because they are not as resistant to breakdown as is plastic; therefore, they are less likely to cause entanglement. In addition, although not a healthy food source, if single-use paper bags are ingested, they can be chewed effectively and may be digested by many animals.

Reusable bags can also be released into the environment as litter. However, because of the weight and sturdiness of these bags, reusable bags are less likely to be littered or carried from landfills by wind as litter compared to single-use plastic and paper bags (Green Cities California MEA, 2010). In addition, since reusable bags can be at least 125 times, reusable bags would be disposed of less often than single-use carryout bags. As such, reusable bags are less likely to enter the marine environment as litter, when compared to single-use plastic or paper bags.

<u>Impacts to Biological Resources/Natural Resources.</u> The Proposed Ordinance would not include any physical activities that would result in direct biological impacts. The Proposed Ordinance would regulate the use of carryout bags within the City of Salinas. The intent of the Proposed Ordinance is to reduce litter and protect the natural resources of Salinas.

All carryout bags, including single-use carryout bags, recycled paper, and reusable bags, have the potential to affect local creeks and coastal habitats, such as the Monterey Bay National Marine Sanctuary and the Pacific Ocean, when improper disposal of bags occurs. These bags can become litter that enter the storm drain system and ultimately enters creeks/rivers and eventually coastal and marine environments. Litter that enters coastal habitats can adversely affect sensitive species that inhabit coastal and marine environments, including sea turtles, seals, fish, otters, or bird species as a result of ingestion or entanglement. However, each type of carryout bag's potential to become litter varies and is based on the number of bags disposed of as well as the bag's weight and material.

Typical single-use carryout bags are made from thin, lightweight HDPE, are less than 2.25 mils (0.00225 inches) thick, and weigh approximately five to nine grams. Post-use from a retail store, a customer may reuse a single-use carryout bag at home, but eventually the bags are disposed of in the landfill, recycling facility, or discarded as litter. Although some recycling facilities handle single-use carryout bags, most reject them because they can get caught in the machinery and cause malfunctioning, or are contaminated after use. Only about 12% of single-use carryout bags in the United States are currently recycled (US EPA, 2012). The majority of single-use carryout bags end up in a landfill or as litter. Even those collected by recycling and solid waste trucks and handled at transfer stations and landfills may blow away as litter due to their light weight (Green Cities California MEA, 2010). Single-use carryout bags that become litter can enter storm drains and watersheds from surface water runoff or may be blown directly into the ocean by the wind.

When single-use carryout bags enter coastal habitats marine species can ingest them or may become entangled in the bag (Green Cities California MEA, 2010). Ingestion or entanglement in single-use carryout bags can result in choking, reduced productivity, lacerations, ulcers, and death to sensitive species in the marine environment, including sea turtles, seals, fish, otters, or bird species.

Recycled paper bags also have the potential to enter the marine environment as litter. Recycled paper bags are typically produced from kraft paper and weigh anywhere from 50 to 100 grams, depending on whether or not the bag includes handles (AEA Technology, 2009). A recycled paper carryout bag weighs approximately 90% more (approximately 45 to 90 grams) than a single-use carryout bag. Because of their weight and recyclability, recycled paper bags are less likely to become litter compared to single-use carryout bags (Green Cities California MEA, 2010). In addition, because recycled paper bags are not as resistant to biodegradation, they create less risk of entanglement if they enter the marine environment compared to single-use carryout bags. Finally, although not a healthy food source, if ingested, a recycled paper carryout bag can be chewed effectively and may be digested by many marine animals (Green Cities California MEA, 2010). Thus, although recycled paper carryout bag litter may enter coastal habitats and affect sensitive species in the marine environment, the impacts of recycled paper bags would be less than those of single-use carryout bags.

Reusable bags may also become litter and enter the marine environment; however, these bags differ from single-use bags in their weight and longevity. Reusable bags can be made from plastic or a variety of cloths such as vinyl or cotton. Built to withstand many uses, reusable carryout bags typically weigh at least ten times what an HDPE single-use carryout bag weighs and two times what a recycled paper carryout bag weighs, therefore restricting the movement by wind (ExcelPlas Australia, 2004; City of Pasadena, 2008). Reusable bags are typically reused until worn out through washing or multiple uses, and then disposed either in a landfill or recycling facility (if the material is recyclable). Because of the weight and sturdiness of these bags, reusable bags are less likely to become litter or to be carried from landfills by wind compared to single-use plastic and paper carryout bags (Green Cities California MEA, 2010). In addition, since reusable bags are specifically designed to be used multiple times, they are

disposed of less often than single-use plastic and paper carryout bags. As such, reusable bags are less likely to enter the marine environment as litter and would generally be expected to result in fewer impacts to sensitive species than single-use plastic or recycled paper carryout bags.

The Proposed Ordinance would reduce single-use carryout bag usage by an estimated 95 -99% compared to existing conditions (from 52.6 million to between 526,145 and 2,630,725 annually). This overall reduction in single-use carryout bags would be expected to generally reduce litter-related impacts to sensitive species. Therefore, sensitive species such as sea turtles, mammals, and bird species would benefit from the Proposed Ordinance, which would reduce the amount of litter that could enter the marine environment. This would be consistent with Salinas General Plan Policy COS-5, which calls for protecting and enhancing "the remaining identified and significant ecological and biological resources within and surrounding the community." There would a benefit to biological resources and to natural resources in Salinas and the surrounding area (particularly the MBNMS) as a result of the Proposed Ordinance.

Hydrology and Water Quality

Existing Hydrological Systems. The hydrological environment within the City of Salinas consists of several creeks, intermittent streams, and other drainage ways as well as Carr Lake that provide habitat corridors for fish and wildlife, preserve riparian vegetation such as woodlands and marshland vegetation, and carry storm water runoff (Salinas General Plan, 2002). These drainages ultimately flow into the Pacific Ocean and the MBNMS. The MBNMS is home to 34 marine mammals, 180 bird species, and 525 different kinds of fish (Center for Ecosystem Management and Restoration, 2008).

Urban runoff within Salinas consists of stormwater runoff from rainfall as well as nonstormwater runoff from human activities (e.g. over-irrigation of landscapes, vehicle washing, discharges from pools, spas, or water features, etc.). Carryout bags can enter the storm drain system and effect storm water flow in urban areas by clogging drains and redirecting flow, and in other areas they may be washed into creeks, intermittent streams, or the Pacific Ocean.

<u>Impacts to Hydrology and Natural Resources</u>. As described above, the majority of single-use carryout bags end up as litter or in the landfill. Even those collected by recycling and solid waste trucks and handled at transfer stations and landfills may blow away as litter due to their light weight (Green Cities California MEA, 2010). Single-use carryout bags that become litter can enter storm drains and may clog catch basins or be transported to the MBNMS. Plastic that enters the marine environment can cause significant damage to the ecosystem (Derraik, 2002).

Recycled paper bags also have the potential to enter the storm drains as litter. However, because of the weight, biodegradability of the materials, and recyclability, recycled paper bags are less likely to become litter compared to single-use carryout bags (Green Cities California MEA, 2010). In addition, because recycled paper bags are not as resistant to breakdown, there is less potential to clog catch basins compared to single-use carryout bags. Thus, although recycled paper bag litter may enter storm drains and affect hydrologic flow of surface water runoff, the potential to enter storm drains and cause hydrologic effects is less than with single-use carryout bags.

Reusable bags may also become litter and enter storm drains; however, these bags differ from the single-use bags in their weight and longevity. Reusable bags can be made from plastic or a variety of cloth such as vinyl or cotton. Built to withstand many uses, reusable bags weigh at least ten times what a single-use carryout bag weighs and two times what a recycled paper bag weighs, thereby restricting the movement by wind. Reusable bags are typically reused until worn out through washing or multiple uses, and then typically disposed either in the landfill or recycling facility. Because of the weight and sturdiness of these bags, reusable bags are less likely to become litter or to be carried from landfills by wind as litter compared to single-use plastic and recycled paper bags (Green Cities California MEA, 2010). Therefore, reusable bags are less likely to enter the storm drain system as litter.

