

Public Outreach and Stewardship Workplan

Practice #3 Anti-Littering Outreach and Stewardship Campaign

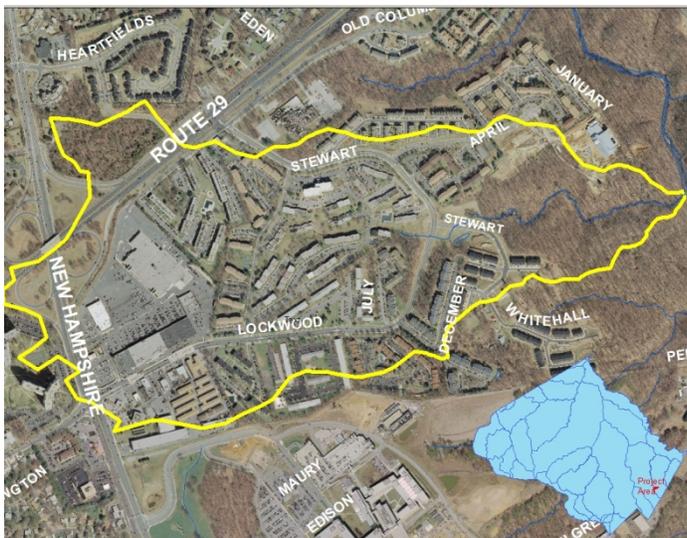
Project- White Oak Neighborhood Anti-Littering Pilot

Project Overview: Montgomery County along with Prince George's County and the District of Columbia must meet regulatory requirements to eliminate litter getting into the Anacostia River and its tributaries. Through the White Oak Community Pilot, the County's goal is to effectively stop litter at the source by changing people's behavior to never litter and always be sure trash ends up in a proper receptacle.

Background: The Environmental Protection Agency (EPA) regulates everything that goes through storm drains under the **National Pollutant Discharge Elimination System (NPDES) Municipal Storm Sewer System (MS4) Permit Program**. The MS4 Permit Program is intended to reduce and eliminate pollution from our storm drain systems. The County's MS4 Permit <http://montgomerycountymd.gov/DEP/water/ms4.html> requires adding stormwater management, achieving water quality goals, and engaging the public in meeting these requirements.

The Public Outreach and Stewardship Workplan (POSWP) <http://montgomerycountymd.gov/DEP/water/county-implementation-strategy.html> for the MS4 Permit laid out outreach priorities, delivery techniques, program start up costs and measurement tools to achieve social behavior change and improve water quality in the County.

Map of project area:



Project: White Oak Neighborhood Anti-Littering Pilot

Watershed: Anacostia

Drainage Area: 223 acres

Impervious Area (watershed): 86.3 acres (38.7%)

Location: White Oak Neighborhood in Lower Paint Branch

Target Audience: Residents, workers, and visitors in the community.

Project Goal: Change littering behavior to be taboo.

Project Partners: White Oak Community Center, Transit Services, Montgomery Parks

Total Project Budget:

Contract Funding: (\$110,000 in FY12 (Anacostia Trash Monitoring)

Internal Funding (FY12-13): \$50,000 (Regional Anti-litter Campaign)

Other Funding: In-Kind, from Partners, etc

Project Timeframe: January 2012-ongoing

Volunteers utilized & Hours of donated service: 150 volunteer hours

Target Audience: Residents in this specific community, businesses and their employees, property managers, those who use the bus shelters; visitors who may not understand the problem with littering.

Process: In 2011, the County identified the White Oak area as a "hot spot" where a high amount of trash was consistently found in the Stewart-April Lane Tributary. During 2013, DEP decided to focus on this 'hot spot' for a pilot project to try a variety of methods of encouraging litter reduction in order to learn which work to reduce litter and which are not effective and not worth repeating.

Assessment and Awareness

The pilot began in January 2013 when County staff performed a visual assessment of the local properties and general area to help determine possible sources of litter. Some apartment complex and shopping center businesses dumpsters were found overflowing or had trash on the ground surrounding them.

In spring of 2013, we started an outreach and education effort by using the regional anti-litter advertising campaign on bus shelters in the community and buses whose routes pass through the target neighborhood. There are a large number of bus shelters in the community, and many visitors who are



Anti-litter ad on a Ride-on bus

not residents use the bus system for transportation.

