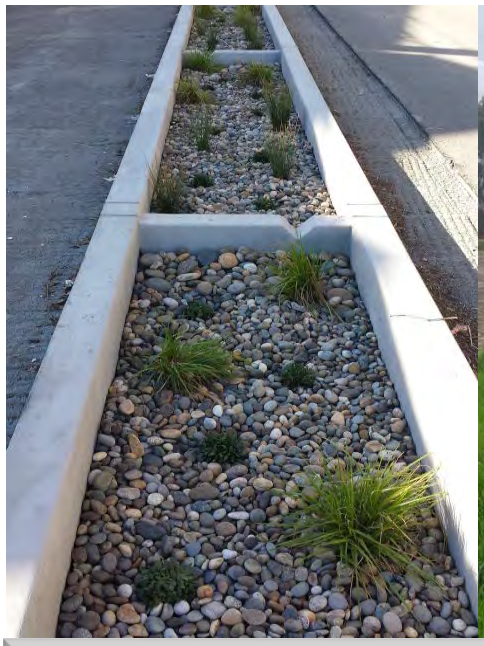

City of Palo Alto

Municipal Regional Stormwater Permit Annual Report FY 2018-2019

September 30, 2019

CITY OF PALO ALTO

PUBLIC WORKS

CITY OF PALO ALTO

2501 Embarcadero Way
Palo Alto, CA 94303
650.329.2598

September 30, 2019

Mr. Michael Montgomery
Executive Officer
San Francisco Bay Regional Water Quality Control Board
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: **City of Palo Alto**
FY 2018-2019 Annual Report

Dear Mr. Montgomery:

This letter and Annual Report with attachments is submitted by the City of Palo Alto pursuant to Permit Provision C.17.a of the Municipal Regional Stormwater NPDES Permit (MRP), Order R2-2015-0049, NPDES Permit No CAS612008 issued by the San Francisco Bay Regional Water Quality Control Board. The Annual Report provides documentation of activities conducted during FY 2018-2019 and consists of the following:

A. Certification Statement
B. Annual Report Form
   - Table of Contents
   - Completed Annual Report Form: Sections 1-15
C. Appendix
   - Table of Contents
   - Appendices

Please contact Karin North at (650) 329-2104 regarding any questions or concerns.

Regards,

Brad Eggleston
Director – Department of Public Works
City of Palo Alto

CITY OF PALO ALTO
FY 2018-2019 ANNUAL REPORT

Certification Statement

"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 ensure that qualified personnel properly gather and evaluate 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."

Signatures by Duly Authorized Representatives:

9/25/19

Brad Eggleston
Director of Public Works

Date

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Section **Page**

Appendices

Section 1 – Permittee Information

Background Information							
Permittee Name:	City of Palo Alto						
Population:	67,082 (2019)						
NPDES Permit No.:	CAS612008						
Order Number:	R2-2015-0049						
Reporting Time Period (month/year):	July 2018 through June 2019						
Name of the Responsible Authority:	Karin North				**Title:**	Manager, Watershed Protection	
Mailing Address:	2501 Embarcadero Way						
City:	Palo Alto	**Zip Code:**	94303		**County:**	Santa Clara	
Telephone Number:	(650) 329-2421			**Fax Number:**		(650) 494-3531	
E-mail Address:	Karin.North@cityofpaloalto.org						
Name of the Designated Stormwater Management Program Contact (if different from above):	Pam Boyle Rodriguez			**Title:**	Stormwater Compliance Program Manager		
Department:	Watershed Protection Group, Environmental Services Division, Public Works Department						
Mailing Address:	2501 Embarcadero Way						
City:	Palo Alto	**Zip Code:**	94303		**County:**	Santa Clara	
Telephone Number:	(650) 329-2421			**Fax Number:**		(650) 494-3531	
E-mail Address:	Pamela.BoyleRodriguez@cityofpaloalto.org						

Section 2 - Provision C.2 Reporting Municipal Operations

Program Highlights and Evaluation

Highlight/summarize activities for reporting year:

Summary:

City of Palo Alto (City) Public Works Department staff is involved in training, outreach and Countywide coordination activities. City staff regularly attends and actively participates in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) Municipal Operations Ad Hoc Task Group. In addition, City staff in both the Public Works and Utilities Departments receives training on stormwater best management practices (BMPs) and provides information at their 'tailgate' meetings, particularly before the wet season commences. Furthermore, City Stormwater Program staff provided training at a monthly Utilities Department safety training regarding the use of BMPs during daily electrical operations.

Power washing in the downtown area of parking lots, plazas and sidewalks is conducted by a contractor that must adhere to appropriate surface cleaning BMPs. Downtown maintenance staff help to monitor that these BMPs are used. In addition, all contractors that provide urban and rural road repair work to the City are required to follow stormwater BMPs.

Please refer to the C.2 Municipal Operations section of the SCVURPPP's FY 18-19 Annual Report for a description of activities implemented at the countywide and/or regional level.

C.2.a. ►Street and Road Repair and Maintenance

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

Y	Control of debris and waste materials during road and parking lot installation, repaving or repair maintenance activities from polluting stormwater
Y	Control of concrete slurry and wastewater, asphalt, pavement cutting, and other street and road maintenance materials and wastewater from discharging to storm drains from work sites.
Y	Sweeping and/or vacuuming and other dry methods to remove debris, concrete, or sediment residues from work sites upon completion of work.

Comments:

All contractors that provide urban and rural road repair work to the City must follow stormwater BMPs.

C.2.b. ►Sidewalk/Plaza Maintenance and Pavement Washing

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

Y	Control of wash water from pavement washing, mobile cleaning, pressure wash operations at parking lots, garages, trash areas, gas station fueling areas, and sidewalk and plaza cleaning activities from polluting stormwater
Y	Implementation of the BASMAA Mobile Surface Cleaner Program BMPs

Comments:

Power washing in the downtown area is conducted by a contractor that must adhere to appropriate BASMAA surface cleaning best management practices (BMPs). Downtown maintenance staff help monitor that these BMPs are used.

C.2.c. ►Bridge and Structure Maintenance and Graffiti Removal

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

Y	Control of discharges from bridge and structural maintenance activities directly over water or into storm drains
Y	Control of discharges from graffiti removal activities
Y	Proper disposal for wastes generated from bridge and structure maintenance and graffiti removal activities
Y	Implementation of the BASMAA Mobile Surface Cleaner Program BMPs for graffiti removal
Y	Employee training on proper capture and disposal methods for wastes generated from bridge and structural maintenance and graffiti removal activities.
Y	Contract specifications requiring proper capture and disposal methods for wastes generated from bridge and structural maintenance and graffiti removal activities.

Comments:

The City does not encounter significant graffiti issues; however, staff is trained to use surface cleaner BMPs when needed.

C.2.e. ►Rural Public Works Construction and Maintenance

Does your municipality own/maintain rural[1] roads:	☒	**Yes**	☐	**No**

If your answer is **No** then skip to **C.2.f**.

Place a **Y** in the boxes next to activities where applicable BMPs were implemented. If not applicable, type **NA** in the box and provide an explanation in the comments section below. Place an **N** in the boxes next to activities where applicable BMPs were not implemented for one or more of these activities during the reporting fiscal year, then in the comments section below provide an explanation of when BMPs were not implemented and the corrective actions taken.

Y	Control of road-related erosion and sediment transport from road design, construction, maintenance, and repairs in rural areas
Y	Identification and prioritization of rural road maintenance based on soil erosion potential, slope steepness, and stream habitat resources
Y	No impact to creek functions including migratory fish passage during construction of roads and culverts
Y	Inspection of rural roads for structural integrity and prevention of impact on water quality
Y	Maintenance of rural roads adjacent to streams and riparian habitat to reduce erosion, replace damaging shotgun culverts and excessive erosion
Y	Re-grading of unpaved rural roads to slope outward where consistent with road engineering safety standards, and installation of water bars as appropriate
Y	Inclusion of measures to reduce erosion, provide fish passage, and maintain natural stream geomorphology when replacing culverts or design of new culverts or bridge crossings

Comments including listing increased maintenance in priority areas:

N/A

[1]Rural means any watershed or portion thereof that is developed with large lot home-sites, such as one acre or larger, or with primarily agricultural, grazing or open space uses.

C.2.f. ►Corporation Yard BMP Implementation

Place an **X** in the boxes below that apply to your corporations yard(s):

	We do not have a corporation yard
	Our corporation yard is a filed NOI facility and regulated by the California State Industrial Stormwater NPDES General Permit
X	We have a **Stormwater Pollution Prevention Plan (SWPPP)** for the Corporation Yard(s)

Place an **X** in the boxes below next to implemented SWPPP BMPs to indicate that these BMPs were implemented in applicable instances. If not applicable, type **NA** in the box. If one or more of the BMPs were not adequately implemented during the reporting fiscal year then indicate so and explain in the comments section below:

X	Control of pollutant discharges to storm drains such as wash waters from cleaning vehicles and equipment
X	Routine inspection prior to the rainy seasons of corporation yard(s) to ensure non-stormwater discharges have not entered the storm drain system
X	Containment of all vehicle and equipment wash areas through plumbing to sanitary or another collection method
X	Use of dry cleanup methods when cleaning debris and spills from corporation yard(s) or collection of all wash water and disposing of wash water to sanitary or other location where it does not impact surface or groundwater when wet cleanup methods are used
X	Cover and/or berm outdoor storage areas containing waste pollutants

Comments:

The City of Palo Alto's Corporation Yard (Municipal Service Center) practices are reviewed on an annual basis by coordinated efforts between Public Works Operations & Maintenance (PWOM) and Public Works Environmental Services staff. Appropriate stormwater BMPs are jointly identified and implemented for daily work tasks as well as training procedures conducted at the Corporation Yard (e.g., fleet washing and Fire Department drills). In addition, staff was able to eliminate all uncovered, unofficial refuse cans throughout the Municipal Service Center this past fiscal year.

