

REQUEST FOR COUNCIL ACTION CITY OF SAN DIEGO	CERTIFICATE NUMBER (FOR COMPTROLLER'S USE ONLY)
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TO: CITY COUNCIL	FROM (ORIGINATING DEPARTMENT): Environmental Services	DATE: 5/26/2015
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SUBJECT: Zero Waste Plan for the City of San Diego

PRIMARY CONTACT (NAME, PHONE): Mario Sierra, 858-573-1212 1102-A	SECONDARY CONTACT (NAME, PHONE): Ken Prue, 858-492-5085 1103-B
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COMPLETE FOR ACCOUNTING PURPOSES

FUND					
FUNCTIONAL AREA					
COST CENTER					
GENERAL LEDGER ACCT					
WBS OR INTERNAL ORDER					
CAPITAL PROJECT No.					
AMOUNT	0.00	0.00	0.00	0.00	0.00

FUND					
FUNCTIONAL AREA					
COST CENTER					
GENERAL LEDGER ACCT					
WBS OR INTERNAL ORDER					
CAPITAL PROJECT No.					
AMOUNT	0.00	0.00	0.00	0.00	0.00

COST SUMMARY (IF APPLICABLE):

ROUTING AND APPROVALS

CONTRIBUTORS/REVIEWERS:	APPROVING AUTHORITY	APPROVAL SIGNATURE	DATE SIGNED
Financial Management	ORIG DEPT.	Sierra, Mario	05/27/2015
Environmental Analysis	CFO		
Liaison Office	DEPUTY CHIEF	LoMedico, Stacey	06/09/2015
	COO		
	CITY ATTORNEY		
	COUNCIL PRESIDENTS OFFICE		

PREPARATION OF: RESOLUTIONS ORDINANCE(S) AGREEMENT(S) DEED(S)

1. Adopt the proposed Zero Waste Plan (ZWP), which establishes a framework for achieving the City's waste goals of 75% diversion by 2020, 90% by 2035, and Zero Waste by 2040.
2. Determine that this activity is statutorily exempt from CEQA pursuant to CEQA Guidelines § 15262.

STAFF RECOMMENDATIONS:
Approve the Requested Actions.

SPECIAL CONDITIONS (REFER TO A.R. 3.20 FOR INFORMATION ON COMPLETING THIS SECTION)

COUNCIL DISTRICT(S):	All
COMMUNITY AREA(S):	All
ENVIRONMENTAL IMPACT:	This action is exempt from the California Environmental Quality Act (CEQA) pursuant to the State CEQA Guidelines, Section 15262 as a planning study that identifies potential projects, programs, and policies for possible future actions that have not yet been approved, adopted or funded by the lead agency. This determination is predicated on Section 15004 of the Guidelines which provides direction to lead agencies on the appropriate timing for environmental review. Any plan component that is a project will undergo environmental review in accordance with the State CEQA Guidelines. This action
CITY CLERK INSTRUCTIONS:	

**COUNCIL ACTION
EXECUTIVE SUMMARY SHEET
CITY OF SAN DIEGO**

DATE: 5/26/2015

ORIGINATING DEPARTMENT: Environmental Services

SUBJECT: Zero Waste Plan for the City of San Diego

COUNCIL DISTRICT(S): All

CONTACT/PHONE NUMBER: Mario Sierra/858-573-1212 1102-A

DESCRIPTIVE SUMMARY OF ITEM:

The Zero Waste Plan is a framework of potential sustainable diversion strategies for future action that would be implemented in incremental steps to achieve 75% diversion by 2020, 90% diversion by 2035 goal currently proposed in the City's Climate Action Plan, and Zero Waste by 2040.

STAFF RECOMMENDATION:

Approve the Requested Actions.

EXECUTIVE SUMMARY OF ITEM BACKGROUND:

Zero Waste is a principle that calls for handling discarded materials as commodities for reuse rather than for disposal, and conserving those commodities through waste prevention, recycling, composting, and other technologies. This “discards” management system takes into consideration how commodities can flow full circle focusing on conservation during the total life cycle of materials from product design, collection, and processing to the marketing of new products made from the material. Progress towards Zero Waste requires an enhanced emphasis on education, legislation, technology, and sustainable markets.

The Zero Waste Plan describes potential programs for the City to achieve the goals of 75% diversion by 2020, 90% diversion by 2035, and provides a foundation for ongoing incremental improvements towards achieving the goal of “zero waste.” It also describes the complex relationship between waste diversion and revenues for each of the enterprise funds that finance the Environmental Services Department’s (ESD) waste management programs and how Zero Waste must be addressed in conjunction with the financial stability of the City’s discards management system.

Please see the attached Report to Council 15-063 for more information.

CITY STRATEGIC PLAN GOAL(S)/OBJECTIVE(S):

Goal #3: Create and sustain a resilient and economically prosperous City.

Objective #3: Diversify and grow the local economy.

Objective #4: Prepare and respond to climate change.

FISCAL CONSIDERATIONS:

A challenge the City faces is that funding of the City's discards management system in the City requires revenue streams that are primarily received when materials are disposed in the landfill, and so as diversion increases, revenues decrease. From FY 1998 through FY 2014, tonnages disposed in the Miramar Landfill declined from 1,336,000 tons to 864,000 tons, representing a significant decrease in revenues. This is further complicated because the Miramar Landfill is operating in a private market place and has lost tonnage to a local private landfill operator. These issues not only create an inherent financial challenge in maintaining the current programs, but also require a combination of cost reductions through increased efficiencies and new funding sources to implement additional diversion strategies.

Please see the attached Report to Council 15-063 for more information.

EQUAL OPPORTUNITY CONTRACTING INFORMATION (IF APPLICABLE):N/A

PREVIOUS COUNCIL and/or COMMITTEE ACTION :

The Zero Waste Objective was presented at the Natural Resources and Culture Committee meeting on November 6, 2013, and was forwarded and adopted by City Council on December 16, 2013.

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

With the objective of developing a plan that best fits the San Diego community, the City engaged a wide array of stakeholders in the development of the Zero Waste Plan (Attachment 1). Eight meetings were scheduled from July 23, 2014 through September 23, 2014 and were held during the day and in the evenings to encourage as much participation as possible. The meetings were open to the whole community and showcased the development of the plan from the initial discussion on the concepts to the final key elements contained within this plan. There were also numerous individual presentations to a wide range of groups and individuals. In addition to collaborating with stakeholders on diversion strategies, stakeholders were engaged on the funding mechanisms to shift away from a system that is financed based on waste being disposed to one that is financed based on waste being diverted and one that will also allow for future programming financing in order to sustain and expand diversion programs.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

City Departments, residents, businesses, and community partners.

Sierra, Mario
Originating Department

LoMedico, Stacey
Deputy Chief/Chief Operating Officer



THE CITY OF SAN DIEGO
REPORT TO THE CITY COUNCIL

DATE ISSUED: June 17, 2015 REPORT NO: 15-063
ATTENTION: Environment Committee
SUBJECT: Zero Waste Plan for the City of San Diego
REFERENCE: N/A

REQUESTED ACTION:

1. Adopt the proposed Zero Waste Plan (ZWP), which establishes a framework for achieving the City's waste goals of 75% diversion by 2020, 90% diversion by 2035 and Zero Waste by 2040.
2. Determine that this activity is statutorily exempt from CEQA pursuant to CEQA Guidelines § 15262.

STAFF RECOMMENDATION: Approve the plan. The ZWP is a framework of potential sustainable diversion strategies for future action that would be implemented in incremental steps to achieve 75% diversion by 2020 and the 90% diversion by 2035 goal currently proposed in the City's draft Climate Action Plan. Further diversion to achieve Zero Waste by 2040 may be possible given the rapid development of technologies and methods to reduce, reuse and recycle.

EXECUTIVE SUMMARY OF ITEM BACKGROUND:

Zero Waste is a principle that calls for handling discarded materials as commodities for reuse rather than for disposal, and conserving those commodities through waste prevention, recycling, composting, and other technologies. This "discards" management system takes into consideration how commodities can flow full circle, with a focus on conservation during the total life cycle of materials from product design, collection, and processing to the marketing of new products made from the material. Progress towards Zero Waste requires an enhanced emphasis on education, legislation, technology, and sustainable markets. The proposed ZWP (attached) was prepared in response to the Zero Waste Objective adopted by the City Council in December 2013. The proposed ZWP lays out strategies that aim to achieve a 75% diversion rate by 2020, which mirrors the statewide goal established under State Assembly Bill 341 (AB 341), and a 90% diversion rate by 2035. It also provides a foundation for ongoing incremental improvements towards achieving the goal of "zero waste" by 2040.

In calendar year 2013, the City diverted 2,780,000 tons and had a diversion rate of 67%. An estimated 332,000 additional tons of materials per year will need to be diverted from landfill disposal towards recycling to achieve the State goal of 75% diversion by 2020. Diversion efforts that were identified for future action in Fiscal Year (FY) 2016 include creating a new practice of recycling fibrous yard trimmings, such as palm fronds, at the Miramar Greenery Composting Facility, which is expected to generate approximately 18,000 tons per year in new diversion. In addition, policies and programs were identified for future action in FY 2016 to ensure compliance with State Assembly Bill 1826 (AB 1826), which requires mandatory commercial organics recycling and is projected to result in the diversion of an additional 120,000 tons per year by 2020. Therefore, if these two FY 2016 diversion efforts are implemented, an additional 194,000 tons of diversion will need to be identified to achieve the 75% diversion goal.

Background

Assembly Bill 939 (AB 939), the Integrated Waste Management Act of 1989, has been the key driver of resource diversion to date. AB 939 required that all local California jurisdictions achieve a 50% diversion rate by 2000 and each year thereafter, and submit an annual update to CalRecycle of the programs designed to divert materials from disposal to the maximum extent feasible.

The City's overall diversion rate of 67% has remained relatively constant since 2010. The City currently has numerous resource management strategies in place, which include: mandatory recycling for single-family, multi-family residences, commercial facilities (including City buildings), and special events; a Construction and Demolition (C&D) Deposit Ordinance, which requires diversion of at least 50% of project debris; curbside yard trimmings and recycling collection; waste reduction, recycling, and composting education; commercial and residential food scrap composting programs; public space recycling programs; and an environmentally preferable purchasing program (EP3). Furthermore, the City requires franchised waste haulers to provide recycling services to their customers as a requirement of their franchise agreements.

Recommended options to achieve 75% Diversion

The ZWP describes potential programs for the City to achieve 75% diversion by 2020, 90% diversion by 2035, and provides a foundation for ongoing incremental improvements towards achieving the goal of "zero waste." It also describes the complex relationship between waste diversion and revenues for each of the enterprise funds that finance the City's waste management programs and how Zero Waste must be addressed in conjunction with the financial stability of the City's discards management system.

Staff owes a large debt of gratitude to the myriad of stakeholders who contributed an enormous amount of time and talent in providing critical input on the plan. Their feedback helped form the plan's design and implementation schedule and resulted in a much more richly nuanced plan. It became apparent through this process that there is a significant network of existing businesses, community members and others that are ready and willing to assist the City in reaching the Zero Waste goal.

A wide range of options were proposed by and/or discussed with stakeholders and are summarized in the ZWP. The following are the key policies and programs proposed for future action to divert the estimated 332,000 tons needed to achieve 75% diversion. The ZWP is a broad framework and includes a number of potential diversion strategies, which are either supporting elements that would not result in specific diversion quantities, or mechanisms that could be used to further enhance recycling beyond 2020. Included below are facility development programs that will need to be developed within a system-wide context to ensure all elements are complementary. For example, there is a clear need for more organics diversion and mixed recycling infrastructure, however the precise details of which entity will construct/operate elements of the infrastructure and when/where it should be developed, will continued to be explored. Stakeholders that are currently critical in determining appropriate infrastructure development include the franchise waste haulers, the military, Public Utilities Department, and Environmental Services Department. Many of the diversion strategies will require additional Council action and stakeholder input and outreach.

Recommendations for diverting 332,000 tons of waste:

- Divert fibrous yard trimmings – This is anticipated to result in 18,000 tons per year.
- Organics diversion to comply with AB 1826 – Beginning a phased approach in FY 2016, it is anticipated this will result in 120,000 tons of new organics diversion by 2020. This primarily relies upon the creation of private infrastructure to provide necessary composting or anaerobic digestion.
- Require franchise haulers to divert an escalating percentage of their collected waste streams to achieve a minimum 50% rate of diversion by 2020. This would result in the diversion of an additional 93,500 tons of materials.
- Resource Recovery Center – the Miramar Landfill receives a large level of traffic from non-franchised haulers including residents, businesses, contractors, and others. The materials they deliver to the landfill for disposal are largely composed of recyclable materials including yard trimmings and C&D debris. Staff proposes to establish a facility at the entrance to the Miramar Landfill by 2020 to receive these loads and divert over 55% of the material. It is anticipated this could result in 80,000 tons of diversion.
- City Recycling Ordinance (CRO) revisions – staff proposes to eliminate the current exemption for smaller businesses and multi-family properties, and require additional materials to be diverted, including reusable items; and yard trimmings and food scraps in support of AB 1826. It is anticipated that this could result in approximately 13,000 tons per year in new diversion, not including yard trimmings and food scraps since they would be recovered through the organics related efforts.
- Construction and Demolition (C&D) Ordinance – raise the diversion requirement from 50% to 65%. It is anticipated this could result in approximately 2,000 tons per year of new diversion, with minimal impacts to customers' ability to receive a full refund of their recycling deposit.