To increase awareness and to actively engage the community, an Earth Day 2013 clean up event was organized through the Parks Department and the Anacostia Watershed Society. The local watershed group Eyes of Paint Branch and a community leader helped to organize and encourage attendance at this event. The County is also participating in educational events put on by the community center and other local organizations to reach people in the area and talk about ways to reduce litter.

Monitoring Litter

To document the type and extent of litter problems, the Metropolitan Washington Council of Governments (COG), under contract to the County, conducts field surveys in the Anacostia watershed including the Stewart-April Lane tributary in White Oak. The White Oak site is one of 5 stream sites in the Anacostia for which an additional level of monitoring is done to better understand how much of each type of trash is found and accumulates over time in the stream. It is also consistently the site with the most litter of any of the sites monitored. COG is also performing further monitoring within this area to better assess why this subwatershed has the highest levels of trash found and determine which targeted outreach programs may be the most effective at reducing the litter issue. Each month the contractors perform three additional types of observation surveys; a bus stop survey, walking survey, and storm drain inlet survey. For the bus stop survey, a count of all litter items found within a 50 foot radius of trash cans at 12 bus stop sites is performed and recorded. In addition, a walking survey is performed at 14 sections of sidewalk in areas determined by their proximity to storm drain locations. These walking surveys involve counting each individual item of litter found and recording the tallies.



Litter Items found in the White Oak storm drains

Finally, a storm drain inlet survey is conducted at all 21 storm drains located within this neighborhood. The manholes are uncovered to count all pieces of litter found in each storm drain. All of the data collected from these ongoing monitoring efforts will help to guide the types of pilot projects we should implement to achieve the greatest amount of litter reduction, as well as provide accurate results of what affect these program are or are not having on achieving our litter reduction goals.

Data/Results:

Earth Day Clean Up



All trash removed from Earth Day Cleanup 2013

One result of success was having more than 50 volunteers attend our Earth Day Cleanup in 2013 and remove 100 bags of trash and 58 tires from the outfall area in this neighborhood.

Survey of Property Managers

To better understand litter issues in the entire Anacostia watershed, surveys on litter management at apartment complexes and shopping centers were conducted in FY14 by COG. The surveys include questions on what is being done by these properties

to manage the issue now and what specific trends may be happening in the area which could be better addressed. A total of 61 multi-family and 16 commercial property managers were contacted and asked to participate in the voluntary survey of litter on their property. There was a 38% return rate for multi-family properties and a 31% return rate for commercial properties which includes 7 properties located in the White Oak area who participated.

From the multi-family property surveys, responses show that most apartment property managers recognized that a litter problem exists on their property, but many rated it as small, but manageable. The managers find that the litter problems are greatest near dumpsters and in parking lots and sidewalks. About half of the managers indicated that they actively contact residents to address the litter problem through written notices.