If you have a corporation yard(s) that is not an NOI facility, complete the following table for inspection results for your corporation yard(s) or attach a summary including the following information:

Corporation Yard Name	Corp Yard Activities w/ site-specific SWPPP BMPs	Inspection Date[2]	Inspection Findings/Results	Date and Description of Follow-up and/or Corrective Actions
City of Palo Alto Municipal Service Center	• Good housekeeping practices are used at the MSC such as weekly	9/5/2018	1. Excessive trash on ground	1. Clear and remove. Completed 9/13/18

[2] Minimum inspection frequency is once a year during September.

	street sweeping and trash pickup by contractor. • Work crews remove trash from work trucks weekly. • Work crews use drip pans for any leaking vehicles. Supervisors send in vehicles for repair if leaks are found on vehicles. • Spills are cleaned up immediately using dry methods and waste material is properly contained and disposed of through the City's Hazardous Waste Program. • Crews wash vehicles at contained wash pad facility. • Paint buckets are rinsed and rinse water contained to sanitary sewer. Please refer to the MSC SWPPP dated 9/6/16 for a complete list of site specific BMPs.		2. Vehicle / Equipment Maintenance and Repair - Evidence of vehicle leaking oil in on ground from heavy equipment. 3. Outdoor Waste / Recycling Storage Areas - Small (40 gallon) waste receptacles without lids	2. Scraped and remove. Completed 9/13/18 3. Remove to inside location or cover tightly with appropriate lid. Completed 9/13/18

Section 3 - Provision C.3 Reporting New Development and Redevelopment

C.3.b.iv.(2) ►Regulated Projects Reporting

Fill in attached table **C.3.b.iv.(2)** or attach your own table including the same information.

C.3.e.iv. ►Alternative or In-Lieu Compliance with Provision C.3.c.

Is your agency choosing to require 100% LID treatment onsite for all Regulated Projects and not allow alternative compliance under Provision C.3.e.?		**Yes**	X	**No**
Comments (optional): The alternative compliance option is available per the City's Municipal Code.				

C.3.e.v ► Special Projects Reporting

1. In FY 2018-19, has your agency received, but not yet granted final discretionary approval of, a development permit application for a project that has been identified as a potential Special Project based on criteria listed in MRP Provision C.3.e.ii(2) for any of the three categories of Special Projects (Categories A, B or C)?		**Yes**	X	**No**
2. In FY 2018-19, has your agency granted final discretionary approval to a Special Project? If yes, include the project in both the **C.3.b.iv.(2)** Table, and the **C.3.e.v.** Table.		**Yes**	X	**No**

If you answered "Yes" to either question, N/A

1) Complete Table C.3.e.v.
2) Attach narrative discussion of 100% LID Feasibility or Infeasibility for each project.

C.3.h.v.(2) ► Reporting Newly Installed Stormwater Treatment Systems and HM Controls (Optional)

On an annual basis, before the wet season, provide a list of newly installed (installed within the reporting year) stormwater treatment systems and HM controls to the local mosquito and vector control agency and the Water Board. The list shall include the facility locations and a description of the stormwater treatment measures and HM controls installed.

See attached Table **C.3.h.v.(2)** for list of newly installed Stormwater Treatment Systems/HM Controls.

C.3.h.v.(3)(a) –(c) and (f) ► Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

Site Inspections Data	Number/Percentage
Total number of Regulated Projects (including offsite projects, and Regional Projects) in your agency's database or tabular format at the end of the previous fiscal year (FY 17-18)	**87**
Total number of Regulated Projects (including offsite projects, and Regional Projects) in your agency's database or tabular format at the end of the reporting period (FY 18-19)	**91**
Total number of Regulated Projects (including offsite projects, and Regional Projects) for which O&M verification inspections were conducted during the reporting period (FY 18-19)	**91**
Percentage of the total number of Regulated Projects (including offsite projects, and Regional Projects) inspected during the reporting period (FY 18-19)	**100%**[1]

[1] Based on the number of Regulated Projects in the database or tabular format at the end of the previous fiscal year, per MRP Provision C.3.h.ii.(6)(b).

C.3.h.v.(3)(d)-(e) ► Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

Provide a discussion of the inspection findings for the year and any common problems encountered with various types of treatment systems and/or HM controls. This discussion should include a general comparison to the inspection findings from the previous year.

Summary:

The City's Stormwater Investigator inspects all stormwater systems each year and will continue to do so as resources allow in order to minimize functionality issues. City staff has found that conducting annual operation and maintenance inspections results in almost all stormwater treatment devices performing as designed. In addition, the Stormwater Inspector builds effective working relationships with facility owners and property managers, providing guidance and receiving cooperation in the treatment devices being properly maintained. Typical issues found this year, which were similar to those of last year, are described in the three items below.

- Plants – either in poor condition or were removed and not replaced
- Mulch - reapplication does not occur in an adequate amount that allows for invasive weed growth
- Irrigation – systems may have a leak or need some type of maintenance

Provide a discussion of the effectiveness of the O&M Program and any proposed changes to improve the O&M Program (e.g., changes in prioritization plan or frequency of O&M inspections, other changes to improve effectiveness program).

Summary:

The City of Palo Alto O&M verification inspection program continues to be effective in compliant inspections and associated follow-up. Development project applicants are required to retain an independent 3rd party to visit the project site within 45 days following installation of the stormwater treatment controls to verify that the treatment measures were installed in accordance with the approved plan designs. City staff then takes on the responsibility to conduct subsequent annual inspections. The City established annual inspection fee, which is intended to cover staff time and ensures that adequate resources are available to conduct regular inspections for all facilities and has proven to be effective in cost recovery and adequate compliance. Staff tracks all time spent on each site from beginning to end of communication with the property contact in order to assess accurate cost effectiveness.

In FY 18-19, staff continued to adjust the inspection period so that most inspections occurred during the latter part of the wet season to assess the treatment measures in active use. Staff intends to conduct all inspections in FY19-20 during the wet season. In addition, staff will create an inspection form to improve documentation of the condition of sites over time.

C.3.i. ►Required Site Design Measures for Small Projects and Detached Single Family Home Projects

On an annual basis, discuss the implementation of the requirements of Provision C.3.i, including ordinance revisions, permit conditions, development of standard specifications and/or guidance materials, and staff training.

Summary:

BASMAA prepared standard specifications in four fact sheets regarding the site design measures listed in Provision C.3.i, as a resource for Permittees. We have modified internal procedures and checklists to require all applicable projects approved after December 1, 2012 to implement at least one of the site design measures listed in Provision C.3.i. Projects are reviewed by planning check staff to ensure projects that trigger these requirements implement a minimum of one of these measures. Comments are documented in Conditions of Approval.

C.3.j.i.(5).(b) ► Green Infrastructure Plan

(For FY 2018-19 Annual Report only) Did your agency complete a Green Infrastructure Plan?	X	**Yes, see attached Green Infrastructure Plan (Appendix 3-1)**		**No**

If No, provide schedule for completion: N/A

C.3.j.i.(5).(c) ► Legal Mechanisms

(For FY 2018-19 Annual Report only) Does your agency have legal mechanisms in place to ensure implementation of the Green Infrastructure Plan?	X	**Yes, see attached documents or links provided below**		**No**

If Yes, describe the legal mechanisms in place and the documents attached or links provided.

As part of the GSI Plan development process, the City of Palo Alto reviewed its existing policies, ordinances, and/or other legal mechanisms related to the implementation of stormwater NPDES permit requirements and found that it has sufficient legal authority to implement the GSI Plan. Acceptance of the GSI Plan by the City Council has further strengthened this authority. This link provides the Staff Report submitted with the GSI Plan to City Council: https://www.cityofpaloalto.org/civicax/filebank/documents/71089. Furthermore, one of City Council's yearly priorities is the Sustainability and Climate Action Plan, which includes the GSI Plan.

Per the GSI Plan, several City plans have been updated or will have been identified for an update with adequate GSI language to ensure GSI integration becomes part of City practices. During FY 19-20, staff will establish a policy to direct staff to actively engage in a process to consider the integration of GSI in all CIPs and participate in the Workgroup focused on implementation of the GSI Plan.

If No, provide schedule for completion: N/A

C.3.j.i.(5)(d) ► Green Infrastructure Outreach

On an annual basis, provide a summary of your agency's outreach and education efforts pertaining to Green Infrastructure planning and implementation.

Summary:

City of Palo Alto (City) Stormwater Program staff conducted green stormwater infrastructure (GSI) outreach to staff, residents and City Committees and Commissions in FY 18-19. The following is a list of the type of outreach conducted:

- Actively participated in SCVURPPP and BASMAA committees and workgroups that coordinate county-wide GSI activities through which Permittee representatives provide guidance and feedback on documents and other products.
- GSI Workgroup: Staff continued to gather the GSI Workgroup made up of Department Managers, Supervisors and representatives that was created to assist in the development of the GSI Plan. In total, six meetings were held during Plan development, with Thus far, four meetings have taken place, with two having occurred in FY 18-19. In addition, GSI Workgroup members were invited to provide feedback during various versions of the Plan (i.e., 50%, 85% and final draft).
- Staff:
    - In addition to the GSI Workgroup, staff also provided a presentation to the City's Sustainability Executive Leadership Group, made of upper-level Department managers regarding GSI.
    - Staff also convened 12 small group meetings (in FY 18-19) with relevant City staff to discuss GSI requirements, obtain feedback and build connections to work together in GSI planning and discuss implementation, maintenance and monitoring strategies and requirements.
    - Two meetings were held with staff from different City departments in October 2018 to obtain feedback regarding City-specific GSI guidelines and standards for both public and private projects. This information was used to understand staff needs and informed a scope of work to contract a consultant to develop City-specific GSI specifications.
- Resident Outreach: In FY18-19, City staff developed and sent out new informational utility bill inserts (UBIs) regarding GSI to approximately 26,000 residential accounts each year. The August 2018 UBI provided examples of GSI in the City's right-of-way, while the May 20198 UBI featured the City's Stormwater Rebate Program, which offsets costs to residents and businesses that install rain barrels, cisterns and pervious pavement on their property as part of a retrofit project.