- City facilities – increase recycling in City facilities by utilizing an annual recycling report card and enhancing education and outreach to departments. It is anticipated this could result in 1,500 tons of diversion.
- Increased Education and Outreach beginning in FY 2017. This does not result in a specific diversion quantity, but would support all diversion efforts. This effort would support partnering with community groups such as reuse organizations and non-profits, and expanding public space recycling at City parks, beaches and libraries to help facilitate behavior change for City residents at home, work, and play.
- Increased staffing to include 1.0 Code Compliance Program Manager, 4.0 Code Compliance Officers, 1.0 Supervising Recycling Specialist, 1.0 Recycling Specialist 3, 2.0 Recycling Specialist 2, and 1.0 Senior Engineer. These positions would support the policies and programs described above.
- Additional CRO compliance efforts focused on City-serviced residences – It is anticipated this could result in 4,000 tons of diversion.

CITY STRATEGIC PLAN GOAL(S)/OBJECTIVE(S):

Goal #3: Create and sustain a resilient and economically prosperous City.

Objective #3: Diversify and grow the local economy.

Objective #4: Prepare and respond to climate change.

FISCAL CONSIDERATIONS:

The City faces the challenge that funding of the City’s discards management system requires revenue streams that are primarily received when materials are disposed in the landfill. As diversion increases, revenues decrease. From FY 1998 through FY 2014, tonnages disposed in the Miramar Landfill declined from 1,336,000 tons to 864,000 tons, which represents a significant decrease in revenues. This is further complicated because the Miramar Landfill is operating in a private market place and has lost tonnage to a local private landfill operator. These issues not only create an inherent financial challenge in maintaining the current programs, but also require a combination of cost reductions through increased efficiencies and new funding sources to implement additional diversion strategies.

The People’s Ordinance (San Diego Municipal Code §66.0127), requires the City to provide collection, transportation and disposal of residential refuse, which includes trash, recyclables and yard trimmings, at no cost. Approximately 52% of the City’s residents are eligible for People’s Ordinance collection. The City’s inability to charge for residential refuse collection precludes the creation of the industry standard “pay as you throw” financial incentives to encourage recycling and waste reduction over disposal. Approximately 23% of disposed material in the City results from the People’s Ordinance collection services, and an additional 2% from Navy discards. As a result, funding current and future programming involves an interwoven fee structure that presents several challenges for the City’s discards management system. Within this intricate structure are two enterprise funds (the Refuse Disposal Fund (RDF) and the Recycling Fund (RF)) and the General Fund (GF). Currently, approximately \$14 million in

waste management related services are paid out of the RDF. As the amount of waste diverted increases, there may be GF impacts to sustain program operations at current funding levels

The costs of the proposed future programs can be covered by reductions in current operating costs at the Miramar Landfill, additional diversion efforts implemented through the non-exclusive franchises, and increases to the City's AB 939 Fee, which funds the bulk of the City's current recycling efforts.

Potential Financial Options to Achieve 75% Diversion

With additional diversion to occur as a result of enhanced statewide requirements, and potential supporting programs contained within this plan, it is anticipated that future additional adjustments beyond those potential options listed below will be necessary to balance the diversion impacts of implemented programs and maintain necessary financial flows to support existing waste related services. Due to the additional diversion, there is an expected reduction of revenue for the RDF of \$6.6 million dollars per year and additional costs of \$1.4 million dollars per year related to expanding recycling efforts. Staff proposes to bring the following items forward to City Council for approval before 2020 in order to provide necessary additional funding sources for the plan:

- Adjust the Miramar Landfill Post Closure contribution plan for long term maintenance to a pledge of revenue. This would allow the City to stop providing annual contributions and allow a reduction of the \$48 million currently in reserve for the closure of Miramar Landfill. This could result in reduced expenditures of \$1 million annually from the RDF.
- Closure of Miramar Landfill on Sundays is anticipated to reduce annual operations costs at Miramar Landfill by over \$500,000 per year.
- Increase tipping fee for disposal at the new Resource Recovery Center to cover additional costs related to recycling material at the Center.
- Currently, the City exempts from its franchises certain types of waste, including source-separated recyclable waste. Due to this, franchise haulers collect additional waste streams that are currently exempt from the AB 939 and Franchise Fees. Staff proposes to remove the exemption for source separated recyclable materials, which could increase revenues to the RF by an estimated \$1.3 million annually and to the GF by an estimated \$1.7 million annually.
- Increase AB 939 Fee by \$2 per ton. This could increase revenues to the RF by an estimated \$2.3 million annually, and have a \$700,000 annual impact on the GF.
- Increase Franchise Fee by \$1 per ton. This could increase revenues to the GF by \$700,000 annually.
- Increase tipping fee for food scraps to a competitive rate of approximately \$50 per ton. In combination with expanded capacity for food scraps as a result of aerated static piles this could increase revenue to the RDF by approximately \$1 million.

- Eliminate fee exemption for self-hauled residential yard trimmings at the Miramar Landfill Greenery. This could increase revenues to the RDF by \$286,000 annually.

Alternative Financial Options for Diversion

With additional recycling to occur as a result of continuing to work towards 90% diversion by 2035 and Zero Waste thereafter, additional adjustments will be necessary to balance the diversion impacts of implemented programs and maintain necessary financial flows. The following items may be brought forward for City Council approval at a future date:

- Potentially entering into waste delivery agreements with haulers for delivery of refuse to the Miramar Landfill.
- Potentially directing the flow of all refuse collected by franchised haulers in the City of San Diego to the Miramar Landfill as a condition of their franchise agreement with the City. The commitment of City waste flows to Miramar Landfill is projected to increase revenues to the RDF by \$5.7 million annually. Given that City forces do not have a franchise agreement, the City can exempt itself and avoid a GF impact. If City forces are made subject to flow control then there is a significant GF impact.
- Exclusive Franchise Agreements could be implemented if the districted exclusive franchise system study concludes that such a system would be beneficial to the City. The City would be required to provide current franchise haulers with a five-year notice in accordance with state law. Exclusive Franchise agreements would provide opportunities to shift waste related services and recycling infrastructure needs to the exclusive franchise haulers.
- People’s Ordinance – 1986 Amendment could possibly be amended or repealed by a vote of the electorate.
- The largest material class in the recycled and disposed stream is C&D materials. The hauling of this material should be regulated similar to the rest of the waste stream. Staff will continue dialogue with the industry to help develop a program.
- Assessing a fee on recycling containers is projected to provide a gradual annual increase in revenues to the RF of up to \$720,000 annually.

EQUAL OPPORTUNITY CONTRACTING INFORMATION (if applicable)

N/A

PREVIOUS COUNCIL and/or COMMITTEE ACTIONS:

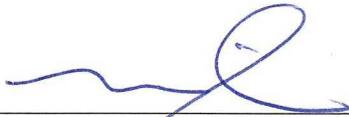
The Zero Waste Objective was presented at the Natural Resources and Culture Committee meeting on November 6, 2013, and was forwarded and adopted by City Council on December 16, 2013.

COMMUNITY PARTICIPATION AND OUTREACH EFFORTS:

With the objective of developing a plan that best fits the San Diego community, the City engaged a wide array of stakeholders in the development of the Zero Waste Plan (Attachment 1). Eight meetings were scheduled from July 23, 2014 through September 23, 2014 and were held during the day and in the evenings to encourage as much participation as possible. The meetings were open to the whole community and showcased the development of the plan from the initial discussion on the concepts to the final key elements contained within this plan. There were also numerous individual presentations to a wide range of groups and individuals. In addition to collaborating with stakeholders on diversion strategies, stakeholders were engaged on the funding mechanisms to shift away from a system that is financed based on waste being disposed to one that is financed based on waste being diverted and one that will also allow for future programming financing in order to sustain and expand diversion programs.

KEY STAKEHOLDERS AND PROJECTED IMPACTS

City Departments, residents, businesses, and community partners.



Mario X. Sierra, Director
Environmental Services Department

Stacey LoMedico
Assistant Chief Operating Officer

Attachment: Zero Waste Plan



City of San Diego Zero Waste Plan

Road to Zero Waste,
next stop 75%



Environmental Services Department

June 2015

CITY OF SAN DIEGO ZERO WASTE PLAN (ZWP)

ACKNOWLEDGEMENTS

Thank you to the myriad of stakeholders that contributed an enormous amount of time and talent in providing critical input on this plan. The feedback was critical and resulted in a much more richly nuanced plan. It became apparent through this process that there is a significant network of existing businesses, community members and others that are ready and willing to assist the City in reaching this goal. The synergy that can be realized by working through this network as much as possible in reaching zero waste goals were evident and are incorporated into the Zero Waste Plan (ZWP).

The stakeholder process has been an integral part of developing the ZWP. Because this is a dynamic plan which will change and adjust over the years, the City will continue to engage stakeholders throughout the implementation process.

PURPOSE OF THE PLAN

Zero Waste is a principle that calls for handling discarded materials as commodities for reuse rather than for disposal, and conserving those commodities through waste prevention, recycling, composting, and other technologies. This “discards” management system emphasizes commodities can flow full circle focusing on conservation during the total life cycle of materials from product design, collection, and processing to the marketing of new products made from the material. The goals of this ZWP are:

- target 75% diversion by 2020, 90% diversion by 2035, and “zero” by 2040 by identifying potential diversion strategies for future action. To increase the City’s waste diversion rate to 75% will require an estimated additional 332,000 tons per year to be diverted from landfill disposal;
- demonstrate continuous improvement towards a goal of zero waste to landfills;
- emphasize education by renewing City public information efforts;
- promote local policies and ordinances and legislation at the state level that encourage manufacturers, consumers, and waste producers to be responsible for waste;
- investigate appropriate new technologies;
- re-emphasize market development at the local and state level.

SETTING

In the City, the People's Ordinance (San Diego Municipal Code §66.0127) requires the City to provide collection, transportation and disposal of residential refuse, which includes trash, recyclables and yard trimmings, at no cost. The City's inability to charge for residential refuse collection precludes the creation of the industry standard "pay as you throw" financial incentives for recycling and waste reduction. In addition, the residential recycling and trash service has a cost of approximately \$47 million dollars per year that is currently funded by the City's General Fund (GF) and fees collected from the commercial waste stream. Approximately 23 percent of disposed material in the City is collected under the People's Ordinance. As a result, funding current and future waste related programming involves an interwoven fee structure that presents several challenges for the City's discards management system.

Within this intricate structure are two enterprise funds (the Refuse Disposal Fund (RDF) and the Recycling Fund (RF)), and the GF. Tipping fees collected at the Miramar Landfill are almost evenly split between the cost of running the landfill and providing waste related programs that support the City. There are approximately \$14 million in services that are currently paid by the RDF through the collection of tipping fees at Miramar Landfill. As the amount of waste diverted increases, there may be GF impacts to sustain program operations at current funding levels. In addition, the cost of disposing City waste will significantly increase when the Miramar Landfill closes and the City must bear the additional costs for receiving, transferring and delivering waste to other local disposal facilities. Services that will become the responsibility of the GF include maintaining 16 closed landfills; recycling/diversion programs; illegal dump/litter abatements; community cleanups; homeless camp removal; dead animal collection; code and franchise agreement enforcement; and servicing of public waste containers in the public rights-of-way.

Current revenue streams are primarily received when materials are disposed in the landfill. Therefore as recycling increases, revenues from tipping fees and AB 939 recycling fees at the Miramar Landfill decrease. This is further complicated in the City because the Miramar Landfill is operating in a private market place. Fees must be kept competitive or the City may lose waste to the other landfills and facilities in the County.

The State legislature has enacted several bills intended to promote waste diversion. In 1986, Assembly Bill (AB) 2020, the California Beverage Container Recycling and Litter Reduction Act, established California Redemption Value, a refundable deposit on certain types of beverage containers. AB 939, the Integrated Waste Management Act of 1989, set forth a requirement that all local California jurisdictions achieve a rate of

50% diversion by the year 2000 and each year thereafter, and submit an annual update to CalRecycle for approval of programs designed to divert materials from disposal to the maximum extent feasible, or face fines of up to \$10,000 per day.

