



City of Pittsburg

ENGINEERING DEPARTMENT 41611

65 Civic Avenue

Pittsburg, California 94565-3814

January 30, 2014

Bruce H. Wolfe, Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

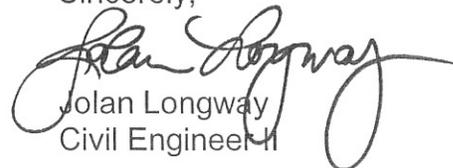
Ms. Pamela Creedon, Executive Officer
California Regional Water Quality Control Board
Central Valley Region
11020 Sun Center Drive, #200
Rancho Cordova, CA 95670-6114

Dear Mr. Wolfe and Ms. Creedon:

Enclosed is the February 2014 Long-Term Trash Load Reduction Plan for the City of Pittsburg which is required by and in accordance with Provision C.10.c in National Pollutant Discharge Elimination System (NPDES) Permit Number CAS612008 issued by the San Francisco Bay Regional Water Quality Control Board and/or by Provision C.10.c in NPDES Permit Number CA0083313 issued by the Central Valley Regional Water Quality Control Board.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,



Jolan Longway
Civil Engineer II



LONG-TERM TRASH LOAD REDUCTION PLAN



Submitted by: CITY OF PITTSBURG

FEBRUARY 1, 2014

This page intentionally left blank

Contents

1. Introduction by the Contra Costa Clean Water Program (CCCWP)	5
A. Trash Sources, Pathways, and Loadings	5
B. Background for this Plan	6
C. Framework for Long-Term Trash Management	6
D. Identifying High-Trash Areas	6
E. Trash Management Strategy	7
F. Assessing Effectiveness	7
2. City of PITTSBURG Trash Management Overview	8
A. Characteristics Affecting Trash Generation and Management	8
B. Drainage System and Water Resources Affected by Trash	9
C. Trash Problems and Priorities	9
3. CITY OF PITTSBURG Trash Management Strategy	10
A. Delineation of Trash Management Areas	11
B. Area-Specific Control Measures, Implementation Schedules, and Effectiveness Assessment	12
C. Creek and Shoreline Cleanups	12
D. Trash Reduction Policies	13
E. Public Education, Outreach, and Community Involvement	14
F. Jurisdiction-wide Progress Assessment and Continuous Improvement	16
4. Trash Management Area Plans	16
TMA-Specific Plans	16
5. References	16

Figures

1-1 Trash Sources and Transport Pathways

Tables

2-1 2010 Census Data

2-2 2005 Land Uses (ABAG)

2-3 Trash Generation Category Percentages by Land Use

3-1 Trash Generation Categories by Trash Management Area

3-2 Creek and Shoreline Hot Spot Cleanups

Attachment

Maps of the City of Pittsburg showing Trash Generation Rates and Trash Management Areas

1. INTRODUCTION BY THE CONTRA COSTA CLEAN WATER PROGRAM (CCCWP)

Contra Costa municipalities have prepared Long-Term Trash Reduction Plans (Plans) in compliance with Provision C.10.c. of the Municipal Regional Stormwater Permit¹ (MRP). Each municipal plan describes control measures and best management practices (BMPs) designed to attain a 70% trash load reduction by July 1, 2017 and a 100% reduction by July 1, 2022.

A. Trash Sources, Pathways, and Loadings

Figure 1 illustrates sources and pathways of trash that enter the region’s creeks and San Francisco Bay. Trash has multiple sources—all of which are episodic and widely dispersed.

In Figure 1, *Stormwater Conveyances* is highlighted because *only this pathway* is subject to MRP trash-reduction requirements. In reality, the other pathways are equally significant, depending on time and location. In practical terms, the pathways are intertwined. For example, on-land clean-ups reduce trash entering storm drains and also reduce wind-blown trash. When visible trash is reduced, litter and dumping from all sources tends to become less frequent and severe.

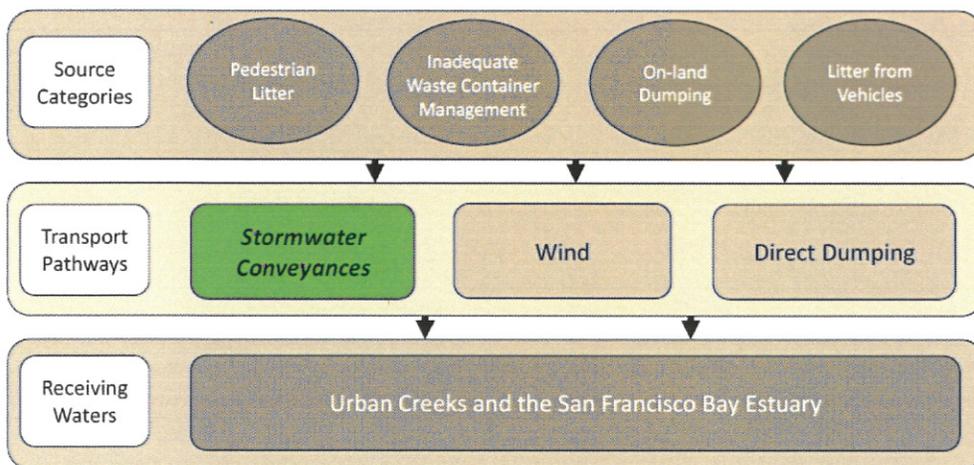


Figure 1. Trash sources and transport pathways.

Municipalities must balance their commitment to MRP compliance with their commitment to preserving and enhancing local environmental quality and quality of life for their residents. That is, municipalities seek to reduce trash on local streets and roads, and to reduce the *total* amount of trash in their creeks and on their shorelines—in addition to fulfilling the Water Board’s mandate to eliminate trash that flows through storm drains.

¹ Order R2-2009-0074, issued by the California Regional Water Quality Control Board for the San Francisco Bay Region, became effective on December 1, 2009 and applies to 76 cities, towns, counties, and flood control districts.

For these reasons, Contra Costa municipalities address trash holistically and comprehensively, integrating a variety of strategies, and uses a variety of methods to assess the success of those strategies.

B. Background for this Plan

MRP Provision C.10 requires the Permittees to reduce trash loads from their storm drains by 40% by 2014, 70% by 2017, and 100% by 2022.

Provision C.10.a.ii. required each Permittee to determine a baseline trash load and a method for tracking reductions in trash loads. Working collectively through the Bay Area Stormwater Management Agencies Association (BASMAA)—and in close collaboration with Water Board staff—the Permittees developed methods, including a calculator, for tracking loads and load reductions.

The Permittees used these methods to develop Short-Term Trash Load Reduction Plans by February 1, 2012, and are implementing those plans through July 1, 2014 to achieve the 40% reduction. Progress has been documented in the Permittees' 2012 and 2013 Annual Reports.

Following their review of the Short-Term Plans, Water Board staff requested Permittees to change the methods used to evaluate trash load reductions. Working collectively through BASMAA—and again in close collaboration with Water Board staff—the Permittees developed the framework and planning tools to be used in the Permittees Long-Term Plans.

C. Framework for Long-Term Trash Management

The following 8-step framework was developed²:

1. Identify high, medium, and low trash generation areas, based on land use and other geographic data, local knowledge, and field verification.
2. Attempt to identify sources in high and medium trash generation areas to assist in focusing control measures.
3. Prioritize areas and problems/types.
4. Identify options (tools) for dealing with prioritized areas/problems.
5. Define success/goals and measurement type.
6. Select and implement tools.
7. Evaluate success.
8. Modify as needed.

Steps 5 and 7 of this framework acknowledge fundamental challenges presented by Provision C.10—how to define and evaluate success.

D. Identifying High-Trash Areas

To implement the first step of the framework—to identify high, medium, and low trash-generation areas—the Permittees collectively, through BASMAA, developed and calibrated a predictive model of trash generation.³ Model variables are designated land use and 2010

² The framework was developed in a November 1, 2012 meeting at Water Board staff offices and was refined in subsequent meetings with Water Board staff.

