







The Organics Project: Phase One Report - January 2013

A Survey of Organics Management Trends in Los Angeles County and Orange County Cities





Table of Contents

Executive Summary	3
Introduction	4
The Problem	5
Project Design	6
Survey Methodology	7
Findings	9
Conclusion	12
Endnotes	14
Attachment A – Phase One Survey Respondents	15
Attachment B – Phase One Survey Tally	16
Attachment C – Phase One Survey Response Matrix	17

All photos courtesy of Dean Cleverdon and Ocean View Farms Community Garden.

The Angeles Chapter Foundation provided generous funding in support of The Organics Project.

Executive Summary

The Zero Waste Committee of the Sierra Club Angeles Chapter has concluded Phase One of The Organics Project survey to determine current and planned organics management practices for the incorporated cities of Los Angeles County and Orange County. The intent of this survey is to produce findings that accurately represent, to the best of our ability, the state of organics management in the two counties.

The project team invited 49 cities to participate in Phase One of this survey and received submissions from 23 cities. The responses of these cities provide an initial glimpse into policies, programs, practices, and plans to reduce landfill disposal and increase source reduction, composting, and anaerobic digestion of food scraps and yard trimmings in Los Angeles County and Orange County.

The outstanding cities we identified in Phase One of this survey are Burbank, Glendale, Irvine, San Clemente, San Juan Capistrano, Santa Clarita, and Santa Monica. Cities that have the longest way to go are Artesia, Commerce, Fullerton, and La Cañada/Flintridge.

Our findings suggest many cities already have made a significant commitment to proactively address organics in the waste stream in an environmentally sound manner and that many more plan to follow suit, while others have been less inclined to take a proactive approach.

These are the initial findings of The Organics Project:

57 percent of cities have adopted environmental policies including zero
waste plans and resolutions, sustainability
plans, and climate action plans. Organics
management is central to zero waste
policies; however, this survey does not

determine to what degree cities recognize organics programs as effective strategies to achieve their sustainability and climate action goals.

Yard trimmings from two cities are NOT sent to landfills. While yard trimmings from ninety percent of surveyed cities go to landfills for use as landfill cover, Calabasas and Santa Clarita report that all collected yard trimmings are used exclusively as feedstock for composting and mulching.

Food scraps diversion programs are most prevalent in the commercial sector. Nearly 50 percent of cities reported having some measure of commercial food scraps diversion programs in place. Meanwhile, less than 20 percent of cities reported having implemented residential food scraps diversion programs.

Cities want more access to commercial composting and anaerobic digestion facilities. Twelve of the 23 cities are considering composting and/or anaerobic digestion for the management of organics.

Organics source reduction programs are more numerous than diversion programs. Cities have implemented 35 percent more source reduction programs than diversion programs to manage organics. However, the distribution of source reduction programs is inconsistent across the region.

Organics waste reduction education and incentive programs are underutilized. Cities have put the least amount of resources into education and incentive programs as pertains to organics management.

Some cities do not know what happens to their waste. These cities delegate waste management to the private sector and appear to have little to no involvement in how the waste is managed.

Introduction

The Zero Waste Committee of the Sierra Club Angeles Chapter has concluded Phase One of The Organics Project survey to determine current and planned organics management practices for the incorporated cities of Los Angeles County and Orange County. The intent of this survey is to produce findings that accurately represent, to the best of our ability, the state of organics management in the two counties.

We are motivated by a desire to address the problem of waste in society and compelled to contribute to finding sustainable solutions to it. We are cautiously optimistic about the new direction of California resources recycling policy and excited by the potential for improved organics management in the state. We are further compelled by a sense of urgency surrounding the future of waste in the region with the impending closure of Puente Hills Landfill, which is the current destination of a lion's share of the region's organics. And finally, we are obligated to advocate for landfill alternatives that do not jeopardize our communities, our planet, or our future. By compiling information on organics management and making it available to cities and residents alike, we hope to add momentum to the statewide push towards environmentally sound organics management. If we succeed, we are confident that our actions will lead to tangible improvements for our communities, our environment, and our economy.

The project team invited 49 cities to participate in Phase One of this survey and received submissions from 23 cities. The

responses of the first 23 cities provide an initial glimpse into policies, programs, practices, and plans to reduce landfill disposal and increase source reduction, composting, and anaerobic digestion of food scraps and yard trimmings in Los Angeles County and Orange County. The resulting tally shows how participating cities compare to one another on criteria related to those polices and programs (See Figure 1 & Appendix B). The resulting matrix provides a more complete picture of policies, programs, practices, and plans including those that Sierra Club sees as inconsistent with a proactive and environmentally sound approach to organics management (See Figure 2 & Appendix C).

While the findings are by no means conclusive they do identify possible trends. The findings suggest many cities already have made a significant commitment to proactively address organics in the waste stream in an environmentally sound manner and that many more plan to follow suit, while others have been less inclined to take a proactive approach and in some cases ostensibly rely on private haulers to determine how the material is managed. The project team's evaluation found that the outstanding Phase One cities are

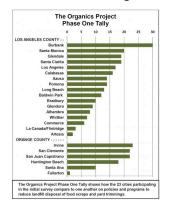


Figure 1 - Thumbnail of the Phase One Survey Tally



Figure 2 - Thumbnail of page from Phase One Survey Matrix

Burbank, Glendale, Irvine, San Clemente, San Juan Capistrano, Santa Clarita, and Santa Monica. Cities that have the longest way to go are Artesia, Commerce, Fullerton, and La Cañada/Flintridge.