Under AB 939, each jurisdiction was required to develop a Source Reduction and Recycling Element (SRRE) demonstrating how they would achieve the mandated diversion goals. Each jurisdiction also developed a Household Hazardous Waste Element (HHWE), similar to the SRRE, which identified those programs the jurisdiction would implement to ensure the proper management and handling of household hazardous waste (HHW). Finally, each jurisdiction was required to prepare a Nondisposal Facility Element (NDFE), which identifies non-disposal facilities used by the jurisdiction to achieve the diversion goals (i.e., Material Recovery Facilities (MRFs), composting facilities, transfer stations recovering at least 5% of material). The Countywide Siting Element identifies disposal facilities used by all jurisdictions within the county and identifies at least 15 years of disposal capacity. The Countywide Summary Plan summarizes AB 939 planning documents for each county.

Additionally, the enactment of AB 341 in 2011 established a statewide goal of 75% diversion by 2020. It also created a mandatory commercial recycling requirement for businesses, public agencies, and multi-family properties; with implementation, outreach, monitoring and compliance being the responsibility of local jurisdictions.

The enactment of AB 1826 on September 29, 2014 required jurisdictions to develop plans to divert additional organic materials from landfill disposal; and will require businesses, public agencies, and multi-family properties to arrange for recycling of organic materials. Beginning April 1, 2016 those who generate eight cubic yards or more of organic waste will be required to separate and pay for the collection of their organic wastes. By January 1, 2019, those with more than four cubic yards of solid waste will be required to separate and pay to have organics materials collected. The bill did not specify who was responsible for development of the facilities accepting these organic wastes. Another organic materials related bill that was passed at the same time is AB 1594, which removed the diversion credit associated with using yard trimmings to cover waste in landfills.

On December 16, 2013, the City Council adopted a Zero Waste Objective that established the targets for this ZWP of 75% diversion of waste from landfills by 2020 and Zero Waste by 2040. Staff is additionally targeting the goal of 90% diversion by 2035 as currently proposed in the City's draft Climate Action Plan.

The City Auditor's Performance Audit of the Environmental Services Department's Waste Reduction and Recycling Programs, issued in August 2014, and titled:

“Opportunities Exist to Improve Recycling Rates and Reduce Adverse Impacts Generated by Waste Hauling,” contained 12 recommendations. Key recommendations include:

- amend franchise agreements to include minimum diversion requirements, with liquidated damages for non-compliance, annually review the minimum required diversion rate and determine whether an increase is needed, and for haulers to provide all customers with a minimum level of recycling service or submit documentation to the City justifying any exceptions that are granted;
- allocate additional resources to City Recycling Ordinance (CRO) enforcement for City-serviced residential properties;
- maximize opportunities for education and outreach; and
- monitor City departments' performance with the CRO, report to the City Council on the status annually, and educate and assist other City departments in meeting recycling requirements.

In 1992, the City Council approved a General Development Plan for the Miramar Landfill, which specified the development of a suite of waste management facilities, including a HHW facility which has been built, a Materials Recovery Facility (MRF), resource recovery facility, and related facilities.

To plan for the City's future facility needs, the Long-Term Resource Management Options (LTRMO) Strategic Plan was accepted by the City Council on November 13, 2012. The Plan provided an analysis of regional demand and landfill capacity; identified options for solid waste reduction, recycling, reuse, and disposal. Options to maximize the capacity and extend the life of Miramar Landfill were identified, including: zero waste programs, a Resource Recovery Center at Miramar Landfill, West Miramar Landfill expansions, permitting and expanding North Miramar Landfill, and a Transfer Station at Miramar Landfill.

Waste from the City is disposed in the Miramar, Sycamore, and Otay Landfills. Facilities used for diversion purposes are described in the City's Nondisposal Facility Element, and include several transfer stations; three mixed C&D processing facilities; the Miramar Greenery and other composting and mulching facilities; several clean MRFs; a substantial number of source separated recycling facilities for materials such as concrete, asphalt, rock, dirt, metal, cardboard, paper, and other materials; and a HHW facility for residents. However, the facilities identified in the NDFE will not be adequate to achieve 75% diversion. Infrastructure to address specific waste streams, like food waste, will need to be built to meet the required diversion goals.

Existing Diversion Programs and Diversion Rates

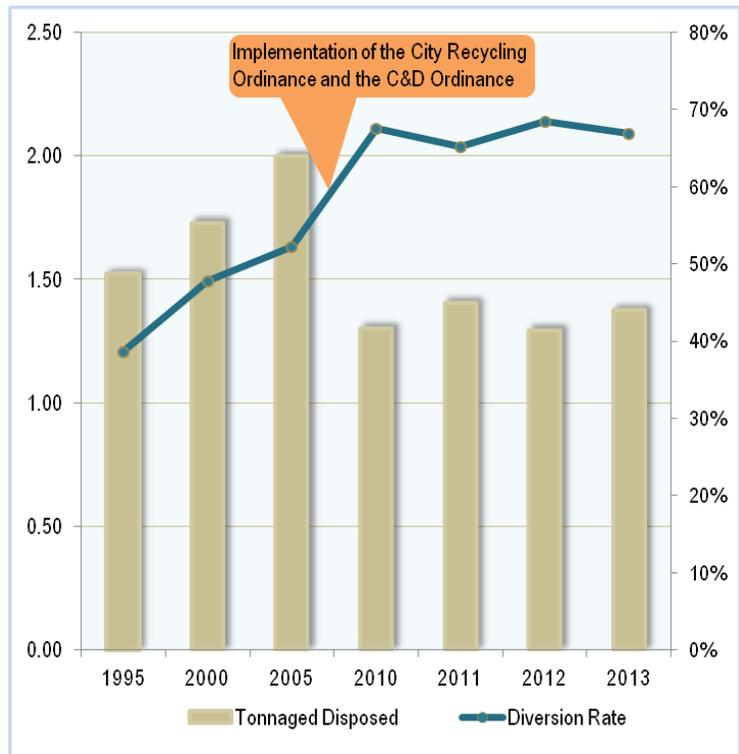
San Diego has made significant strides in diverting waste from the landfill by increasing its diversion rate by more than 20% in the last decade (see Exhibit 1 (below)). The adoption and implementation of the City Recycling Ordinance (CRO) and Construction and Demolition (C&D) Debris Deposit Ordinance (C&D Ordinance) and a variety of other waste diversion programs have been crucial in positioning the City on the road to Zero Waste.

The CRO was adopted in 2007 and phased into effect between 2008 and 2010. It requires recycling of recyclable materials generated from residential facilities (both single family and multi-family), commercial facilities (including City buildings), and special events. As a result of the implementation of the CRO, haulers are required to report the volume (not the *weight*) of refuse and recycling services provided. Those reports show that the volume of recycling service to commercial and multi-family customers increased by 90% between 2008 and 2012. In 2012, the exemption threshold for commercial and multi-family properties was lowered to largely coincide with the requirements of the State's

mandatory commercial recycling requirement under AB 341. Already having the CRO in place put the City in a very good position for complying with this new requirement.

The C&D Ordinance took effect in July 2008. It requires certain building and/or demolition project applicants to post a refundable deposit to ensure compliance with the ordinance which requires diversion of at least 50% of the C&D debris generated by the project. Diversion credit is counted for debris that is recycled, reused, or donated for reuse. Based upon deposit refund requests, the overall recycling rate under the Ordinance is 85% for projects asking for and receiving a refund. Larger projects typically send much of their waste to recycling facilities with 100% diversion rates, whereas smaller projects often co-mingle waste and use a mixed C&D processing facility with a lower diversion rate. The average recycling rate for all projects is 71%.

Exhibit 1: Disposal and Diversion in San Diego



The City also provides curbside yard trimmings and recycling collection; waste reduction, recycling, composting education in schools, City departments, and the community; a compost bin voucher program to residents which discounts three styles of compost bins; a commercial food scrap composting program; public space recycling programs; and an environmentally preferable purchasing program (EP3). Additionally the City requires franchise waste haulers to provide recycling services as a requirement of their franchise agreements. Currently, the City's diversion rate is 67% but has remained relatively constant since 2010. There is still significant room for improvement. The City's single family curbside recycling and yard trimmings collection programs divert 23% of the waste generated by that sector; commercial and multi-family facilities divert 26% of the waste they generate; and the City facility diversion rate is 27%. Most mature curbside recycling programs achieve at least a 40% rate of diversion and commercial rates can often be significantly higher than that.

Waste Composition

The overall composition of discarded material that is landfilled is tracked by composition as seen in Exhibit 2. When tracked by generating sector, the disposed tonnage is shown in Exhibit 3. It can be seen in Exhibits 4-6 that all sectors have almost equal opportunity to enhance their diversion rate for all the major recyclable streams.

The total annual discards generated by San Diego residents and businesses is approximately 4.15 million tons, of which 2.78 million tons is recycled. In order to determine what further diversion opportunities are available, the City conducted a Waste Characterization Study in 2012-2013 which evaluated the composition of materials being disposed. The following tonnages and tables were assembled using data from this study. Results

Exhibit 2: Composition of Materials Landfilled & What They Can Be Recycled Into



Exhibit 3: Disposed Tons by Generating Sector

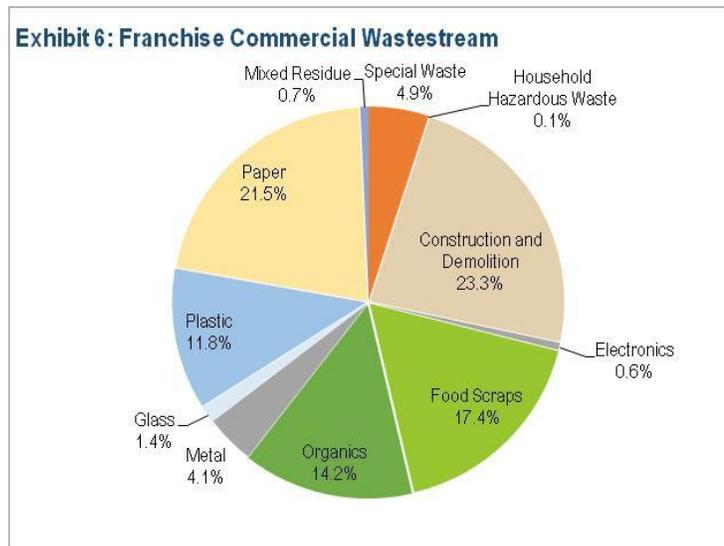
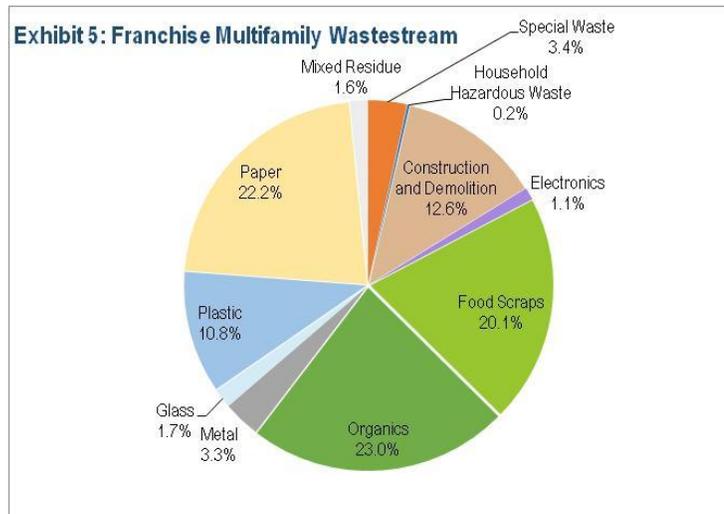
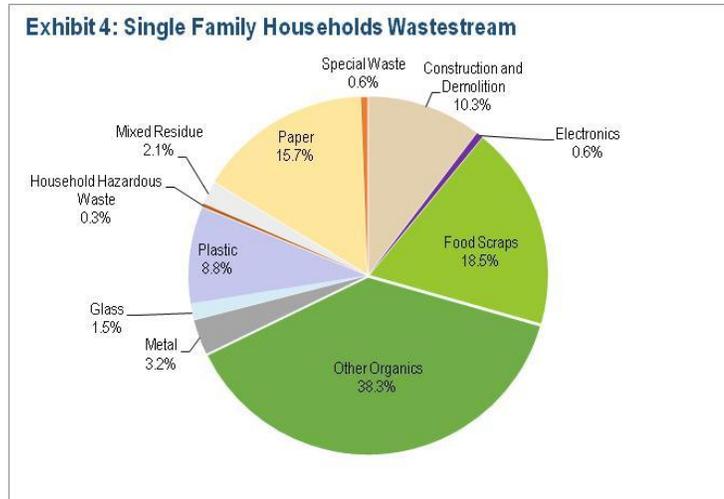
Sector	CY 2013 tons
Single-Family	381,000
Multi-Family	266,000
Commercial	645,000
Military	27,000
City Departments (self-haul)	51,000
Total	1,370,000

indicated that 76% of materials being disposed City-wide are recyclable and that the value of the disposed recyclables is approximately \$54M (see Exhibit 2 for commodities and markets for those commodities). The ZWP strategies will address and focus on the most prevalent recyclable materials.

When broken down by material class, organics and C&D waste are the largest components. One-third of all landfilled materials are organics, and food scraps alone accounting for 15% (or approximately 200,000 tons) of the materials discarded. C&D Waste accounts for one-quarter of the waste stream.