³ “Generation” is understood to be the volume of trash potentially available to be transported from the urban watershed (per acre, per year) into the storm drains in the absence of any control measures and BMPs.

median household income; the model was calibrated based on trash collected in full-trash-capture devices (BASMAA, 2012a, BASMAA, 2012b).

The Permittees applied the model as follows: The model was used to generate a preliminary map designating very high, high, moderate, and low trash generation areas. Local municipal staff reviewed the preliminary map and identified areas that had incorrect designations based on local knowledge of actual land uses and of trash generation rates (CCCWP, 2013). Specific methods used to verify local trash generation rates are documented in Section 2 below and may include queries of municipal staff or members of the public, reviews of municipal operations data, viewing areas using Google Maps and Street View, application of BASMAA's On-Land Visual Trash Assessment Protocol (BASMAA, 2013), or other methods.

E. Trash Management Strategy

Municipalities delineated Trash Management Areas (TMAs) within their jurisdictions. TMA boundaries are based on land uses, drainage areas, management areas, and/or geographic considerations, and are drawn to facilitate focused and efficient efforts to reduce trash in areas with very high, high, and medium trash generation rates. The rationale for delineating TMAs in the specific municipality, an overview of the municipality's trash management approach, and a description of activities that apply throughout the municipality (including hot spot cleanups, jurisdiction-wide policies, and jurisdiction-wide public outreach) is in Section 3.

Section 4 consists of individual summary plans for each municipal TMA. Each TMA plan describes the key TMA characteristics, summarizes control measures, and describes methods for evaluating effectiveness of efforts within the TMA.

F. Assessing Effectiveness

Each TMA summary plan includes methods to evaluate effectiveness. As indicated in the framework, the primary purpose of these evaluations is to facilitate continuous improvement of control measures within the TMA. Continuous improvement requires TMA-specific interpretation of results, including consideration of factors that may have contributed to success, or lack of success, at that locale during the evaluation period. Evaluations of effectiveness and adjustments to the TMA summary plans will be included in each annual report.

A secondary purpose of the evaluation methods is to contribute evidence toward an annual general evaluation of progress toward MRP goals. Such an evaluation will be based on weight-of-evidence, using the results from TMA-level evaluations of the effectiveness of specific actions within the TMA, and of the total of TMA-level actions, during the reporting period. A jurisdiction-wide assessment of progress will be compiled by combining this TMA-level evidence with the results of hot spot cleanups, visual assessments of creeks and shorelines, and observations by local residents and cleanup participants. As additional outcome-based assessment methods are devised and pilot tested—regionally and statewide—information derived from these methods will be incorporated into annual progress assessments.

2. CITY OF PITTSBURG TRASH MANAGEMENT OVERVIEW

A. Characteristics Affecting Trash Generation and Management

Demographic data from the 2010 census is presented in Table 2-1.

Population	63,263
Under 18	19,452
18-24	4,810
25-44	18,363
45-64	15,209
65 and older	5,420
Median household income	\$56,422

Table 2-2 presents summarizes land uses within the City of Pittsburg

Land Use Category	Jurisdictional Area	% of Jurisdictional Area
Commercial and Services	301.5	3.3%
Industrial	696.3	7.7%
Residential	3762.1	41.5%
Retail	252.4	2.8%
K-12 Schools	290.1	3.2%
Urban Parks	236.1	2.6%
Other	3525.4	38.9%

Pittsburg is primarily a residential community, sustained by industries such as Dow Chemical, USS-Posco Steel, Los Medanos Energy Center, and Delta Energy Center. Traditionally, Pittsburg has been a pass-through city for commuters of East County communities. The major arterials through town are Pittsburg/Antioch Highway, State Highway 4, Buchanan Road, and BART. These industrial sites are non-jurisdictional trash generators that have been identified as medium trash generation areas. Access to these sites is via the Pittsburg/Antioch Highway, which, like much of the community is affected by the litter deposited by commuter traffic. The commercial /retail, schools, and multi-family dwelling units, are clustered around the much older, central and eastern portions of the City. These areas were found to be medium trash generators. There are four main commercial hubs, containing big-box retail and supermarket stores, which are the main shopping destinations within the City. These areas produce the highest trash generation rates. Additionally, like many communities, Pittsburg has its share of

homeless encampments, which tend to cluster around open stretches of creek tributaries. The camps are disbanded once City crews discover them during the course of their regular maintenance work, but inevitably the camps re-establish themselves in other creek stretches within the City. The City has mapped the areas that they frequently inhabit; though more work has to be done to assist these people with providing housing alternatives.

B. Drainage System and Water Resources Affected by Trash

The City of Pittsburg is located in north-central Contra Costa County. Suisun Bay lies to the north of the City, unincorporated areas in Contra Costa County lies to the south of the City, and to the east and west lies Antioch and Bay Point, respectively. The City's drainage system consists of Kirker Creek, Lawlor Creek, and other small watersheds. The Kirker Creek watershed comprises most of the eastern portion of the City. Lawlor Creek and other smaller watersheds comprise the western portion of the City. These portions of the City are most affected by trash as they are much older with established commercial, residential, and school uses. In addition, these stretches of Kirker Creek are adjacent to thoroughfares heavily used by east-county bound commuters.

The southern portion of the City consists of steep hills and crest at elevations of 1,200 to 1,800 feet along the drainage divide south of the City. Most of the City is drained by Kirker creek, which originates from the southernmost end of the watershed, northward through the City. The Kirker Creek watershed comprises about 14.5 square miles, and is approximately 7 miles in length.

The western portion of the City is drained by Lawlor Creek, and intervening parallel drainages between Lawlor Creek and Kirker Creek. Over the last ten years the City has experienced a heavy influx of residential development in this section of the City. For the most part, these areas are not as affected by trash as the eastern portion of the City.

Much of the City's drainage system consists of open stretches of creek tributaries, which are prone to illegal dumping, and trash generated by homeless encampments.

C. Trash Problems and Priorities

The initial estimated trash generation map was shared with the street sweeping, storm drain, and streets crews. Verification of the data was achieved either by their historic knowledge or observed through their day to day activities. For other areas that were questionable, staff divided the city into sections to conduct field verifications according to the BASMAA on-land visual protocol. Additionally, the work order database of Public Works' daily operations was queried for reported items such as closed drain work, illegal dumping, and removal of homeless encampments to confirm the areas that were predicted to be high trash generators.

Table 2-3 summarizes trash generation by land use:

Table 2-3. Trash Generation Category by Land Use

Trash Generation Category	Jurisdictional Area (Acres)	Commercial and Services	Industrial	Residential	Retail	K-12 Schools	Urban Parks	Other
Very High	131.8	10%	0	0	85%	0	0	5%
High	210	0	0	28.5%	33.3%	7.2%	0	30.9%
Medium	2,891.9	9.6%	23.9%	50%	1.6%	7.2%	7.5%	0.2%
Low	5,823.9	0.4%	0	38.8%	0.1%	1.2%	0.3%	59.3%

3. CITY OF PITTSBURG TRASH MANAGEMENT STRATEGY

The following trash management strategy is designed to attain a 70% trash load reduction by July 1, 2017 and a 100% reduction by July 1, 2022. The strategy may be updated and revised in response to changing conditions, including the amounts and location of trash generation, effectiveness of management actions, and available resources. Updates will be documented in Annual Reports.