The Proposed Ordinance would decrease the amount of single-use bags discarded within Salinas and encourage a shift toward reusable bags. Therefore, the Proposed Ordinance would be expected to reduce the amount of litter that could enter storm drains and local waterways, thus improving water quality, reducing maintenance and cleanup costs, and reducing the potential for storm drain blockage. Water quality, storm drain operation, and associated hydraulic and hydrological conditions would benefit from the Proposed Ordinance because reducing the amount of single-use carryout bags in Salinas would result in an incremental reduction in the amount of litter that enters the storm drain system and local waterways, thereby improving water quality and natural resources within Salinas and also to surrounding areas outside of Salinas's jurisdictional boundaries.

Air Quality

Existing Conditions in Salinas. Salinas is located within the North Central Coast Air Basin (NCCAB), which includes Monterey County, San Benito County, and Santa Cruz County. The Monterey Bay Unified Air Pollution Control District (MBUAPCD) is responsible for local control and monitoring of criteria air pollutants throughout the NCCAB. Local air districts and CARB monitor ambient air quality to assure that air quality standards are met, and if they are not met, to also develop strategies to meet the standards. Air quality monitoring stations measure pollutant ground-level concentrations (typically, ten feet aboveground level). Air quality in Salinas is generally good in comparison to more urbanized areas. Table 2 summarizes the state and federal attainment status for criteria pollutants in the NCCAB.

As shown in Table 2, although the NCCAB is in attainment or unclassifiable of all federal ambient air quality standards (AAQS), it is designated as non-attainment with respect to the more stringent state PM₁₀ standard and the state's eight-hour ozone standard.

Pollutant	State Standard	Federal Standard
Ozone (O ₃)	Non-attainment ¹	Attainment/Unclassified ²
Inhalable Particulates (PM ₁₀)	Non-attainment	Attainment
Fine Particulates (PM _{2.5})	Attainment	Attainment/Unclassified ³
Carbon Monoxide (CO)	Attainment	Attainment/Unclassified
Nitrogen Dioxide (NO _x)	Attainment	Attainment/Unclassified ⁴
Sulfur Dioxide (SO _X)	Attainment	Attainment ⁵
Lead	Attainment	Attainment/Unclassified ⁶

 Table 2

 Attainment Status of the North Central Coast Air Basin

¹ Effective July 26, 2007, the ARB designated the NCCAB a non-attainment area for the state ozone standard, which was revised in 2006 to include an 8-hour standard of 0.070 ppm.

² On March 12, 2008, USEPA adopted a new 8-hour ozone standard of 0.075 ppm, while temporarily retaining the existing 8-hour standard of 0.08 ppm.

³ In 2006, the Federal 24-hour standard for PM_{2.5} was revised from 65 to 35 μg/m³. Although final designations have yet to be made, it is expected that the NCCAB will remain designated unclassified/attainment.

⁴ In 2011, EPA indicated it plans to designate the entire state as attainment/unclassified for the 2010 NO2 standard. Final designations have yet to be made by EPA.

⁵ In June 2011, the ARB recommended to EPA that the entire state be designated as attainment for the 2010 primary SO₂ standard. Final designations have yet to be made by EPA.

⁶ On October 15, 2008 EPA substantially strengthened the national ambient air quality standard for lead by lowering the level of the primary standard from 1.5 μg/m³ to 0.15 μg/m³. Final designations were made by EPA in November 2011.

Note: Non-attainment pollutants are highlighted in Bold.

<u>Air Quality Impacts Related to Carryout Bags</u>. The manufacturing process to make carryout bags requires fuel and energy consumption which generates air pollutant emissions. These may include particulate matter, nitrogen oxides, hydrocarbons, sulfur oxides, carbon monoxide, and odorous sulfur (Green Cities California MEA, 2010). The level of emissions varies depending on the type and quantity of carryout bags produced. These emissions may contribute to air quality impacts related to acid rain (atmospheric acidification) or ground level ozone formation. However, it should be noted that there are no single-use carryout bag manufacturers or manufacturers of recycled paper bags or reusable bags located in Salinas or within the NCCAB.

Several life cycle analyses have been completed which investigate the air quality impacts of producing single-use carryout bags, including the Boustead (2007) and Ecobilan (2004) studies. The parameters used in each of these studies varied as did the final results. However, the studies both agree that the manufacture, transport, and disposal of single-use carryout bags do result in substantial emissions which negatively impact air quality. The proposed ordinance would decrease the number of single-use carryout bags used in Salinas, which would reduce air pollution impacts resulting from their manufacture, transport, and disposal.

The proposed project would eliminate single-use carryout bags at covered stores and as a result would increase the use of recycled paper bags and reusable bags. The previously mentioned life-cycle assessments concluded that the emissions resulting from the manufacture, transport, and disposal of both recycled paper bags and reusable bags could be marginally higher than those produced by single-use carryout bags on a per bag basis. However, these findings are based on assumed reuse variables and do not take into account the specific characteristics of Salinas and the Proposed Ordinance. For example, there are no manufacturing facilities for either recycled paper bags or reusable bags located in Salinas. Therefore, the impacts to air quality due to the manufacture transport, and disposal of recycled paper and reusable carryout bags is deemed to be insignificant and would not result in impacts on criteria air pollution.

Delivery trucks that transport carryout bags from manufacturers or distributors to the local retailers in Salinas also contribute air emissions locally and regionally. Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material (ARB "Diesel & Health Research," 2011). The visible emissions in diesel exhaust are particulate matter, or PM, which are small and readily respirable. The particles have hundreds of chemicals adsorbed onto their surfaces, including many known or suspected mutagens and carcinogens. Diesel PM emissions are estimated to be responsible for about 70% of the total ambient air toxics risk. In addition to these general risks, diesel PM can also be responsible for elevated localized or nearsource exposures ("hot-spots"). A switch to reusable bags is expected in the long term, which would decrease transport-related emissions due to less bag manufacturing, delivery, and disposal. Because single-use carryout bags have a lower volume than both recycled paper and reusable bags, an initial increase in truck trips may take place. However, this increase is expected to be insignificant as any additional truck trips would be spread throughout the city and would result in a net increase of less than one truck trip per week. Such an increase in truck trips would result in marginal increases (less than one pound per day) in emissions monitored by the MBUAPCD and would not exceed any thresholds of significance. Therefore, the proposed ordinance would not result in any significant impacts to air quality.

Greenhouse Gas Emissions

The Proposed Ordinance has the possibility of changing the levels of greenhouse gas (GHG) emissions related to the manufacturing, transport, and disposal of single-use plastic, recycled paper, and reusable carryout bags. The manufacturing process to make carryout bags requires fuel and energy consumption. This generates GHG emissions, including CO₂, CH₄, N₂O_x, fluorinated gases, and ozone. In addition, fertilizers that are used on crops for resources such as cotton, which are then utilized in the manufacture of reusable bags, also have the potential to emit N₂O. The amount of GHG emissions varies depending on the type and quantity of carryout bags produced. Compared to truck trips and disposal, the manufacturing process is the largest emitter of GHGs due to the high volume of fuel and energy consumption that is used during the process. Delivery trucks that transport carryout bags from manufacturers or distributors to Salinas retailers also create GHG emissions. GHG emissions from truck trips result primarily from the combustion of fossil fuels and include CO₂, CH₄, and N₂O. The energy use to power washing machines and clothes dryers to wash and sanitize reusable bags creates GHG emissions. The quantity of GHG emissions depends on the method of washing (i.e., hand washing, electric or natural gas-powered washing machine) and on the frequency of washing.