The Problem

Food scraps and yard trimmings represent two significant material flows from cities that typically are disposed of in landfills. The California 2008 Statewide Waste Characterization Study found that, at 15.5 percent, food scraps are the single largest component of the state's overall disposed waste stream while yard trimmings comprise an estimated 7 percent.² Assuming those figures have remained constant, municipalities in Los Angeles County and Orange County sent in excess of 1.6 million tons of food scraps and more than 700,000 tons of yard trimmings to landfills as garbage last year. Another 1 million tons of source separated yard trimmings used as landfill cover brought the total amount of food scraps and yard trimmings sent to landfills by municipalities in Los Angeles County and Orange County to 3.3 million tons in 2011.4 These calculations suggest that food scraps and yard trimmings make up 35 percent of total landfill disposal (including yard trimmings as landfill cover) in Los Angeles County and Orange County each year. (See next page inset for details on landfill cover.)

Signed by Governor Brown in October 2011 to boost California's economic competitiveness, AB 341 set a new 75 percent statewide recycling goal to increase source reduction, recycling, and composting.⁵ The California Department of

Resources Recycling and Recovery (CalRecycle) states, "The 75% goal likely cannot be reached unless a significant amount of organics now being landfilled is instead used by composting, anaerobic digestion, and recycling facilities."6 CalRecycle has suggested that diversion credits for green waste landfill cover could be repealed, or the disposal fee be raised, to remove the incentives for the continued systemic and inexpensive landfilling of yard trimmings. Additionally, CalRecycle has mentioned a possible "organics disposal phase-out" that would eliminate landfill disposal of food scraps and other organics.⁷ Sierra Club supports the 75 percent goal as well the organics management options that CalRecycle has put on the table.

One of the largest sinks for food scraps and yard trimmings in the region, Puente Hills landfill ("Puente Hills") is slated for closure in October 2013. In 2011, Puente Hills accepted approximately 250,000 tons of food scraps and over 270,000 tons of yard trimmings for use as landfill cover. Fifty of the eighty-eight cities in Los Angeles County rely exclusively on Puente Hills for disposal of yard trimmings as landfill cover for diversion credit (see inset). Consequently, its closure will have significant regional impacts. Without credits from Puente Hills many cities would fall far below the 75 percent recycling goal of AB 341 and some would fall below the 50 percent diversion mandate of AB 939. In the wake of the closure, other regional landfills may raise their rates to take advantage of the glut.

Will cities see these challenges as an opportunity to begin planning for

ABOUT YARD TRIMMINGS AS LANDFILL COVER

Source separated yard trimmings collected curbside typically end up in landfills instead of being composted or mulched. Once in the collection cart, the yard trimmings become "green waste." In Los Angeles County and Orange County, green waste is predominantly used for alternative daily cover ("landfill cover") at landfills. The CalRecycle definition of landfill cover is "cover material other than earthen material placed on the surface of the active face of a municipal solid waste landfill at the end of each operating day to control vectors, fires, odors, blowing litter, and scavenging" (CalRecycle). The purpose of landfill cover is, in part, to deal with the problems that arise from food scraps in the landfill-bound waste stream.

Since the passage of AB 1647 in 1996, California jurisdictions have been allowed to claim credits towards achieving AB 939 waste diversion mandates for the disposal of certain types of material as landfill cover. The law prompted municipalities to implement yard trimming collection programs across the state to secure a constant stream of material that could be used to that end. Today the practice of using yard trimmings as landfill cover is most heavily concentrated in Los Angeles County and Orange County where nearly two-thirds of all California green waste landfill cover is applied. As noted elsewhere in this report, municipalities in Los Angeles County and Orange County sent over 1 million tons of yard trimmings to landfills for use as landfill cover in 2011.

alternative organics management strategies? Will they work to find creative new ways to utilize their organic resources? Or will they struggle to maintain the status quo?

The Zero Waste Committee of the Sierra Club Angeles Chapter has launched The Organics Project to find out how cities in Los Angeles County and Orange County are addressing these questions.

Project Design

The core project team for Phase One of The Organics Project consisted of five Sierra Club volunteers who conducted research and administered the survey, one member of the Zero Waste Committee who acted as project manager, the chair of the Zero Waste Committee who provided guidance and insight, and two staff conservation coordinators who provided guidance and technical support. The volunteers came to the project with little to no prior knowledge about waste policy. Indeed, learning "on the

job" about organics material management was a key aspect of the project team's process. (Core project team members are listed at the end of this report.)