In general the management strategy to address the City-wide trash issue is to enhance and refine many of the measures that the City is currently implementing. Current measures include:

- Street sweeping: The City intends to enhance the process of street sweeping with the installation of “No Parking” signage to facilitate sweeper contact with the curbs and gutter. The installation of signs will be a phased process to get residents accustomed to the change.
- Adopt a Spot Program: The City re-launched its adopt a spot program as a way to formalize and acknowledge groups that have donated their services for creek clean up days, and individuals to band together to and take ownership of their neighborhoods. The program provides materials with their efforts, and the City collects and disposes the bags.
- Active enforcement of uncovered loads: The City, in partnership with the Contra Costa Waste Service, conducted a brief outreach to their customers, and the City Police Department conducted surprise inspections citing individual caught transporting uncovered refuse.
- Security cameras in areas prone to illegal dumping: The City has installed several security cameras and/or shouting camera boxes in areas of chronic illegal dumping, as part of the citywide illegal dumping program. With the assistance of our Public Works and Police Department, it is the City’s goal to prosecute more individuals photographed in the act of dumping.
- Plastic Bag Ban: As of January 14, 2014 the City initiated its plastic bag ban policy. Outreach occurred in the fall of 2013 to all commercial retailers; further monitoring will be conducted to assess its effectiveness.
- Continued maintenance of installed of a full trash capture device: The City was a participant in SFEP’s grant program which enabled the City to install a large

trash capture device, which receives runoff from approximately 300 acres. As shown on the attached map.

Financial resources are an obvious constraint to implementing costly measures such like installing full trash capture devices citywide. Moreover, this would not address the roots of the trash problem. It is our intent to demonstrate to our citizens that we've put forth our best efforts to enhance the measures already in place and have done our part to engage the general public's help to reduce trash, before the City seeks public approval to invest in costly measures such as installation of full trash capture devices.

A. Delineation of Trash Management Areas

Trash management areas within the City were created according to similar land uses or sources of trash generated within each area. This process has resulted in the creation of 10 trash management areas. Details of these individual trash management areas are summarized in Section 4 of this report. Like many cities, Pittsburg also contains several non-jurisdictional areas such as a freeway, a BART station, and school properties that contribute to the litter condition.

City properties are affected by windblown litter generated from an 8 mile long stretch of State Highway 4. The freeway area on the City's trash generation map is designated as areas that are very high, and at the same time, outside of our jurisdictional authority. Current lane expansions of State Route 4 are near completion, thereby initiating amendments to the existing maintenance agreements with the City. The City is currently trying to negotiate terms with Caltrans on a number of maintenance issues, including trash and litter abatement for the lands directly adjacent to the newly constructed portions of the freeway. Assistance from the Water Board would be greatly appreciated to persuade Caltrans to address the litter generated from their property. Until such time that arrangements can be made for a cooperative agreement to address the litter issue, mitigation measures for the freeway management areas will not be addressed in this Long-Term Plan. However, the City will continue to keep up with on-land pick up of the wind-blown litter affecting the City's right of ways.

Table 3-1. Trash Generation Category by Trash Management Area

TMA	Jurisdictional Area (Acres)	Trash Generation Category			
		Very High	High	Medium	Low
TMA 1	327	62.3%	0%	10.7%	0%
TMA 1A&B	94.7	2%	79%	19%	0%
TMA 2	91.7	0%	0%	100%	0%
TMA 3	174.2	0%	0%	98.2%	1.8%
TMA 4	796.8	0%	0.1%	98.4%	1.5%
TMA 5	611.5	0%	0%	99.3%	0.7%
TMA 6	242.1	0%	0%	100%	0%

TMA 7	902.4	0.1%	0%	98.9%	1%
TMA 8	56.6	0%	0%	100%	0%
TMA 9	54.9	0%	0%	100%	0%
TMA 10	5,803.8	0%	0%	0.1%	99.9%

B. Area-Specific Control Measures, Implementation Schedules, and Effectiveness Assessment

Long-Term Trash Reduction Plans for each Trash Management Area, including control measures, detailed implementation plans, and methods of assessing the effectiveness of control measures are in Section 4.

C. Creek and Shoreline Cleanups

Table 3-2. Creek and Shoreline Cleanups

Location	Description	Cleanup Frequency			
		Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
Location 1	Buchanan Park	2x/month + 3-4 organized events/year	2x/month + 2-3 organized events /year	2x/month + 3-4 organized events /year	2x/month + 4-5 organized events / year
Location 2	Yosemite and Harbor Streets	2x/month + 3-4 organized events/year	2x/month + 2-3 organized events /year	2x/month + 3-4 organized events /year	2x/month + 4-5 organized events / year
Location 3	Behind Martin Luther King Jr. Junior High School	4x/year	5x/year	5x/year	5x/year
Location 4	Parkside Drive	2x/month +	2x/month +	2x/month +	2x/month +

Buchanan Park and Yosemite /Harbor Street locations are common stretches of Kirker Creek, which are popular for creek clean up events. In addition to the regular maintenance schedule conducted by City staff, these areas are popular for semi-annual and annual creek cleanup days hosted by the City or other organized groups. Trash sources for the creek segment in Buchanan Park are largely from debris generated by the adjacent picnic area or homeless encampments. Trash sources for the portion of creek behind properties along Yosemite and harbor Streets are generally products of illegal dumping.

Prior to 2002, the area behind Martin Luther King Junior High School was under private ownership, and was fenced off from public access along the south portion of the property. The City acquired the property as part of a City Capital Improvement Project to alleviate flooding issues for the residents to the west of the property as well as the junior high school. A majority of the creek tributary was enclosed in pipe except for the section north of the school. After improvements were completed in 2003, the area became a popular spot for cleanups hosted by the school district. Access to this area is fenced off; however, there is a gap in the fencing to the north, which belongs to BNSF Rail. During the hot spot clean up days the debris found varies; most of what is retrieved is from homeless that live under the trees along the bank of the creek.

The cleanup conducted by City staff is documented via standard work order system, which documents types and volumes of debris removed, and whether the cleanup was due to homeless encampment removal, illicit discharge, or gen maintenance. This database and staff interviews are the most reliable source of monitoring the effectiveness of our reduction actions.

D. Trash Reduction Policies

On March 19, 1990, the City Council adopted Ordinance 979, "Litter Control" which requires take-out establishments to arrange for the pick-up and proper disposal of trash, litter, and garbage originating from it or deposited on public property within 400 feet of its premises at least 3 times per week. If the establishment fails to comply, after receiving sufficient warnings from the Planning Director, the City may require the establishment to provide monetary compensation, or an irrevocable letter of credit or similar surety to the City to ensure compliance with the ordinance provision. The Planning Department, with the assistance of the City Code Enforcement division of the Police Department is tasked with monitoring enforcement of the ordinance. Violators are sent notifications from the Planning or Engineering Departments, with follow-up by Code Enforcement.

On November 11, 1990, the City Council adopted Ordinance 997, "Vehicles Used to Transport Refuse" which requires all vehicles used for transporting refuse to comply with all state regulations, and all refuse to be completely covered when in route from the last collection station to the disposal area to prevent any refuse from spilling or blowing from the vehicle. Enforcement of this municipal code provision had not been aggressive until last year. With the assistance from the local transfer station and our police department, the City initiated a campaign to remind waste haulers that all loads must be covered per Pittsburg municipal code. Surveys of transported uncovered loads were taken prior to the outreach effort. Several months after the notification period, the Police conducted a surprise check for haulers. In the 3 weeks of observation, PPD traffic officers spent about 24 hours monitoring trucks going to the transfer station to ensure loads are covered; 8 individuals were cited for not having covered loads. Our traffic officers did notice compliance was much higher than past years when we have conducted similar enforcement efforts. Monitoring for effectiveness is still on-going; another surprise check by the Police Department is scheduled to occur in spring 2014.

On November 4, 1991 the City Council adopted Ordinance 1019, "Prohibited Food Packaging" to address several of the City's goals at that time to make recycling a mandatory duty on both residential and commercial property owners and to require retail food establishments to increase the use of returnable or recyclable packaging materials in take-out food. Through this act, the City also included a section of the ordinance to prohibit the use of polystyrene CFC-processed take-out food packaging. The ordinance requires the food establishment to maintain documentation regarding the recyclable nature of their packaging and use of non-CFC processed take out containers. The City has not aggressively enforced this ordinance. An update to the ordinance clarifying the ban for all polystyrene take-out food packaging, rather than CFC-processed packaging will be forthcoming once sufficient time has passed after the onset of the plastic bag ban ordinance has taken place. It is anticipated the there will be mandatory reporting requirements to the City to ensure conformance with the ordinance.

