

DATE ISSUED: April 21, 2004

REPORT NO. 04-083

ATTENTION: Natural Resources and Culture Committee
Agenda of April 28, 2004

SUBJECT: Collection Services Re-Routing/Greenery Expansion Project

SUMMARY

The Collection Services Division of the Environmental Services Department is planning a re-routing/greenery expansion project to optimize collection efficiency and expand greenery collection to help comply with the State's AB 939 diversion mandate. The project will re-route all collection routes to reduce miles traveled and concentrate equipment and crews in a single area, or Zone, of the City to make more effective use of resources. The project requires changes in the day of collection for approximately 68% of residents. Greenery expansion will be facilitated by changing the frequency of collection for all residents to bi-weekly, alternating with curbside recycling collection in most instances. The project is projected to result in general fund savings in Fiscal Year 2005 expenditures of \$500,000 to \$600,000, and annually recurring savings of up to \$1,000,000 beginning in Fiscal Year 2006.

BACKGROUND

On June 18, 2001, the new Environmental Services Operations Station was opened at 8353 Miramar Place. This allowed for the consolidation of all City residential solid waste and recycling collection operations at a single location near the Miramar Landfill. Collection had been operated from four (4) other City locations, three (3) of which are located more distant from the landfill. This consolidation reduced total fleet miles traveled because the last trip of the day, from the landfill (or the recycling center) to the station, is shorter, on average, than had been the case. To optimize this improvement, and further reduce miles traveled, the department initiated a project to re-map or re-route and adjust all City collection routes, to re-balance workload by day of week, and to concentrate each day's collection activity in a single area or zone of the City. This will result in a change in day of collection for approximately 68% of City residents.

In addition, the department has designed a pilot program for expansion of Greenery (yard-waste) collection routes citywide by converting existing routes from weekly to bi-

weekly collection, alternating or coinciding with the bi-weekly Curbside Recycling Collection, utilizing resources freed by the re-routing improvements. As savings of equipment and crews occurs, Greenery collection will be expanded citywide within existing resources.

DISCUSSION

The project consists of three parts, Technical Route Planning, Public Information and Operational Implementation. The Technical Route Planning includes the actual re-mapping and testing of routes, including the Greenery expansion pilot. The Public Information effort includes informing the public of changes in their collection schedules (day of collection and biweekly greenery collection schedule) and service level changes due to the Greenery collection expansion. Day of collection changes are expected to affect about 68% of residences serviced by the city. Operational Implementation includes internal activities to accomplish the re-routing including development of new route sets and sections, assignment of drivers and Area Collection Supervisors to new route sets and sections.

Technical Route Planning The Technical Route Planning includes the evaluation, planning, development and testing of new route maps that will result in more efficient collection of municipal waste and recycling commodities. Using computer modeling, Geographic Information System (GIS) data bases and a Global Positioning Satellite (GPS) system, the project has redesigned routes to concentrate daily collection activities in a single Zone on each day of the five-day workweek. All of the department's equipment and crews will be dispatched to work in the same area of the City (Zone) on Mondays, then in another Zone on Tuesdays, and so forth. The current deployment (routing) scheme places collection equipment and crews in at least four (4) different areas of the City on each collection day. In the new scheme, each of the five Zones will be designed to require approximately the same number of collection vehicles and crews needed each day, resulting in an improved balance of resources from day-to-day. This balance will optimize the number of packer trucks and crews (labor hours) required daily as well as improve the spare ratio (the number of trucks needed above and beyond the number of scheduled route trucks). The new routing will result in fewer miles traveled by the fleet over-all, and greater logistical support in the event of breakdowns, or other disruptions.

In addition to implementation of the Zone Collection System, the department will employ an area management concept. Each collection Zone will be subdivided into 10 equal collection areas. Area management means that all of the collection streams within an area (refuse, recycling and greenery) will be managed by one Area Collection Supervisor rather than having separate Area Collection Supervisors for each stream. Customer service will be improved because residents will have one route supervisor for all their residential collection needs. Each Area Collection Supervisor will have responsibility for the same Zone areas each week and each route driver will normally be assigned to collect the same set of routes each week.