Emission rates per bag have been estimated by several life cycle analysis studies including the Boustead (2007) and Ecobilan (2004) studies mentioned above. Much like the estimation of air quality emissions, the estimation of GHG emissions are based on several estimated variables such as bag reuse, bag volume, and frequency and methodology of washings. Because the life cycle analysis studies do not take into account the specific variables inherent in this particular ordinance and Salinas, the overall findings of these reports have limited utility. However, the Proposed Ordinance would impose a fee on recycled paper and reusable bags, and studies have shown that establishing a fee on paper bags results in an increase in reusable bag and no bag use and a decrease in paper bag use if no fee was required. The Proposed Ordinance would include a public education and outreach campaign aimed at promoting reusable bags to further reduce impacts from paper bags or single-use carryout bags to both retailers and customers. Therefore, any additional greenhouse gas impacts that may result from the Proposed Ordinance (i.e., consumers switching from single-use carryout bags to recycled paper instead of reusable bags) would not be cumulatively considerable.

<u>Utilities</u>

The production and ultimate disposal of single-use carryout, recycled paper, and reusable bags have impacts on water usage and waste disposal. As with air quality and GHG emissions, life cycle analysis has been conducted previously concerning the water use and waste impacts of carryout bags. However, as stated above these studies have utilized varying parameters and thus, results varied from study to study. However, the assessments did conclude that manufacture and use of carryout bags does result in substantial water use and waste generation. Single-use carryout bags are currently allowed throughout Salinas. The Proposed Ordinance would ban single-use carryout bags and instate a fee on recycled paper bags as a way to encourage reusable bag use. Therefore, the Proposed Ordinance is expected to decrease the use of single-use carryout bags as well as the associated waste and water impacts.

The Proposed Ordinance would decrease the use of single-use carryout bags within Salinas. The result would be an increase in both recycled paper bags and reusable bags. The aforementioned life cycle analysis studies commonly conclude that the manufacture of recycled paper and reusable carryout bags use more water and produce more waste then single-use carryout bags. However, these findings are based on assumed variables such as bag durability and reuse which may not be consistent with the specific study area and ordinance in question. Therefore, the life cycle analysis may not accurately represent the actual water consumption and waste generation rates to be expected within Salinas.

The impacts of the Proposed Ordinance on water consumption and waste disposal outside of Salinas would be indirect and difficult to quantify. It is plausible that a significant reduction and in single-use carryout bags and an associated increase in recycled paper bags and reusable bags could result in the necessary expansion of recycled paper and reusable bag manufacturing. Although speculative, these new facilities would be subject to environmental review including an evaluation of the water supply and waste disposal capabilities of the area. Therefore, the cumulative impacts to both water and waste service providers are expected to be less than significant.

5. Summary

Single-use carryout bag use is known to have environmental impacts on biological resources, hydrology and water quality, air quality, greenhouse gas emissions, and utilities. The Proposed Ordinance would decrease the use of single-use carryout bags within Salinas by enacting a ban on single-use carryout bags and levying a ten cent (\$0.10) fee on recycled paper bags at covered stores. Although recycled paper bags and reusable bags can have a negative impact on GHG, air quality, and utilities, there would be a net decrease in the overall number of bags used in Salinas (including single-use, recycled paper and reusable bags). As described in the above

analysis, the Proposed Ordinance would decrease overall use of single-use carryout bags and incentivize the use of reusable bags. As a result, the overall environmental impacts relating to air quality, GHG emissions, and utilities would be less than significant. The reduction of single-use carryout bags would also have a beneficial impact to the important biological resources and natural resources in Salinas including to local creeks, intermittent streams, the Monterey Bay National Marine Sanctuary and the Pacific Ocean. Therefore, the Proposed Ordinance would not have a significant impact on the environment but would rather enhance the environment and natural resources in Salinas.

Exempt Status and Conclusion

The California Environmental Quality Act (CEQA) Guidelines Section 15307 (Class 7), provides exemption for "actions taken by regulatory agencies as authorized by state law or local ordinance to assure the maintenance, restoration, or enhancement of a natural resource where the regulatory process involves procedures for protection of the environment". CEQA Guidelines Section 15308 (Class 8) provides exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment." Because the purpose of the Ordinance is to assure the maintenance, restoration, and enhancement of natural resources and protection of the environment, and because of the benefits to biological resources and hydrology/water quality, as shown above, the Proposed Ordinance would be exempt under Classes 7 and 8.

Furthermore, CEQA State Guidelines Section 15300.2 states that an environmental exemption shall not be used for an activity where there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances. No unusual circumstances have been identified in association with the Proposed Ordinance. Therefore, the Proposed Ordinance fully qualifies for exemption under Classes 7 and 8 of CEQA review.

6. REFERENCES

- Boustead Consulting and Associates Ltd. 2007. *Life Cycle Assessment for Three Types of Grocery Bags – Recyclable Plastic; Compostable, Biodegradable Plastic; and Recycled, Recyclable Paper.* Prepared for the Progressive Bag Alliance.
- California Air Resources Board. 2011. Website: Diesel & Health Research. Retrieved from: <u>http://www.arb.ca.gov/research/diesel/diesel-health.htm</u>
- Californians Against Waste Homepage: Summary of Local Ordinances. Updated July 2014. Available at: <u>http://www.cawrecycles.org/issues/plastic_campaign/plastic_bags/local</u>
- Center for Ecosystem Management and Restoration, *Steelhead/Rainbow Trout Resources of Salinas*. Accessed June 22, 2014. <u>http://www.cemar.org/SSRP/pdfs/SSRP_Monterey.pdfs</u>
- Center for Biological Diversity, Ocean Plastics Pollution, 2014. Accessed June 22, 2014. http://www.biologicaldiversity.org/campaigns/ocean_plastics/
- City of San Jose. Single-Use Carryout Bag Ordinance. Final Environmental Impact Report. SCH # 2009102095. October 2010.
- Derraik, J.B., and M.R. Gregory. 2009. *Environmental implications of plastic debris in marine settings- entanglement, ingestion, smotherings, hangers-on, hitchhiking, and alien invasions*. Phil. Trans. R. Soc. B. 364.
- Jose G.B Derraik, Marine Pollution Bulletin, The Pollution of the Marine Environment by Plastic Debris: a review, 2002, Accessed June 23, 2014 <u>http://www.sciencedirect.com/science/article/pii/S0025326X02002205</u>
- Ecobilan. February 2004. Environmental Impact Assessment of Carrefour Bags: An Analysis of the Life Cycle of Shopping Bags of Plastic, Paper, and Biodegradable Material. Prepared for: Carrefour Group. Neuilly-sur-Seine, France.
- Equinox Center, Plastic Bag Bans: Analysis of Economic and Environmental Impacts, 2013. Accessed June 24, 2014.
- ExcelPlas Australia. 2004. "The Impacts of Degradable Plastic Bags in Australia." Centre for Design at RMIT, and NOLAN-ITU.
- Green Cities California. March 2010. *Master Environmental Assessment on Single-use and Reusable Bags*. Prepared by ICF International.
- Herrera Environmental Consultants. City of San José Single-Use Carryout Bag Fee Fiscal Analysis – Final Report. June 22, 2010.
- Hyder Consulting. 2007. Comparison of existing life cycle analyses of plastic bag alternatives.