On June 17, 2013 the City Council adopted Ordinance 13-1373 updating the City's existing stormwater ordinance to reflect current NPDES permit requirements, and to allow the City to require private development to install and maintain devices or facilities to prevent the discharge of trash or other pollutants from private parking lots, streets, roads, and drainage facilities into the storm drain system. The City continues to enforce the provisions of the stormwater ordinance with the assistance of our Public Works and Code Enforcement Departments. Requirements for the installation of full trash capture devices will become a standard condition of approval for future food establishments.

On October 21, 2013, the City Council adopted Ordinance 13-1377, "Plastic Carryout Bags Prohibited", regulating the use of plastic carryout and recyclable paper bags and promoting the use of reusable bags within the City. The Ordinance requires retail establishments to provide annual reports to the City Manager, the total # of paper carryout bags provided, total amount of funds collected for providing recycled carryout bags, and a summary of retailer's efforts to promote the use of reusable bags. The ordinance took into effect on January 14, 2014. The City conducted door-to-door outreach to retailers, and Chamber of Commerce. In addition, the City has partnered with three of the Junior High School Campuses to support the promotion of an anti-plastics/environmental awareness curriculum initiated by the School District's Administrators. Photographs have been taken of the areas directly adjacent to the retail establishments that typically propagate plastic bag litter; visual monitoring will be conducted to assess the effectiveness of the plastic bag ban.

E. Public Education, Outreach, and Community Involvement

Through the CCCWP, the Permittees conducted a "Litter Travels, But It Can Stop with You" multi-year campaign beginning in FY 2009-2010. The multi-media campaign was designed to educate Contra Costa's citizens about the impacts of trash and litter in the County's waterways and how they can help address this problem and included TV spots, billboards, posters at BART stations, placards on transit buses, print ads and updates to the CCCWP website. Other outreach included more than 10,000 letters to County residents, contact with youth sports leagues, outreach to the 17 school districts

in the County, and distribution of flyers to students in 5 of those districts. Pre and post-campaign surveys were conducted.

Through the CCCWP, Permittees also support the work of the California Product Stewardship Council (CPSC) and the Green Business Program. Both of these organizations address trash through source reduction and waste management. CPSC's mission is to promote Extended Producer Responsibility (EPR), which is based upon shifting California's product waste management system from one focused on government funded and ratepayer financed waste diversion to one that relies on producer responsibility in order to reduce public costs and drive improvements in product design that promote environmental sustainability. The CPSC's position is that the producers should have the primary responsibility to establish, fund, and manage end of life systems for their products. CPSC has advocated for EPR legislation affecting a wide-range of products including pharmaceuticals, batteries, paint, sharps, and mattresses.

The Green Business Program, of which CCCWP is the largest contributing Partner in Contra Costa County, is designed to publicly recognize private businesses and public agencies that take extra steps, beyond baseline compliance with environmental regulations, to prevent pollution and save resources (e.g., conserve water and energy, reduce waste through reuse and recycling, prevent stormwater pollution through good housekeeping practices, etc.). To date, 530 businesses have been certified as Green Businesses in Contra Costa County. Currently, 334 businesses are certified including a large number of auto repair shops, landscapers, waste haulers, printers, grocery and hardware stores, solar panel installers, and home remodelers. Numerous public agencies have also been certified. Municipal stormwater and POTW inspectors assist the Green Business program by encouraging potential Green Business candidates. CCCWP staff serves on the Green Business Program's "Partners Committee" and actively engages in development of the Green Business checklist (i.e., the stormwater pollution prevention section that each business needs to complete before becoming certified as a green business). Some of the more relevant actions that businesses have undertaken to become certified or recertified that also reduce trash loads include the following: commit to reduce waste in a minimum of five ways, maintain parking areas free of litter, keep dumpsters covered when not in use, ensure tarps for covering loads are in good condition and used correctly, and purchase a minimum of three recycled-content products.

To address trash from illegal dumping, the CCCWP operates a 1-800-No-Dumping hotline. The hotline is used by both businesses and the public to report potentially illegal dumping activities. All hotline calls are referred to the appropriate municipality for follow-up and, if necessary, enforcement. Calls have been logged since FY 2004-2005. Calls to the hotline are combined with calls that come directly to municipalities and Contra Costa County Hazardous Materials (Hazmat) Division and are tracked and documented annually in the municipal annual reports.

The CCCWP will continue to identify new partners and areas of outreach for source reduction and measures to reduce trash in the environment. CCCWP is currently in contact with California Department of Transportation (Office of Stormwater Program

Development) and hopes to identify trash load reduction projects in Contra Costa County that would be financially and strategically feasible for all involved parties. CCCWP has also made contact with the California Highway Patrol, Contra Costa County Solid Waste Authority, and a number of transfer stations to potentially develop additional outreach materials to reduce litter from uncovered loads.

In 2006 the City, through its Neighborhood Improvement Team, established a citywide program to address illegal dumping as part of their Blight Eradication Program. This team traveled from neighborhood to neighborhood making presentations about illegal dumping, and established a reward program for residents to call and report dumping they've witnessed. Cameras and shouting boxes were also installed in areas that are "hidden" from public view. Brochures and signage of the illegal dumping program were developed and distributed.

The City has established a long standing partnership with the local school district, local college, and industries located along Kirker Creek have organized into a group called Partners for the Watershed. This group has created curriculum for educational watershed tours. These tours involve stations that teach about various aspects of the health of the delta, to include affects that littering and pesticides have on a watershed.

The Great Pittsburg Cleanup is still a yearly tradition that encourages the general public to participate in yearly creek cleanups.

F. Jurisdiction-wide Progress Assessment and Continuous Improvement

Progress Assessment will be conducted in collaboration with Public Works Staff. The work order database will be queried periodically to compare volumes and types of debris removed from open and closed drain maintenance, creek channel work, and illegal dumping reports. In addition, staff will be interviewed for their observations; photographs of on-land visual observations will be monitored.

In addition, information will be gathered from hot spot cleanup events to assist with monitoring the progress of the trash reduction actions. Adjustments will be made to the proposed mitigation measures if the maintenance records and visual observations confirm that the effort is not effective.

Future submissions of the City's Long-term Trash management plan will include a map of C.3 compliant LID facilities.

4. TRASH MANAGEMENT AREA PLANS

TMA-Specific Plans

TMA-specific plans for 10 trash management areas are attached.

5. REFERENCES

BASMAA 2012a. Bay Area Stormwater Management Agencies Association. Trash Generation Rates for San Francisco Bay Area MS4s (Draft Final). Presentation to the BASMAA Trash Committee, August 2012. Prepared by EOA, Inc.

BASMAA 2012b. Baseline Trash Generation Rates, Preliminary Calibration of Modeled Results, Presentation to BASMAA Trash Committee, September, 2012. Prepared by EOA, Inc.

BASMAA 2013a. Visual On-Land Trash Assessment Protocol for Stormwater, Version 1.0 (Draft). April 30, 2013. Prepared by EOA, Inc.

CCCWP, 2013. Contra Costa Clean Water Program. Long-Term Trash Load Reduction Plan Development—Trash Generation Map Refinements. Technical Memorandum, May 20, 2013. Prepared by EOA, Inc.

City of Pittsburg Long-Term Trash Reduction Plan



Trash Management Area 1 is characterized as high to very high trash generating areas. The areas are comprised of the most frequented retail shopping areas within the City. This management area consists of two large grocery stores, one north and one south of highway 4, a home improvement outlet, and a large box retail outlet. These areas are categorized in the same TMA because these areas are privately maintained, and the trash generated within these parcels is similar in nature.

Key Characteristics of Trash Management Area [1]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
222.4	60.3	29	10.7	[0]	Retail / Commercial	Pedestrian-generated litter from nearby fast food restaurants, windblown plastic bags from grocery stores.