The project began with an examination of CalRecycle disposal data for the 62 cities in Los Angeles County for which data was available and for all 34 cities in Orange County.8 Our analysis indicated that green waste landfill cover as a proportion of all landfilled material increased from 2005 to 2009 and has only dropped slightly since (See Figure 3). In other words, the landfilling of municipal solid waste ("waste") is declining faster than the landfilling of yard trimmings. We acknowledge that the decline in waste may be partially due to the success of ordinances to restrict landfilling of construction and demolition debris that many cities have adopted in recent years. While the decline in waste to landfills is encouraging, we were compelled to ask ourselves: Are cities taking any action or planning to take action to also reduce the

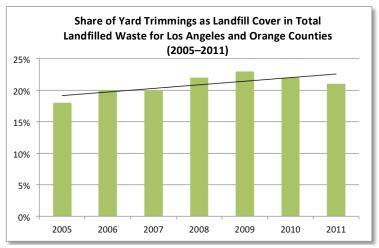


Figure 1 - Yard trimmings as landfill cover trend. Source: CalRecycle

amount of yard trimmings sent to landfills? Our understanding of the problem of food scraps in the waste stream led us to expand this initial question to include food scraps as well.

We designed an online survey instrument to collect information from city officials about the organic fraction of municipal solid waste that originates in their city. The survey focused on three general topics: 1) the extent of current city policies, programs, and practices focused on reducing or diverting the amount of organics sent to landfills, 2) the city's scope of knowledge about organics flows within its jurisdiction and across city lines, and 3) what the future of organics management might look like for the city.

Over a period of two months beginning in July and concluding in September 2012, team members contacted city officials and invited them to participate in the survey on behalf of their municipality. On September 10, we concluded Phase One of the survey after contacting 49 cities in Los Angeles County and Orange County. In all, 23 cities participated in Phase One of The Organics Project survey.

The project team evaluated the responses and rated cities by assigning points to policies, programs, practices, and plans that suggest a proactive and environmentally sound approach to organics management. The resulting survey tally shows how participating cities compare to one another. The survey matrix provides a more complete picture of policies, programs, practices, and plans including those that Sierra Club sees as inconsistent with a proactive and environmentally sound approach to organics management.

Survey Methodology

We developed an online survey instrument consisting of closed and open questions. The survey includes two types of closed questions: multiple-choice and Yes/No. We selected the criteria for the multiple-choice questions by evaluating source reduction, diversion, and disposal options for organics management as identified on the CalRecycle website¹⁰. In most cases, closed questions are accompanied by an open question that provides space for respondents to add any additional information related to the preceding closed question in their own words. In some cases, open questions ask for specific additional information related to the preceding closed question. There are five autonomous open questions that seek qualitative information about educational and incentive programs, documentation on city waste plans, and future plans. The only required fields are those that allow us to identify the city, city official, and the official's contact information.

The four volunteers and the project manager each "adopted" between 5 and 14 cities primarily based on four (4) criteria:

- Tons of green waste landfill cover disposed per city in 2010;¹¹
- Hypothetical drop in diversion rate by the elimination of green waste landfill cover credits;¹²
- Population of the city as a proxy for the amount of food waste generated;¹³ and,
- 4. Anecdotal data on a city's efforts towards sustainability. 14

We attempted to make initial contact to public works, environmental, and waste management officials of our adopted cities by telephone. Once we reached the proper city official, we briefly explained the project and asked if they would be willing to participate in our survey. The call was followed by an email that contained more detailed information about the project and a link to the online survey. We sent reminder emails at one week and two weeks if we had not yet received a city's responses.

In all, we invited 49 cities to participate in Phase One of the survey, 32 cities in Los Angeles County and 17 cities in Orange County. We received completed surveys from 23 cities, 17 cities in Los Angeles County and 6 cities in Orange County. Overall, our respondent rate was 47 percent with a 53 percent respondent rate for Los Angeles County cities and 35 percent respondent rate for Orange County cities (See Figure 4).

Many respondents provided written responses that complemented closed question responses, which allowed us to

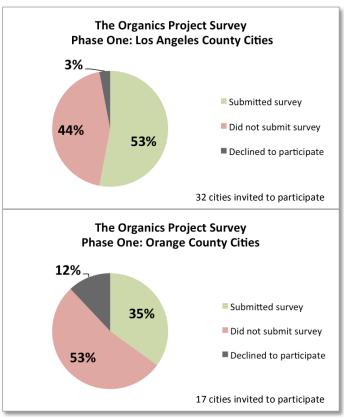


Figure 2 - Cities contacted in Phase One and response rate by county

gain deeper insight into current organics management in their city. At times written responses for a question actually answered a different question. In our evaluation of the responses, we determined the need to look at all written responses simply as data and match responses to the questions they answered most accurately. In a few instances, project team members contacted respondents to ask clarifying questions so that we could be certain that we were accurately coding written responses.

The Organics Project Phase One survey Tally and Response Matrix are based upon information about policies, programs, practices, and plans gleaned from the responses provided by city officials. We relied on faith that city officials submitted responses that accurately reflect the policies, programs, practices, and plans of

their city and, based on that information, our goal has been to accurately represent the cities in this report. The Phase One Tally and Response Matrix may be subject to revision if city officials provide additional information to complement their original responses. We invite and encourage Phase One cities to scrutinize our findings and provide additional information as they see fit. More information means more accuracy and our aim is to accurately represent, to the best of our ability, organics management in the cities of Los Angeles County and Orange County.