- Staff actively engaged and updated three City committees made up of residents appointed by City Council.
  - Stormwater Oversight Committee, which was created to oversee the expenditures of the City's Stormwater Fee, was provided updates regarding the development of the GSI Plan three times during the fiscal year. Feedback was integrated into the final Plan. The Committee provided a support letter to City Council regarding GSI implementation in June 2019.
  - Two presentations were provided to the Parks and Recreation Commission and one to the Planning and Transportation Commission, all in regards to GSI Plan development.

In addition to City efforts, Please refer to SCVURPPP FY 18-19 Annual Report for a summary of outreach efforts implemented by the Program.

C.3.j.ii.(2) ► Early Implementation of Green Infrastructure Projects

On an annual basis, submit a list of green infrastructure projects, public and private, that are already planned for implementation during the permit term and infrastructure projects planned for implementation during the permit term that have potential for green infrastructure measures. Include the following information:

- A summary of planning or implementation status for each public and private green infrastructure project that is not also a Regulated Project as defined in Provision C.3.b.ii. (see C.3.j.ii.(2) Table B - Planned Green Infrastructure Projects).
- A summary of how each public infrastructure project with green infrastructure potential will include green infrastructure measures to the maximum extent practicable during the permit term. For any public infrastructure project where implementation of green infrastructure measures is not practicable, submit a brief description of the project and the reasons green infrastructure measures were impracticable to implement (see C.3.j.ii.(2) Table A - Public Projects Reviewed for Green Infrastructure).

Background Information:

Stormwater Program staff has spent considerable time developing the City's Green Stormwater Infrastructure (GSI) Plan, which was ultimately accepted by City Council on May 13, 2019. This GSI Plan development involved vetting projects that can be included and prioritized in the GSI Plan, and consequently, submitted in this Annual Report section. The following was reviewed as part of this process: 1) projects included in the City's Capital Improvement Plan; 2) potential sites identified through the development of the Santa Clara Basin Stormwater Resource Plan (SWRP); 3) areas identified during Google Map investigations; 4) leveraging potential of adding or increasing GSI in public and private projects during plan reviews; and 5) potential project ideas identified at various staff meetings. In addition, as part of the acceptance of the GSI Plan, Stormwater Program staff along with other City staff is working to develop a City Manager's Policy that will require all public projects to consider GSI, sea level rise, and sustainability components during the project design phase.

Stormwater Program staff has also been working with City staff during the design of the City's Public Safety Building (PSB), a Regulated Project, to increase the GSI included within the project to treat additional impervious surface beyond the requirements. These on-going meetings follow the goals of the GSI Plan to increase consideration of GSI features throughout the City. Finally, Public Works and Planning staff were trained regarding Regulated Project GI requirements when they came about in the last Permit term and generally understand the benefit of GI projects, and therefore, able to advocate for GSI when possible. However, staff will continue to receive training so that these type of processes are completely embedded with the City.

Summary of Planning or Implementation Status of Identified Projects:

City of Palo Alto staff used BASMAA "Guidance for Identifying Green Infrastructure Potential in Municipal Capital Improvement Program Projects" (May 6, 2016) for guidance on identifying and reviewing potential green stormwater infrastructure (GSI) projects. See Tables C.3.j.ii.(2)-A and C.3.j.ii.(2)-B for the required information.

C.3.j.iii.(2) and (3) ► Participate in Processes to Promote Green Infrastructure

On an annual basis, report on the goals and outcomes during the reporting year of work undertaken to participate in processes to promote green infrastructure. *(For FY 2018-19 Annual Report only)* Submit a plan and schedule for new and ongoing efforts to participate in processes to promote green infrastructure.
Please refer to SCVURPPP FY 18-19 Annual Report for: 1) a summary of efforts conducted to help regional, State, and federal agencies plan, design and fund incorporation of green infrastructure measures into local infrastructure projects, including transportation projects; and 2) a plan and schedule for new and ongoing efforts to participate in processes to promote green infrastructure.

C.3.j.iv.(2) and (3) ► Tracking and Reporting Progress

On an annual basis, report progress on development and implementation of methods to track and report implementation of green infrastructure measures and provide reasonable assurance that wasteload allocations for TMDLs are being met. (For FY 2018-19 Annual Report only) Submit the tracking methods used and report implementation of green infrastructure measures including treated area, and connected and disconnected impervious area on both public and private parcels within their jurisdictions.
Please refer to SCVURPPP's FY 18-19 Annual Report for a summary of methods being developed to track and report implementation of green infrastructure measures.

C.3.b.iv.(2) ►Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Project Location[2], Street Address	Name of Developer	Project Phase No.[3]	Project Type & Description[4]	Project Watershed[5]	Total Site Area (Acres)	Total Area of Land Disturbed (Acres)	Total New Impervious Surface Area (ft^2)[6]	Total Replaced Impervious Surface Area (ft^2)[7]	Total Pre-Project Impervious Surface Area[8] (ft^2)	Total Post-Project Impervious Surface Area[9] (ft^2)
Private Projects											
380-410 Cambridge	380-410 Cambridge Avenue	Greenheart Land Company	N/A	Three story commercial mixed use with office, retail, and covered parking	Matadero Creek	0.4	0.4	0	14,850	17,484	14,850
4115 El Camino Real	4115 El Camino Real	4115 ECR LLC	N/A	Three story mixed use with retail, office and residential units and underground parking	Adobe Creek	0.35	0.35	0	13,487	15,651	13,487
3223 Hanover Street	3223 Hanover Street	Steep Slope Property LLC	N/A	New 2 story office building and 2 level below grade parking garage	Matadero Creek	10.17	10.17	0	256,932	271,945	256,932
3406 Hillview Avenue/3380 Coyote Hill Road	3406 Hillview Avenue/3380 Coyote Hill Road	Leland Stanford Jr University Board of Trustees	N/A	New Two-Story 83,030 sq. ft. Research & Development building	Matadero Creek	6.5	5.42	0	124,823	124,867	124,823

[2]Include cross streets
[3]If a project is being constructed in phases, indicate the phase number and use a separate row entry for each phase. If not, enter "NA".
[4]Project Type is the type of development (i.e., new and/or redevelopment). Example descriptions of development are: 5-story office building, residential with 160 single-family homes with five 4-story buildings to contain 200 condominiums, 100 unit 2-story shopping mall, mixed use retail and residential development (apartments), industrial warehouse.
[5]State the watershed(s) in which the Regulated Project is located. Downstream watershed(s) may be included, but this is optional.
[6]All impervious surfaces added to any area of the site that was previously existing pervious surface.
[7]All impervious surfaces added to any area of the site that was previously existing impervious surface.
[8]For redevelopment projects, state the pre-project impervious surface area.
[9]For redevelopment projects, state the post-project impervious surface area.

C.3.b.iv.(2) ►Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Project Location[2], Street Address	Name of Developer	Project Phase No.[3]	Project Type & Description[4]	Project Watershed[5]	Total Site Area (Acres)	Total Area of Land Disturbed (Acres)	Total New Impervious Surface Area (ft^2)[6]	Total Replaced Impervious Surface Area (ft^2)[7]	Total Pre-Project Impervious Surface Area[8](ft^2)	Total Post-Project Impervious Surface Area[9](ft^2)
Courtyard by Marriott and Marriott AC	744 San Antonio Rd	M10 DEV, LLC	N/A	Two new hotel buildings with underground parking garage	Adobe Creek	1.92	1.92	0	67,683	76,439	67,683
3001 El Camino Real	3001 El Camino Real	The Sobrato Organization	N/A	One mixed use and one residential building	Adobe Creek	0.39	0.39	12,758	0	0	12,758
695 Arastradero	695 Arastradero	Alta Mesa Memorial Park Cemetery	N/A	New reception area at Alta Mesa Cemetery	Adobe Creek	0.39	0.39	12,758	0	0	12,758
Public Projects											
375 Hamilton Avenue	375 Hamilton Avenue	City of Palo Alto	N/A	New parking garage with 1 level of underground parking and 5 above ground levels of parking and a ground floor retail space	San Francisquito Creek	0.66	0.66	0	26,122	28,368	26,122

Comments:
N/A

C.3.b.iv.(2) ►Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (private projects)

Project Name Project No.	Application Deemed Complete Date[10]	Application Final Approval Date[11]	Source Control Measures[12]	Site Design Measures[13]	Treatment Systems Approved[14]	Type of Operation & Maintenance Responsibility Mechanism[15]	Hydraulic Sizing Criteria[16]	Alternative Compliance Measures[17/18]	Alternative Certification[19]	HM Controls[20/21]
Private Projects										
380-410 Cambridge	3/12/19	3/12/19	Covered dumpster area drain to sanitary sewer, Beneficial landscaping, Maintenance	Cluster structures/ pavement, disconnected downspouts, pervious pavement, other self-treating area	Flow-through planter	O&M Agreement recorded with the County	2c	N/A	Yes - Schaaf & Wheeler	N/A
4115 El Camino Real	1/21/19	1/21/19	Maintenance	Minimize impervious surfaces, pervious pavement	Flow-through planter	O&M Agreement recorded with the County	2c	N/A	Yes - Schaaf & Wheeler	N/A
3223 Hanover Street	9/27/18	9/27/18	Covered dumpster area, drain to sanitary sewer, beneficial landscaping, maintenance, storm drain labeling	Minimize land disturbed, minimize impervious surfaces, disconnected downspouts	Bioretention area	O&M Agreement recorded with the County	2c	N/A	Yes - Schaaf & Wheeler	N/A

[10]For private projects, state project application deemed complete date. If the project did not go through discretionary review, report the building permit issuance date.
[11]For private projects, state project application final discretionary approval date. If the project did not go through discretionary review, report the building permit issuance date.
[12]List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.
[13]List site design measures approved for the project. Examples include: minimize impervious surfaces; conserve natural areas, including existing trees or other vegetation, and soils; construct sidewalks, walkways, and/or patios with permeable surfaces, etc.
[14]List all approved stormwater treatment system(s) to be installed onsite or at a joint stormwater treatment facility (e.g., flow through planter, bioretention facility, infiltration basin, etc.).
[15]List the legal mechanism(s) (e.g., O&M agreement with private landowner; O&M agreement with homeowners' association; O&M by public entity, etc…) that have been or will be used to assign responsibility for the maintenance of the post-construction stormwater treatment systems.
[16]See Provision C.3.d.i. "Numeric Sizing Criteria for Stormwater Treatment Systems" for list of hydraulic sizing design criteria. Enter the corresponding provision number of the appropriate criterion (i.e., 1.a., 1.b., 2.a., 2.b., 2.c., or 3).
[17]For Alternative Compliance at an offsite location in accordance with Provision C.3.e.i.(1), on a separate page, give a discussion of the alternative compliance site including the information specified in Provision C.3.b.v.(1)(m)(i) for the offsite project.
[18]For Alternative Compliance by paying in-lieu fees in accordance with Provision C.3.e.i.(2), on a separate page, provide the information specified in Provision C.3.b.v.(1)(m)(ii) for the Regional Project.
[19]Note whether a third party was used to certify the project design complies with Provision C.3.d.
[20]If HM control is not required, state why not.
[21]If HM control is required, state control method used (e.g., method to design and size device(s) or method(s) used to meet the HM Standard, and description of device(s) or method(s) used, such as detention basin(s), biodetention unit(s), regional detention basin, or in-stream control).