Summary of Control Measures and Implementation Schedule for Trash Management Area [1]

Control Measure	Control Measure Details	Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
Street Sweeping	Increased frequency of parking lot street sweeping and frequency of public street sweeping	X	X	X	X
[Partial-Capture Treatment Devices]	Installation of full trash capture or partial-capture devices			X	X
Improved Trash Bins/Container Management	Furnish and install trash receptacles in the parking lot areas			X	
[Other Control Measures]	Plastic bag ban			X	X

Maintenance of private street to be enhanced with additional street sweeping of the private streets within these parcels as well as overall enhanced on-land trash pick-up. Delta Diablo Sanitation District pays the City for conducting street sweeping. Any additions to the frequency or route are subject to approval by the sanitation district. The plastic bag ban is an integral part of the trash control measure, since a large majority of litter that affects adjacent parcels is wind-blown plastic bags.

Evaluation of Program Effectiveness for Trash Management Area [1]

City of Pittsburg 2014-2022 Trash Management Plan

Control Measure	Evaluation Method	Evaluation Method Details
Enhanced Street Sweeping	Work Order documentation of closed drain maintenance as well as sweeper data.	Create a database to track amounts collected
Plastic Bag Ban	Yearly documentation confirming compliance will be reviewed in conjunction with visual observations of the TMA.	Track compliance against the City's Business License database Visual observations to be recorded and tracked by database as well.

City of Pittsburg Long-Term Trash Reduction Plan



Trash Management Sub-Area 1A is characterized as high and very high trash generating areas. The land uses within these areas are primarily retail commercial, and includes big box retail and grocery stores. In addition one single-family neighborhood was included in this category for its history of chronic illegal dumping. This area also includes 10 acres of adjacent parcels, which are characterized as medium trash generators that are affected by the garbage from the high and very high loading areas. Much of the trash found in these areas is from littering of fast food packaging, plastic bags, and miscellaneous debris from illegal dumping.

Key Characteristics of Trash Management Area [1A & B]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
94.7	2	79	19	[0]	Parcels adjacent to commercial areas, and one neighborhood that experiences chronic illegal dumping.	Pedestrian-generated litter nearby fast food restaurants.

Summary of Control Measures and Implementation Schedule for Trash Management Area [1A & B]

Control Measure	Control Measure Details	Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
Street Sweeping	Increased frequency to 3x/week in high-generation areas	X		X	X
On-land Trash Cleanups	Areas to be cleaned; frequency; participants	X	X	X	X
Improved Trash Bins/Container Management	Stricter enforcement for container management		X	X	X
Plastic Bag Ban	Yearly documentation confirming compliance will be reviewed in conjunction with visual observations of the TMA.		X	X	X

Evaluation of Program Effectiveness for Trash Management Area [1A & B]

Control Measure	Evaluation Method	Evaluation Method Details
Full Capture	Document	Create a database to track amounts collected

Maintenance

<p>Enhanced Street Sweeping</p>	<p>Work Order documentation of closed drain maintenance as well as sweeper data</p>	<p>Create a database to track amounts collected</p>
<p>On-land Trash Cleanups</p>	<p>Work Order documentation of closed drain maintenance as well as sweeper data</p>	<p>Create a database to track amounts collected</p>
<p>Improved Trash Bins/Container Management</p>	<p>Visual Inspection of observed litter reduction</p>	<p>Create a database to track amounts collected</p>
<p>Plastic Bag Ban</p>	<p>Yearly documentation confirming compliance will be reviewed in conjunction with visual observations of the TMA.</p>	<p>Track compliance against the City's Business License database Visual observations to be recorded and tracked by database as well.</p>

City of Pittsburg Long-Term Trash Reduction Plan



Trash Management Area 2 is characterized as medium trash generating areas that are located adjacent to or affected by parcels of high trash generating areas. These parcels are also active commercial areas, consisting largely of retail commercial, a big box retail outlet, restaurants, and fast food establishments. This area is conveniently located off the Auto Center Drive Exit from State Highway 4. The drainage in this area is typical of the City of Pittsburg, stormwater run-off flows from south to north. The shopping center consists of a large parking lot, a large, fairly contiguous continuous multi-tenant retail commercial building, and several fast food establishments that are interconnected by a privately maintained street. The shopping complex is divided by a major public roadway, which the City maintains. Included within this management area is a 3.1 acre parcel, characterized as a medium trash generating area, which is affected by the trash from the adjacent high trash generating area. There is also a main road within the shopping complex, privately maintained by the property owner. Currently there are no trash capture devices installed in any storm drainage structures. This area is designated as its own trash management area because it is semi-isolated in relation to the remainder of the City – the commercial area is surrounded by several undeveloped parcels and State Highway 4. In addition, the commercial area is owned and maintained by one private entity.

Key Characteristics of Trash Management Area [2]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
91.7	0%	76.6	23.4	0%	Commercial	Pedestrian-generated litter nearby fast food restaurants and wind-blown trash from the freeway.

30 % of the total retail businesses in this area are fast food establishments. The majority of the trash in this area consists of food wrappers and beverage containers, deposited on the ground by careless patrons and other windblown trash such as plastic bags and paper from motorists on the adjacent freeway.

This management area also encompasses 3.1 acres of undeveloped land that is affected by the wind-blown trash from the adjacent freeway and by direct deposit of litter by pedestrian passers-by.

Summary of Control Measures and Implementation Schedule for Trash Management Area [2]

Control Measure	Control Measure Details	Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
Street Sweeping	Increased frequency to 3x/week in high-generation areas; increased parking enforcement			X	X

Partial-Capture Treatment Devices	Installation of partial capture treatment devices			X	X
Enhanced Storm Drain Inlet Maintenance	Increase frequency of downstream inlet maintenance			X	X

Cooperation of the property owner to increase street sweeping of the parking areas and private streets, in conjunction with the installation of these partial capture treatment devices are intended to produce a significant reduction in trash levels in the storm drain conveyance system. The property owner has agreed to install a partial trash capture device in one of the on-site inlets. The City’s updated stormwater ordinance allows the City to require commercial development to install full trash capture devices. As the remainder of this commercial area develops, the requirement to install full trash capture devices will be included as standard conditions of approval.

Evaluation of Program Effectiveness for Trash Management Area [2]

Control Measure	Evaluation Method	Evaluation Method Details
Street Sweeping	Work Order documentation of closed drain maintenance as well as sweeper data	Create a database to track amounts collected
Partial-Capture Treatment Devices	Work Order documentation of closed drain maintenance	Create a database to track amounts collected
Enhanced Storm Drain Inlet Maintenance	Work Order documentation of closed drain maintenance	Create a database to track amounts collected

City of Pittsburg Long-Term Trash Reduction Plan



Trash Management Area 3 is characterized as medium trash-generating area, located adjacent to These areas are single family residential developments. These developments are privately maintained by homeowner’s associations. Trash sources can be attributed to pedestrian and vehicular litter, as these areas are either adjacent to a busy roadway or are well traveled pathways.

Key Characteristics of Trash Management Area [3]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
174.2	0	0	98.2	1.8	Residential	Wind-blown litter from automobile traffic from arterial road and residential waste containers, pedestrian litter.

Summary of Control Measures and Implementation Schedule for Trash Management Area [3]

Control Measure	Control Measure Details	Pre- MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
On-land Trash Cleanups	Active outreach will be conducted to persuade business owners to “adopt a spot” to help keep the downtown area litter and graffiti free.		X	X	X
Improved Trash Bins/Container Management	The City has plans to expand the existing public plaza to include a public park to accommodate various venues; the City will be providing additional waste receptacles in the public areas. In addition, the City has been constructing improvements with regard to appropriate garbage enclosures to meet current standards.	X	X	X	X

The City has been heavily invested in improving the commercial component to the downtown and marina area to draw more business to Pittsburg. City resources will be used as needed to maintain the area free of blight and litter. Additionally, the City is researching the feasibility of installing a device to capture litter in the waterway at the marina.