- Kavanagh, Patrick, "The Irish Plastic Bag Levy-A Review of its Perfomance 5 Years on." 2008. Accessed June 22, 2014. <u>http://www.webmeets.com/files/papers/EAERE/2008/294/Plastic%20Bags%20-Irish%20Levy%20-%20EAERE%20PAPER%202008.pdf</u>
- Laist, D.W. 1997. Impacts of marine debris: entanglement of marine life in marine debris including a comprehensive list of species with entanglement and ingestion records. In Marine Debris :sources, impacts and solutions (eds J.M. Coe & B.D. Rogers), pp.99-141. Berlin, Germany: Springer.
- Mato Y., Isobe T., Takada H., et al. 2001. *Plastic resin pellets as a transport medium of toxic chemicals in the marine environment*. Environmental Science & Technology. Volume 35.
- Moore, C.J., Lattin, G.L., Zellers, A.F. 2005a. A Brief Analysis of Organic Pollutants Sorbed to Pre and Post-production Plastic Particles from the Los Angeles and San Gabriel River Watersheds. Agalita Marine Research Foundation, Long Beach, CA.

Ocean Conservancy. April 2010. Trash Travels: 2010 Report. International Coastal Cleanup Day.

Opinion Works, Public Perceptions and Willingness to Address Litter in the District of Colombia, February 15, 2011. <u>http://fergusonfoundation.org/wp-</u> <u>content/uploads/2012/12/AFF-DC-Research-Memo-2-15-11.pdf</u>

Salinas General Plan, 2002, accessed July 6, 2014. <u>http://www.ci.salinas.ca.us/services/commdev/generalplan/GeneralPlan.pdf</u>

Teuten et al, 2009. Transport and Release of chemcials from plastics to the environment and to Wildlife. Philosophical Transactions of the Royal Society of Biological Sciences. <u>http://rstb.royalsocietypublishing.org/content/364/1526/2027.abstract</u>

The Washington Post, "District Businesses not Harmed by Bag Tax" February 24, 2011.

- US Environmental Protection Agency, 2012. Wastes Resource Conservation Common Wastes & Materials. <u>http://www.epa.gov/osw/conserve/materials/plastics.htm</u>
- US Environmental Protection Agency, 2014. Surf Your Watershed, Salinas. http://cfpub.epa.gov/surf/county.cfm?fips_code=06053

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Appendix A

Efficacy Analysis of Bag Ordinance Fees and Sample Bag Use Estimates

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Efficacy Relationship between Bag fee and Bag Use Reduction

Single-use carryout bag ordinances have become common throughout California in recent years. These ordinances often enact a flat out ban on single-use carryout bags made from plastic, and impose a mandatory fee on any other "alternative" bag provided at the register. These alternative bags are often recycled paper, but also include reusable bags. The overall goal of these ordinances is to encourage the use of reusable bags and discourage the use of all single-use bags, including those made of recycled paper. The fee placed on recycled paper bags is meant to act as an economic signal to bring a reusable bag, or forgo a bag altogether. Several studies have been conducted which try and determine the effect that various bag fees have on bag use choices.

In 2010, the City of San José commissioned a fiscal analysis to assess potential costs and cost recovery to be borne by the City and affected retailers as a result of the proposed ordinance (Herrera report). This report was included in San Jose's EIR for their Bag Ordinance (City of San Jose Final EIR, SCH # 2009102095, October 2010). The analysis included estimates on consumer behavior changes at various store charge levels. These estimates assume a link between the amount of the fee and the level of bag uses. A higher charge on paper bags under the proposed ordinance, it is assumed, would result in a greater reduction in the number of single-use paper carryout bags being used than would a lower fee. Taking into account the information derived from a wide variety of programs implemented around the world to encourage reusable bags and/or to discourage single-use carryout bags, and averaging their success rates with the survey results mentioned above, the Herrera report estimates that 65 percent of retail customers in San José will readily change to reusable bags (or no bag) if single-use plastic carryout bags are banned and a \$.10 fee is charged for exempt single-use paper carryout bags. Once the \$.25 bag charge is implemented in two years, the percentage of customers using reusable bags (or no bag) will increase to 89 percent.

A review compiled by the Equinox Center (2013) compiled the results of three bag ordinances in California including the City of San Jose, City of Santa Monica, and County of Los Angeles. All three of these ordinances have banned single-use carryout bags and imposed a minimum \$0.10 fee on recycled paper bags. The City of San Jose's fee will rise to \$0.25 cents after 2014 and Los Angeles County's fee can be raised to any level above \$0.10 at the discretion of the retailer. The results of these bans can be seen in Table 1.

			Pre-	Ban			Post-	Ban	
Location	Fee	Single-Use Carryout	Recycled Paper	Reusable	No- Bag	Single-Use Carryout	Recycled Paper	Reusable	No-Bag
San Jose	\$0.10	75%	3%	3%	19%	0%	22%	35%	43%
Santa Monica	\$0.10	69%	5%	10%	15%	0%	23%	41%	36%
LA County	\$0.10	82%	2%	2%	17%	0%	2%	58%	40%

Table 1. Result of Single-Use Carryout Bag Ordinance

Table 1 outlines the effect of imposing a \$0.10 fee on recycled paper bags. Although an increase in recycled paper bag use can be seen, it is significantly less than the increase in paper bag use seen in places with no bag fee at all. Carmel by the Sea implemented a plastic single-use carryout bag ban without including a recycled paper bag fee. According to an observational study performed by Save Our Shores, 377 people were observed with single-use carryout bags before the ban and 366 after. With plastic bags being banned, almost all of these bags were recycled paper (Monterey Herald, 2014). This suggests that even a minor fee has the ability to significantly decrease the amount of single-use carryout bags consumed.

Although data describing the results of bag ordinances in California is not prevalent, other studies have investigated the price elasticity of demand or "willingness to pay" of single-use carryout bags. One such study utilized a contingent valuation survey to determine customer's willingness to pay for single-use carryout bags. The study found that the average willingness to pay was \$0.33 (Dunn, 2012). Another study investigating the willingness to pay for single-use carryout bags found that 92% of respondents were unwilling to pay more than \$0.05 per bag. Although some cities including the City of Monterey have levied \$0.25 fees on recycled paper bags, no data has been made available to quantify the effect this higher fee has had on bag use. In addition, many of the currently active bag ordinances will increase from \$0.10 to \$0.25 at a later date. This may be in reaction to the belief that consumers will become used to the new bag fee and overall single-use carryout bag use will begin to increase as it has in some other areas. (Kavanagh, 2008).

R3 Consulting performed a study for the City of Santa Monica to determine the necessary bag fees based on assumptions including bag reduction factors, City costs, and Retailer costs. Using a range of parameters this study suggests a bag fee between \$0.026 and \$0.215 (avg \$0.199) in order to cover the costs associated with the proposed ordinance. A study completed by Elway Research, Inc. for the City of Kirkland, Washington conducted a survey of 407 Kirkland residents to determine their willingness to pay for a paper or plastic bag at checkout. Approximately 33% of respondents stated that they would not be willing to pay anything for a bag, 31% would be willing to pay <\$0.05 and 10% would be willing to pay \$0.10 per bag. Only 1% of respondents reported they would still purchase a bag if it was greater than \$0.25 (Elway Research Inc. May, 2013).

Although the currently available data is not complete, the overall implications of the available data show that a bag fee between \$0.05 and \$0.25 has been successful in reducing the number of single-use carryout bags (both recycled paper and plastic). No concrete evidence has been presented that ties a higher per bag fee to a decrease in bag use. However, this may change as current bag ordinances mature and more data is collected.

References

City of San Jose. Single-Use Carryout Bag Ordinance. Final Environmental Impact Report. SCH # 2009102095. October 2010.

Santa Monica Nexus Study, R3 Consulting, January 2010

Elway Research Inc. Resident Opinions of Disposable Bag Ban, City of Kirkland, WA. May 2013. <u>http://www.kirklandwa.gov/Assets/Plastic+Bag+Staff+Report.pdf</u>

Equinox Center, Plastic Bag Bans: Analysis of Economic and Environmental Impacts, 2013.

