

Administrative Report

N.2., File # 21-2000 Meeting Date: 2/2/2021

To: MAYOR AND CITY COUNCIL

From: TED SEMAAN, PUBLIC WORKS DIRECTOR

TITLE

DISCUSSION AND POSSIBLE ACTION REGARDING THE RESIDENTIAL TWO WASTE STREAM PILOT PROGRAM THAT WAS CONDUCTED FROM MARCH 2020 TO NOVEMBER 2020.

EXECUTIVE SUMMARY

The City Council approved the two-waste stream pilot program for the Thursday residential route on February 2, 2020. The pilot program began March 5, 2020 and concluded on November 5, 2020. The Thursday residential route was selected by Athens Services and staff due to having the highest number of one way and narrow streets that potentially would be impacted the greatest or show the greatest benefit of a two-barrel system. It initially was scheduled to run for six months, however due to Covid-19 the pilot program was extended to eight months in order to capture more accurate data; the pilot program operated uninterrupted during the duration of the pilot.

The goal of the pilot program was to analyze whether moving to a two-waste stream system would be beneficial for the City in terms of reducing traffic, reducing wear and tear on City streets, and reducing the City's carbon footprint. During the pilot program, data was collected on waste tonnage, hours spent servicing, miles driven, and number of trips taken.

While the number of trips in and out of the City decreased by two total trips, every other pertinent element increased. For instance, the cumulative amount of time servicing the route increased by approximately ten hours, the cumulative number of miles driven increased by 245 miles, and the total tonnage of all combined material increased by 19 tons. While the reason for the total tonnage increase is possibly due to more residents being at home due to Covid-19 restrictions, the increase in hours spent servicing and the total miles driven are directly correlated with switching from a three-waste stream system to a two-waste stream system.

The increases in service time and miles traveled lead to operational and disposal fee increases, thus the change to a two-barrel system would result in fee increases to all residential households. The current single-family rate of \$20.74 would see an increase of either \$4.25 or \$8.80, depending on agreed upon diversion rates. Given the significant monthly fee increase per residential household, potential decrease in diversion, along with the lack of significant measurable benefits with regards to traffic reduction or environmental benefits, staff would not recommend switching to a two-barrel system at this time.

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BACKGROUND

On June 18, 2019 the City Council approved the first amendment with Athens Services, which extended the agreement for an additional nine years plus a twenty-four-month City option to extend. One of the elements of the amendment is the City option to pilot a two-waste stream program on a residential route. This was driven by the Mayor and City Council to assess whether a two-waste stream program would alleviate traffic congestion, noise pollution, improve road safety, and lessen road impact to City streets. The City Council also commented on concentrating the pilot on the narrow streets in the City, which happen to be concentrated in North Redondo Beach.

In August 2019 City Staff met with Athens Services to determine the parameters of the pilot program and determine the logistics and details of the program. After several meetings the City and Athens Services determined the pilot residential route, the outreach plan, and the potential operational outlook. The pilot program included the entire Thursday residential route. This specific route was chosen due to the high number of one way and narrow streets that would potentially be impacted the greatest. The route included 3,794 separate addresses that were included in the pilot program.

Staff and Athens Services presented the pilot program plan to the Public Works Commission on October 28, 2019 and received positive feedback to move forward with the pilot. During the month of January, Athens Services and staff presented the pilot program at the community meetings of District 3, District 4 and District 5 council members. The route included all of District 4 and parts of District 3 and 5. The feedback from the community was mostly positive and supportive of the pilot.

On February 4, 2020 the City Council approved the pilot program plan. Before the pilot was rolled out officially, Athens Services underwent an outreach campaign to the residents within the pilot, which included call blasts, email blasts, bill inserts, mailers, and pilot program flyers. All elements of the program were described in detail in order to least impact the residents.

In essence the two-stream pilot program required two trash trucks instead of three when servicing the trash barrels. The green/organics barrel continued to be serviced by one truck, while the grey/trash and blue/recycling barrels were serviced together by one trash truck. Athens Services utilized the Materials Recovery Facilities (MRF) to sort mixed solid waste, which allowed the recovery of recyclables during the process. Therefore, even though the grey and blue barrel material were comingled at the point of service, the materials were sorted and recyclables recovered during the MRF process. Any disposal residual was transported to the Southeast Resource Recovery Facility (SERRF) to capture higher diversion.