Findings

The findings that follow are based primarily on survey responses; however, subsequent web research helped us identify populations and specific program information.

57 percent of cities have adopted environmental policies.

These policies include zero waste resolutions, zero waste plans, sustainability plans, and climate action plans. Glendale and Burbank each have three policies in the

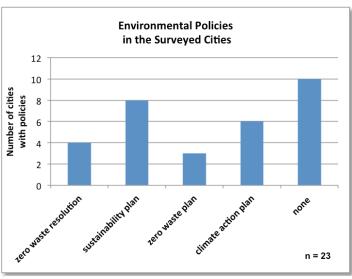


Figure 3 - Environmental policies in the surveyed cities

books: a zero waste resolution, a zero waste plan, and a sustainability plan. Of the remaining twenty-one, four cities have two policies, seven cities have one policy, and ten cities have no policies (See Figure 5). Organics management is central to zero waste policies, however, this survey does not determine to what degree the cities with sustainability plans and climate action plans recognize organics management programs as effective strategies to achieve their sustainability and climate action goals.

Yard trimmings from two cities are NOT sent to landfills.

It comes as no surprise that yard trimmings from nearly 90 percent of surveyed cities go to landfills for use as landfill cover. What is surprising is that yard trimmings from two of the surveyed cities— Calabasas and Santa Clarita—are NOT sent to landfills. Rather, the cities report that yard trimmings are used as feedstock for composting and mulching. Two additional cities—Burbank and Los Angeles—manage yard trimmings from the public and residential sectors by composting or a combination of composting and mulching/ grasscycling/on-site mulching and report that such material is not sent to landfills for use as cover or for disposal. Currently in Los Angeles, yard trimmings generated in the commercial sector cannot be accounted for and therefore could be managed in other ways. Nevertheless, the highly successful curbside yard trimmings collection program run by the Los Angeles Bureau of Sanitation prevents the landfill disposal of 480,000 tons of yard trimmings each year. 15 It should be noted that while the program allows for vegetative kitchen scraps to be added to the yard trimmings bin, anecdotal

evidence suggests that a large majority of residents are unaware of this option.
Burbank, a city with its own citywide collection fleet, reports sending 18,000-20,000 tons of "landscape clippings" per year to commercial composting facilities.

Many cities claim to know how yard trimmings generated in the commercial sector, i.e. by commercial landscapers, are managed. Yet, considering the variety of available disposal options in the region for this material, only cities that manage their own collection fleet or have exclusive or semi-exclusive contracts with waste haulers could know for certain. Only five cities report that they have identified large private generators of yard trimmings. We optimistically interpret that as a possible first step towards a better grasp on organics flows within those cities.

Food scraps diversion programs are most prevalent in the commercial sector.

Forty-eight percent of cities reported

having commercial food scraps diversion

programs in place. Of the eleven cities, seven reported involvement in the implementation of the programs while four have identified programs autonomously implemented by private waste haulers in their city. Programs include supermarket produce spoils collection and restaurant food scraps collection. Franchised waste haulers provide collection service for all of the programs except for the Santa Monica Food Waste Recycling program, which is operated by the city's Resource Recovery and Recycling Division. Ten cities reported having identified large

generators of food scraps, eight of those cities do not have commercial food scraps diversion programs in place, a possible sign that more programs will be launched in the future.

Meanwhile, only four cities—less than 20 percent of the respondents—reported having implemented residential food scraps diversion programs. Los Angeles has a pilot program that allows 8,700 households to commingle food scraps with yard trimmings for curbside collection. Santa Monica's citywide residential commingled curbside collection program services over 45,000 households, while over 8,500 households in Calabasas receive commingled collection service. A different approach is used in Azusa where the city's exclusive hauler recovers organics for composting from the curbside waste collected at over 12,000 residences.

Cities want more access to commercial composting and anaerobic digestion facilities.

Three out of four cities are seeking alternatives to using yard trimmings as landfill cover. Twelve cities—over 50 percent of respondents—are considering commercial composting, municipal

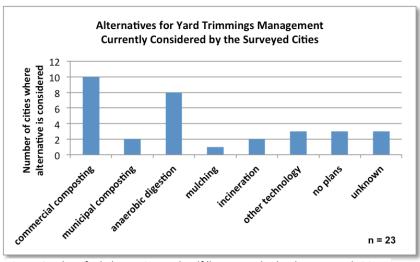


Figure 6 - Identified alternatives to landfill cover under by the surveyed cities

composting, and/or anaerobic digestion (AD) for the management of organics. Seven cities are considering those alternatives exclusively. One city is considering mulching. Six cities are considering incineration and other alternative technologies. Of those six, five reported considering such alternatives in addition to composting and AD while two are considering those alternatives exclusively. Three cities are not seeking alternatives to using yard trimmings as landfill cover, and public officials from three cities did not know if their municipality is seeking alternatives (See Figure 6).

Organics source reduction programs are more numerous than diversion programs.