Herrera Environmental Consultants. City of San José Single-Use Carryout Bag Fee Fiscal Analysis – Final Report. June 22, 2010.

Plastic Bag Report 2012 Update, Metropolitan Washington Council of Governments. http://www.mwcog.org/uploads/pub-documents/p15dWl820121105113857.pdf

Larry Parsons, Monterey Herald, 2/28/2014. Accessed June 25, 2014 http://www.montereyherald.com/localnews/ci_25251411/year-later-carmel-reviews-plasticbag-ban-progress

Kavanagh, Patrick. "The Irish Plastic Bag Levy-A Review of its Performance 5 years on, 2008. http://scholar.google.com/scholar?q=The+Irish+Plastic+Bag+Levy+%E2%80%93+A+Review+of+its+Performance+5+years+on.+&btnG=&hl=en&as_sdt=0%2C5

Bag Use in Salinas Associated with the Proposed Ordinance

As discussed in the Efficacy Analysis above, various studies have shown that bag ordinances similar to the Proposed Ordinance that ban single-use carryout bags and require a \$0.10 fee to be charged on recycled paper bags shift the existing bag use such that single-use carryout bags are replaced with a combination of recycled paper, reusable or no bag use (depending on the customer's preference). These existing studies and the associated change in bag use rates found in the studies are not specific to Salinas. However, using these various studies including the Herrera Report (2010) and the Equinox Center report (2013), a reasonable estimated range of bag use related to implementation of the Proposed Ordinance in Salinas was completed. With a \$0.10 fee for recycled paper bags, the Proposed Ordinance could result in the following approximate range of bag use per year for each type of bag to replace the approximately 52.6 million single-use carryout bags currently used in Salinas:

- 526,145 2.63 million single-use carryout bags (bags associated with restaurants)
- 6.66 million 15.78 million recycled paper bags
- 168,366 657,681 reusable bags
- Up to 40% of customers could choose no bag
- Some other types of plastic bags would be purchased by customers in order to replace single-use carryout bags that are currently reused for uses such as waste can liners or dog waste pickup bags

In total, it is estimated that as a result of the Proposed Ordinance, the approximately 52.6 million single-use carryout bags currently used in Salinas annually would be reduced to between 7.36 million and 40.11 million total carryout plastic, paper, and reusable bags depending on which of the various rates are utilized. In either case, the number of single-use carryout bags would be significantly reduced in Salinas (from 52.6 million currently used to less than 2.63 million single-use carryout bags).

Appendix B



Recently Adopted, Proposed and Pending Carry-out Bag Ordinances in California

Ordinance Location	Proposed Action	Status
City of Calabasas	This ordinance bans the issuance of plastic carry-out bags and imposes a ten (10) cent charge on the issuance of recyclable paper carry-out bags at regulated stores.	Adopted February 2011 Effective July 2011
City of Capitola	This ordinance bans the issuance of plastic carry-out bags at all retail establishments and imposes a 25 cent fee for paper bags at regulated retail establishments.	Adopted January 2013 Effective April 2013
City of Carmel-by- the-Sea	This ordinance is a plastic bag ban in all retail stores.	Adopted July 2012 Effective February 2013
City of Carpinteria	This ordinance is the first double bag ban in the state. Starting in July 2012, large retailers as specified are prohibited from distributing single-use paper and plastic bags. Starting in April 2013, plastic bags are banned in all other retail stores including restaurants.	Adopted March 12, 2012 Carpinteria's 2012 bag ban was challenged by the Save The Plastic Bag Coalition (STPBC) March 20, 2012. They settled out of court with the agreement that the City would exempt restaurant carry-out bags from the ordinance.
City of Culver City	This ordinance bans the issuance of plastic carry-out bags and imposes a ten (10) cent charge on the issuance of recyclable paper carry-out bags at all supermarkets and other grocery stores, pharmacies, drug stores, convenience stores, and foodmarts, in Culver City. The ordinance requires a store to provide or make available to a customer only recyclable paper carry-out bags or reusable bags.	Adopted May 2013
City of Dana Point	This ordinance places a ban on single-use carry-out bags from all retail stores within city limits.	Adopted March 6, 2012 Effective in larger stores April 1, 2013, and all other stores October 1, 2013.
Town of Fairfax	This ordinance allows all stores, shops, eating places, food vendors and retail food vendors, to provide only recyclable paper or reusable bags as carry-out bags to customers.	Adopted August 2007 After legal challenge, adopted by voter initiative November 2008
City of Fort Bragg	This ordinance bans plastic bags and requires a 10 cent paper bag charge in all retail stores.	Adopted May 14, 2012 Effective in large stores December 10, 2012 and all other stores December 2013.
City of Glendale	This ordinance is similar to the County of Los Angeles ordinance in that it bans plastic bags and places a 10 cent charge on paper bags in regulated retail establishments.	Adopted January 2013 Effective in larger stores and farmer's markets starting in July 2013 and expanded to other covered stores January 1, 2014.
City of Huntington Beach	This ordinance would prohibit distribution of plastic carry-out bags in commercial point of sale purchases within Huntington Beach, and establish a ten (10) cent charge on the issuance of recyclable paper carry-out bags at all stores that meet at least one of the criteria listed below.	Adopted March 2013 Effective To be determined
City of Laguna Beach	This ordinance requires a plastic bag ban in all retail stores. Grocery stores, pharmacies, and	Adopted February 2012 Effective January 1, 2013

Ordinance Location	Proposed Action	Status
	convenience/liquor stores must include a 10 cent minimum price requirement on paper bags distributed.	
City of Long Beach	This ordinance bans plastic carry-out bags at all supermarkets and other grocery stores, pharmacies, drug stores, convenience stores, food marts, and farmers markets and would place a ten (10) cent charge on the issuance of recyclable paper carry-out bags by an affected store, as defined. The ordinance would also require a store to provide or make available to a customer recyclable paper carry-out bags or reusable bags.	Long Beach passed this ordinance in May 2011. But unlike LAC, Long Beach did not issue a statement of overriding consideration for the likelihood of passing the GHG emission threshold of significance. The suit was settled after Long Beach agreed to adopt the County's Statement of Overriding Consideration in October 2011. Addendum to the County of Los Angeles Final EIR certified May 2011. The ordinance was also effective in larger stores starting August 2011, and will expand to others
		stores in 2012.
City of Los Angeles	The ordinance would prohibit provision of single-use carry-out bags at supermarkets. Large markets are allowed to phase out plastic bags over 6 months and then provide free paper bags for 6 months. Smaller markets have a year to phase out plastic bags. After a year, paper bags would be allowed for a charge of 10 cents.	Approved May 2013
City of Malibu	This ordinance bans the use of non-compostable and compostable plastic shopping bags for point-of-sale distribution.	Adopted May 2008 Effective November 2009
City of Manhattan Beach	This ordinance bans the distribution of plastic bags at the point-of-sale for all retail establishments in Manhattan Beach.	Adopted July 2008 The California Supreme Court overturned a legal challenge to the ordinance in July 2011, ruling in favor of an appeal by the City of Manhattan Beach affirming the right of small local governments to phase out plastic grocery bags without an EIR.
City of Millbrae	This ordinance bans single-use bags and free paper carry-out bags and would apply to all retailers. Stores can charge a minimum of 10 cents per bag, should a customer need to purchase one. Those paper bags sold must be comprised of at least 40 percent post- consumer recycled materials. Thicker reusable plastic bags are allowed but would also need to be imprinted showing the bag is made of at least 40 percent post- consumer recycled materials.	Adopted February 2012. Certified a Negative Declaration. Effective September 1, 2012.
City of Monterey	This ordinance bans plastic bags and places an initial 10 cent minimum price requirement on paper bags for the first year, and 25 cents after.	Adopted December 6, 2011 Effective January 2013