Challenges

There are many challenges to increased diversion, foremost development of new infrastructure. AB 1826 requires the collection of organic materials including yard trimmings and food scraps, but adequate infrastructure does not currently exist in California to handle the processing of these additional materials. The City operates the Greenery at the Miramar Landfill, but this facility will not be adequate for the projected increase in organic material requiring processing. Therefore, additional infrastructure must be developed. To help in expanding infrastructure, this ZWP includes



adding additional composting infrastructure at the Miramar Greenery. The development of mixed recycling/ anaerobic digestion facility(ies) by private stakeholders, will be monitored, and use of existing facilities, like the anaerobic digesters used for the decomposition of sludge from the sewer system will be evaluated for inclusion of food scraps. If the construction of necessary facilities to achieve the goals do not materialize, evaluation of other options will be proposed. Other options would include implementation of exclusive franchises that require the franchisee to develop appropriate infrastructure or development of a City operated facility for example.

The mandatory commercial recycling programs established under AB 341 and AB 1826 are examples of state mandated local programs. These bills have established aggressive goals for organics diversion but do not address the lack of existing infrastructure to process the diverted organics/recyclables.

Another challenge to diversion is the requirement to divert materials requiring special handling. Difficult to manage items including sharps, batteries, bulbs, and pharmaceuticals present large challenges to jurisdictions as the responsibility to manage these materials has fallen on jurisdictions, with no funding provided to aid in the management of these wastes. Management of these items is highly regulated, and very costly to the City and other jurisdictions. Further, these items are dangerous and problematic if/when placed in refuse and recycling containers, or otherwise improperly/illegally disposed. When producers and consumers share responsibility for costs of disposal, it is easier to achieve waste reduction targets.

Stakeholder Recommendations

The City identified a broad list of stakeholders. Stakeholders were primarily alerted via email or through the City website. Exhibit 7 shows the diversity of participation and Exhibit 8 lists individual participants by stakeholder interest.

Eight meetings were open to the whole community and there were also numerous individual presentations to a wide range of groups and individuals, which were provided upon request.

The stakeholders recommended the City should:

- increase the responsibility to recycle in the CRO;
- expand curbside green waste collection;
- enhance public education, outreach, collaboration and enforcement;
- correct inequities associated with the People's Ordinance;
- develop new diversion strategies;
- potentially make policy changes; and
- lead by example.

Stakeholders also discussed financing mechanisms. They suggested a shift away from financing based on waste disposal to funding that is sustainable and resource based. A detailed Stakeholder Participation Report is provided as Attachment 1.

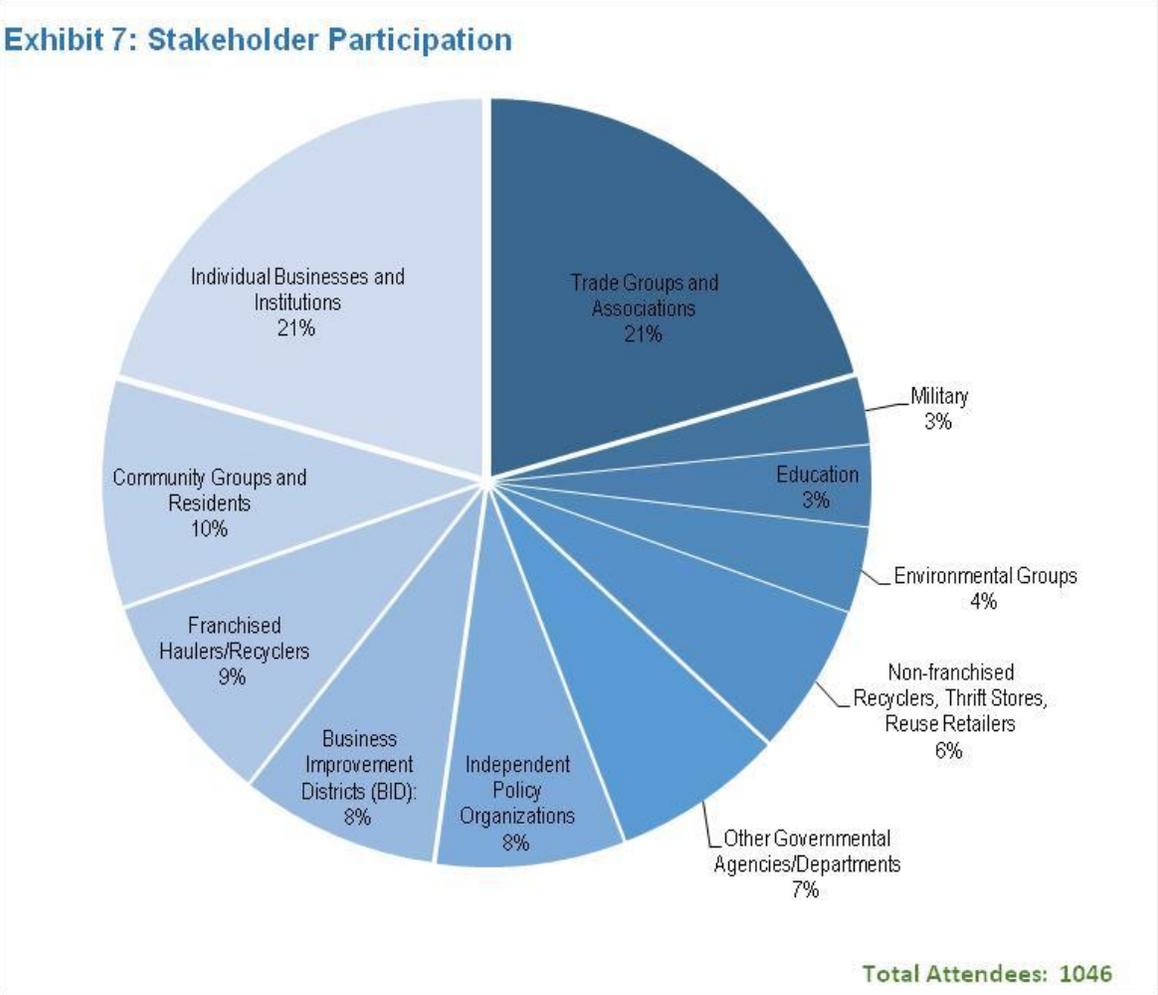


Exhibit 8: Stakeholder Participants		
Business Improvement Districts (BID)	Individual Businesses and Institutions	Trade Groups and Associations
Adams Avenue BID	Bigsly Enterprises	American Forest and Paper Association
BID Council Board of Directors	Bridgepoint Education & Ashford University	Associated General Contractors of America San Diego Chapter
Gaslamp Quarter Association	California Strategies	Balboa Park Cultural Partnership
College Area Business District	CP Manufacturing	Building Industry Association
North Park BID San Diego	Crowne Plaza Hanalei San Diego	Building Owners and Managers Association
Community Groups and Residents	Evans Hotels	Food and Beverage Association of San Diego County
	EWR	IFMA
College Neighborhood Foundation	Feeding America San Diego	NAIOP
Community Planners Committee	Mesa College	San Diego Regional Chamber of Commerce
Individual Residents (18)	Omnire	San Diego County Apartment Association
Kensington Garden Club	PK Holdings, LLC.	San Diego County Disposal Association
San Diego River Park Foundation	Point Loma Nazarene University	San Diego Green Building Council
Scripps Miramar Ranch Planning Group	Recycle San Diego	San Diego League of Women Voters
Sustainable Scripps Ranch	San Diego Zoo	SD County Taxpayers Association
Public Education and Outreach	SeaWorld San Diego	Zero Waste San Diego
	Sharp Healthcare	Non-franchised Recyclers, Thrift Stores, Reuse Retailers
I Love A Clean San Diego	Solar Turbines	
Inika Small Earth	Sony	Boxed Green
San Diego County Office of Education	Tap and Press	EcoParts
Solana Center for Environmental Innovation	The Lodge at Torrey Pines	Goodwill Industries
The 1:1 Movement	UCSD Sustainable Solutions	IMS Recycling
Environmental Groups	United Cerebral Palsy San Diego	On Site Waste Solutions
	WAXIE	Recon Recycling
Audubon Society	WES	Ripple Textile Recycling
OB Green Gold	WISH	San Diego Fibers
Sierra Club	Governmental Agencies and Departments	Urban Corps
Surfrider Foundation		CalRecycle
The Green Store	City Auditor	Sustainable Surplus
EcoVerse	City of Chula Vista	Franchised Haulers/Recyclers
Phoenix Foods	City of Encinitas	
Zero Waste San Diego	City of Oceanside	Allan Company
Ssubi is Hope	City of Poway	Daily Disposal Services
Independent Policy Organizations	City of San Diego Parks and Recreation Department	Debris Box
	Center on Policy Initiatives	Dependable Disposal
CRRRA	City of San Diego Public Utilities	Diamond Solid Waste Services
Equinox Center	County of San Diego	EDCO
Integrated Waste Management Citizens Advisory Committee	LEA	Express Waste and Recycling
Integrated Waste Management Technical Advisory Committee	MetroTransit System	John Smith Earthworks
	Military	Republic Services
MCAS Miramar		Tayman Industries
World Resource SimCenter (WRSC)	Naval Region Southwest	Ware Disposal
		Waste Management

POTENTIAL DIVERSION STRATEGIES

In order to develop sustainable funding mechanisms, the City worked in collaboration with stakeholders to develop strategies that will allow for the continuance of existing programs while also increasing funding to a level that will support new programming. The following potential strategies are possible future actions to achieve the additional 332,000 tons of diversion needed to achieve 75% recycling. These mechanisms can also be used to further enhance recycling beyond 2020 in order to achieve the goals of 90% diversion by 2035 and zero waste by 2040. Many of the potential programs that have been included are direct recommendations from stakeholders received during the outreach effort. Staff will bring specific components forward to City Council for approval as the ZWP is implemented. The ZWP attempts to maintain as much equity as possible across the various segments of the community.

- 1. Establish AB 1826 infrastructure:** Additional organics recycling infrastructure will be needed to comply with AB 1826. The City plans to encourage the private sector development of facilities that will reduce and reuse this waste stream. These facilities will be a key strategy to increasing the City's diversion rate. This is projected to result in 120,000 tons of additional diversion.
- 2. Establish diversion requirements in franchise agreements:** Franchised haulers collect from commercial and multi-family properties and their diversion rate is 26%. There are approximately 15,000 commercial and multi-family properties that are serviced by the franchised haulers. Experience in other jurisdictions shows that by including recycling benchmarks into franchise agreements, significant progress can be made and many impediments to waste reduction and recycling removed, including the difficulty measuring waste reduction. It has been determined that the *minimum* diversion requirements should be 50% to ensure that the City can achieve 75% by 2020. Staff plans to propose this new target at the next franchise renewal. Staff plans to review the target annually at the time of renewal of franchise agreements. This is projected to result in 93,500 tons of additional diversion.
- 3. Provide enhanced technical assistance for commercial and multi-family:** to increase their current 26% diversion rate to 50% and materials are added to the CRO, a train the trainer model will be applied to ensure that haulers are adequately prepared and their staff is adequately trained. This does not result in a specific diversion quantity, but would support diversion efforts conducted by the haulers.
- 4. Allow fibrous yard trimmings at the Miramar Greenery:** As a result of a recent acquisition of a new grinder and the modification of the conditions in the composting permit, staff will now be phasing in the acceptance of fibrous yard trimmings at the Miramar Landfill Greenery. This is projected to result in 18,000 tons of new diversion.

5. Develop a Resource Recovery Park (RRP): As originally proposed in the Miramar Landfill General Development Plan, staff plans to construct a RRP at Miramar Landfill, which could include a Resource Recovery Center (RRC), additional composting infrastructure, and mixed recycling infrastructure, as are described below. The initial step will be evaluating potential partnerships for the creation of the RRP. The RRC would likely be the first component of the RRP to be built.

a. Develop a Resource Recovery Center (RRC): The RRC would be at the entrance to the Miramar Landfill and would service all 200,000 transactions from non-franchised haulers delivering wastes in small vehicles, including home owners, contractors, and businesses. This would be constructed using funds in an existing Capital Improvement Project and would result in the diversion of an additional 80,000 tons from disposal, and is a model that could eventually be replicated on a smaller scale throughout the City.

b. Develop an aerated static pile system composting system: The City currently composts using long windrows that are mixed and watered. A portion of this operation is proposed to be modified to an aerated static pile system. This type of technology conducts composting in a controlled environment under a cover in the outdoors. Computer systems monitor and regulate oxygen, temperature and moisture to ensure ideal conditions for rapid and nuisance free composting. This change would enable the City to better process clean separated food scraps that would come to the Greenery as a result of increased collection efforts. Diversion associated with this system would be part of the overall AB 1826 infrastructure.