Cities have implemented 35 percent more source reduction programs than diversion programs to manage organics. Phase One revealed 98 source reduction programs and 72 diversion programs among the 23 cities; however, the distribution of programs is inconsistent suggesting that these numbers could rise if more cities were to implement programs that are already in place in neighboring communities.

Source Reduction: Out of the nine program options identified by CalRecycle, a large majority of cities have implemented only four types of programs. 83 percent of cities have implemented an education program to reduce contamination in yard trimmings collection program carts while 75 percent of cities have a xeriscaping/native planting program, backyard/on-site composting program, or both. Seventy percent of cities have a grasscycling program in place. Any other source reduction programs are in

place in 35 percent of cities or fewer. Glendale and Long Beach each have eight programs in place, more than the other 21 cities. Fullerton is the sole city with no source reduction programs in place at present (See Figure 7).

Diversion: Out of the nine program options identified by CalRecycle, a majority of cities have implemented only one type of program¹⁶. Due in part to landfill cover diversion credits, residential curbside yard trimming collection is almost ubiquitous. Phase One responses suggest that only Fullerton and Long Beach do not have a residential curbside yard trimming collection program in place. In the case of Long Beach, that material is collected with waste and sent to the South East Resource Recovery Facility, an incinerator within the city limits. On the other hand, CalRecycle landfill cover data for Fullerton suggests a program is probably in place, since the high tonnage of reported landfill cover could only be achieved through a collection program. A plurality of cities has implemented commercial on-site yard trimmings collection and food scraps composting programs, yet they are

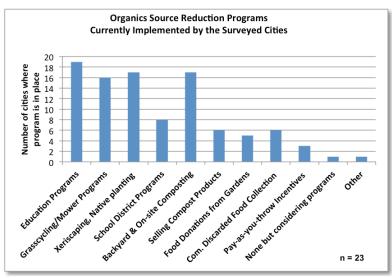


Figure 7 - Source reduction programs in the surveyed cities.

implemented in less than 40 percent of cities. Less than 30 percent of cities have implemented the remaining six programs identified by CalRecycle. A verbal response provided by Irvine allowed us to add another diversion program to the menu: commercial anaerobic digestion (See Figure 8).

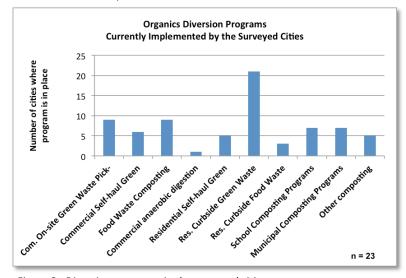


Figure 8 - Diversion programs in the surveyed cities

Organics waste reduction education and incentive programs are underutilized.

Our survey suggests that cities have put the least amount of resources into education and incentive programs as pertains to organics management. Burbank is an outlier with a total of eight programs in place, yet the average is one education or incentive program per city. Considering the surveyed cities identified a total of 21 types of programs, there is a lot of room for improvement in these two areas. (See the Phase One Survey Response Matrix for details about the distribution of education and incentive programs across the 23 cities.)

Some cities do not know what happens

to their waste.

Some of the smaller cities we contacted delegate waste management to the private sector and appear to have little to no involvement in how the waste is managed. Five of the 49 contacted cities that did not participate in our survey were unable to answer our questions and referred us to their franchised waste hauler. As this appears to occur in the smaller cities, we can only assume that size of city is a factor in this phenomenon. Whatever the factors may be, this is a clear indication that some cities are letting private sector waste companies independently set the standard for how their city's waste is managed.

Conclusion

Phase One of The Organics Project survey gives us an initial glimpse into policies, programs, practices, and plans to reduce landfill disposal and increase source reduction, composting, and anaerobic digestion of food scraps and yard trimmings in Los Angeles County and Orange County. We understand that, of the contacted cities, the Phase One respondents may include cities that feel they have something to say about their efforts. Therefore we understand that a full accounting of all 122 cities in Los Angeles County and Orange County may offer a very different picture than what we have seen with this small sample. Our hope is that with each phase of this project the picture will become clearer and our understanding of organics management in our region will become deeper. Nevertheless, this survey has allowed us to begin to identify cities that are spearheading the efforts to keep organics away from landfills and those that

lag behind. It has allowed us to begin to identify what the norm is by comparing cities to one another and to identify those that exceed that norm and those that fail to meet it.

While some results of this survey are encouraging, the only truly invariable thread we found in comparing city programs, policies, and plans is inconsistency. From city to city and program to program, organics management is plagued by an inconsistency of approach, both current and planned. Landfill cover—a unique exception—has inspired the only regularly implemented program: residential curbside yard trimming collection, a program that arose in response to statewide legislation. Yet since the Sierra Club does not believe that yard trimmings belong in a landfill under any name, the inconsistency with which environmentally sound organics management practices are implemented is a barrier to a more sustainable waste system in Los Angeles County and Orange County.

We hope that the organics management strategies adopted by the outstanding cities of Phase One of this survey will be considered as a roadmap for the remaining cities in Los Angeles County and Orange County to achieve their waste diversion goals in an environmentally sound manner.