Ordinance Location	Proposed Action	Status
City of Ojai	A proposed ordinance would ban plastic shopping bags and impose a 10-cent fee on paper bags at grocery stores, supermarkets, convenience stores, liquor stores and gasoline mini-marts.	Adopted April 2012. Effective July 1, 2012.
City of Pacific Grove	The proposed ordinance would ban single-use plastic and paper bags and place a fee on recycled content paper bags.	Pending
City of Palo Alto	This ordinance bans large grocery stores in Palo Alto from distributing single-use plastic check out bags. Only reusable bags (preferred) or paper bags can be distributed. Single-use carry-out bags can still be used in produce and meat departments. Pending expansion of the ordinance would apply the ban to all retailers including restaurants in the city. An EIR on the expanded ordinance is currently being prepared.	Adopted March 2009 Palo Alto's 2009 bag ban was challenged by the STPBC. They settled out of court with the agreement that the City would not expand its ban to other stores without an EIR. Effective September 2009 An EIR for the expansion of the ordinance to all retailers including restaurants was prepared. The expanded ordinance was adopted by the City Council on May 6, 2013 and will become effective July 2013.
City of Pasadena	This ordinance bans plastic bags, and imposes a10 cent minimum price on paper bags.	Adopted November 2011 Effective July 1, 2012 for large stores and supermarkets and December 2012 for convenience stores.
City of Sacramento	This ordinance bans plastic bags and imposes a 10 cent minimum price on paper bags.	Final EIR has been completed, awaiting ordinance hearings.
City of San Francisco	Retail stores governed by the ordinance can only provide the following types of bags:	Adopted April 2007
	 a. compostable plastic b. recyclable paper c. reusable bag of any material In February 2012, the ordinance was expanded to all retail and food establishments within the City and requires a minimum 10 cent charge for reusable bags. 	In February 2012, San Francisco expanded its bag ban and was sued by the STPBC. The two causes of action are related to CEQA compliance and the bag ban for restaurants. A judge upheld the expansion in September 2012.
City of San Jose	This ordinance prohibits the distribution of single-use carry-out paper and plastic bags at the point of sale (i.e., check-out) for all commercial retail businesses in San José except restaurants. An exception is made for "green" paper bags containing at least 40 percent recycled content, accompanied by a charge of 10 cents to the customer, with the charge retained by the retailer. For the first two years, paper bags will be sold under this ordinance at 10 cents each; after two years the minimum price per paper bag is 25 cents each.	Adopted January 2011 Effective January 2012

Ordinance Location	Proposed Action	Status
City of Santa Cruz	This ordinance bans plastic bags and places a 10 cent paper bag charge.	Adopted July 2012 Effective April 2013
City of Santa Monica	This ordinance: (1) prohibits retail establishments in Santa Monica from providing "single-use plastic carry- out bags" to customers at the point of sale; (2) prohibits the free distribution of paper carry-out bags by grocery stores, convenience stores, mini-marts, liquor stores and pharmacies; and (3) requires stores that make paper carry-out bags available to sell recycled paper carry-out bags to customers for not less than ten cents per bag.	Adopted January 2011 Effective September 2011
City of Solana Beach	This ordinance prohibits the provision of plastic bags (except at restaurants) and allows purchase of paper bags for 10 cents.	Adopted May 2012, amended July 2012
City of Sunnyvale	This ordinance prohibits specified retail establishments in Sunnyvale from providing single- use plastic carry-out bags to customers at the point of sale, and creates a mandatory 10 cent (\$0.10) charge for each paper bag distributed by these stores.	Adopted December 2011 Effective June 20, 2012 (grocery stores, convenience stores and large retailers) Effective March 2013 (all retailers)
City of Ukiah	This ordinance prohibits retail establishments (except eating establishments) in Ukiah from providing single- use bags. Recycled-content paper bags or reusable bags could be provided at a minimum charge of 10 cents per bag.	Adopted May 2012 Effective in large stores 180 days after adoption and 545 days for all other stores.
City of Watsonville	This ordinance prohibits retail establishments from providing non-recycled paper or plastic bags and allows sale of recycled and recyclable paper bags for a 10 cent charge.	Adopted May 2012
City of West Hollywood	This ordinance prohibits retail establishments from providing non-recycled paper or plastic bags and places a 10 cent recyclable paper bag charge.	Adopted August 2012
County of Alameda (Cities of Albany, Berkeley, Dublin, Emeryville, Fremont, Hayward, Livermore, Newark, Oakland, Piedmont, Pleasanton, San Leandro, and Union City)	This ordinance prohibits the distribution of single-use carry-out paper and plastic bags at the point of sale (i.e., check-out) for all commercial retail businesses in Alameda County. Exception would be made for recycled paper or reusable bags containing a specified minimum percentage of recycled content, which can only be provided to customers for a nominal charge (ten cents on or before January 1, 2015 and 25 cents on or after January 1, 2015) to cover the cost to the business of providing the bags.	Adopted January 2012 Effective January 1, 2013
County of Los Angeles	This ordinance bans the issuance of plastic carry-out bags and imposes a ten (10) cent charge on the issuance of recyclable paper carry-out bags at all supermarkets and other grocery stores, pharmacies, drug stores, convenience stores, and foodmarts, in unincorporated Los Angeles County. The ordinance requires a store to provide or make available to a customer only recyclable paper carry-out bags or reusable bags. The ordinance would also encourage a store to educate its staff to promote reusable bags and to post signs encouraging customers to use	Adopted November 2010 In October 2011, Hilex and some individuals filed a petition to void the LA County ordinance. They alleged that the 10-cent charge on paper bags is really a local special tax that requires voter approval as amended by Prop 26. In March 2012, the Court denied the petition and ruled that a paper bag charge

Ordinance Location	Proposed Action	Status
	reusable bags in the unincorporated areas of the County of Los Angeles.	was not a tax under Prop 26. Helix appealed the decision April 2012 and the case is still pending.
County of Marin ²	This ordinance prohibits the distribution of plastic carry-out bags and would charge at least \$0.05 for a recycled paper bag.	Adopted January 2011 In September 2011, Marin County Superior Court found the ordinance "a reasonable legislative and regulatory choice" to protect the environment without causing a significant negative impact. The County had correctly determined the project to be exempt based on its actions to protect the environment and natural resources. STPBC filed an appeal of this decision on November 29, 2011. On June 25, 2013 the First District Court of Appeal upheld the lower court ruling in favor of Marin County.
County of Mendocino	This ordinance bans plastic bags with a 10 cent paper bag charge.	Adopted June 12, 2012 Effective in large stores January 2013, and all other retailers January 2014
County of San Luis Obispo (City and County of San Luis Obispo, Atascadero, Grover Beach, Morro Bay, Paso Robles, and Pismo Beach)	The San Luis Obispo County Integrated Waste Management Authority adopted a plastic bag ban with a 10 cent minimum price requirement on paper bags.	Adopted January 2012 It goes into effect on September 1, 2012 in all seven incorporated cities as well as unincorporated areas of the county. A petition was filed January 30, 2012. The SLO lawsuit had two causes of action, but the second cause was dropped in February. The first cause of action is CEQA compliance. On October 15, 2012 The San Luis Obispo Superior Court ruled in favor of the IWMA.
County of San Mateo (unincorporated) and 24 participating municipalities in San Mateo and Santa Clara Counties ¹	This ordinance prohibits the provision of single-use plastic bags and places a 10 cent (up to 25 cents in January 2013) charge on recycled paper bags.	Approved by San Mateo County Board of Supervisors November 2012. Effective April 2013.
BEACON (unincorporated Santa Barbara County, Buellton,	The Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) model ordinance for cities and counties in either Santa Barbara or Ventura counties would regulate the distribution of single-use	City of Santa Barbara adopted an ordinance in October 2013. The Santa Barbara County released a Draft EIR in December 2013