Exhibit 9: Aerated Static Pile System



c. Encourage the development of additional composting and mixed recycling infrastructure: There is currently insufficient infrastructure in the City of San Diego to process all of the organics that will need to be diverted to meet the AB 1826 mandate and the 75% diversion goal. The expectation is for the City's franchised haulers to develop the infrastructure they need to achieve the diversion requirements for their customers, and the requirements that will be incorporated into their franchise agreements as a result of the AB 1826 mandates.

6. Modify CRO: ESD staff is planning on bringing forward two modifications to the CRO and this is projected to result in 13,000 tons of new diversion. Additional outreach will be required.

a. Reduce exemptions in the City Recycling Ordinance (CRO): Approximately 3,500 of the nearly 6,000 commercial and multi-family properties that are currently exempt do not have recycling. The exemption threshold is for facilities that generate less than four cubic yards of refuse and recycling per week. Eliminating the four cubic yards exemption would increase the number of multi-family properties subject to the CRO by almost 40% and in so doing, further help to spread the burden of additional zero waste programs across the whole community.

b. Add materials to the City Recycling Ordinance (CRO): The CRO language was developed such that additional materials can be added as markets become available. To comply with state law, two key commodity areas are proposed to be added to the CRO: organics (yard trimmings and food scraps) and reusable items. Currently only single family residents that have the greenery collection program are required to recycle their yard trimmings and unpainted wood waste. Yard trimmings, unpainted wood, and food scraps diversion requirements will be phased in for commercial and multifamily waste generators. Reuseable items are a more general, and subjective, category and it is anticipated by adding this category to the CRO requirements, the reuse opportunities that currently exist will be used with more frequency by the community.

7. Modify C&D Ordinance: increase diversion requirement to 65%: Construction and demolition debris constitutes more than 23% of the commercial waste stream. Increasing the C&D Ordinance requirement from 50% to 65% diversion appears to be a readily reachable goal, given that mixed C&D recycling facilities servicing the City of San Diego have been certified at 65% by staff for at least the past two years. This is projected to result in 2,000 tons of additional diversion.

8. Develop a recycling reporting by neighborhoods and City departments program: While reporting programs are not generally associated with a specific number of tons diverted, studies show that participation increases when metrics are recorded and reported. Capturing metrics and then sharing that information with program participants is expected to enhance participation. Quarterly trends in City serviced single family recycling participation for over 110 individual single family residential communities will be publicized. For the City departments, a scorecard will be incorporated into the City facility refuse and recycling collection contract to provide direct feedback to all departments. Coupled with enhanced education and outreach to departments, the City departments program could result in 1,500 tons of diversion.

9. Require City Recycling Ordinance (CRO) compliance as part of City leases of commercial office space: Staff is working with the Real Estate Assets Department staff to develop CRO compliance language to be incorporated into future leases of

commercial office space. This will help increase diversion for franchised haulers, as they service buildings where the City leases space.

10. Provide enhanced education about and enforcement of City serviced residences recycling programs: While education programs are not generally associated with a specific number of tons diverted, they are considered essential to increasing the efficiency of existing collection programs. Staff plans to develop additional outreach and increase the frequency of residential recycling and trash cart inspections. Coupled with enforcement efforts focused on City serviced residences, this could result in 4,000 tons of diversion.

11. Draft and propose policies:

a. Support local, state and federal producer responsibility policies and laws: Although it is difficult to determine an exact number of tons that would be diverted, producer responsibility is a key strategy. Because an effective Zero Waste approach considers that the producers of waste should be responsible for costs of disposal, and indeed for the total life cycle of a product, the ZWP advocates support of education, policies and laws that promote the sharing of the financial responsibility for hard to handle materials with the product manufacturers and their distributors. Target materials include but are not limited to:

- Plastic film, packaging materials
- Paint, stains, varnishes
- Carpet
- Mattresses, couches, furniture, appliances
- Electronics, batteries, compact fluorescent light bulbs (CFLs), universal waste
- Sharps, pharmaceuticals, medical waste
- Motor oil, antifreeze, lubricants, home chemicals

b. Further promote reuse policies: The City will continue to support and promote reuse policies such as distribution events for reuseable bags, use of reuseable water bottles, cups, flatware, etc. as appropriate.

12. Develop “Zero Waste Star” recognition program to encourage diversion: This recognition program will recognize local businesses, properties, non-governmental organizations, and City departments, for their zero waste efforts. It will expand on the current Waste Reduction and Recycling Awards Program that has primarily been targeting businesses and multi-family complexes, to include residents, education providers, policy groups, non-profits, etc.

13. Reuse/repair resource directories and community reuse programs: While resource directories and community reuse programs are not generally associated with a specific number of tons diverted, they are considered essential to increasing the use of existing facilities and events. Providing funding is available, staff plans to promote existing repair workshops, online resources, and reuse businesses.

14. Develop and continue community partnerships: By enhancing existing and developing new partnerships with non-profits, local green businesses, and franchise haulers, existing resources can be leveraged to reduce, reuse, recycle and compost material while minimizing duplication of effort between the City and the efforts already underway in the community.

15. Fully implement public space recycling at parks, beaches, recreation centers, transit centers, and libraries: Public space recycling is a key public education component that supports behavior change, where recycling away from home leads to increased recycling at both home and work. ESD staff will work with other departments to identify opportunities to expand recycling service in new and existing public facilities. The City will continue to expand public space recycling opportunities with its own funds as available and also seek grants and other opportunities to allow for public space adoption programs that help with capital funding and maintenance costs.

Exhibit 10: Public Recycling Containers



16. Add materials to the City serviced single family recycling stream as markets develop: The number of additional tons diverted will vary depending on what materials can be added to the program. Staff routinely reassesses market conditions and periodically adds materials to the curbside recycling program for City serviced residences. Staff recently identified dimensional Styrofoam, the material used in consumer goods and other packaging, to be added to the curbside recyclable materials collection program. This commodity was added in December 2014. Although not a significant tonnage, it removes a problematic component of the wastestream that cause blown litter issues at the Miramar Landfill. This material type does not include Styrofoam fast food containers and flatware, but implementation of a process to recycle Styrofoam fast food containers will be considered in the future as secondary markets are developed.

17. Investigate expanding and automating single family yard trimmings collection to include all City single family residential customers: Strategies for increasing the City's diversion rate must focus on organics. Currently only 190,000 of the 289,000 City customers have greenery collection and of that only 30,000 have automated carts. Expanding yard trimmings collection to all City serviced residential customers and switching to automated carts, would divert 20,000 tons. This is key to achieving ZWP goals. Use of automated carts will allow for the potential addition of food scraps to the greenery collection program.

18. Investigate providing weekly greenery collection with food scraps and every other week trash collection: The City will monitor and evaluate ongoing pilot programs in other jurisdictions where yard trimmings collection combined with food scraps is offered weekly and trash services are offered bi-weekly. If success is apparent in these other jurisdictions, staff will determine feasibility of conducting a similar pilot in San Diego.

19. Establish an outreach program that emphasizes the food scraps hierarchy: reduce, reuse/rescue, compost: This approach place the first emphasis on working with the food industry to reduce waste. It is difficult to estimate how many tons of food scraps could be diverted from disposal. Staff will assist in publicizing best practices. Staff will also promote the next step in the hierarchy, diverting unwanted food before it spoils, by promoting facilities where it can be used, such as the food bank, shelters, etc. Staff will investigate options for food scraps as animal feed. The City will also continue its food scraps program, which currently diverts approximately 10,000 tons from disposal.

20. Promote on-site food scraps processing and/or composting where consistent with stormwater objectives: Staff already coordinates on Master Composter training programs. In addition to on site composting in containers, there are other technologies, such as food dehydrators that electrically heat and dry food scraps for sanitary storage and transportation to a composting location.

21. Develop a community composting program: Staff plans to encourage the establishment of additional composting sites throughout the community. It is envisioned that sites such as community gardens, which are currently limited by state and local law to composting vegetative waste generated on site, could expand the source of organics to include food scraps, coffee grounds, etc. from off-site locations. The City plans to further study such successful models as are being developed in other jurisdictions and work with stakeholders to develop a solution for San Diego. Potential tonnage will be determined if/as a program is developed.

CONCLUSION

This ZWP and the programs described herein provide a framework of potential strategies to increase the City's diversion rate over the next 25 years and ensure compliance with current state diversion requirements. Potential strategies would be phased in over multiple years with implementation of specific components brought forward for City Council consideration and approval. It is anticipated that staff will expand on the potential strategies contained herein, and develop additional ideas to take the incremental steps to 75% diversion by 2020 and the 90% goal currently proposed in the City's draft Climate Action Plan. Further diversion to Zero Waste by 2040 is achievable given the rapid development of technologies and methods to reduce reuse and recycle all materials. Each set of incremental increases to the City's diversion rate will be developed by considering the opportunities, technologies, and associated costs that are available at that time. It is anticipated that staff will remain engaged with stakeholders as all phases of this plan are implemented to ensure that the City's future diversion strategies are an expression of the interests of all segments of the San Diego community.

ATTACHMENTS:

- 1) City of San Diego Zero Waste Plan (ZWP) Stakeholder Participation Report

REFERENCES:

- 1) Compilation of Zero Waste Plan Stakeholder Feedback Correspondence
- 2) City of San Diego Long-Term Resource Management Options (LTRMO) Strategic Plan
 - a. LTRMO Phase II Report to City Council
 - b. LTRMO Webpage from February 2015
 - c. LTRMO Final Report Phase II
 - d. LTRMO Tables and Figures Phase II
 - e. Resolution Number R-307836
- 3) Miramar Landfill General Development Plan
- 4) City of San Diego Nondisposal Facility Element
- 5) Countywide Siting Element and Summary Plan (updates)
- 6) City of San Diego 2012 – 2013 Waste Characterization Study Final Report
- 7) Zero Waste Objective
 - a. Proposed Zero Waste Objective for the City of San Diego Report to City Council
 - b. Zero Waste Plan Vision Document
 - c. Resolution Number R-308657
- 8) City Auditor's Report: "Opportunities Exist to Improve Recycling Rates and Reduce Adverse Impacts Generated by Waste hauling"
- 9) Zero Waste Stakeholder Meeting Presentation Slides (four meeting sessions):
- 10) CalRecycle Landfill Tipping Fees in California February 2015 Report
- 11) CalRecycle State of Disposal in California March 2015 Report
- 12) CalRecycle State of Recycling in California March 2015 Report

ATTACHMENT 1: CITY OF SAN DIEGO ZERO WASTE PLAN (ZWP) **STAKEHOLDER PARTICIPATION REPORT**

Background

The feedback captured in this document has been incorporated into the ZWP under general programmatic headings, wherever possible. As the ZWP is implemented, ESD will re-engage with stakeholders to ensure that the road to zero waste is a collaborative journey.

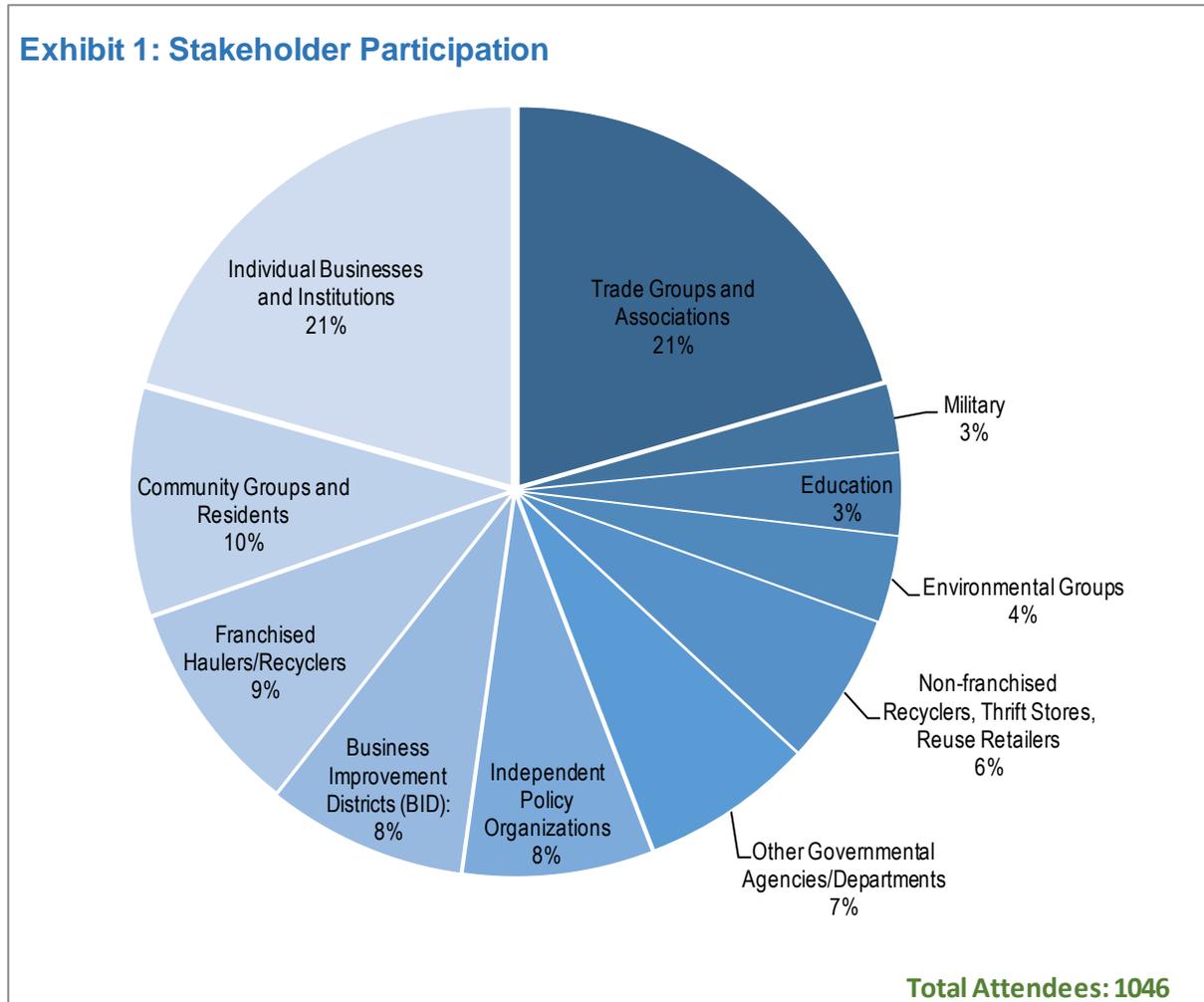
The comments, which were either from notes taken during the stakeholder meetings by staff or were from written submissions, are placed under headings mirroring the headings in the ZWP, as applicable. The longer written submissions were edited to capture the key ideas. The commentary has been kept anonymous in this report, but copies of individual written submissions are available upon request.