C.3.b.iv.(2) ►Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (private projects)

Project Name Project No.	Application Deemed Complete Date[10]	Application Final Approval Date[11]	Source Control Measures[12]	Site Design Measures[13]	Treatment Systems Approved[14]	Type of Operation & Maintenance Responsibility Mechanism[15]	Hydraulic Sizing Criteria[16]	Alternative Compliance Measures[17/18]	Alternative Certification[19]	HM Controls[20/21]
3406 Hillview Avenue/3380 Coyote Hill Road	8/14/18	8/14/18	Beneficial landscaping, maintenance	Minimize land disturbed, minimize impervious surfaces, other self-treating area	Bioretention area, tree credits	O&M Agreement recorded with the County	2c	N/A	Yes - Schaaf & Wheeler	N/A
Courtyard by Marriott and Marriott AC	6/12/17	6/12/17	Covered dumpster area, drain to sanitary sewer (ss), ss connection for swimming pool	Minimize land disturbed, minimize impervious surfaces, minimum impact street or parking lot design, cluster structures/pavement, self-retaining area	Bioretention area, flow-through planter	O&M Agreement recorded with the County	2c/3 & 2c	N/A	Yes - Schaaf & Wheeler	N/A
3001 El Camino Real	11/9/18	11/9/18	Beneficial landscaping, maintenance, storm drain labeling	Minimize impervious surfaces, disconnected downspouts	Media filter system, biotreatment pond	O&M Agreement recorded with the County	3	N/A	Yes - Schaaf & Wheeler	N/A
695 Arastradero	3/13/19	3/13/19	Maintenance, storm drain labeling	Minimize land disturbed, disconnected downspouts	Bioretention areas	O&M Agreement recorded with the County	2c	N/A	Yes - Schaaf & Wheeler	N/A

C.3.b.iv.(2) ►Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (public projects)

Project Name Project No.	Approval Date[22]	Date Construction Scheduled to Begin	Source Control Measures[23]	Site Design Measures[24]	Treatment Systems Approved[25]	Operation & Maintenance Responsibility Mechanism[26]	Hydraulic Sizing Criteria[27]	Alternative Compliance Measures[28/29]	Alternative Certification[30]	HM Controls[31/32]
Public Projects										
375 Hamilton Avenue	2/11/19	N/A	Covered dumpster area, drain to sanitary sewer, beneficial landscaping	Minimize land disturbed, minimize impervious surfaces, pervious pavement	Bioretention area	Internal Maintenance Agreement	3	N/A	Yes - Schaaf & Wheeler	N/A

Comments:

1) Courtyard by Marriott and Marriott AC was approved in FY 16-17; however, the City missed reporting it at that time. The City realized its mistake in FY 18-19, and thus, is reporting it in this current Annual Report.
2) The parking garage at 375 Hamilton Avenue was previously approved; however, due to concerns from residents, City Council decided to stall the project on February 11, 2019. Therefore, the project does not currently have an anticipated date for construction to begin.

[22]For public projects, enter the plans and specifications approval date.
[23]List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.
[24]List site design measures approved for the project. Examples include: minimize impervious surfaces; conserve natural areas, including existing trees or other vegetation, and soils; construct sidewalks, walkways, and/or patios with permeable surfaces, etc.
[25]List all approved stormwater treatment system(s) to be installed onsite or at a joint stormwater treatment facility (e.g., flow through planter, bioretention facility, infiltration basin, etc.).
[26]List the legal mechanism(s) (e.g., maintenance plan for O&M by public entity, etc.) that have been or will be used to assign responsibility for the maintenance of the post-construction stormwater treatment systems.
[27]See Provision C.3.d.i. "Numeric Sizing Criteria for Stormwater Treatment Systems" for list of hydraulic sizing design criteria. Enter the corresponding provision number of the appropriate criterion (i.e., 1.a., 1.b., 2.a., 2.b., 2.c., or 3).
[28]For Alternative Compliance at an offsite location in accordance with Provision C.3.e.i.(1), on a separate page, give a discussion of the alternative compliance site including the information specified in Provision C.3.b.v.(1)(m)(i) for the offsite project.
[29]For Alternative Compliance by paying in-lieu fees in accordance with Provision C.3.e.i.(2), on a separate page, provide the information specified in Provision C.3.b.v.(1)(m)(ii) for the Regional Project.
[30]Note whether a third party was used to certify the project design complies with Provision C.3.d.
[31]If HM control is not required, state why not.
[32]If HM control is required, state control method used (e.g., method to design and size device(s) or method(s) used to meet the HM Standard, and description of device(s) or method(s) used, such as detention basin(s), biodetention unit(s), regional detention basin, or in-stream control).

C.3.h.v.(2). ►Table of Newly Installed[33] Stormwater Treatment Systems and Hydromodification Management (HM) Controls (Optional)

Fill in table below or attach your own table including the same information.

Name of Facility	Address of Facility	Party Responsible[34] For Maintenance	Type of Treatment/HM Control(s)
430 Forest	430 Forest Avenue	Property Owner	Flow though planters Bioretention
Oshman Family Jewish Community Center	3921 Fabian Way	Property Owner	Bioretention
3181 Porter Drive	3181 Porter Drive	Property Management	Bioretention Pervious Pavement
University Terrace	1451-1601 California Avenue	Property Management	Bioretention

[33] "Newly Installed" includes those facilities for which the final installation inspection was performed during this reporting year.
[34] State the responsible operator for installed stormwater treatment systems and HM controls.

C.3.e.v.Special Projects Reporting Table

Reporting Period – July 1 2018 - June 30, 2019

Project Name & No.	Permittee	Address	Application Submittal Date[35]	Status[36]	Description[37]	Site Total Acreage	Gross Density DU/Acre	Density FAR	Special Project Category[38]	LID Treatment Reduction Credit Available[39]	List of LID Stormwater Treatment Systems[40]	List of Non-LID Stormwater Treatment Systems[41]
Name of the Special Project and Project No. (if applicable)	Name of the Permittee in whose jurisdiction the Special Project will be built	Address of the Special Project; if no street address, state the cross streets	See footnote	See footnote	See footnote	Total site area in acres	Number of dwelling units per acre.	Floor Area Ratio	Category A: Category B: Category C: Location: Density: Parking: See footnote	Category A: Category B: Category C: Location: Density: Parking: See footnote	Indicate each type of LID treatment system and % of total runoff treated. See footnote	Indicate each type of non-LID treatment system and % of total runoff treated. Indicate whether minimum design criteria met or certification received See footnote
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

[35]Date that a planning application for the Special Project was submitted.
[36] Indicate whether final discretionary approval is still pending or has been granted, and provide the date or version of the project plans upon which reporting is based.
[37]Type of project (commercial, mixed-use, residential), number of floors, number of units, type of parking, and other relevant information.
[38] For each applicable Special Project Category, list the specific criteria applied to determine applicability. For each non-applicable Special Project Category, indicate n/a.
[39]For each applicable Special Project Category, state the maximum total LID Treatment Reduction Credit available. For Category C Special Projects also list the individual Location, Density, and Minimized Surface Parking Credits available.
[40]**:** List all LID stormwater treatment systems proposed. For each type, indicate the percentage of the total amount of runoff identified in Provision C.3.d. for the Special Project's drainage area.
[41]List all non-LID stormwater treatment systems proposed. For each type of non-LID treatment system, indicate: (1) the percentage of the total amount of runoff identified in Provision C.3.d. for the Special Project's drainage area, and (2) whether the treatment system either meets minimum design criteria published by a government agency or received certification issued by a government agency, and reference the applicable criteria or certification.

Special Projects Narrative

City of Palo Alto has no Special Projects to submit for FY 18-19.

C.3.j.ii.(2) ► Table A - Public Projects Reviewed for Green Infrastructure

Project Name and Location[42]	Project Description	Status[43]	GI Included?[44]	Description of GI Measures Considered and/or Proposed or Why GI is Impracticable to Implement[45]
Baylands Athletic Center Expansion	10.5 acre expansion of the Baylands Athletic Center	Preliminary design	TBD	Baylands Athletic Center is proposed to extend onto the 10.5 acres that was previously part of the golf course. This project includes potential for stormwater storage under the athletic fields
Bicycle and Pedestrian Plan Improvements	Various projects	On hold	TBD	Bioretention cells (bulb outs) are continuously being considered and installed when possible. Residents' concerns are being addressed regarding past transportation projects (concerns not related to green infrastructure).
Bike Boulevard Project – Phase II	6 miles of residential streets that will be converted into Bike Blvds.	On hold	TBD	This project is currently on hold following the installation of the Bike Boulevard Project – Phase I based on public feedback following that installation. Residents' concerns are being addressed regarding past transportation projects (concerns not related to green infrastructure).
Bol Park	Park improvements	No longer being considered	No	This park was considered as a potential concept project to be included in the Santa Clara Valley Stormwater Resource Plan. Since the draft concept consideration, Stormwater Program staff met with neighborhood residents and determined that the project would be infeasible based on public feedback during outreach events.
E. Charleston Rd./San Antonio Rd.	Pedestrian improvement at one corner	Preliminary design	TBD	Staff is currently considering adding a bioretention measure as part of the pedestrian improvement. Due to staffing changes, the project has been on hold.

