



DATE: March 13, 2017

TO: Council Sustainability Committee

FROM: Director of Utilities and Environmental Services

SUBJECT Sustainable City Year Program: Fall 2016 Reports on Littering & Composting

RECOMMENDATION

That the Committee reviews and comments on this informational report.

SUMMARY

The Sustainable City Year Program (SCYP), a partnership between the City and California State University East Bay (CSUEB), includes four projects for the 2016/2017 academic year. The projects are Trail Planning; Art Master Plan; Outreach to Increase Composting; and Outreach to Reduce Littering. For the composting and littering projects, CSUEB will prepare a report for each project for each academic quarter. This report summarizes the composting and littering reports (Attachments II and III) from the Fall 2016 quarter

BACKGROUND

Hayward's General Plan, adopted by Council in 2014, includes the following policy regarding City partnerships with higher education institutions:

ED-4.1 – Town Gown and Communiversity Partnerships. The City shall collaborate with local colleges to develop strategic “town gown” or “communiversity” partnerships that enhance the Hayward community and economy, improve the overall educational experience of college students, and assimilate college students and graduates into the Hayward community.

On [June 28, 2016](#), Council authorized a Memorandum of Understanding with CSUEB to establish the SCYP. On [November 14, 2016](#), staff provided an update to the Committee including a summary of the October kick-off event. CSUEB now refers to the SCYP as “Pioneers for Sustainable Communities”.

DISCUSSION

In the fall of 2016, the Environmental Ethics class at CSUEB was tasked with studying the current issues and community attitudes around littering and curbside collection of organic materials. Both are issues that are difficult to address at the municipal or community level. Prevention of litter is a struggle faced by almost all communities and encouraging the collection of organics is a relatively new issue that causes confusion for many households.

Attitudes Toward Littering – Students in the Environmental Ethics class researched anti-littering campaigns including those in the Bay Area, across the nation, and some international examples. Some campaigns have documented clear results, but many do not. In addition to online research, students conducted windshield surveys and photographed litter throughout the community to gain an understanding of the locations and types of litter found in the community.

The students reviewed surveys that document people's perceptions of litterers, behaviors of litterers, and issues with convenience and disposal products. The primary disconnect discovered by the students was that most outreach campaigns focus on clean-ups and not on prevention of litter. Another problem noted in the report was that the City of Hayward's online program, "Access Hayward", is difficult and confusing because there are too many categories for the user to choose from. Finally, the report notes that while the Water Board focuses on litter that enters the Bay, it is also important that we address litter that affects the community, but does not necessarily reach the storm drain system.

The report mentions that the City and County of San Francisco is not covered by the Municipal Regional Permit (MRP) for storm water. This is due to the fact that San Francisco has a combined storm water and wastewater treatment system and is therefore regulated differently by the Water Board.

The report concludes that outreach to school-aged children is key to influencing behavior. The report mentions the Broken Windows Theory, which is the idea that people are more likely to litter in an area where there is already litter on the ground. However, the authors cited a study that found that outreach is more effective at preventing litter than an area already being clean.

Attitudes Toward Organic Waste Disposal and Composting – Environmental Ethics students also studied composting, or more specifically, how to encourage residents to participate in curbside collection of organic materials. The students evaluated online resources and commented on the City's website. One suggestion made is to provide information about why people should keep organics out of the landfill. Another suggestion is to prominently display information about the availability of countertop kitchen pails/bins. They noted that when reviewing information online, some websites focus on backyard composting while others, such as Waste Management's are more focused on curbside collection for commercial composting facilities.

The students evaluated possible reasons for people not properly sorting their organics. Their conclusion is that it is not laziness, but lack of knowledge. They note that there doesn't seem to be enough easily accessible information about why residents should be composting. For some people, it may be enough to know that it is "sustainable". For others, it may make a difference to know that composting reduces methane emissions and reduces the need for chemical fertilizers. Students also spent two mornings last fall checking green carts to see if people were putting food scraps in the carts along with yard trimmings. They found that only about 25% of households were disposing food scraps in the green cart.