Stakeholder Participation

As noted in the ZWP, the City engaged a wide array of stakeholders in the development of the Zero Waste Plan. Exhibit 1 shows the diversity of participation and Exhibit 2 lists individual participants by stakeholder interest. Eight meetings (see Exhibit 3 (below)) were open to the whole community and there were also numerous individual presentations to a wide range of groups and individuals, which were provided upon request. The stakeholders recommended the City should:

- change the CRO;
- expand curbside green waste collection;
- enhance public education, outreach, collaboration and enforcement;
- correct inequities associated with the People's Ordinance;
- develop new diversion strategies;
- potentially make policy changes; and
- lead by example.

Stakeholders also discussed financing mechanisms. They suggested a shift away from financing based on waste disposal to funding that is sustainable and resource based. A detailed summary of specific feedback commentary and suggestions regarding financing and diversion strategies is provided below.



City of San Diego Zero Waste Plan Stakeholder Participation Report

Exhibit 2: Stakeholder Participants		
Business Improvement Districts (BID)	Individual Businesses and Institutions	Trade Groups and Associations
Adams Avenue BID	Bigsly Enterprises	American Forest and Paper Association
BID Council Board of Directors	Bridgepoint Education & Ashford University	Associated General Contractors of America San Diego Chapter
Gaslamp Quarter Association	California Strategies	Balboa Park Cultural Partnership
College Area Business District	CP Manufacturing	Building Industry Association
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San Diego River Park Foundation	PK Holdings, LLC.	San Diego County Disposal Association
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Sustainable Scripps Ranch	Recycle San Diego	San Diego League of Women Voters
Public Education and Outreach	San Diego Zoo	SD County Taxpayers Association
I Love A Clean San Diego	SeaWorld San Diego	Zero Waste San Diego
Inika Small Earth	Sharp Healthcare	Non-franchised Recyclers, Thrift Stores, Reuse Retailers
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San Diego County Office of Education	Sony	EcoParts
Solana Center for Environmental Innovation	Tap and Press	Goodwill Industries
The 1:1 Movement	The Lodge at Torrey Pines	IMS Recycling
Environmental Groups	UCSD Sustainable Solutions	On Site Waste Solutions
Audubon Society	United Cerebral Palsy San Diego	Recon Recycling
OB Green Gold	WAXIE	Ripple Textile Recycling
Sierra Club	WES	San Diego Fibers
Surfrider Foundation	WISH	Urban Corps
The Green Store	Governmental Agencies and Departments	Sustainable Surplus
EcoVerse	CalRecycle	Franchised Haulers/Recyclers
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Zero Waste San Diego	City of Chula Vista	Daily Disposal Services
Ssubi is Hope	City of Encinitas	Debris Box
Independent Policy Organizations	City of Oceanside	Dependable Disposal
Center on Policy Initiatives	City of Poway	Diamond Solid Waste Services
CRRA	City of San Diego Parks and Recreation Department	EDCO
Equinox Center	City of San Diego Public Utilities	Express Waste and Recycling
Integrated Waste Management Citizens Advisory Committee	County of San Diego	John Smith Earthworks
Integrated Waste Management Technical Advisory Committee	LEA	Republic Services
World Resource SimCenter (WRSC)	MetroTransit System	Tayman Industries
	Military	Ware Disposal
	MCAS Miramar	Waste Management
	Naval Region Southwest	

Exhibit 3: Eight Public Stakeholder Meetings

SESSION 1: Preliminary ESD Strategies, Global and National Initiatives, & Stakeholder Feedback

Wednesday, July 23—6:00 p.m. to 7:30 p.m. @ *Ridgehaven Auditorium*

Thursday, July 24—9:30 a.m. to 11:30 a.m. @ *Metro Biosolids Conference Center*

SESSION 2: Overview and Analysis of Stakeholder Input

Wednesday, August 27—6:00 p.m. to 7:30 p.m. @ *Ridgehaven Auditorium*

Thursday, August 28, 2014—9:30 a.m. to 11:30 a.m. @ *Metro Biosolids Conference Center*

SESSION 3: Draft Plan Presentation for Consultation and Feedback

Wednesday, September 10—6:00 p.m. to 7:30 p.m. @ *Ridgehaven Auditorium*

Thursday, September 11—9:30 a.m. to 11:30 a.m. @ *Metro Biosolids Conference Center*

SESSION 4: Finalizing the Draft Plan for City Council

Monday, September 22—9:30 a.m. to 11:30 a.m. @ *Metro Biosolids Conference Center*

Tuesday, September 23—6:00 p.m. to 7:30 p.m. @ *Ridgehaven Auditorium*

Specific Feedback Commentary and Suggestions Regarding Financing and Diversion Strategies

Sustaining Funding

General Comments:

- City should seek Cap and Trade money to help fund programs.
- City should consider charging a rental fee for automated carts.
- City should charge more for black bin and keep the blue bin free.
- San Diego expanded curbside by using \$6.8M in revenue from the state – other jurisdictions had to pay for it themselves.
- Since the franchise agreement will require franchised haulers to collect pass through revenues on recyclables, there will be more self haulers – which will undercut the revenue stream.
- Educate the public on the fact that there is a cost for recycling and show the comparison cost for collecting refuse.
- Support for the issuance of Non-Exclusive Franchise Agreements to current haulers and qualified, existing recyclers operating in the City and the City recovering an equal fee on all tonnage collected, including recyclables.

- Absent any changes to the People's Ordinance, funding for the expansion of single family residential programs to achieve the previously adopted Zero Waste goals will be a financial obligation of the City.
- One way to bring in extra funds would be to fine people for putting trash in the Blue Bin. Blue and Black bin inspectors could generate fines but also jobs for the many unemployed.
- If the City is looking to maximize both profits and recycling, then looking at cleanup/hauling companies that service construction sites could be beneficial. These companies haul trash and recycling without franchise agreements, pay no franchise or AB939 fees, while hauling many tons of materials each year. While the hauling may be considered incidental to the service currently, the amount of waste hauled could make this an area that could provide substantial funding and additional recycling of Construction and Demolition(C&D) materials which still compose a large amount of the waste stream going into local landfills.
- The Environmental Services needs to provide guidance to public and private sectors, examining and identifying those policies that will encourage Zero Waste outcomes. The fact that this hasn't happened is due in large part to city officials' emphasis on revenue generation. This forces departments to focus on finances, rather than on public assistance. Unfortunately, this culture of money has led to an unacceptable drop in real public service. Governmental agencies are also supposed to provide public services, not just revenue generation. Place the need to generate income where it belongs- on our elected city officials. It is their responsibility to raise the funds to support needed government programs. This is a problem that needs to be addressed at City Council and City Mayor level. Environmental Services should determine which zoning/ land use ordinances are impeding movement to Zero Waste. This proposal of ZW strategies unfortunately lacks this, relying on the existing status quo, rather than offering draft ordinances to promote innovation and success in the private/ non-profit/ community sectors. You must identify the barriers currently in place and offer the City Council alternatives.
- Last night seemed more focused on finances and disposal, than on other key aspects of Zero Waste such as Reduce, Reuse, and Repair. What is a key component in the waste stream that the City and citizens can reasonably take on? (Organic waste, diapers, cans/bottles, etc.)
- Support the proposed development of revenue streams outside of disposal to resource recovery in order to support current programs and future diversion efforts for implementation of Zero Waste goals.
- Recommend a pricing structure based on how much a resident throws away versus how much is diverted from the landfill. Residents should be incentivized

by paying for the size of their garbage bin and rewarded for anything not destined for the landfill by free collection.

- There are many costs associated with maintaining and expanding Miramar that aren't being included in the cost analysis by staff, such as costs incurred by previous site emissions and rigorous maintenance of the landfill impermeable liner.

Policy Initiatives

Establish diversion requirements in franchise agreements:

- City should consider franchising Construction and Demolition (C&D) haulers, they are doing what haulers are doing and the City is missing out on a lot of revenue.
- This is no small item coming up, business models will be changed, extensive economic studies will be done, they'll have to develop new marketing strategies, how to handle from a capital expenditures, etc. This is all probably a good thing over a period of time, but one thing I would ask is as you consider timelines for any piece, let's all talk a lot and get input in before dates are issued for compliance and the dates should probably have the ability to slide, because no matter how hard we try no one will be able to have this ready to go – so we really need to talk to see how this happens – because there will be a tremendous economic impact on the hauler which will need to be passed onto the customers. Urge to make haste slowly and communicate.
- Support incremental, phased diversion increases as a mandatory requirement in Non-Exclusive Agreements, with a clearly defined compliance and remedy path.

Increase C&D Ordinance diversion to 65%:

- Require homeowners to recycle C&D from small projects.
- Three discard streams make up the construction and demolition debris category: construction discards; demolition discards; and deconstruction and recovery of building materials for reuse. The City should upgrade the C&D ordinance. Deconstruction and recycling of construction and demolition materials should be required for all building and take down permits.
- Impose additional construction waste management requirements, specifically a mandate to use recycled and salvaged building materials.

City Recycling Ordinance (CRO):

- The City needs to look at custodial companies and the fact that many just throw all recyclables and trash into one dumpster and say they're recycling.
- Why has the City not levied more fines on people that do not recycle?

- Include reuseables in the CRO but exclude them from the franchise agreements.
- Make it mandatory that rental property owners provide recycling bins to their tenants.
- Begin collection of polystyrene foam #6 (e.g. appliance packaging) for recycling. EDCO is already doing this in parts of San Diego County.

Support local, state and federal Extended Producer Responsibility policies and laws:

- The City should push for more advanced disposal fees on products such as mattresses, carpet, etc. This would make it economically feasible to recover these materials and free up money for other programs.
- The City should be addressing wastes upstream by focusing on legislation and extended producer responsibility.
- City should advocate for CRV on wine bottles.
- Packaging should be addressed.
- Encourage waste reduction policies in retail food businesses, for example, by allowing customers to bring their own to-go containers and by supporting a plastic bag ban if it is not implemented at the state level.
- The City should look at banning products that are not recyclable or compostable.
- There should be a greater emphasis on policies and laws that reduce packaging.
- Staff should propose city-specific “Producer Responsibility” draft regulations, that will help reduce the quantity and quality of materials sold in the city. This will aid waste management issues more than any other action. Staff should work with City Council and the Mayor’s Office on lobbying at the state and national levels for sensible regulations that will reduce the toxic or non-reusable materials currently found in consumer products.
- San Diego should be a strong advocate for legislation and programs regionally and statewide to encourage producers and retailers to take back their products and packaging and reuse, recycle or compost them.
- A Plastic Bag Reduction Ordinance should be adopted as a priority and use of reusable shopping bags by residents should be encouraged.
- A dialog should be initiated with industry representatives about product redesign or product bans for materials such as treated wood and diapers. Require retailers to take back disposable diapers, as they are not recyclable or compostable in San Diego.
- Fees should be assessed at the retail level for discarded items requiring special handling for proper disposal.
- Make a recommendation to the Environment Committee and City Council to ban polystyrene and non-recyclable plastic containers from food and retail outlets.

Program Initiatives – Waste Reduction

Enhanced education and diversion:

- Include tours of the Miramar Landfill at closing time to observe the amount of waste that is buried every day.
- Provide for reuse at the Resource Recovery Center.
- Provide business license discounts for repair and reuse businesses.
- Programs also need to be enhanced and information disseminated with regard to the best and least expensive options for properly disposing of working appliances and single use household batteries.