Ordinance Location	Proposed Action	Status
Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, Solvang, unincorporated areas of Ventura County, Camarillo, Fillmore, Moorpark, Oxnard, Port Hueneme, Santa Paula, Simi Valley, Thousand Oaks, and Ventura)	plastic and paper carry-out bags and would impose a 10 cent fee on recycled paper bags. The EIR encompasses the County of Santa Barbara (unincorporated Santa Barbara County, Buellton, Goleta, Guadalupe, Lompoc, Santa Barbara, Santa Maria, Solvang, unincorporated areas of Ventura County, Camarillo, Fillmore, Moorpark, Oxnard, Port Hueneme, Santa Paula, Simi Valley, Thousand Oaks, and Ventura).	specifically for unincorporated areas of Santa Barbara County. All other cities and the County of Ventura are currently pending.
County of Santa Clara	This ordinance allows affected retail establishments to distribute either a 'green' paper bag or a reusable bag. Reusable bags may be given away or sold and are initially defined (until January 2013) as bags made of cloth or other machine washable fabric that has handles; or a durable plastic bag with handles that is at least 2.25 mils thick and is specifically designed and manufactured for multiple use. 'Green' paper bags may be sold to customers for a minimum charge of \$0.15 and are defined as paper bags that are 100% recyclable and are made from 100% recycled material.	Adopted April 2011 Effective January 2012
County of Santa Cruz	The ordinance bans single-use carry-out bags and places a 10 cent minimum price requirement on single-use paper bags throughout unincorporated county areas.	Adopted September 13, 2011 The STPBC filed a lawsuit in October 2011. The case was settled out of court and in February 2012 the City repealed the ban of plastic bags used at restaurants.
County of Sonoma	The Sonoma County Waste Management Agency ordinance would ban single-use carry-out bags and place a 10 cent minimum price requirement, that goes up to 25-cents, on single-use paper bags throughout the County.	Pending
Marin County Hazardous and Solid Waste Management Joint Powers Authority (JPA)	The Marin County Hazardous and Solid Waste Management Joint Powers Authority (JPA) prepared a Draft Model Single-use Carry-out Bag Reduction Ordinance that participating JPA member agencies within Marin County could consider for adoption. The model ordinance would regulate the distribution of single-use plastic and paper carry-out bags and would impose a 5 cent fee on recycled paper bags and reusable bags. The EIR encompasses the following member agencies in Marin County Belvedere Corte Madera Larkspur Mill Valley Novato Ross San Anselmo	EIR was certified by the JPA in January 2014. Pending adoption of the ordinance by the member agencies. Belvedere, Novato and San Rafael have each already adopted ordinances in their respective jurisdictions.

Ordinance Location	Proposed Action	Status
	San RafaelSausalitoTiburon	

Source: Californians Against Waste, http://www.cawrecycles.org/issues/plastic_campaign/plastic_bags/local, accessed January 2014; Save the Plastic Bag Coalition, http://savetheplasticbag.com, accessed December 2012; San Luis Obispo County, Alameda County, City of Oakland, City of San Jose, City of Calabasas, City of Capitola, City of Carpinteria, City of Dana Point, Town of Fairfax, City of Laguna Beach, City of Palo Alto, City of Los Angeles, County of Los Angeles, City of Malibu, City of Manhattan Beach, City of San Francisco, City of Solana Beach, City of Pasadena, Marin County, City of Santa Monica, Santa Clara County, Santa Cruz County, City of Long Beach, City of Ojai, City of Sunnyvale, City of Millbrae Homepages, January 2014.

¹The City of Belmont adopted the County's Reusable Bag Ordinance in January 2013 and it became effective in April 2013. The City of Brisbane adopted the San Mateo County's Reusable Bag Ordinance on March 18, 2013 and it also became effective in April 2013. The city of Burlingame adopted the San Mateo County's Reusable Bag Ordinance on March 18, 2013 and it also became effective in April 2013. The city of Burlingame adopted the San Mateo County's Reusable Bag Ordinance on March 18, 2013 and it also became effective in April 2013. The City of Colma, Daly City, Menlo Park, Mountain View, Pacifica, Portola Valley, San Bruno, South San Francisco, and Foster City adopted the County's Ordinance January 2013 and both ordinances also became effective in April 2013. The City of Redwood City and San Carlos adopted the County's ordinance in March 2013 and it became effective in October 2013, respectively. The City of Cupertino adopted an amended ordinance, similar to the County's in March 2013 and it became effective in October 2013. The City of Half Moon Bay adopted the County's ordinance in March 2013 and it became effective July 4, 2013.

²This ordinance only applies to the unincorporated areas of Marin County, not the incorporated jurisdictions such as those which comprise the Study Area for the Marin County Hazardous and Solid Waste Management Joint Powers Authority (JPA) EIR.

Appendix C



Table of Freshwater/Coastal/Marine Special-Status Species Locations of Special-status Species and Natural Communities in Monterey County

Freshwater/Coastal/Marine Special-Status Species

Scientific Name	Common Name	Current Federal/State Status			
Reptiles					
Emys marmorata	western pond turtle	SSC			
Thamnophis hammondii	two-striped garter snake	SSC			
Anniella pulchra pulchra	silvery legless lizard	SSC			
Anniella pulchra nigra	black legless lizard	SSC			
Phrynosoma blainvillii	coast horned lizard	SSC			
Masticophis flagellum ruddocki	San Joaquin whipsnake	SSC			
	Amphibians				
Ambystoma macrodactylum croceum	Santa Cruz long-toed salamander	FE/SE			
Ambystoma californiense	California tiger salamander	FT/ST			
Rana draytonii	California red-legged frog	FT			
Spea hammondii	western spadefoot	SSC			
Anaxyrus californicus	arroyo toad	FE			
Taricha torosa	Coast Range newt	SSC			
Rana boylii	foothill yellow-legged frog	SSC			
	Birds				
Haliaeetus leucocephalus	bald eagle	SE			
Rallus longirostris obsoletus	California clapper rail	FE/SE			
Gymnogyps californianus	California condor	FE/SE			
Vireo bellii pusillus	least Bell's vireo	FE/SE			
Falco peregrinus anatum	American peregrine falcon	-			
Pelecanus occidentalis californicus	California brown pelican	-			
Oceanodroma homochroa	ashy storm-petrel	SSC			
Cypseloides niger	black swift	SSC			
Athene cunicularia	burrowing owl	SSC			
Eremophila alpestris actia	California horned lark	-			
Phalacrocorax auritus	double-crested cormorant	-			
Buteo regalis	ferruginous hawk	-			

Freshwater/Coastal/Marine Special-Status Species

Scientific Name	Common Name	Current Federal/State Status				
Aquila chrysaetos	golden eagle	-				
Ardea herodias	great blue heron	-				
Circus cyaneus	northern harrier	SSC				
Falco mexicanus	prairie falcon	-				
Progne subis	purple martin	SSC				
Agelaius tricolor	tricolored blackbird	SSC				
Fratercula cirrhata	tufted puffin	SSC				
Elanus leucurus	white-tailed kite	-				
Dendroica petechia brewsteri	yellow warbler	SSC				
Riparia riparia	bank swallow	ST				
Buteo swainsoni	Swainson's hawk	ST				
Charadrius alexandrinus nivosus	western snowy plover	FT				
Fish						
Spirinchus thaleichthys	longfin smelt	FC/FT				
Eucyclogobius newberryi	tidewater goby	FE				
Oncorhynchus mykiss irideus	Steelhead	FT				
	Mammals					
Corynorhinus townsendii	Townsend's big-eared bat	SCT				
Lasiurus cinereus	hoary bat	SSC				
Antrozous pallidus	pallid bat	-				
Eumops perotis californicus	western mastiff bat	SSC				
Lasiurus blossevillii	western red bat	SSC				
Reithrodontomys megalotis distichlis	Salinas harvest mouse	-				
	Invertebrates					
Coelus globosus	globose dune beetle					
Euphilotes enoptes smithi	Smith's blue butterfly	FE				
Euphydryas editha bayensis	Bay checkerspot butterfly	FT				
Socalchemmis monterey	Monterey socalchemmis spider					