The core project team members for Phase One of The Organics Project were:

Jeremy Drake, project manager and member of the Angeles Chapter Zero Waste Committee;

Hillary Gordon, chairperson of the Angeles Chapter Zero Waste Committee;

Veronica Hernandez, Kenneth Licea, Michael Mikulewicz, and Marjorie Phan, project volunteers, and;

Jennifer Robinson and George Watland, Angeles Chapter conservation coordinators.

Endnotes

¹ We use the term "organics" as opposed to organic waste to support the notion that these materials are by no means "waste" or that they are valueless. On the contrary, if managed properly these materials are valuable resources. They only remain waste as long as we think of them and treat them as such.

² CalRecycle. (2009, November). California 2008 Statewide Waste Characterization Study. (http://www.calrecycle.ca.gov/publications/Detail.aspx?PublicationID=1346 on September 27, 2012.)

³ From reports generated using the CalRecycle Disposal Reporting System. (http://www.calrecycle.ca.gov/lgcentral/drs/ on September 29, 2012.)

⁴ ibid

⁵ The More Jobs, Less Pollution report by the Tellus Institute provides an in-depth analysis of the link between increased recycling and job creation. The report validates Governor Brown's act.

⁶ CalRecycle. (2012, May). California's New Goal: 75% Recycling. (http://www.calrecycle.ca.gov/75percent/Plan.pdf, accessed on September 29, 2012.)

⁷ ibid

⁸ Since the 16 member cities of the Los Angeles Regional Agency (LARA) do not report individual data to the state, our data is currently incomplete for those cities. LARA data is reported as a single jurisdiction.

⁹ For the purposes of this report the organic fraction includes source-separated yard trimmings (aka "green waste") and food scraps. We refer to this material as "organics" throughout this report.

http://www.calrecycle.ca.gov/lgcentral/paris/codes/Reduce.htm;
http://www.calrecycle.ca.gov/lgcentral/paris/codes/Compost.htm;
http://www.calrecycle.ca.gov/LGCentral/Library/Innovations/Organics/default.htm accessed June and July, 2012.

¹¹ From reports generated using the CalRecycle Disposal Reporting System in May and June, 2012. We conducted our initial analysis of disposal data in the weeks before 2011 data was made available. We included 2011 data in our subsequent trend analysis. (http://www.calrecycle.ca.gov/lgcentral/drs/ accessed May through June, 2012.)

¹² Calculated using data and this equation from CalRecycle: disposal tons x 2000 lbs per ton / population / 365 days = ppd

¹³ More people means more food in the waste stream. Therefore we determined size of population is an important criterion to consider. CalRecycle uses U.S. Census data for disposal calculations for census years. Population information is from 2010 Census data.

¹⁴ We tapped the project team brain pool to identify cities that may be regional models for organic material management based on our knowledge about their efforts towards sustainability.

¹⁵ http://www.lacitysan.org/solid resources/recycling/index.htm, accessed on December 13, 2012

¹⁶ We selected diversion programs relevant to organics management that have been identified by CalRecycle. (http://www.calrecycle.ca.gov/lgcentral/reports/diversionprogram/DetailSummary.aspx accessed in July 2012.)

ATTACHMENT A

The Organics Project Phase One Respondents

Los Angeles County Cities (17)

Alhambra, Ann-Marie Hayashi, Assistant to City Manager

Artesia, Jose Hernandez, Assistant Planner

Azusa, Cary Kalscheuer, Assistant Director of Utilities

Baldwin Park, Vicky Valverde, Executive Secretary

Bradbury, Kevin Kearney, Management Analyst

Burbank, Kreigh Hampel, Recycling Coordinator

Calabasas, Daniel Pankau, Environmental Servicies Assistant

Commerce, Gina Nila, Environmental Services Manager

Glendale, Regina Wheeler, Recycling Coordinator

Glendora, Diane Walter, Environmental Services Dpt.

La Cañada/Flintridge, Jackson Dodd, Public Works

Long Beach, Lisa Harris, Recycling Specialist

Los Angeles, Bernadette Halverson, Sr. Environmental Engineer, Bureau of Sanitation

Pomona, Howard Morris, Solid Waste Manager

Santa Clarita, Brendy Heter, Environmental Services Division

Santa Monica, Wes Thompson, Recycling Coordinator

Whittier, Vicki Smith, Management Analyst–Public Works

Orange County Cities (6)

Fullerton, Phyllis Garrova, Utility Services Manager

Huntington Beach, Deborah Jubinsky, Administrative Analyst

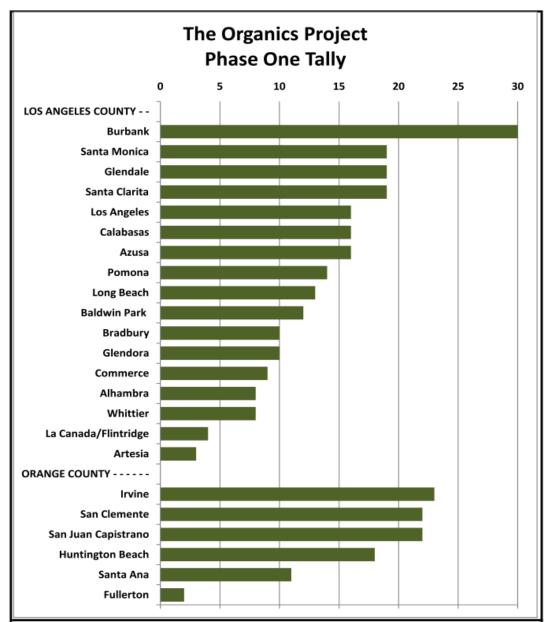
Irvine, Michael Byrne, Senior Management Analyst–Public Works