Evaluation of Program Effectiveness for Trash Management Area [3]

Control Measure	Evaluation Method	Evaluation Method Details
Street Sweeping	Work Order documentation of closed drain maintenance as well as sweeper data	Create a database to track amounts collected
On-land Trash Cleanups	Work Order documentation of staff pick up for adopt a spot and/ or staff time for on-land pick up, and visual observation.	Create a database to track amounts collected
Improved Trash Bins/Container Management	Visual Observation	Visual observations to be recorded and tracked by database as well.

City of Pittsburg Long-Term Trash Reduction Plan

Trash management area 4 is characterized as a medium trash generating area. The land uses themselves do not directly generate the garbage found in these areas; the land uses are primarily industrial, and have close proximity to creek tributaries. Pittsburg/Antioch Highway and Willow Pass Road are major arterials which are common to the parcels within this category, and are the primary routes the public use to haul their loads to the transfer station from the east and west. There is little to no pedestrian traffic as sidewalk, curb, and gutter is not continuous, which also means these areas are not included in street sweeping. Additionally, these are also areas which the homeless frequently occupy.

Key Characteristics of Trash Management Area [4]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
796.6	0%	0%	98.4%	1.5%	Industrial	Litter from adjacent vehicular traffic, homeless encampments.

Summary of Control Measures and Implementation Schedule for Trash Management Area [4]

Control Measure	Control Measure Details	Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
Creek channel cleanup	The creek channels adjacent to Pittsburg-Antioch Highway are a popular venue for the Great Pittsburg cleanup. Additionally, City PW crews conduct regular maintenance of the creek channel as part of the City's Streambed Alteration Agreement for Routine Maintenance issued by Fish and Wildlife Service	X	X	X	X
Activities to Reduce Trash from Uncovered Loads	Active outreach and enforcement for the City's existing uncovered load ordinance began in 2013.		X	X	X
Anti-littering and illegal dumping enforcement	The City installed several cameras along the roadside, to catch people in the act of dumping, as well as no dumping signs.	X	X	X	X

Additionally, City staff is exploring ways to track independent junk haulers. These are generally mobile businesses which require a business license to operate within the City, but moreover, The City is working on ways to educate the Public about hiring these individuals, such as requiring the hauler to present tags to verify that their loads were appropriately disposed, and not just illicitly unloaded off the side of the road.

Evaluation of Program Effectiveness for Trash Management Area [4]

Control Measure	Evaluation Method	Evaluation Method Details
Creek channel cleanup	Work Order documentation of closed drain maintenance as well as sweeper data	Create a database to track amounts collected
Activities to Reduce Trash from Uncovered Loads	Work Order documentation of closed drain maintenance as well as sweeper data	Create a database to track amounts collected
Anti-littering and illegal dumping enforcement	Work Order documentation of illegal dumping pick up and visual observation	Create a database to track amounts collected, and observations

City of Pittsburg Long-Term Trash Reduction Plan

Trash Management Area 5 is characterized as medium trash generating areas. These areas are single family residential neighborhoods, which are adjacent to stretches of Willow and Kirker Creek tributaries and parks. These neighborhoods are bordered by Parkside Drive, which is a major thorough fare for east-west bound commuters, and Railroad Avenue, which is the main access through the City to the freeway and to Concord.

Key Characteristics of Trash Management Area [5]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
611.5	0	0	100	0	Residential.	Pedestrian-generated litter

Summary of Control Measures and Implementation Schedule for Trash Management Area [5]

Control Measure	Control Measure Details	Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
On-land cleanups	One of the City's hot spot locations is in this TMA, and will continue to be cleaned.	X	X	X	X
Enhanced street sweeping	Street sections are now in the process of being added to the street sweeping route. Notice to residence for no parking on street sweeping days for more effective street sweeping		X	X	X

Recent construction of the roadway installed curb, gutter, sidewalk, and cutoff wall with safety fencing, thereby reducing the amount of direct windblown litter from accessing the creek channel. However, the safety fence and cut-off wall has become a spot for the homeless. PW crews continue to clean the creek channels and know this is another location to keep watch for established camps.

Additionally now that a large portion of Parkside Drive has curbs, the City is in the process of obtaining approval from the sanitation district to include this portion of roadway in the street sweeping route.

Evaluation of Program Effectiveness for Trash Management Area [5]

Control Measure	Evaluation Method	Evaluation Method Details
On-land cleanups	Work Order documentation of debris removed during creek	Create a database to track amounts collected

City of Pittsburgh 2014-2022 Trash Management Plan

	maintenance and visual observation	
Enhanced street sweeping	Work Order documentation of sweeper data	Create a database to track amounts collected

City of Pittsburg Long-Term Trash Reduction Plan

Trash Management Area 6 is characterized as medium trash generating areas. These TMAs consist of school campuses and surrounding residential single and multi-family parcels. The trash sources in these areas are generally from pedestrian litter that radiate from the school sites. PW staff has also witness on several occasions parked people littering in these neighborhoods as they wait to pick up their kids.

Key Characteristics of Trash Management Area [6]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
242.1	0	0	100	0	School Residential	Pedestrian-generated litter nearby fast food restaurants.

Summary of Control Measures and Implementation Schedule for Trash Management Area [6]

Control Measure	Control Measure Details	Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
On-land cleanups	Students participation/ host clean up days				
	Work Alternative crews to increase cleanup events.	X	X	X	X
Outreach and education	Curriculum to pledge a behavioral change		X	X	X

Grade school –aged students have proven to be the most eager group to participate in creek and on-land cleanup days. They are also effective in passing along the anti-littering message to their parents and family members.

The City has also recently been approached by a Pittsburg school district administrator for the junior high school science program for assistance with a new hands-on based curriculum for the junior high school campuses that focuses on the problem of plastic pollution that requires active participation and tracking behavioral changes.

Evaluation of Program Effectiveness for Trash Management Area [6]

Control Measure	Evaluation Method	Evaluation Method Details
On-land cleanups	Work Order documentation of debris removed during creek maintenance and visual observation	Create a database to track amounts collected

Outreach and education	Students' pledges	City will receive copies of the results of the students' challenge and track changes over time.
-------------------------------	-------------------	---



City of Pittsburg Long-Term Trash Reduction Plan

Trash Management Area 7 is characterized as medium trash generating areas. These parcels are residential areas that experience chronic illegal dumping.

Key Characteristics of Trash Management Area [7]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
902.4	0.1%	0	98.9	1	Residential	Illegal dumping and pedestrian generated litter

Summary of Control Measures and Implementation Schedule for Trash Management Area [7]

Control Measure	Control Measure Details	Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
Anti-littering and Illegal Dumping Enforcement	Anti-littering campaign to be re-introduced	X	X	X	X
Enhanced Street sweeping	Notice to residence for no parking on street sweeping days for more effective street sweeping		X	X	X
On-land pick up	PW work staff to conduct regular pick up of debris.	X	X	X	X

Evaluation of Program Effectiveness for Trash Management Area [7]

Control Measure	Evaluation Method	Evaluation Method Details
Anti-littering and Illegal Dumping Enforcement	Monitoring of illegal dumping reporting program	Create a database to track amounts collected
Enhanced Street sweeping	Work Order documentation of sweeper data	Create a database to track amounts collected
On-land pick up	Work Order documentation of debris picked up and visual observation	Create a database to track amounts collected

City of Pittsburgh Long-Term Trash Reduction Plan



Trash Management Area 8 is characterized as medium trash generating areas. These parcels consist of privately managed multi-family dwelling units.

Key Characteristics of Trash Management Area [8]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
56.6	0	0	100	0	Multi-family dwelling units	Pedestrian /household litter

Summary of Control Measures and Implementation Schedule for Trash Management Area [8]

Control Measure	Control Measure Details	Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
Improved Trash Bins/Container Management	Outreach to property/ HOA to ensure the residents are covering their trash containers		X	X	X
Enhanced Street sweeping	Outreach to property/ HOA to improve street sweeping.		X	X	X

Evaluation of Program Effectiveness for Trash Management Area [8]

Control Measure	Evaluation Method	Evaluation Method Details
Improved Trash Bins/Container Management	Visual observation	Create a database to track visual observations
Enhanced Street sweeping	Work order Date of closed drain maintenance of areas downstream of these neighborhoods	Create a database to track amounts collected



City of Pittsburg Long-Term Trash Reduction Plan

This management area is characterized as medium trash generating areas. These areas consist of parks or trail. The trash sources are generally from pedestrian litter and spot homeless camps.