Reuse/repair resource directories and community reuse programs:

- Have city-wide garage sales and move-out programs for universities to more effectively manage re-use of bulky items.
- City Departments, local businesses and residents should be encouraged to buy reusable, recycled and repairable products.
- Source reduction strategies rest at the top of the Zero Waste hierarchy.
- Help form a reuse collaborative with businesses and nonprofits.
- Promote existing thrift stores and used building material stores.
- The City should consider providing a central warehouse for the accumulation of discards for reuse and recycling. The warehouse could house programs to train for vocation trades like electrical product repairs, clothing and accessories mending and ultimately material dismantling for recycling.
- Electronic product and material matching services (e.g., FreeCycle, Craig's List, eBay and other product and material exchanges) should be promoted.
- Use of returnable shipping containers and pallets by local businesses should be encouraged. The City should organize a workshop on this topic.
- San Diego should work with historic preservation advocates to restore and reuse buildings, rather than demolish them.
- Allow for reusable hazardous items, such as paint, to be made available for reuse or sold at the landfill.

Program Initiatives- Recycling

Peoples' Ordinance:

- Commercial businesses subsidize AB 939 fees, private sector is given burden, there is the social justice issue – low income families paying for trash for multi-millionaires in La Jolla, 67% of people will never pass an ordinance to repeal the People's Ordinance.

- I want all the programs, but making things so simple for single family is not fair, it's not free and multi-family and businesses shouldn't have to pay for it.
- Peoples Ordinance says it can actually levy fees but then the City passed resolution and the City said no – never have to pay, seems unreasonable.
- My understanding is that the People's Ordinance provides no money for services. City Attorney has determined not unless people vote on it. So wouldn't General Fund have to pay for these services?
- Put it on the ballot - the People's Ordinance. Let the people choose. Zero Waste San Diego will argue the case. Recommend this to the council.
- Why isn't challenging People's Ordinance a strategy? We have to bring it up because we can't get to zero waste without it. It might not be ESD's job to challenge it, but it has to be a laid out strategy, that is – challenging is a best idea to put forward tip toeing around and provide education around it because most people don't know. It's the monster in the room.
- When was the People's Ordinance last addressed? Ask people what they think.
- Try to address People's Ordinance, don't know until we try.
- Staff must address the discrimination enshrined in the People's Ordinance and provide ideas to improve the situation. We all know that this Ordinance is paid on the backs of lower income residents living in multi-residential building. The City Council amended this Ordinance around 1985, adding "recyclables" to the definition of "waste". This can be revoked by the present City Council. In addition, you must recommend that the Ordinance be challenged- either at the polls or by court challenge. \$52 Million at stake here. To continue to increase rates on the other sectors to cover this cost is irresponsible and will be challenged.
- The People's Ordinance has been examined and picked apart for loopholes in verbiage so that charges (like for bin replacement) can be imposed to recoup hauling costs. Recognizing that charging to haul away recyclables is disincentivizing positive behavior, I still wonder if there is yet another way to charge for some other service or provision in conjunction with trash removal.
- The Surfrider Foundation, San Diego County Chapter suggests a recommendation to the Environment Committee and City Council to consider scheduling a public vote to repeal The People's Ordinance of 1919. As you know, this ordinance prevents the City from collecting fees to pay for trash, recycling and yard waste collection, but over 40% of city households - apartments & condos - pay for private hauling.

Overall Strategies:

- The San Diego County Disposal Association supports Zero Waste goals as adopted by the City of San Diego.

- Need to sponsor local college/university courses to train for resource management locally.
- Other jurisdictions should also adopt Zero Waste and Climate Action Plan regionally – supporting each other.
- City should focus on what is good for our communities, not only what is cost effective today. The City should be on the forefront in this area.
- The city should target disposable diapers as a special waste.
- The City needs to address battery recycling.
- Zero waste should be considered more contextually within the climate plan so that other environmental impacts are considered and not just waste diversion when making program decisions.
- Is there was a way where positive financial incentives could be provided to commercial businesses with green practices? I see lots of waste such as: countless incidences where no recycle bins are provided at extracurricular school events-school sporting events can be notorious for selling bottled and canned beverages, without easy provision for recycling them; young students carefully place recyclables in blue bins during the school day only to have custodial staff comingle everything at the end of the day; school gardens are ripped up and started over yearly, with all of the old material going to trash dumpsters instead of to compost bins; and the other huge offender are people conducting estate/garage sales and clean-up services like "junk haulers."
- Encourage reusable cloth diaper use as part of overall source reduction efforts.
- Key components that will support the culture change needed to get to Zero Waste include: outreach and education, public awareness, training, enforcement, and reinforcement.
- Pick up flattened cardboard and bundled green waste that does not fit in the provided bins.
- An annual recognition ceremony of businesses that that have diverted over 90% of their waste from landfills is warranted.
- The discussions and public input opportunity has been great so far but we feel these meetings need to start going a little deeper into specifics and reaching out to the broader spectrum of the community. Each initiative will eventually have a budget, partnerships with community groups to roll out the program, and specifics with respect to education, implementation and impact assessment. These details will take some time (at least 6 months) to flesh out and vet. These details are also important to share with the council to get their full support and backing. Why not develop these now so we can hit the ground running as soon as the council approves the plan?

Fully implement public recycling at parks, beaches, recreation centers, and libraries:

- Allow businesses and community organizations to adopt-a-bin as a way for expanding public space recycling.
- Require recycling bins at bus stops.
- Full implementation of public recycling at parks and beaches is clearly needed, with a recycling bin present at every location with a trash bin. The use of open drum receptacles on our beaches should be discontinued, as wind and birds often pull garbage from the drums which then ends up polluting waterways and the ocean.
- Implement additional guidelines for park maintenance. To help reduce green waste, plant native species which require little regular pruning, fertilization, or watering. Use plant trimmings as compost to nourish soils. Reduce waste during site maintenance by recovering vegetation trimmings for compost and mulch.

Enhanced education about contamination in single family recycling programs:

- Residents should be informed that they should not share bins without permission (can result in trash being placed in another neighbor's recycling can which could lead to a violation for the resident who put out clean recyclables).

Recycling reporting by neighborhoods and City departments:

- City Departments walk the talk, promote their programs and follow through.
- On City Department scorecard should also count EP3 purchases.
- City Departments should be fined in the same manner as commercial businesses.
- Can the City have a map on its website that shows recycling efforts by Council district?
- Provide more information about recycling by Council District.

Expand and automate single family green waste collection to include all city customers:

- Why is it going to take until 2020 to provide all residents with green waste recycling? This should be a top priority.
- There is a concern that the City is not addressing the recovery of organics quickly or forcefully enough because of the high cost. Organics are an important waste stream that, if not addressed, will have an adverse impact on the atmosphere.

- Residents in Ocean Beach have voiced their concern that they are not included in the greenery pick-up and also expressed strong interest in local composting sites for their kitchen scraps.
- In working with the public at community events, I have noticed that many residents of communities in San Diego that are not provided with green bins do not realize that Curbside Yard Waste Recycling service may still exist in their neighborhoods by using their own bins. This information needs to be shared more widely.
- Support the implementation of weekly source separated green waste and recycling collection for single family residents.
- I would like to see the introduction of Green bins for yard waste.
- Expand to whole City Curbside Yard Waste Recycling program with food preparation scraps and deliver those materials to a local composting facility.
- Local drop off centers could be used for drop off for collected clean yard debris.

Provide weekly greenery collection with food scraps and every other week trash collection:

- Greenery program should be weekly for zero waste.
- San Diego should reduce the size of black automated carts when food waste is added to single family homes.
- San Diego should look at collecting more compostables in its curbside recycling program.
- San Diego should shift trash to biweekly and have recycling weekly.

Establish a programmatic practice which emphasizes the food waste hierarchy: reduce, reuse/rescue, compost:

- City should provide enhanced education about food dating programs (e.g. the difference between “use by” versus “best by”, etc.).
- One of the major opportunities for reuse is promotion of food donation programs.
- There needs to be the development of a plan to connect generators of donatable food to local shelters and food banks.
- Hierarchy of options for food scraps and other compostables: 1) source reduction; 2) donation to food banks; 3) food to animal feed/direct land application; 4) subsidized distribution of compost units and intensive training for residents; 5) shared, small-scale, decentralized composting systems for residences and businesses; 6) use of discarded organics for production of liquid fertilizers and other beneficial, value-added products; 7) combination/comprehensive programs; 8) co-collection of food residuals with yard trimmings/centralized composting using In-vessel or open windrow technologies;

and 9) single stream collection/drop-off of food residuals for decentralized or centralized composting.

Phase in food scraps to the CRO and require franchise haulers to offer organics collection to customers:

- Please roll out food recycling requirements for multi-family as well.
- There is concern about food waste collection at multi-family complexes and the nuisance it would cause.

On-site food waste processing and/or composting:

- Food waste dehydration units are another way of managing the storage of onsite food waste. To be used as a soil amendment, dehydrated food waste should be composted after dehydration.
- All schools should have recycling and composting programs on site.
- Continue discount program for home compost bins.

Community composting:

- Home composting and AD is good, but the strategies need to be laid out, and include community composting. Can't get to 75% without looking at diverting organics in lots of various ways.
- Small commercial generators of food waste should be able to drop off food discards at these community composting sites (as is done in New York).
- City should make food rescue more convenient by providing community drop off locations for processed food products.
- Offer decentralized composting facilities.
- What about using parks to have community composting sites.
- Keep in mind potential odor issues associated with composting if piles are not managed.
- Consider having food waste collection bins at Parks and Recreation sites.
- Initiatives such as community composting will take off (more easily) if the City (facilitated by ESD) lends a helping hand with the following: 1) develop clarifications on land use and zoning, update the City's definitions on composting (to match CalRecycle definitions) and create "no permit" or low-cost/ simple permit requirements for community composting initiatives-Composting needs to be considered an agricultural activity, allocated by right on our farms with streamlined or without 'Use Permit' requirement. It is important to consider land use for our farms, especially our rural farms, because they can partner with generators (such as neighboring farms) from outside the City limits and import compostable material to support their operations. Farms must be given priority

access to grow soil. Meanwhile the Greenery can allocate its resources to focus on large commercial generators within City limits; 2) develop collection, processing and distribution protocols for small scale composting to ensure a uniformity and quality in the soil communities grow; and 3) partner proactively with organizations like Inika Small Earth in clearing the common misconceptions about composting-(that it is smelly, unsightly, attracts pests, cannot be carried out in tight compact spaces, is not permitted by law etc. etc). Leveraging our mutual strengths in marketing, education and networking will allow us to quickly dismantle the barriers to organics recycling.

- Decentralized options such as home and onsite composting for the commercial sector and shared sites at community gardens or strategic business clusters should be developed.

Overall Organics Diversion:

- Organics diversion needs to be implemented now. While there is much to like in the present Zero Waste proposal, the decision to move organics diversion to the back-burner is backwards. It ignores the city's Climate Action Plan proposals, and ignores state requirements for climate emissions reductions. Organics contribute more to methane emissions than any other sector in California.

Program Initiatives- Facilities

General Comments:

- South Chollas landfill should be considered for use in developing infrastructure.
- Recycling infrastructure is currently inefficient for bulky item collections.
- We should have MRF infrastructure to also take mixed "dirty" streams.

Establish a Resource Recovery Center (RRC):

- Resource Recovery Center should cover its complete costs with its tipping fee.
- City should make recycling easier to do in the communities for hard to recycle items, otherwise they will end up in the watershed and then cost more to remove.
- There should be decentralized RRC's around the City to include organics recycling.
- City should partner with existing partners to operate regional RRCs.
- The continuing focus on one centralized waste location doesn't make sense given these negative impacts: the miles travelled, the gas required to transport large amounts of waste to one place, and the damage done to local infrastructure.
- Providing local facilities (decentralized RRC's) will benefit residents and near-by businesses, increasing their ability to properly divert and sort. The City should

take advantage of the “brownfields” scattered around – using these as staging areas or as mini-treatment facilities for neighborhood wastes, especially organics.

- Establish neighborhood material recovery facilities to support local economic development. The city should invest in this and strengthen local economic opportunities as well by providing vetted Small Business loans to encourage entrepreneurship around organics management.
- Local parks provide excellent site to establish these smaller material recovery programs, as do local supermarkets (which generate tons of food waste and have the parking space to situate small organics recovery sites). This has the added benefit of maintaining soil health in local communities as opposed to hauling it away to a “central” location.
- The Resource Recovery Center is an excellent way for people to do some last minute recycling en route to the hole at the landfill, but could there be a way for people that only have materials for resource recovery (and not for the hole), to avoid paying the landfill entrance fee to dispose of these items?
- If the City will be accepting items for reuse at the Miramar front gate, consider contracting the operation of the “store” to a third party. Set up the contract for a reasonable base fee plus a % of sales or other factors.