[42] List each public project that is going through your agency's process for identifying projects with green infrastructure potential.
[43] Indicate status of project, such as: beginning design, under design (or X% design), projected completion date, completed final design date, etc.
[44] Enter "Yes" if project will include GI measures, "No" if GI measures are impracticable to implement, or "TBD" if this has not yet been determined.
[45] Provide a summary of how each public infrastructure project with green infrastructure potential will include green infrastructure measures to the maximum extent practicable during the permit term. If review of the project indicates that implementation of green infrastructure measures is not practicable, provide the reasons why green infrastructure measures are impracticable to implement.

Embarcadero Rd/El Camino Real Intersection Improvements project	Intersection improvements and bike lanes along Embarcadero Rd.	On hold	No	Green Infrastructure was added to the bulb out at Kingsley/ Embarcadero Rd during the design phase, but this project has since been put on hold due to staffing changes.
John BOULWARE Park	Park improvements	Preliminary design/community engagement process	TBD	This park is nearby a planning area for which the City recently contracted with a firm to develop. Discussions have begun for the North Ventura Coordinated Area Plan, which will outline comprehensive goals for this priority development area, including potential creek improvements. GI additions to John Boulware Park, including bioretention cells and rain barrels, could be an extension of the improvements to the neighboring North Ventura area. City is in the process of purchasing nearby land to be added to this Park, which will provide additional GI opportunities in the future.
Newell Road/San Francisquito Creek Bridge Replacement	Replacement of a bridge	Design Phase	No	Bioretention cells (bulb outs) are no longer being considered due to the location next to the creek and a narrow neighborhood street that does allow enough room to fit GI. This project was recently resumed in the spring of 2019 after being put on hold in FY 16-17 while environmental documentation was developed.
Upgrade Downtown Project	Replacement water/gas pipes	On-going construction (estimated completion 2021)	No	GI is infeasible to implement for this project due to the various utility conflicts with replacing water/gas pipes throughout the downtown area. The City is planning on developing City-specific GI specifications by FY 20-21, in order to account for future GI potential for both utility replacement projects, as well as any projects involving GI in close proximity to current utilities.
Various City Parks (Byxbee Park, Seale Park, Hoover Park, Ramos Park)	City parks that are scheduled for upgrading and renovating various elements	Will be determined over time; coordination is on-going with staff from that Department.	TBD	Although GI funding is currently not designated for these various City parks, the City identified GI opportunities in terms of underground stormwater storage and bioretention for parks that are scheduled to be upgraded within the next few years.

C.3.j.ii.(2) ► Table B - Planned and/or Completed Green Infrastructure Projects

Project Name and Location[46]	Project Description	Planning or Implementation Status	Green Infrastructure Measures Included
Bike Boulevard Project – Phase I	7.1 miles of residential streets that will be converted into Bike Blvds.	Implementation (construction) stage. Groundbreaking 9/25/17, completion in 9/18	Bioretention was to this project in the form of three curb extensions, with two designed as flow-through planters and one designed as a bioretention area.
Charleston Arastradero Corridor	2.3 mile corridor improvement including bike/ped improvements and traffic modifications.	On-going construction (estimated completion Spring 2021)	Five (5) bioretention bulb-outs are planned for construction. This number was reduced from the planned eight bulb-outs due to utility conflicts.
Embarcadero Rd/El Camino Real Intersection Improvements project	Intersection improvements and bike lanes along Embarcadero Rd.	Design Stage (project is on hold)	Green Infrastructure has been added to the bulb-out design at Kingsley/Embarcadero Rd.
Highway 101 Pedestrian/Bike Bridge Overpass (public)	Construction of a new pedestrian and bike bridge over Hwy 101. This is a Regulated Project	Construction will begin Fall 2019	Bioretention will be included in this project, as it is a C.3 Regulated Project. Because of project space constraints, part of a road that is within project boundaries will also be treated to account for additional treatment needed (that cannot occur at that location).
Lincoln Avenue/Middlefield Road Resurfacing Project	Repaving 2.5 lane miles of high-use arterial streets and 1.1 lane miles of residential streets.	Completed Fall 2018	Bioretention planters were integrated within sidewalk curb extensions at Kellogg Ave and Middlefield Rd.
Palo Alto Transit Center Pedestrian/Bicycle Pathway Project	Upgraded the Bike/ped path from El Camino Real to Transit center	Construction Completed	Added pervious concrete to portion of pathway.
Public Safety Building	New construction to house City's public safety departments	Design phase (approx. 85%)	Although this project is a Regulated Project, City staff is working with the design consultant to treat part of the street ROW's impervious surfaces beyond the required GI.
Matadero Pump Station	Replaced pump station	Completed September 2018	Added pervious pavement to portion of area surrounding pump station.

[46] List each planned (and expected to be funded) public and private green infrastructure project that is not also a Regulated Project as defined in Provision C.3.b.ii. Note that funding for green infrastructure components may be anticipated but is not guaranteed to be available or sufficient.

San Francisquito Pump Station	Replaced pump station	Construction completed 2009	Added pervious pavement to portion of area surrounding pump station.
Southgate Neighborhood	Storm drain improvement project for Southgate neighborhood	Construction completed in 2015	Bioretention installed throughout neighborhood.

Section 4 – Provision C.4 Industrial and Commercial Site Controls

Program Highlights and Evaluation
Highlight/summarize activities for reporting year:

Summary:

City of Palo Alto (City) Environmental Compliance staff actively participates in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) Industrial and Commercial Ad Hoc Task Group (IND AHTG). In addition, all City inspectors and respective managers attend annual SCVURPPP trainings, such as the Annual Training that took place on May 30, 2019, to improve upon current skills and learn from other member jurisdictions. City inspectors also communicate regularly with each other regarding issues encountered during inspections and participate in cross-training when feasible.

During FY 17-18, City staff developed a new C.4 survey form to establish a baseline for the type of facilities that should be inspected as part of the Business Inspection Program as well as to pinpoint items to observe during inspections. This led to an update of the list of facilities that are part of the City's Program. In FY 18-19, City staff continued efforts to update the Business Inspection Program by working on an updated inspection form after conducting the initial survey. This updated inspection form will replace existing inspection forms and will be utilized along with the City's new online inspection database that will be implemented in FY 19-20. City staff also plans to update its Enforcement Response Plan in the upcoming fiscal year.

Refer to the C.4. Industrial and Commercial Site Controls section of SCUVRPPP's FY 18-19 Annual Report for a description of activities of SCVURPPP's and/or the BASMAA Municipal Operations Committee.

C.4.b.iii ► Potential Facilities List (i.e., List of All Facilities Requiring Stormwater Inspections) (Isabel)

Facility data, status, and inspection results are stored in an internal database. City inspectors update the database subsequent to a facility inspection. Refer to Appendix 4-1 for the current list of the facilities subject to periodic inspections.

C.4.d.iii.(2)(a) & (c) ►Facility Inspections (Isabel)

Fill out the following table or attach a summary of the following information. Indicate your reporting methodology below.

	X	Permittee reports multiple discrete potential and actual discharges at a site as one enforcement action.
		Permittee reports the total number of discrete potential and actual discharges on each site.

	Number
Total number of inspections conducted (C.4.d.iii.(2)(a))	429
Violations, enforcement actions, or discreet number of potential and actual discharges resolved within 10 working days or otherwise deemed resolved in a longer but still timely manner (C.4.d.iii.(2)(c))	72

Comments:
Thirteen sites with potential discharges were not resolved in a timely manner (i.e. ten business days). All thirteen sites were food facilities with under-maintained refuse enclosures, with issues such as messy tallow bins, refuse bins being stored outside of the refuse enclosure, and overall poor housekeeping in these areas. These food facility inspections are on-going and difficult to manage due to ever-changing restaurant staff, dense commercial areas, and the limited number of third party companies that maintain tallow bins. Oftentimes, the manager or owner is also not on-site at the time of the inspection, which limits communication between the Inspector and management to ensure that non-compliance is addressed in a timely manner.

C.4.d.iii.(2)(b) ►Frequency and Type of Enforcement Conducted

Fill out the following table or attach a summary of the following information.

	Enforcement Action (as listed in ERP)[1]	**Number of Enforcement Actions Taken**
Level 1	Verbal Notice	63
Level 2	Written Notice	6
Level 3	Notice of Non-Compliance	2
Level 4	Compliance Agreement, Criminal Citation, Civil Action	1
Total		72

C.4.d.iii.(2)(d) ► Frequency of Potential and Actual Non-stormwater Discharges by Business Category

Fill out the following table or attach a summary of the following information.

Business Category[2]	**Number of Actual Discharges**	**Number of Potential Discharges**
Food Facility	1	67
Automotive	0	3
Other – Nanotechnology Research	0	1

[1]Agencies to list specific enforcement actions as defined in their ERPs.
[2]List your Program's standard business categories.

C.4.d.iii.(2)(e) ►Non-Filers

List below or attach a list of the facilities required to have coverage under the Industrial General Permit but have not filed for coverage:

N/A

C.4.e.iii ►Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Industrial/ Commercial Site Inspectors in Attendance	Percent of Industrial/ Commercial Site Inspectors in Attendance	No. of IDDE Inspectors in Attendance	Percent of IDDE Inspectors in Attendance
SCVURPPP IND/IDDE Workshop	5/30/19	County-wide strategy for control of mobile sources, multiple city illicit discharge procedures, and inspection scenarios.	6	86%	6	86%

Comments:
The SCVURPPP Workshop agenda and attendance list are available on the SCVURPPP website. One of the City's Stormwater Inspectors was on vacation during this training and was unable to attend.