Freshwater/Coastal/Marine Special-Status Species

Scientific Name	Common Name	Current Federal/State Status
Branchinecta lynchi	vernal pool fairy shrimp	FT
Tryonia imitator	California brackishwater snail	-
Optioservus canus	Pinnacles optioservus riffle beetle	-

FT = Federally Threatened

FE = Federally Inteatened FE = Federally Endangered FC = Federal Candidate SSC = California Species of Special Concern SE = California Endangered

ST= California Threatened SCT = California Candidate Threatened

- = no status but included in Rarefind database as deserving of concern



Legend

- Monterey County Boundary One-Mile County Radius City Limits

CNDDB Record

🔲 Animal

CNDDB Record Undisclosed

- 1 Santa Cruz long-toed salamander
- 2 California tiger salamander 3 Coast Range newt
- 4 arroyo toad
- 5 western spadefoot 6 California red-legged frog
- 7 foothill yellow-legged frog
- 8 California brown pelican
- 9 double-crested cormoran
- 10 California condor 11 white-tailed kite
- 12 bald eagle
- 13 Swainson's haw
- 14 ferruginous hawk
- 15 golden eagle 16 American peregrine falcon 17 prairie falcon
- 18 western snowy plove
- 19 tufted puffin
- 20 burrowing owl 21 short-eared owl
- 22 black swift
- 23 California horned lark
- 24 bank swallow 25 - least Bell's vireo
- 26 yellow warbler
- 27 tricolored blackbird
- 28 steelhead south/central California coast DPS
- 29 longfin smelt
- 30 tidewater goby
- 31 hoary bat
- . 32 western red bat 33 - Townsend's big-eared bat
- 34 pallid bat
- 35 western mastiff bat
- 36 Salinas pocket mouse
- 37 big-eared kangaroo rat
- 38 Salinas harvest mouse 39 - Monterey dusky-footed woodrat
- 40 San Joaquin kit fox
- 41 American badger
- 42 western pond turtle
- 43 black legless lizard
- 44 silvery legless lizard
- 45 coast horned lizard
- 46 San Joaquin whipsnake
- 47 vernal pool fairy shrimp
- 48 California linderiella 49 globose dune beetle
- 50 Pinnacles optioservus riffle beetle
- 51 Tulare cuckoo wasp
- 52 Smith's blue butterfly
- 53 Bay checkerspot butterfly
- 54 monarch butterfly
- 55 Dolloff Cave spider
- 56 Arroyo Seco short-tailed whipscorpion
- 57 Ubick's leptonetid spider 58 - Monterey socalchemmis spider
- 59 redwood shoulderband
- 60 mimic tryonia (=California brackishwater snail)



Sensitive Animals Reported by the California Natural Diversity Database City of Salinas

> Figure 1 City of Salinas





Legend

Monterey County Boundary One-Mile County Radius City Limits (not within project)

CNDDB Record

Natural Communities

- 61 North Central Coast Fall-Run Steelhead Stream

- 62 Central Dune Scrub 63 Valley Sink Scrub 64 Central Maritime Chaparral 65 Valley Needlegrass Grassland 66 Northern Coastal Salt Marsh
- 67 Coastal Brackish Marsh
- 68 Coastal and Valley Freshwater Marsh
- 69 Valley Oak Woodland
- 70 Northern Bishop Pine Forest
- 71 Monterey Pine Forest 72 Monterey Cypress Forest 73 Monterey Pygmy Cypress Forest



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Natural Communities Reported by the California Natural Diversity Database City of Salinas

> Figure 2 City of Salinas



Legend Monterey County Boundary One-Mile County Radius City Limits (not within project) CNDDB Record Plants 74 - California screw moss 75 - tear drop moss 76 - San Simeon baccharis 77 - dwarf calycadenia 78 - small-flowered calycadenia 79 - compact cobwebby thistle 80 - Eastwood's goldenbush 81 - Hall's tarplant 82 - Congdon's tarplant 83 - Santa Cruz tarplant 84 - Diablo Range hare-leaf 85 - beach layia 86 - pale-yellow layia 87 - Munz's tidy-tips 88 - showy golden madia 89 - Carmel Valley malacothrix 90 - Santa Cruz microseris 91 - marsh microseris 92 - woodland woollythreads 93 - San Benito pentachaeta 94 - chaparral ragwort 95 - Mason's neststraw 96 - Muir's tarplant 97 - hooked popcornflower 98 - Lemmon's jewelflower 99 - sand-loving wallflower 100 - Menzies' wallflower 101 - most beautiful jewelflower 102 - caper-fruited tropidocarpum 103 - delicate bluecup 104 - legenere 105 - Robbins' nemacladus 106 - Arroyo de la Cruz manzanita 107 - Hooker's manzanita 108 - Toro manzanita 109 - Pajaro manzanita 110 - sandmat manzanita 111 - Little Sur manzanita 112 - Gabilan Mountains manzanita 113 - Napa false indigo 114 - alkali milk-vetch 115 - Tidestrom's lupine 116 - saline clover 117 - Pacific Grove clover 118 - Monterey clover 119 - Santa Cruz clover 120 - round-leaved filaree 121 - Palmer's monardella 122 - northern curly-leaved monardella 123 - Santa Lucia mint 124 - Abbott's bush-mallow 125 - Indian Valley bush-mallow 126 - Davidson's bush-mallow

127 - Carmel Valley bush-mallow 128 - Santa Lucia bush-mallow 129 - Hickman's checkerbloom 130 - maple-leaved checkerbloom 131 - Hardham's evening-primrose 132 - Jolon clarkia 133 - Hernandez spineflower 134 - Brewer's spineflower 135 - Monterey spineflower 136 - straight-awned spineflower 137 - robust spineflower 138 - Butterworth's buckwheat 139 - Eastwood's buckwheat 140 - Pinnacles buckwheat 141 - Temblor buckwheat 142 - Indian Valley spineflower 143 - Santa Lucia monkeyflower 144 - yellow-flowered eriastrum 145 - Monterey gilia 146 - shining navarretia 147 - prostrate vernal pool navarretia 148 - Santa Cruz Mountains pussypaws 149 - Hospital Canvon larkspur 150 - Hutchinson's larkspur 151 - recurved larkspur 152 - umbrella larkspur 153 - Kellogg's horkelia 154 - Hickman's cinquefoil 155 - pine rose 156 - Cone Peak bedstraw 157 - Santa Lucia bedstraw 158 - Hardham's bedstraw 159 - pink Johnny-nip 160 - San Antonio collinsia 161 - San Francisco collinsia 162 - seaside bird's-beak 163 - Dudley's lousewort 164 - oval-leaved snapdragor 165 - Gowen cypress 166 - Monterey cypress 167 - bristlecone fir 168 - San Luis Obispo sedge 169 - Santa Lucia dwarf rush 170 - Hickman's onion 171 - late-flowered mariposa-lily 172 - Santa Lucia purple amole 173 - talus fritillary 174 - fragrant fritillary 175 - San Benito fritillary 176 - Cook's triteleia 177 - Yadon's rein orchid

178 - vernal pool bent grass

6.3 Miles 3.15

Plants Reported by the California Natural Diversity Database City of Salinas

> Figure 3 *City of Salinas*