Design of collection Zones, collection areas, route-sets and individual routes will standardize workloads resulting in route-sets that represent more even distribution of

work among collection crews. This will contribute to the department's ability to maintain more balanced workloads each day of the week. Other design benefits include reduced miles, fuel savings, reduced greenhouse gas and other pollutant emissions, improved customer service coverage for missed stops, and improved use of limited "road call" repair capability. The design also accommodates population growth because it utilizes a computer data base which easily allows for route and area adjustments.

High demand exists for expansion of residential greenery collection in neighborhoods throughout the city. The department examined the current weekly collection system and plans to implement a change to biweekly collection, alternating with curbside recycling, to make more effective use of equipment and crews. Currently, greenery service is provided to just 150,000 households citywide with approximately 122,000 receiving weekly collection service and the remaining households receiving biweekly collection.

To assist in achieving the State AB 939 diversion mandate of 50%, a greenery expansion plan has been developed on a biweekly schedule using resources from re-routing and conversion of existing weekly service to biweekly. This conversion will take place during the overall citywide re-routing project. Based on projected resource savings and equipment availability, specific areas of the city, where it is cost effective to do so, will be targeted for expansion of the greenery collection service. Expansion areas will be determined based on factors including routing efficiencies and the potential to generate sufficient amounts of green waste. It is expected that approximately 30,000 additional households will receive greenery collection as a part of the initial expansion program. Additional homes will be added in subsequent expansions as it is determined to be feasible. Greenery collection service will continue to operate as a manual collection system and residents will be asked to provide their own City-approved containers in order to participate in the program.

Public Information Public information and education are critical to the success of this project. Affected residents will be informed of changes in days of collection or service in a timely manner through community presentations, direct mail and media outreach. ESD staff will provide presentations to Community Groups in all Council Districts. Three weeks before implementation, impacted residents will receive letters and collection calendars indicating new collection day, collection weeks through the year and services. Press releases will be distributed to media. One week prior to implementation, residents will receive a reminder postcard. A press conference will kick off the first day of the implementation. Residents will have access to their collection day and services by contacting ESD's Customer Service or visiting the department's Web site. The Web site will include information on affected communities, and an interactive Collection Day Identifier for residents to enter their street address and learn their old and new days of collection.

Operational Implementation The department will implement the re-routing project during the week of June 7, 2004. Existing sections for each of our 206 sanitation drivers will be reassigned to the new collection routes. Because of the routing changes, locations of daily route assignments will change for all drivers. The department has worked with the division's Labor Management Advisory Committee, which includes representatives from the work force and AFSCME Local 127, on processes for facilitating these changes

in daily route assignments. A bid process will be used by drivers to select desired route sets based primarily upon their seniority with the City within the Sanitation Driver classification. Formal impact bargaining has also been commenced with AFSCME Local 127 and MEA. Division employees have been kept informed of the process through periodic briefings, newsletter updates, and scheduled orientation meetings laying out the reassignment process. As final route planning is completed, new master route map books will be produced, computer data bases updated, and section rosters updated prior to the implementation date.

CONCLUSION

The residential waste and recycling collection services for the City of San Diego can be optimized to take full advantage of the new single operations center at Miramar Place. Current collection routes have been remapped using a Zone collection concept that, when implemented, will concentrate each day's collection activities in a single part of the City. This change will result in significant improvements including improved customer service, reduced motive equipment needs, ongoing cost-avoidance savings and reduced fleet miles, less fuel consumption and therefore less greenhouse gas and other emissions. Anticipated cost-avoidance savings in the general fund of \$500,000 to \$600,000 are projected during FY 2005 with up to \$1.0 million per year cost avoidance beginning during fiscal 2006. Up to 68% of residents will be impacted by changes in their days of collection which will be required by the re-routing improvements. Expansion of greenery collection will result in increased diversion of yard waste from the Miramar Landfill, contributing to extension of its useful life, and helping to meet AB 939 diversion mandates. Approximately 30,000 residences will receive this service expansion. All existing weekly service scheduled will be changed to bi-weekly to accommodate the expansion. The department plans to deliver these improvements for the residents of San Diego with minimal disruption, completing the re-routing during the two-week period beginning on June 7, 2004.

Respectfully submitted,

Elmer L. Heap, Jr.
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EWELL/ LOVELAND / CEW

Note: The attachments are not available in electronic format. A copy is available for review in the Office of the City Clerk.

- Attachment(s):
1. Refuse Collection Areas by Day and Council District before and after Re-Routing.
 2. Greenery Collection, Affected/Expanded Services Areas