Section 5 – Provision C.5 Illicit Discharge Detection and Elimination

Program Highlights and Evaluation
Highlight/summarize activities for reporting year:

Provide background information, highlights, trends, etc.

Summary:

The City of Palo Alto (City) actively participates in the Santa Clara Valley Urban Runoff Pollution Prevention Program's (SCVURPPP) Illicit Discharge, Detection and Elimination Ad Hoc Task Group (IND/IDDE AHTG). During work hours (generally 6:00am-4:30pm), City inspectors respond as soon as feasible to potential and actual illicit discharge complaints. After hours, residents are directed through our main phone number to contact the Police Dispatch non-emergency phone number. On-duty Public Works Operations staff are notified as needed, and City Stormwater staff investigate the matter on the following work day. City staff, including the Police Department, may request assistance from the City's Fire Department if an unknown hazardous substance is encountered. All discharges are cleaned by appropriate staff immediately if they have entered (or are about to enter) the storm drain system. The City requires that the responsible party clean the spill when possible but provides support as necessary.

During their regular workday, Public Works and Utilities Department field staff continuously monitors the streets and storm drain system for illicit discharges and connections. Utilities and Public Works staff notifies Stormwater Program staff if any issues are observed in the field. The Stormwater Inspector or other field inspector is notified of any issues, visits the site and resolves the issue as soon as possible, and enters it into the database. As with the public, field staff also notifies Police Dispatch if it is after hours. Staff is working on updating the current, paper-based inspection form and will integrate the new form into the City's new online inspection database that will be implemented in FY 19-20.

Please refer to the C.5 Illicit Discharge Detection and Elimination section of SCVURPPP's FY 18-19 Annual Report for description of activities at the SCVURPPP or regional level.

C.5.c.iii ►Complaint and Spill Response Phone Number

Summary of any changes made during FY 18-19.

No change.

C.5.d.iii.(1), (2), (3) ►Spill and Discharge Complaint Tracking

Spill and Discharge Complaint Tracking (fill out the following table or include an attachment of the following information)

	Number
Discharges reported (C.5.d.iii.(1))	10
Discharges reaching storm drains and/or receiving waters (C.5.d.iii.(2))	3
Discharges resolved in a timely manner (C.5.d.iii.(3))	10

Ten public or inter-departmental complaints of potential or actual discharges were made in FY 18-19. Three complaints that were substantiated in the field reached the storm drain system. Of the remaining 10 discharges, six were substantiated, and inspectors were not able to pinpoint the source of the remaining one. In addition, in terms of enforcement, one party (due to a RV discharge to the storm drain system) received a citation from the City's Police Department; two parties received warning letters; five parties received verbal warnings; and two were not enforced upon. All discharges were cleaned by the City or the responsible party within a reasonable time period before any rainfall events.

C.5.e.iii.(2) ►Control of Mobile Sources

(a) Provide changes to your agency's minimum standards and BMPs for each of the various types of mobile businesses since the 2017 Annual Report (C.5.e.iii.(2)(a))).

The City of Palo Alto follows the minimum standards and BMPs described in the "Mobile Businesses—Best Management Practices" brochure developed by the SCVURPPP IND/IDDE AHTG in May 2012 for the following mobile business categories: automobile washers/detailers, power washers, carpet cleaners, steam cleaners, pet care services. There have been no changes to the BMPs since the 2017 Annual Report.

(b) Provide changes to your agency's enforcement strategy for mobile businesses (C.5.e.iii.(2)(b).

The City's inspectors continually look for non-stormwater discharges during travel to and from routine inspections and have also trained other field staff to identify mobile discharges as well. Mobile businesses identified not carrying out appropriate BMPs are investigated, and similar enforcement is taken as is for non-mobile illicit discharges. It should be noted that the City focuses on education as a first step in or in tandem with enforcement. In addition, SCVURPPP's countywide enforcement strategy was updated in FY18-19 to include tracking mobile business enforcement actions from SCVURPPP agencies in a table available on the SCVURPPP members-only website. City staff reports substantiated mobile discharges to SCVURPPP to be added to the tracking table, which is periodically updated. If City staff identifies recurring issues with a particular party, the City may choose to elevate enforcement accordingly.

(c) Provide minimum standards and BMPs developed for additional types of mobile businesses addressed since 2017 Annual Report (C.5.e.iii.(2)(c)).

SCVURPPP and the City have not developed minimum standards and BMPs for additional types of mobile businesses than those described in (a) above.

(d) Provide a list and summary of the specific outreach events and education conducted to each type of mobile business operating within your jurisdiction during the Permit term (C.5.e.iii.(2)(d).
Please refer to the C.5 Illicit Discharge Detection and Elimination section of SCVURPPP's FY 18-19 Annual Report for a description of activities at the countywide or regional level.
(e) Discuss inspections conducted at mobile businesses and/or job sites (C.5.e.iii.(2)(e).
The City's inspectors continually look for non-stormwater discharges during travel to and from routine inspections and have also trained other field staff to identify mobile discharges as well. Mobile businesses identified not carrying out appropriate BMPs are investigated, and inspectors focus on educating the parties about BMPs that need to be established as part of their regular practice. Similar enforcement is taken as is for non-mobile illicit discharges.
(f) List below or attach the list of mobile businesses operating within your agency's jurisdiction (C.5.e.iii.(2)(f)).
In 2014, SCVURPPP complied an inventory of mobile businesses located in Santa Clara County. The inventory was developed by reviewing business licenses, yellow page searches, and online business searches. The inventory includes automotive washing, steam cleaning, power washing, pet care services, and carpet cleaning mobile businesses. The inventory is periodically updated with mobile businesses that stormwater inspectors observe during routine field activities, including responding to illicit discharges. The inventory is made available to all Co-permittees on the SCVURPPP members-only webpage. The inventory is included in SVURPPP's FY 18-19 Annual Report. The inventory currently has over 190 mobile businesses.
(g) Discuss enforcement actions taken against mobile businesses during the Permit term (C.5.e.iii.(2)(g))
Enforcement actions are typically taken in response to a complaint or illicit discharge through the City's IDDE Program. Enforcement actions are tracked in the City's stormwater inspection management database required by MRP C.5.d.ii. There were zero (0) enforcement actions taken for mobile businesses in FY 18-19.

C.5.f.iii ►MS4 Map Availability

Discuss how you make your MS4 map available to the public and how you publicize the availability of the MS4 map.
The notification that the City's storm drain maps are available for public inspection at the Development Center is posted on the stormwater website: cityofpaloalto.org/gov/depts/pwd/stormwater/drains.asp.

Section 6 – Provision C.6 Construction Site Controls

C.6.e.iii.(3)(a), (b), (c), (d) ►Site/Inspection Totals

Number of active Hillside Sites (sites disturbing < 1 acre of soil requiring storm water runoff quality inspection) (C.6.e.iii.3.a)	**Number of High Priority Sites (sites disturbing < 1 acre of soil requiring storm water runoff quality inspection)** (C.6.e.iii. 3.c)	**Number of sites disturbing ≥ 1 acre of soil** (C.6.e.iii.3.b)	**Total number of storm water runoff quality inspections conducted (include only Hillside Sites, High Priority Sites and sites disturbing 1 acre or more)** (C.6.e.iii. 3.d)
5	9	23	193

Comments:

The City of Palo Alto (City) uses the 15% permit slope definition for Hillside Sites. In FY 18-19, the definition of High Priority Sites was expanded to include City Capital Improvement Program projects in addition to those sites adjacent to local waterways. One of the sites recorded as being larger than an acre was also nearby San Francisquito Creek, and thus also a High Priority Site.

Provide the number of inspections that are conducted at sites not within the above categories as part of your agency's inspection program and a general description of those sites, if available or applicable.

N/A

C.6.e.iii.(3)(e) ►Construction Related Storm Water Enforcement Actions

	Enforcement Action (as listed in ERP)[1]	**Number Enforcement Actions Issued**
Level 1[2]	Verbal Notice	1
Level 2	Written Notice	0
Level 3	Notice of Non-Violation	0
Level 4	Administrative	0
Total	**For all enforcement actions**	**1**

[1]Agencies should list the specific enforcement actions as defined in their ERPs.
[2]For example, Enforcement Level 1 may be Verbal Warning.

C.6.e.iii.(3)(f), ►Illicit Discharges

	Number
Number of illicit discharges, actual and those inferred through evidence at hillside sites, high priority sites and sites that disturb 1 acre or more of land (C.6.e.iii. 3.f)	1

C.6.e.iii.(3)(g) ► Corrective Actions

Indicate your reporting methodology below.

	Permittee reports multiple discrete potential and actual discharges at a site as one enforcement action.
X	Permittee reports the total number of discrete potential and actual discharges on each site.

	Number
Enforcement actions or discrete potential and actual discharges fully corrected within 10 business days after violations are discovered or otherwise considered corrected in a timely period (C.6.e.iii. .3.g)	1

Comments:

N/A

C.6.e.iii.(4) ►Evaluation of Inspection Data

Describe your evaluation of the tracking data and data summaries and provide information on the evaluation results (e.g., data trends, typical BMP performance issues, comparisons to previous years, etc.).

Description:

The City continues to use an electronic database to track construction inspections to meet the requirements of the MRP. Data is collected in the field with the use of a tablet that can be synced and backed up on the office network. In FY 18-19, staff researched and evaluated alternative types of cloud-based database software to replace the currently one used. Staff anticipates establishing the new database for use in FY 19-20.

During the plan review stage, contractors for both private and public projects are made aware of stormwater requirements and must include a construction best management practices (BMP) sheet based on recommendations from the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) in their submitted plans before receiving planning entitlement. During the required construction inspections, the City's full-time Stormwater Inspector ensures that the BMPs are being applied appropriately. In addition to conducting the required wet weather inspections, the City's Inspector conducts windshield (drive-by) surveys of the City during rain storms and at other times to identify illicit discharges at active construction sites. Furthermore, other City field inspectors in the Public Works and Utilities Departments with other primary tasks are also cross-trained to support the Stormwater Inspector by observing active sites or to fill in when the Inspector is not available. The Stormwater Inspector is notified of any issues, visits the site as soon as his schedule allows, and enters it into the database.