San Juan Capistrano, Ziad Mazboudi, Senior Civil Engineer-Environmental Division

San Clemente, William Cameron, Director of Public Works

Santa Ana, Christy Kindig, Projects Manager-Public Works

ATTACHMENT B



The Organics Project Phase One Tally compares the 23 cities participating in the initial survey by the number of policies and programs in place or planned to reduce landfill disposal of food scraps and yard trimmings.

ATTACHMENT C

The Organics Project Phase One Survey Response Matrix

The following pages are a distillation of the survey responses that offers a more complete picture of city policies, programs, practices, and plans.

What the symbols mean:



A green check mark signifies policies, programs, practices, and plans that Sierra Club considers consistent with a proactive and environmentally sound approach to organics management.



A red "X" signifies policies, programs, practices, and plans that Sierra Club considers inconsistent with such an approach.



A blue circle indicates a city that has identified some measure of commercial food scraps programs autonomously implemented by private waste haulers in their city. The city has not been involved in the planning or implementation of the program.

			,	,	,	, , ,								
	Environne Leio's	ntal os	Jution	an In		jør /	nent		//	on s	ke I.covet I.andii		//	
	Environici	waste les	Junatifity P	waste plan	the action of	nicies	Maragenera Opions	, si / x	/	eyclingly wi	i conet	, disposal Incine	ation Unknow	an /
Cities Surveyed	1e10	Sust	120	Clim	Mobi		Comit	Mulch	Grass	ulic Janor	Land	Incine	Unkir	
Los Angeles County														
Burbank	4	4	4				PRC	С	Р	×	×			
Santa Monica		4					R						×	
Glendale	4	1	4				Р			×			×	
Santa Clarita				4			PRC	PRC						
Los Angeles			4	4			PRC	PRC						
Calabasas					×		PRC	PC						
Azusa					×		Р			×				
Pomona				4				R	Р	×			×	
Long Beach		4						PC	Р	×	×	×	×	
Baldwin Park		4						Р		×			×	
Bradbury				4			PRC			×			×	
Glendora					×					×				
Commerce					×					×			×	
Alhambra					×		PRC			×				
Whittier					×		PC	PC		×				
La Canada/Flintridge							R	Р		×	×			
Artesia					×					×				
Orange County														
Irvine	4	4					PRC	PRC		×				
San Clemente		4		4			PRC	С	С	×				
San Juan Capistrano	4						PRC	Р		×				
Huntington Beach		4		4			R	Р	Р	×			×	
Santa Ana					×		PRC			×	×			
Fullerton					×								×	

		REGERIER LORD CORPOSITION OF THE PROPERTY OF T									, I om the waste stream				
			eting	(18)		/ /	/ /	/ /							
	ament	Omp	100	ii Jesio			rive	lans			,ot				
	Warade frent	rcialCo	Sal con.	nic dig	/ .s. /	ation	Iternatines	64061	un /		Sector	atial			
Distra Communical	Mr OF Onn	Munici	cility raer	Mulchi	ng Inciner	Other	Are tradique se chrodose	Je no plans			Sectu	ntial Conne			
Cities Surveyed		1 14. 6	7 8	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	<u> </u>	/ ⁰ [\]	7 4				(*				
os Angeles County	4	4	4												
Burbank	•	*	4								4	4			
Santa Monica			4								*	4			
Glendale															
Santa Clarita	4					×						4			
Los Angeles		4	4		×							4			
Calabasas							×				4	4			
Azusa	4		4								4				
Pomona				4											
Long Beach					×							4			
Baldwin Park	4		4									•			
Bradbury	4														
Glendora	4														
Commerce						×						•			
Alhambra	4														
Whittier							×					•			
La Canada/Flintridge							×								
Artesia							×								
Orange County															
Irvine	4		4			×						4			
San Clemente	4		1			×						1			
San Juan Capistrano	4		4									4			
Huntington Beach	*		*			×						4			
Santa Ana						••						0			
Fullerton							×								
i uneitori															

Does the city have any Source Reduction Programs to keep food scraps and yard trimmings from entering the waste stream?

