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

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Attachment: Zero Waste Plan