The total number of inspections conducted this past fiscal year increased by 53 from the previous fiscal year. In addition, as compared to last fiscal year, the number of construction sites greater than an acre increased from 19 to 21, while the total number of high priority and hillside sites increased from 6 to 16. The City has adjusted its definition of High Priority Sites to also include City buildings and street projects (even if less than one acre as long as project last longer than one month) and construction projects located up to the lot line on all sides of the property, where little to no space is made available for material storage.

C.6.e.iii.(4) ►Evaluation of Inspection Program Effectiveness

Describe what appear to be your program's strengths and weaknesses, and identify needed improvements, including education and outreach.

Description:

The City actively participates in SCVURPPP's Construction Ad Hoc Task Group (IND/IDDE AHTG) and yearly trainings to ensure staff is adequately cross-trained. The City's Stormwater Inspector has almost two decades of experience and is certified in Erosion Control methods. Furthermore, inspectors and other staff use regionally-developed materials for inspection and education. Other members in the Public Works Department, which houses the Stormwater Program, and other City Department field staff actively watch for potential construction issues while conducting regular duties.

Private and public projects are tracked through a City planning database from design to construction. In FY 18-19, the Stormwater Program team worked with the Public Works staff that approves building permits to improve coordination in tracking construction projects that must be inspected per MRP requirements. There is still a gap in communication in terms of receiving immediate notification of the commencement of construction projects and demolition of structures. As the City's goal is to ensure all stormwater BMPs are in place before demolition activities begin, staff will continue to improve this process.

As mentioned, contractors must include the Stormwater BMP sheet in their planning application. Planning, Utilities and other Department staff are aware of this requirement and support the Stormwater Program Team by communicating this requirement to project applicants. However, there continues to be a gap in understanding for projects that are less than one acre, since most of these projects do not have a staff person trained in appropriate BMPs. Staff aims to improve this gap over time by creating a webpage resource that can be referenced on the BMP sheet as well as determining other potential solutions.

Finally, please refer to the C.6 Construction Site Control section of SCVURPPP's FY 18-19 Annual Report for a description of activities at the SCURVPPP or regional level.

C.6.f.iii ►Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Inspectors in Attendance
SCVURPPP: Construction Site Municipal Stormwater Inspection Workshop	3/5/19 and 3/7/19	Construction Site BMPs and MRP Requirements, Managing PCBs in Building Demolition, Track out Control Systems	3 (in total)

Section 7 – Provision C.7. Public Information and Outreach

C.7.b.i.1 ►Outreach Campaign

Summarize outreach campaign. Include details such as messages, creative developed, and outreach media used. The detailed outreach campaign report may be included as an attachment. If outreach campaign is being done by participation in a countywide or regional program, refer to the separate countywide or regional Annual Report.

Summary:

The following separate reports developed by Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) summarize countywide efforts conducted during FY 18-19:

- FY 18-19 Watershed Watch Campaign Annual Campaign Report
- FY 18-19 Watershed Watch Partner Report
- FY 18-19 Watershed Watch Web Statistics Report

These reports are included within the C.7 Public Information and Outreach section of the SCVURPPP FY 18-19 Annual Report.

In addition, the City of Palo Alto (City) provides ongoing outreach through utility announcements, print and online ads, two web pages (cleanbay.org and cityofpaloalto.org/hazwaste) and other media. The City also maintains a phone application (Recycle Where?) that provides information regarding hazardous waste disposal. Outreach during fiscal year 18-19 included a campaign to collect single-use disposable propane containers in return for a full free one, which attracted over 200 participants and thirteen utility bill inserts focused on watershed and stormwater pollution prevention and awareness, with each topic listed below by month.

1. Ants Control Without Toxic Chemicals (July 2018)
2. Avoiding Sewer Line Blockages (July 2018)
3. Green Stormwater Infrastructure in Streets (August 2018)
4. Household Hazardous Waste (August 2018)
5. Street Sweeping Schedule (October 2018)
6. Fats, Oil and Grease (November 2018)
7. Storm Tips (November 2018)
8. King Tides (December 2018)
9. Oh Rats! Safe Pest Management (March 2019)
10. Drain Smart (March 2019)
11. Pool Maintenance (May 2019)
12. Stormwater Rebates (May 2019)
13. Storm Preparation Tips (September 2019)

C.7.c. Stormwater Pollution Prevention Education

No change to the website or public phone numbers occurred in fiscal year 18-19. In addition, the stormwater point of contact is provided through utility bill inserts, utility announcements, events, and electronic and print advertising.

C.7.d ►Public Outreach and Citizen Involvement Events

Describe general approach to event selection. Provide a list of outreach materials and giveaways distributed. Use the following table for reporting and evaluating public outreach events.

In addition to the SCVURPPP's outreach events across Santa Clara County, City staff attended 15 additional events, reaching 980 people. General information regarding these events is listed below, with specifics provided in Appendix 7-1.

- Event Selection: The City provides staffing to nearly all of the event requests it receives. Only a small number have been declined, usually due to past repeated low turnout for events, poor messaging opportunities (e.g., staff feels the event is not a good fit to meet the team's outreach goals), or because of competing outreach events resulting in unavailable resources.
- Giveaway items include: reusable produce bags, tattoos, reusable to-go cutlery, erasers, and various relevant outreach information. In addition, the Earth Day event in April 2019 involved a rain barrel giveaway.

Please also refer to the C.7 section of SCVURPPP's FY 18-19 Annual Report.

Event Details	**Description** (messages, audience)	**Evaluation of Effectiveness**
City staff attended 15 local events, reaching 1,120 people. Details provided in Appendix 7-1.	Staff attended a variety of events. Please refer to Appendix 7-1 for details.	Effectiveness is determined by direct staff contacts. Please refer to Appendix 7-1 for details.

C.7.e. ►Watershed Stewardship Collaborative Efforts

Summarize watershed stewardship collaborative efforts and/or refer to a regional report that provides details. Describe the level of effort and support given (e.g., funding only, active participation etc.). State efforts undertaken and the results of these efforts. If this activity is done regionally refer to a regional report.

Evaluate effectiveness by describing the following:

- Efforts undertaken
- Major accomplishments

Summary:

During FY 18-19, SCVURPPP actively supported the Santa Clara Basin Watershed Initiative, including the Land Use Subgroup, and the Santa Clara Valley Zero Litter Initiative. Information on these efforts is included within the C.7 Public Information and Outreach section of the SCVURPPP's FY 18-19 Annual Report.

In addition, the City funds Grassroots Ecology, a local, environmental non-profit organization, to provide Citizen Volunteer Monitoring activities. Grassroots Ecology involves volunteers to monitor five sites on San Francisquito Creek, four on Adobe Creek and two sites each on Matadero and Barron Creeks. Volunteers make monthly visual observations, including the presence of trash, and monitor pH, temperature, conductivity, turbidity, and dissolved oxygen.

C.7.f. ►School-Age Children Outreach

Summarize school-age children outreach programs implemented. A detailed report may be included as an attachment. Use the following table for reporting school-age children outreach efforts.

In addition to City's support of SCVURPPP activities, the City contracts with Grassroots Ecology to offer programs for elementary and middle school classes in the Regional Water Quality Control Plant (RWQCP) service area (East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Mountain View, Palo Alto, and Stanford University). See the table below for general information regarding school programs provided in the City of Palo Alto, and please refer to Appendix 7-2 for additional details.

Please refer to the C.7 section of SCVURPPP's FY 18-19 Annual Report for information on regional children outreach programs.

Program Details	Focus & Short Description	Number of Students/Teachers reached	Evaluation of Effectiveness
Provide the following information: Name Grade or level (elementary/ middle/ high) Please refer to Appendix 7-2	In all programs, students either learn or review the difference between wastewater and stormwater (e.g., where it comes from, where it goes); the water cycle; the definition and function of a watershed; and concept of reduce/reuse/recycle/rot/respect. The	The RWQCP 2017-2018 school outreach goal was to provide 115 presentations to 3,000 students related to	The teachers' rating of classes for this school year averaged 4.8 out of 5.0, both for quality of program and clarity of presenter. In addition, teachers stated that students in 90% of classes showed an increased understanding of the difference between the storm drain and sanitary sewer systems.

(MRP School Outreach Stats FY 18-19) for a detailed list of all classroom presentations.	following includes the class descriptions. **Classes include:** **1. What's Bugging You? (2nd Grade)** Students crawl into the world of insects as they learn about the importance of insects in the food chain and in various ecosystem services. Students evaluate what they know about bugs, discussing and developing their concepts of "good" and "bad" bugs as they share bug facts. Students will learn how pesticides can enter the environment and impact the food chain. The program concludes with giving students the opportunity, with no pressure, to eat edible bugs. **2. Problem Plastics (2nd grade, revised in 2018)** Students dive into local watershed dynamics to learn about how plastics and other trash can flow directly into San Francisco Bay. Students will categorize different types of trash into "Worst, Better, and Best" and present their recommendations in a conference-style format. They'll learn alternatives to plastic and how to be part of the pollution solution. Students finish by decorating a reusable bag made from recycled plastic to take home (which can also serve as a year-end "take-home" bag!). **3. Watershed Warriors! (3rd grade)** Using an interactive tabletop relief model called "Enviroscape®," students learn what defines a watershed. After building out the model with props to create residential, commercial and agricultural communities, students simulate how rain	wastewater or stormwater protection. The program exceeded its target by providing 136 classes to 3,189 students. Of this total, 43 classes at eight schools were provided classes focused strictly on stormwater pollution prevention. The total number of students reached was 1,048. Please refer to Appendix 7-2 for a detailed list of all classroom presentations.	Teachers in 96% of classes reported an increase in students' understanding of what they can do to prevent water pollution.

	moves pollutants through the watershed to a river, bay and ocean. The simulation concludes with a discussion of pollution sources and best practices to keep pollutants from entering the watershed. **4. Who Dirtied the Bay? (3rd grade)** Students step into a time machine and trace the history of the San Francisco Bay to learn about the impact of humans on our watershed. A hands-on activity builds their understanding of how runoff flows into creeks and the Bay, both directly and through the storm drain system, as they "dirty" a simulated model with pollutants from the past and present. Students learn what they can do to be solutions to the pollution that impacts this vital ecosystem. **5. Mercury (4th grade)** Students take a hands-on look at the impact of mercury on San Francisco Bay through the lens of the Gold Rush by tracing the history of how mercury was mined in southern Santa Clara County, used in the gold mining process, and subsequently washed into San Francisco Bay. Through the interactive "Fish-Eat-Fish" game, students experience how this toxic metal is transferred through the Bay ecosystem and food chain through bioaccumulation. Students learn what we do in present day to prevent more mercury from entering our local environment.		