Ideas for improving participating in curbside collection of organics include:

- Simply having a countertop bin may help reinforce the desired behavior.
- Positive reinforcement such as giving someone a discount on their Waste Management bill if they reduce their waste by a certain percentage.
- Or, instead of discounting Waste Management bills for residents that do compost, the City can create a fee for those that do not.
- Prizes or rewards to those who do good sorting.
- Marketing materials that tell people why they should be composting.
- A logo for organics similar to the chasing arrows used for recycling would be helpful for marketing.
- Reduce the size of available landfill curbside bins (as was done in Sonoma county).
- Attach sorting rubrics or charts to the curbside bins. (Stickers with graphics were added to carts in 2015.)

The report also emphasizes the importance of early education. The authors noted that children's habits develop during the school-aged years; between ages five and twelve. The authors go on to state,

"All of this not only demonstrates the importance of coordination between the City, its schools, and its residents, but it also shows that it is beneficial for young children to be practicing proper sorting behaviors with a three-stream system, even if the schools are unable to make the change to a three-stream system of waste disposal, and are only capable or willing to maintain a single-stream system. There certainly would be financial benefits for the City of Hayward and the Hayward Unified School District (HUSD) if HUSD were to implement a three-stream system, as much more organic waste would be diverted from landfills, contributing to a higher diversion rate, citywide; lowering the chances of Hayward being fined for not making their mandated waste diversion percentages. HUSD would save money from diverting their waste as well, as an increase in food waste has been found in school that are offering 'healthier' options for their students."

HUSD must comply with the requirements of AB 341 and AB 1826, California's mandatory commercial recycling and organics laws. Upon direction from the Committee, staff can make a renewed effort to reach out to HUSD, Republic (HUSD's solid waste hauler), and StopWaste to assist with compliance. StopWaste does outreach to schools, but due to limited resources, they only provide services to those that are "Priority Districts", meaning those that have committed to providing access to recycling and organics bins, training staff to support school recycling

programs, and reducing the amount of readily recyclable and compostable materials in landfill trash to less than 10% by 2020. As of yet, HUSD is not a Priority District and therefore, does not benefit from StopWaste's outreach services.

FISCAL IMPACT

The cost of the 2016/2017 SCYP program is \$150,000, with the City and the University each paying \$75,000. The program cost is based on ten courses, so the City's cost is \$7,500 per course. In total, the composting and littering projects will have five courses, with a cost of \$37,500, which will be paid from the Recycling and Storm water Funds. In addition, Environmental Services staff is spending time working with students and faculty from the University. The US Environmental Protection Agency has also contributed by providing funding to the University of Oregon to provide technical assistance to universities in California to assist with adoption of Oregon's program model.

SUSTAINABILITY FEATURES

The Sustainable City Year Program supports several General Plan policies, including those that strive to reduce greenhouse gas emissions. In addition, the program has the following sustainability features or benefits:

- A primary goal of the composting project will be to reduce the volume of organic material sent to landfills and to improve the City's overall solid waste diversion rate.
- Reducing litter will not only improve the community's appearance, but will also help prevent trash from entering the storm drain system and creeks, which will help the City meet its trash reduction goals mandated by the Regional Water Quality Control Board.

NEXT STEPS

The work of the fall quarter Environmental Ethics class is being continued through the winter and spring quarters by students in the following courses:

- COMM 4107: Relational Communication in Organizations - Winter 2017
- COMM 3004: Quantitative Communication Research Methods - Winter 2017
- COMM 4107: Relational Communication in Organizations - Spring 2017
- HDEV 3203: Applying Theory and Methods of Human Development - Spring 2017

Deliverables by these courses will include:

- Press kits on composting and littering, which may include a game that can be used at public events.
- Data on composting and littering behavior.
- Implementation of suggested composting campaign.
- Written reports.

Finally, an end-of-year celebration for the Sustainable City Year Program is scheduled for May 18, 2017, from 2:00 to 4:00 p.m. at Hayward City Hall.

Prepared by: Erik Pearson, Environmental Services Manager

Recommended by: Alex Ameri, Director of Utilities and Environmental Services

Approved by:

A handwritten signature in black ink, appearing to read 'Kelly McAadoo', is positioned above a horizontal line.

Kelly McAadoo, City Manager