Key Characteristics of Trash Management Area [9]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
54.9	0	0	100	0	Park/trail	Pedestrian / homeless

Summary of Control Measures and Implementation Schedule for Trash Management Area [9]

Control Measure	Control Measure Details	Pre-MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
Improved Trash Bins/Container Management	Addition of trash receptacles on trail		X	X	X
On-land Cleanup	PW crew conduct increased maintenance of park and trail areas		X	X	X
Closed access	City staff installed gates and eliminated the vegetation around two open outfalls frequented by homeless.		X	X	X

Evaluation of Program Effectiveness for Trash Management Area [9]

Control Measure	Evaluation Method	Evaluation Method Details
Improved Trash Bins/Container Management	Visual observation, work order documentation for loads removed during routine maintenance	Create a database to track amounts collected
On-land Cleanup	Work order Documentation for loads removed during routine	Create a database to track amounts collected

City of Pittsburgh 2014-2022 Trash Management Plan

	maintenance	
Closed access	Visual observation	Create a database to track visual observations



City of Pittsburg Long-Term Trash Reduction Plan

This management area is characterized as low generating areas. These areas consist of newer single-family residential neighborhoods and open space.

Key Characteristics of Trash Management Area [10]

Total Jurisdictional Area (Acres)	Percent in Trash Generation Category				Dominant Land Uses	Dominant Types and Sources of Trash
	Very High	High	Medium	Low		
5,803.8	0	0	0	100	Residential / open space	Windblown / pedestrian

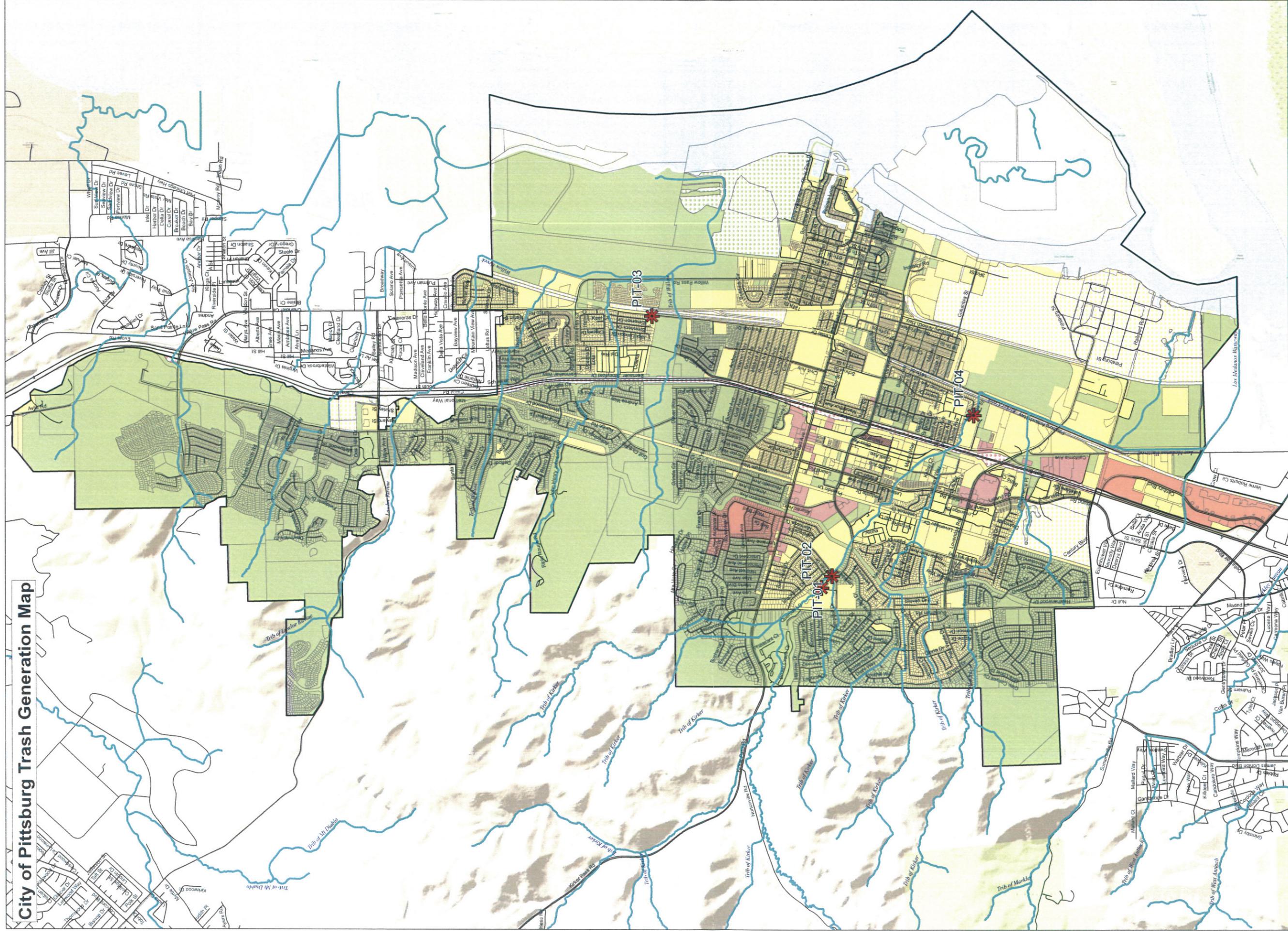
Summary of Control Measures and Implementation Schedule for Trash Management Area [10]

Control Measure	Control Measure Details	Pre- MRP	12/2009 to 7/2014	7/2014 to 7/2017	After 7/2017
Plastic bag ban	Ban of plastic bag use		X	X	X
Condition of approval to require the installation of full trash capture devices for new and redevelopment multi-family or commercial projects.	COAs to be met prior to final inspection approvals of the projects		X	X	X

Evaluation of Program Effectiveness for Trash Management Area [10]

Control Measure	Evaluation Method	Evaluation Method Details
Plastic bag ban	Visual observation	Create a database to track visual observation
Condition of approval to require the installation of full trash capture devices for new and redevelopment multi-family or commercial projects.	Staff inspection	Create a database to track installation of these devices