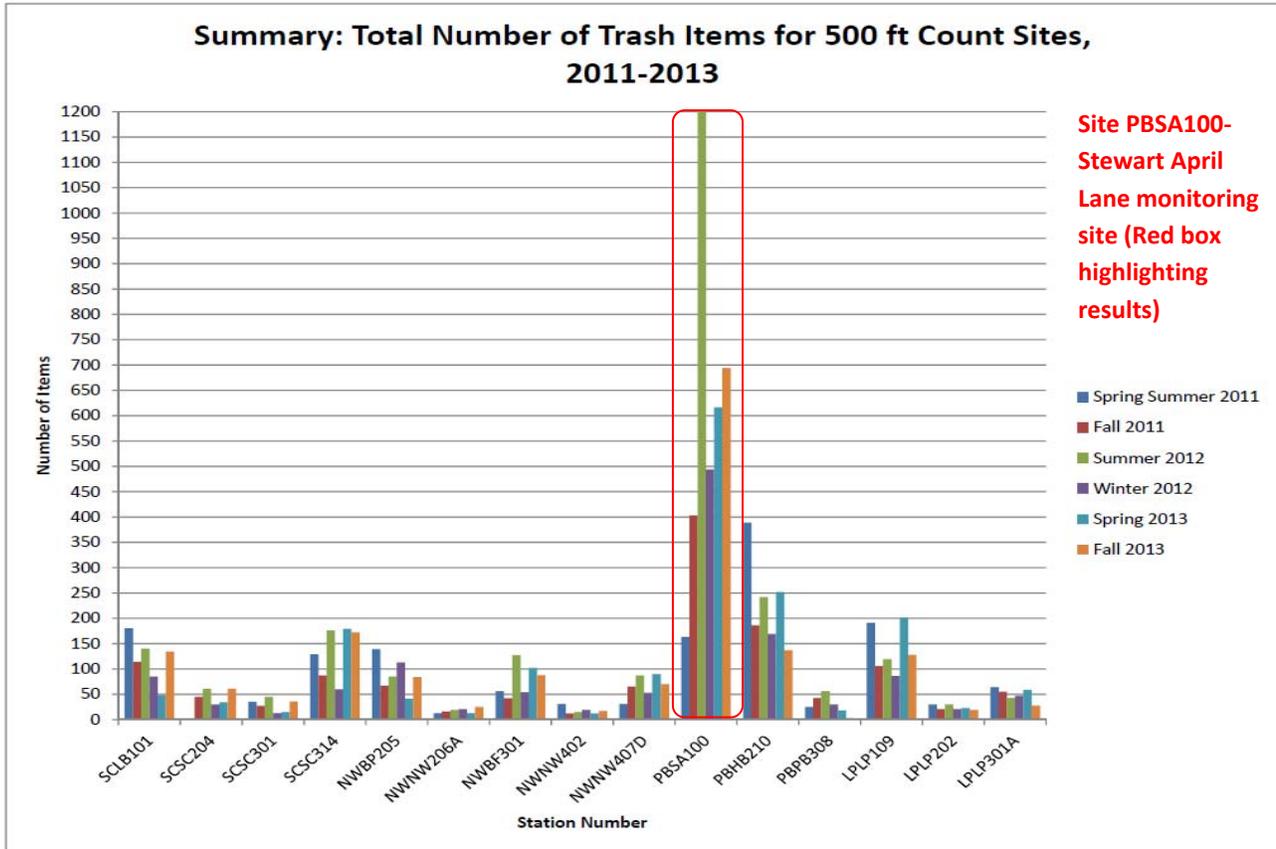
From the commercial property surveys, most commercial property managers recognize that a litter problem exists on their property and rate it either as small but manageable, or noticeable. Most managers find that the litter problems are greatest near dumpsters, street curbs, sidewalks, parking lots, and near buildings. Almost all of the managers indicated that they have not contacted their tenants about the litter problem and also have not posted signage on the property to discourage littering. Also most of the respondents indicated they do not have a problem with illegal dumping and do not have signage on the property to discourage illegal dumping.

Conclusions:

Monitoring

Ongoing stream monitoring conducted by COG confirms that the Stewart April Lane site (PBSA 100) remains a hot spot and requires continued efforts to reduce litter found in this area.

Summary of trash items from COG monitoring, 2011-2013.



Survey of Property Managers

From the multi-family survey, it seems that communicating and keeping residents informed about litter issues is important. It was also often suggested that monetary penalties is a successful approach to curb litter by residents. From the commercial survey, it seems that more communication with tenants about the litter issues and how to resolve them will be necessary. It may also be useful to encourage more commercial property managers to post signage discouraging littering and illegal dumping on their properties. We will use monitoring data from before and after recycling bins are installed to determine their effectiveness in reducing litter. We also hope to somehow measure the effectiveness of the anti-litter campaigns on creating behavior change in the community during this process.

Recommendations going forward/Future plans:

In the White Oak community, the population is very diverse, many languages are spoken, and the residents tend to be transient and move frequently. The County has developed a proposal for targeted outreach which focuses on identifying advocates within the community to work on educating residents and visitors about the litter issues and specific programs to encourage people to stop littering for the good of those who live and work there. We will continue to work with all members of the community from residents, property managers, business employees, community groups, and students to educate people about the importance of not littering and change behavior by disposing of trash properly.

For more information:

<http://montgomerycountymd.gov/DEP/water/stormwater.html>

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