Aerated static pile (ASP) composting system:

- Who services compostable utensils and containers, etc – San Francisco is using compostable stuff. We went that direction at the airport but we can’t compost it. Need an ASP system so that we can handle compostable flatware.

Develop an RFP for a private company to design, build, and operate a City owned Anaerobic Digestion (AD) and mixed recycling facility:

- City should consider including worker conditions in their RFP for the AD/Mixed Recycling facility – like they did in Los Angeles.
- The City should maximize the revenue streams from AD – the digestate and the energy.
- The proposal to initiate anaerobic digestion is good. These programs should be part of the City’s revenue generation, rather than shifting profits off to the private sector.

Provide enhanced technical assistance for commercial and multi-family:

- City should revisit recycling space allocation to ensure adequate space for recycling.

- CRO enforcement for Multi-Family Organics should be similar to existing enforcement of Multi-Family Recycling.
- Provide a separate listing on the City's web-site of on-site technology options as well as one for waste haulers and recyclers for the food waste generators to consider in order to meet AB 341, AB 1826 and the City's zero waste strategy.
- The City could also work with local resource recovery businesses to increase the demand for recycled or repurposed materials, through technical assistance, small business loans.
- It is important for Waste Haulers to have a common color scheme throughout San Diego for recycling and trash containers.
- The City should continue to provide waste audits to businesses. These audits should focus on eliminating waste and setting up reuse systems.

Develop and continue community partnerships:

- Partner with Balboa Park Cultural Partnership to make Balboa Park a zero waste example for the rest of the City.
- “Ssubi is Hope” is reclaiming and repurposing materials from hospitals (Veterans Affairs Hospital La Jolla and Sharp Coronado.) – I hope city is going to partner with organizations doing other waste streams in the City. Small funding opportunities etc., looking for partnerships.
- City should partner with five to 10 nonprofits that are doing good work educating the community and diverting waste, and help promote them.
- Charities need to do repair of items donated to them, avoiding their disposal in the landfill. Possibly offer repair services.
- City should partner with I Love a Clean San Diego’s hot line to provide information on the ZW actions, instead of creating another source for that purpose.
- Have you thought about private partnerships where materials and architectural elements can be resold?
- I Love a Clean San Diego (ILACSD) is interested in a partnership to assist the City of San Diego in the following areas: 1) Reuse / Repair - ILACSD houses San Diego’s most comprehensive referral resource for reuse, recycling, and repair through two online databases, WasteFreeSD.org, and RepairSD.org, with almost 20,000 inquiries each year. 2) Enhanced Education (youth & adults) to assist the City with advising residents, businesses, and youth of future policies & incentive programs. 3) Program Management / Facilitation of Programs-Business outreach & recognition programs, Public spaces recycling - Adoption program, University / College outreach campaigns - Move out programs, Zero Waste Schools, and public awareness campaigns.

- Feeding America San Diego (FASD) is committed to building a hunger-free and healthy San Diego through innovative programs and collaborative partnerships. Since our founding in 2007, FASD has worked to ensure food does not go to waste, rescuing nearly one million pounds of food through our Food Rescue program each month. In total, partnerships with local farmers, grocery stores and manufacturers have allowed us to save over 30 million pounds of perishable goods since the program began. In addition, FASD is proud to partner with the greenery, utilizing volunteer efforts to sort unsafe product into food waste bins, recycle bins and landfill waste bins.

Blue Bin program for single-family households:

Program Design:

- The City should look at split vehicles that collect commodities separately.
- Blue bin program should be weekly.
- The City should consider renting carts.
- Consider converting trucks to electric.
- Do not charge for a blue bin. If you do, it will provide a greater incentive for people to put recyclables in the trash bin.
- City should subsidize the cost of collection containers for low income residents serviced by City forces.

Education and Enforcement

- Partner with the water department so that when residents ask for water services, they can be asked if they have a black bin and a blue bin. High turnover in my neighborhood results in many residents not knowing if they have recycling. Have PUD put info in bills. Should be electronically at the bottom of water bills.
- Recommend a psychologist be hired to help create behavior change.
- City should have equal penalties and enforcement for single family residents and businesses.
- Where are the diversion requirements on single family residents? They aren't paying so there is not an incentive to recycle. There should be more enforcement and monetary fines.
- More resources are needed for education and outreach/enforcement.
- Use community volunteers to help with education.
- Encourage residents to only put out blue cart when it is full to improve collection efficiency.
- We need to show single family residents how much money they are throwing away in their black cans.
- We do not see enough public service announcements or ad campaigns encouraging people to recycle. City should be doing more in this area.

- Scavenging is a problem. The Department should be more aggressive in addressing this problem.
- How do you see code enforcement helping with education? How do we make it cost effective?
- Use ILACSD and Urban Corps for monitoring trash bins in the city (residential cart checks and educate residents). Utilize non-profit sector more frequently.
- To make Zero Waste a realistic possibility we will have to tap into each and every avenue to engage the community. The stakeholder meetings are great but only tap into a homogenous, subset of Zero Waste supporters. We need to employ webinars, social media, news media, community planning groups so we can get inputs from a diverse group of people and know the pulse of the population on the issues we are about to tackle. Furthermore, the backbone of the ZW plan needs to be education and outreach.
- A 10-fold increase in enforcement staff will pay for itself in increased revenues from fines, with the added benefit of increased education of the public and private sectors around responsible resource recovery actions. Residents and commercial establishments will begin to understand the need for proper resource separation through the increase in code violations notices.
- It is important to recognize outreach education and the efforts of code officers as separate pieces of the solution in aiming towards Zero Waste. It is entirely different to teach people the rules in a less-then defensive situation than that created by Code Officers threatening to fine and by posting a list of the rules on a bin with incorrect contents! In the neutrality of an educational environment, people are generally appreciative of the information, and are most likely to change their behavior in positive ways.
- If Environmental Services and the City are not able to or are not willing to enforce the current recycling laws and the prohibition on scavenging in blue bins, is there justification to enact additional laws? I am not suggesting overzealous enforcement efforts like the parking meter readers downtown. Educate, then enforce.
- An Oak Park resident commented that there needs to be education programs for these people in languages other than English and Spanish.

Study exclusive districted collection system:

- Why is the City not doing this right away – why the delay to study it?
- Give notice to the waste haulers immediately that the City is considering restricted franchise districts rather than giving them an additional 18+ months to complete a study on top of the five years they will be given to comply with the new franchise districts, if implemented.

- The San Diego County Disposal Association supports continuation of the current Non-Exclusive Franchise System and continuation of the current open market disposal option.

Additional Comments/ Feedback:

- ESD should continue to send staff to other high performing Zero Waste cities to study and evaluate best practices and programs.
- Will there be a provision to allow businesses or residences to get variances from the standard programs if their actions achieve the greater good? We need room for pilot programs and alternate approaches if we are to look at this globally.
- Zero Waste landscaping and yard care should be supported, as well as use of native plants and xeriscaping as part of a Master Gardeners and Master Composters program.
- Allow nearby businesses to share containers for landfill waste, recycling, and composting. Having small businesses share their waste bins would reduce the cost to the businesses and consolidate collections.

Zero Waste Plan for the City of San Diego

COMMITTEE ON THE ENVIRONMENT

June 17, 2015





Zero Waste

“Zero Waste is a principle that calls for handling discarded materials as commodities for reuse rather than for disposal, and conserving those commodities through waste prevention, recycling, composting and other technologies”.

- 67% current diversion rate

Zero Waste Plan:

- Divert 75% waste by 2020
- Divert 90% waste by 2035
- Reach Zero Waste by 2040





Background

- San Diego does not charge and unable to charge
- Unable to recover cost of services
- Lose the ability to promote conservation by not charging “consumption based” rates

- Top 25 Cities: \$12-\$100 / month
- Local Cities: \$17-\$26 / month





State Incentives, Mandates & Goals

1986

- AB 2020: Bottle Bill

1989

- AB 939: Integrated Waste Management Act

2011

- AB 341: Solid Waste Diversion

2015

- AB 1826: Organics Recycling





Current Diversion is 67%

- Waste Generated 4,150,000
- Tons disposed 1,370,000
- Tons diverted 2,780,000

Additional Diversion

- 75% 332,000 tons
- 90% 622,500 tons
- Zero Waste





Major Challenges to Achieve Expanded Diversion

- Infrastructure
 - Composting
 - Anaerobic Digestion
 - Material Recovery Facilities
- Reduced waste related fees due to additional recycling
- Difficult to recycle materials



75% Recommendations for Future Action

RECOMMENDATIONS	Tons	Impact
Divert Fibrous Yard Trimmings	18,000	(\$234,000)
AB 1826 Organic Recycling	120,000	(\$1,779,000)
Franchise Haulers 50% min	93,500	(\$1,386,000)
Resource Recovery Center	80,000	(\$2,800,000) *
City Recycling Ordinance Revisions	13,000	(\$193,000)
C&D Ordinance to 65%	2,000	minimal
City Facilities 50% min	1,500	(\$22,000)
Education, Outreach, Enforcement	4,000	(\$1,586,000) **
Total	332,000	(\$8,000,000)

*operating costs covered by tip fees

** includes \$1.4 million for new staff and services



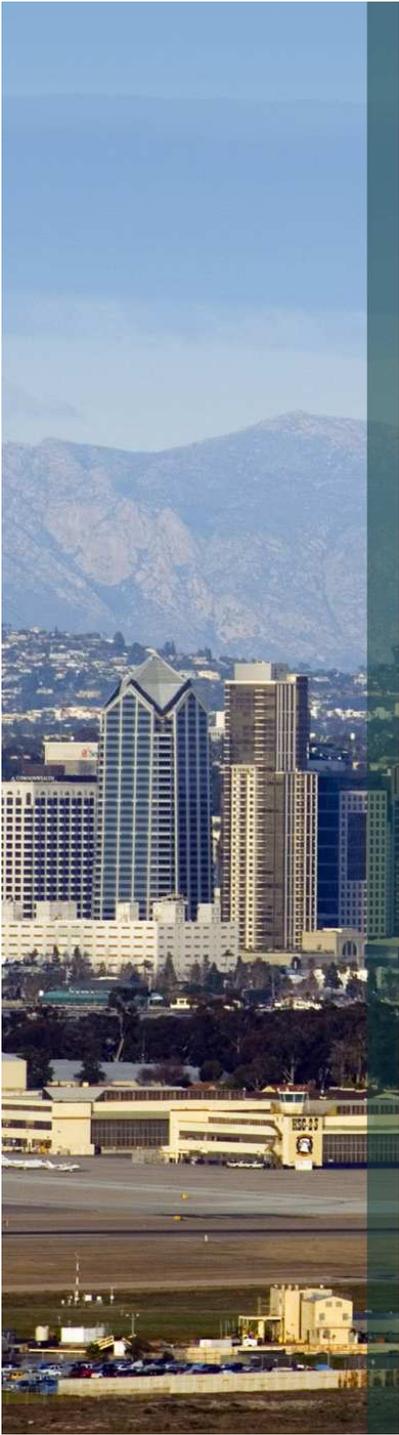
Proposed Funding for 75%

PROPOSED POTENTIAL FUNDING SOURCES FOR 75%	Disposal Fund	Recycling Fund	General Fund
Adjust Post Closure to Pledge of Revenue	\$1,000,000		
Closure of Miramar Landfill on Sundays	\$500,000		
Increase tipping fee for disposal at Resource Recovery Center	tbd		
Franchise Fees on additional waste (All Tons)			\$1,700,000
AB 939 Fees on additional waste (All Tons)		\$1,300,000	
Increase AB 939 Fee by \$2/ton		\$2,300,000	(\$700,000)
Increase Franchise Fee \$1/ton			\$700,000
Increase tipping fee for food scraps to approx. \$50/ton to expand capacity with aerated static piles	\$1,000,000		
Eliminate exemption for self-hauled residential greens	\$286,000		
Sub-totals	\$2,786,000	\$3,600,000	\$1,700,000

Total for All Funds

\$8,086,000





Possible Future Strategies Beyond 75% 90% Diversion = 622,500 Tons by 2035

ZERO WASTE RECOMMENDATIONS:

- Build/Expand Infrastructure
 - Mixed Recycling MRF
 - Aerated Composting System
 - Anaerobic Digestion Facility
 - Resource Recovery Center
 - Joint Use Military Center
- Increase C&D Ordinance beyond 65%
- Franchise Haulers beyond 50%
- City Facilities beyond 50%
- Bi-weekly automated greens
- Weekly automated greens/recycling
- Education, Outreach, Enforcement
- Legislation, Extended Producer Responsibility
- Partnerships w/ nonprofits





Alternative Financial Options for Diversion

POSSIBLE FUNDING ALTERNATIVES:

- Waste Delivery Agreements
- Flow Control
- Exclusive Franchise Agreements
- People's Ordinance
- Regulate C&D self-haulers
- Assess Fees on recycling containers





Next Steps

- Seek City Council approval of the Zero Waste Plan
- Staff to bring specific components of the Zero Waste Plan forward to City Council for approval