City of Pittsburg Trash Generation Map



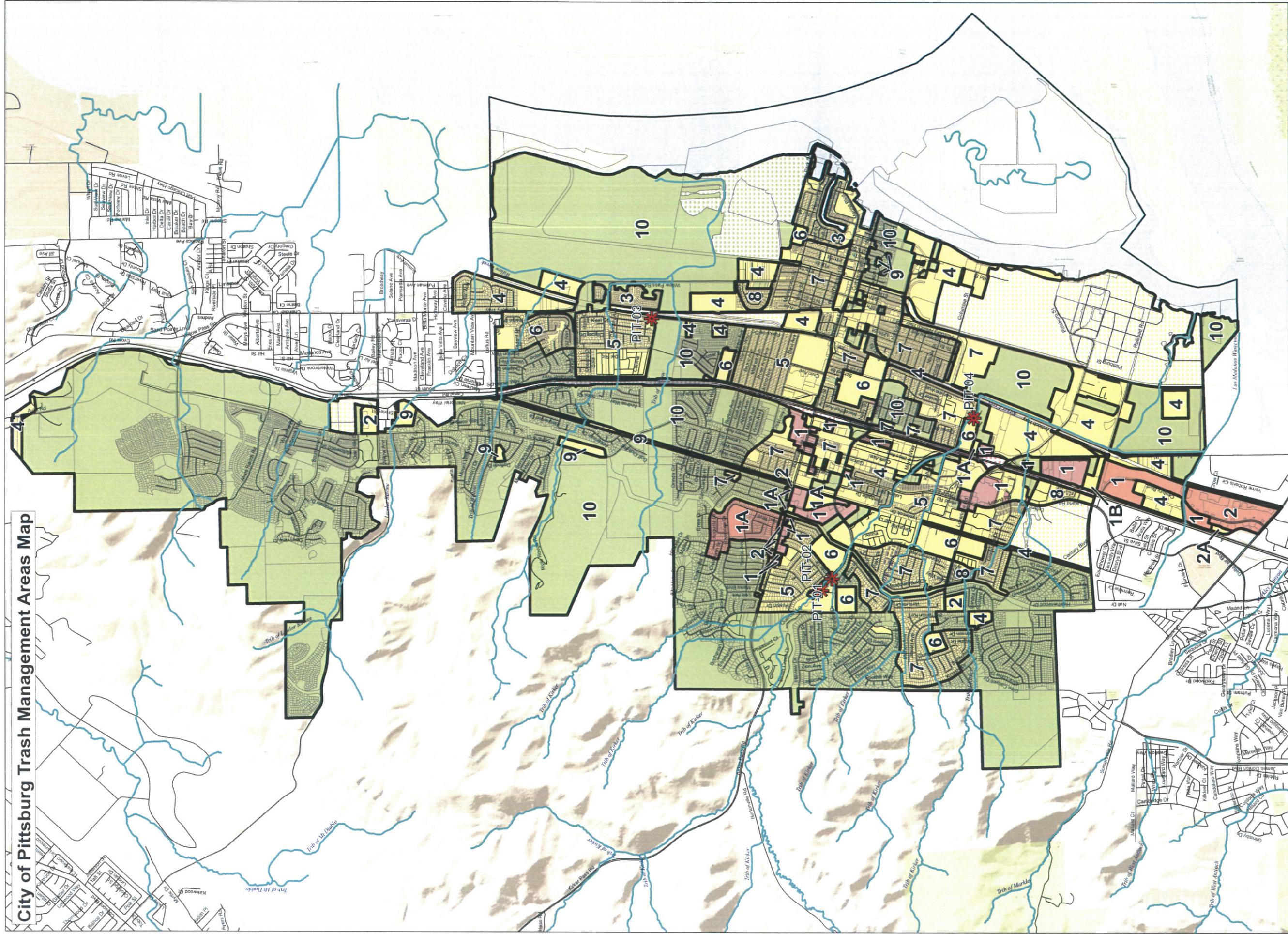
Legend

	Low		Creek/Shoreline Hotspot		Streets
	Low/Medium		Non-Jurisdictional		Agency Boundary
	Medium		(Dot color = Generation Category)		Creeks
	Medium/High				Parcel Boundary
	High				
	High/Very High				
	Very High				

Data Sources:
 Roads: Tele Atlas
 City Boundaries: Contra Costa County
 Background: ESRI World Topographic Map
 Map Created By:
 EOA, Inc.
 Date: November 13th, 2013



City of Pittsburg Trash Management Areas Map



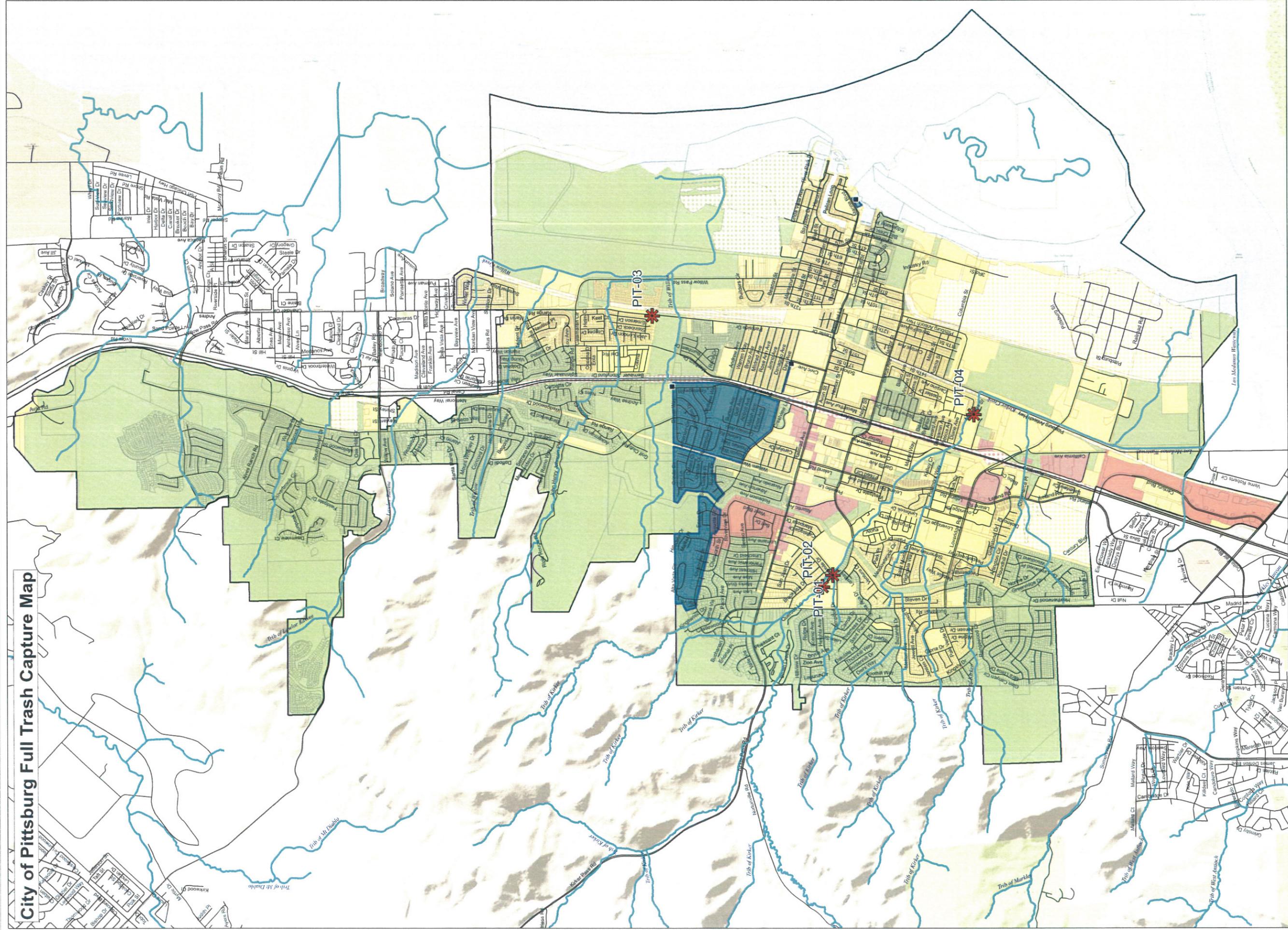
Legend

	Low		Creek/Shoreline Hotspot		Streets
	Low/Medium		Trash Management Area		Agency Boundary
	Medium		Non-Jurisdictional (Dot color = Generation Category)		Creeks
	Medium/High				Parcel Boundary
	High				
	High/Very High				
	Very High				

Data Sources:
 Roads: Tele Atlas
 City Boundaries: Contra Costa County
 Background: ESRI World Topographic Map
 Map Created By:
 EOA, Inc.
 Date: November 13th, 2013



City of Pittsburg Full Trash Capture Map



Legend

	Low		Creek/Shoreline Hotspot		Streets
	Low/Medium		Full-Capture Location		Agency Boundary
	Medium		Full Trash Capture		Creeks
	Medium/High		Non-Jurisdictional		Parcel Boundary
	High		(Dot color = Generation Category)		
	High/Very High				
	Very High				

Data Sources:
 Roads: Tele Atlas
 City Boundaries: Contra Costa County
 Background: ESRI World Topographic Map
 Map Created By:
 EOA, Inc.
 Date: November 18th, 2013