	Source Reduction	or program	Sodians p	ş /18	/	/ /	. /	organis from the control	od parati	ded /	/ /	nd policy of the	nd not diant
	Reduce	Drodia.	inglnov	ng Nativ	etrict	& on si	mpost	ations	ial Discu	of Jrithon	'al dato	moderaide	not plan
	Ource Offair	on ass	odians /	saring being	District Cody Backer	and sorrate	compost congost	one s	Sign Colle	der Southor	sternings,	odians a	id. Ket
Cities Surveyed	400	\Q\ \d	1 4. 9	°/5° 0	(\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \) 	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\frac{1}{2} \cdot	68,4	9/0°X	11. MO. 0	40,40	Ott
Los Angeles County													
Burbank	4	4	✓	4	4	4	4						
Santa Monica		4	4	✓	4	4	4						
Glendale	✓	4	4	4	4	4	4		4				
Santa Clarita	4	4	4		4			4					
Los Angeles	4				4								
Calabasas		4	4	4	4								
Azusa	4	4	4	4	4				4				
Pomona	4	4	4	4	4								
Long Beach	4	4	4	4	4	4	4	4					
Baldwin Park	4	4	4						4				
Bradbury	4						4						
Glendora		4	4		4	4							
Commerce	4	4	4					4					
Alhambra	4				4								
Whittier	4				4								
La Canada/Flintridge	4												
Artesia	4		4										
Orange County													
Irvine	4	4	4		4			4					4
San Clemente	4	4	4		4			4					
San Juan Capistrano	4	4	4		4	4		4					
Huntington Beach	4	4	4	4	4								
Santa Ana	4	4	4		4								
Fullerton											×		

Does the city have any Diversion Programs to keep food scraps and yard trimmings out of landfills?

	Confidence Confidence	ins its	ckup st. 1. second seco	Control Control	stro angel	Spic Spirio Spir	tid tribid	s section it	odianici di	Pod Composition of Other of	ing (od Hore?	And not plant	ing
	ON Pros	ris Secretaring Secretaring	cital sett.	cte comb	cial anale	isal self.it.	ial curos	iglicitos	Section of the conforting of t	Compos	Hore D	Conside	1 not plan	/ ,
Owere Owere	COMM	Selmas Linu	selmas v	as oning	destion de	eenwas de	nti We de	od Was	ograms, unici	odjams/	or lone	odiams/3	ind lone	Jrknow
	ه ی ر	5/00	57 4°	/ 6 8	7 4 9	87 42 6) (7 2 6	, In 6	S 0 -	1 4 6	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	7 42	
Los Angeles County Burbank		1	4			4		4						
Santa Monica		4	4		✓	4		4						
Glendale	4		,			4		4	4	4				
Santa Clarita	4		4		4	4								
Los Angeles			4			4								
Calabasas	4		4			4								
Azusa		4			4	4				4				
Pomona	4	4				4								
Long Beach								4						
Baldwin Park		4	4			4								
Bradbury						4			4	4				
Glendora	4					4				4				
Commerce	4		4			4			4					
Alhambra						4								
Whittier						4								
La Canada/Flintridge						4								
Artesia						4								
Orange County														
Irvine	4		4	4		4			4					
San Clemente	4		4			4		4	4					
San Juan Capistrano			4		4	4		4	4					
Huntington Beach	4	4			4	4			4					
Santa Ana	4					4			4					
Fullerton										4				

Does the city have any programs to Educate residents about how to properly manage food scraps and yard trimmings?

	2		Advertiges to	Haire Haire	pops portestiny portestiny popular	out tou	Programmi Ads. 1	Spenting Confunity Heating Spings Spi					
	Educational Arong	5 0 0	NOTE IS TO	resid work	ntskill y	onter to	15	Ogramm	radio.	engager	Meetil	ambass	
	Education of Prono	ion still	ets, ites	Stille	diginories/	ops shore	Call	Dig S	rini, eski	ing o min	unit's cyc	ind art roof	
Cities Surveyed	\\ \delta \text{rt} \cdot \text{c}'	Ma. P.	10 CO.	Maria	24 6ec.	Phi	/cits	Adz	/50°	\ <u>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</u>	\600 \	107 gct	
Los Angeles County													
Burbank			4	4	4	4		4	4				
Santa Monica		4											
Glendale			4									4	
Santa Clarita		4											
Los Angeles													
Calabasas													
Azusa		4											
Pomona		4										4	
Long Beach													
Baldwin Park	4												
Bradbury													
Glendora		4											
Commerce		4											
Alhambra	4												
Whittier		4											
La Canada/Flintridge													
Artesia													
Orange County													
Irvine			4										
San Clemente			4										
San Juan Capistrano	4		4										
Huntington Beach												4	
Santa Ana		4											
Fullerton													

Does the city have any Incentive Programs for residents and businesses to reduce the amount of food scraps and yard trimmings sent to landfills? Rates depending on site Free Compost promoting deen water composition estine reservation de la constant de Grasscycling lebate Louis take to vaid Free COMPOSE BINS Cities Surveyed Los Angeles County Burbank Santa Monica Glendale Santa Clarita Los Angeles Calabasas Azusa Pomona Long Beach **Baldwin Park** Bradbury Glendora Commerce Alhambra Whittier La Canada/Flintridge Artesia Orange County Irvine Survey Key **Good Organics Poor Organics Private Hauler** San Clemente Management Offering Management 0 San Juan Capistrano Parks and Public Lands P **Huntington Beach** operations Santa Ana R **Residential Curbside Pickup**

Fullerton

C

Commercial Landscapers