The current three waste stream system operates by having the residential grey bin taken to Southeast Resource Recovery Facility (SERRF) in Long Beach, CA for transformation to energy, while the blue bin is taken to Potential Industries in Wilmington, CA. During the pilot program, the grey and blue barrel materials were taken and processed at Athens' MRF in the City of Industry with the residual disposal processed at SERRF. The green barrel material continued to be sent to American Organics in Victorville, CA.

As illustrated in the tables below, while the number of trips in and out of the City decreased by two total trips, every other pertinent element saw an increase. For instance, the cumulative amount of time servicing the route increased by approximately ten hours, the cumulative number of miles driven increased by 245 miles, and the total tonnage of all combined material increased by 19 tons. While the reason for the total tonnage increase is possibly due to more residents being at home due to

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Covid-19 restrictions, the increase in hours spent servicing and the total miles driven are directly correlated with switching from a three waste stream system to a two waste stream system.

Current 3 Barrel System									
Routes	Barrel Count	Tons	Hrs	Miles	Trips				
320 Trash & Green	1373	10.5	11:21	86	2				
321 Trash & Recycle	1373	11.3	11:48	93	2				
322 Trash & Green	1534	10.6	11:07	87	2				
323 Trash & Recycle	1388	13.0	11:52	80	2				
324 Trash & Recycle	2110	13.0	10:58	86	2				
325 Trash & Recycle	1705	14.3	12:00	91	2				
326 Recycle & Green	2124	4.8	10:30	94	2				
327 Recycle & Green	2214	7.8	11:33	98	2				
Total	13821	85	91:09	715	16				

2 Barrel System									
Routes	Barrel Count	Tons	Hrs	Miles	Trips				
320 Trash	1445	11.8	13:00	149	2				
321 Trash	1345	12.5	12:30	79	1				
322 Trash	1721	13.6	13:00	146	2				
323 Trash	1501	13.6	12:45	147	2				
324 Trash	1841	16.9	13:00	147	2				
325 Trash	2205	16.9	13:00	152	2				
326 Green	1755	8.2	12:15	80	1				
327 Green	2008	10.0	12:00	60	2				
Total	13821	104	101:30	960	14				

^{*}Current 3 Barrel System data from March 2019 to November 2019

In a two waste stream system, the trash and recyclables are serviced by the same truck and transferred to the Materials Recovery Facility (MRF) in the City of Industry and any residual waste is transferred to Southeast Resource Recovery Facility (SERRF) in Long Beach, CA. This accounts for the increase in miles traveled as well as the increase in hours servicing the material. For comparison, the current three barrel system includes shorter trips to SERRF for trash disposal along with Potential Industries in Wilmington, CA for recyclables.

The increases in service time and miles traveled lead to operational and disposal fee increases, thus the change to a two barrel system would result in fee increases to all residential households. If the City Council wishes to pursue an amendment to the solid waste agreement to incorporate a two barrel system, Athens Services has provided two options to consider.

Option 1:

- Transport trash and recyclables to the MRF and the residual to SERRF
- Diversion would remain at 75%
- Monthly fee increase per household: \$8.80 (42% increase)

Option 2:

- Transport trash and recyclables to the MRF and the residual to the landfill
- Diversion would decrease to 52%
- Monthly fee increase per household: \$4.25 (20% increase)

Given the significant monthly fee increase per residential household, potential decrease in diversion, along with the lack of significant measurable benefits with regards to traffic reduction or environmental benefits, staff would not recommend switching to a two-barrel system at this time. Furthermore, as a point of reference, the majority of the South Bay cities operate a three-barrel

^{*2} Barrel System data from March 2020 to November 2020

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system, with the exception of the City of Palos Verdes Estates which has operated a two barrel system for some time.

COORDINATION

The report was coordinated between the Public Works Department and Athens Services.

FISCAL IMPACT

There is no fiscal impact associated with this item at this time.

APPROVED BY:

Joe Hoefgen, City Manager

ATTACHMENTS

PowerPoint