Section 9 – Provision C.9 Pesticides Toxicity Controls

C.9.a. ►Implement IPM Policy or Ordinance

Is your municipality implementing its IPM Policy/Ordinance and Standard Operating Procedures?	X	**Yes**		**No**

If no, explain:

N/A

Report implementation of IPM BMPs by showing trends in quantities and types of pesticides used, and **suggest reasons for increases in use of pesticides** that threaten water quality, specifically organophosphates, pyrethroids, carbamates fipronil, indoxacarb, diuron, and diamides. A separate report can be attached as evidence of your implementation.

Trends in Quantities and Types of Pesticide Active Ingredients Used[1]

Pesticide Category and Specific Pesticide Active Ingredient Used	**Amount[2]**					
	FY 15-16	**FY 16-17**	**FY 17-18**	**FY 18-19**	**FY 19-20**	**FY 20-21**
Organophosphates	0	0	0	0		
Active Ingredient Chlorpyrifos	0	0	0	0		
Active Ingredient Diazinon	0	0	0	0		
Active Ingredient Malathion						
Pyrethroids (see footnote #2 for list of active ingredients)	0	0	0	0		
Active Ingredient Type X	0	0	0	0		
Active Ingredient Type Y						
Carbamates	0	0	0	0		
Active Ingredient Carbaryl	0	0	0	0		
Active Ingredient Aldicarb	0	0	0	0		
Fipronil	0	0	0	0		
Pesticide Category and Specific Pesticide Active Ingredient	**Amount**					

[1]Includes all municipal structural and landscape pesticide usage by employees and contractors.

[2]Weight or volume of the active ingredient, using same units for the product each year. Please specify units used. The active ingredients in any pesticide are listed on the label. The list of active ingredients that need to be reported in the pyrethroids class includes: metofluthrin, bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambdacyhalothrin, and permethrin.

Used	**FY 15-16**	0	0	0	**FY 19-20**	**FY 20-21**
Indoxacarb	Reporting not required in FY 15-16	0	0	0		
Diuron	Reporting not required in FY 15-16	0	0	0		
Diamides	Reporting not required in FY 15-16	0	0	0		
Active Ingredient Chlorantraniliprole		0	0	0		
Active Ingredient Cyantraniliprole		0	0	0		

Reasons for increases in use of pesticides that threaten water quality:

N/A

IPM Tactics and Strategies Used:

-Mulching planters with City-supplied mulch.

-Mowing/line trimming down weeds before going to seed.

-Manually pulling weeds in feasible locations.

-Designing planters with large shrub material to out-compete weed growth.

-Using weed fabric in newly-installed landscape.

-Using traps for controlling gopher and mole populations.

-Maintaining 21 pesticide-free parks and facilities throughout the City of Palo Alto (City).

C.9.b ►Train Municipal Employees

Enter the number of employees that applied or used pesticides (including herbicides) within the scope of their duties this reporting year.	15
Enter the number of these employees who received training on your IPM policy and IPM standard operating procedures within this reporting year.	15
Enter the percentage of municipal employees who apply pesticides who have received training in the IPM policy and IPM standard operating procedures within this reporting year.	100%

Type of Training:

All employees who applied pesticides as part of their duties received training regarding IPM. However, staff did not use any pesticides this past fiscal year. Training in FY 18-19 included tailgate meetings, annual chemical management training through Target Specialty (City's contract online training system), and (California) Pesticide Applicators Pesticide Association Seminars.

C.9.c ►Require Contractors to Implement IPM

Did your municipality contract with any pesticide service provider in the reporting year, for either landscaping or structural pest control?	X	**Yes**		**No**
If yes, did your municipality evaluate the contractor's list of pesticides and amounts of active ingredients used?	X	**Yes**		**No**

If your municipality contracted with any pesticide service provider, briefly describe how contractor compliance with IPM Policy/Ordinance and SOPs was monitored:

City's Parks Department has two Field Service Inspectors that monitor the landscape contractor to ensure the IPM Policy, which is outlined in the contract, is followed appropriately. Herbicides were used in certain locations as a last resort when dealing with weed growth in the landscape. The contractor is also responsible for reporting use of herbicides to the California Department of Pesticide Regulation.

C.9.d ►Interface with County Agricultural Commissioners

Did your municipality communicate with the County Agricultural Commissioner to: (a) get input and assistance on urban pest management practices and use of pesticides or (b) inform them of water quality issues related to pesticides,		Yes	X	No

If yes, summarize the communication. If no, explain.

The municipality did not communicate directly with the County Agricultural Commissioner; however, please refer to Section 9 of the SCVURPPP FY 18-19 Annual Report for a summary of SCVURPPP's communication with the Santa Clara County Agricultural Commissioner.

Did your municipality report any observed or citizen-reported violations of pesticide regulations (e.g., illegal handling and applications of pesticides) associated with stormwater management, particularly the California Department of Pesticide Regulation (DPR) surface water protection regulations for outdoor, nonagricultural use of pyrethroid pesticides by any person performing pest control for hire.		**Yes**	X	**No**

If yes, provide a summary of improper pesticide usage reported to the County Agricultural Commissioner and follow-up actions taken to correct any violations. A separate report can be attached as your summary.

N/A

C.9.e.ii (1) ►Public Outreach: Point of Purchase

Provide a summary of public outreach at point of purchase, and any measurable awareness and behavior changes resulting from outreach (here or in a separate report); **OR** reference a report of a regional effort for public outreach in which your agency participates.

Summary:

Please refer to the following separate reports developed by SCVURPPP and BASMAA summarize point of purchase outreach efforts conducted during FY 18-19:

- FY 18-19 Store Employee Training Report (SCVURPPP)
- FY 18-19 Store Employee Training Evaluation Summary (SCVURPPP)
- FY 18-19 Store Employee Training Status Table (SCVURPPP)
- FY 18-19 List of Stores in the IPM Store Partnership Program (SCVURPPP)
- FY 18-19 BASMAA "Our Water, Our World" (OWOW) Report (BASMAA)

C.9.e.ii (2) ►Public Outreach: Pest Control Contracting Outreach

Provide a summary of outreach to residents who use or contract for structural pest control and landscape professionals); **AND/OR** reference a report of a regional effort for outreach to residents who hire pest control and landscape professionals in which your agency participates.

Summary:

Please refer to Sections 7 and 9 of SCVURPPP's FY 18-19 Annual Report for a summary of outreach to residents and businesses that use or hire structural pest control and landscape professionals. In addition, please refer to FY 18-19 Watershed Watch Campaign Final Report included within Section 7 of the Program's FY 18-19 Annual Report for more information.

C.9.e.ii.(3) ►Public Outreach: Pest Control Operators

Provide a summary of public outreach to pest control operators and landscapers and reduced pesticide use (here or in a separate report); **AND/OR** reference a report of a regional effort for outreach to pest control operators and landscapers in which your agency participates.

Summary:

Please refer to the C.9 Pesticides Toxicity Control section of SCVURPPP's FY 18-19 Annual Report for a summary of our participation in and contributions towards countywide and regional public outreach to pest control operators and landscapers to reduce pesticide use.

C.9.f ►Track and Participate in Relevant Regulatory Processes

Summarize participation efforts, information submitted, and how regulatory actions were affected; **AND/OR** reference a regional report that summarizes regional participation efforts, information submitted, and how regulatory actions were affected.

Summary:

During FY 18-19, we participated in regulatory processes related to pesticides through contributions to SCVURPP, BASMAA and CASQA. For additional information, see the Regional Report submitted by BASMAA on behalf of all MRP Permittees.

C.9.g. ► Evaluate Implementation of Pesticide Source Control Actions

(For FY 18-19 Annual Report only) Submit an evaluation that assesses; 1) the effectiveness of IPM efforts required in Provisions C.9.a-e and g, 2) a discussion of any improvements made in the past five years; 3) any changes in water quality regarding pesticide toxicity in urban creeks; and 4) a brief description of one or more pesticide-related area(s) the Permittee will focus on enhancing during the subsequent permit term.

Summary:

Please refer to Section C.9 Pesticides Toxicity Control of SCVURPPP's FY 18-19 Annual Report for a report that includes the following:

- An evaluation of the effectiveness of source control measures implemented;
- Changes in water quality regarding pesticide toxicity in urban creeks;
- Improvements made to the City of Palo Alto's IPM Program in the past five years; and
- Pesticide-related area(s) that the City of Palo Alto will focus on enhancing during the next permit term.

Section 10 - Provision C.10 Trash Load Reduction

C.10.a.i ► Trash Load Reduction Summary

For population-based Permittees, provide the overall trash reduction percentage achieved to-date within the jurisdictional area of your municipality that generates problematic trash levels (i.e., Very High, High or Moderate trash generation). Base the reduction percentage on the information presented in C.10.b i-iv and C.10.e.i-ii. Provide a discussion of the calculation used to produce the reduction percentage

Trash Load Reductions	
Percent Trash Reduction in All Trash Management Areas (TMAs) due to **Trash Full Capture Systems** (as reported C.10.b.i)	8.3%
Percent Trash Reduction in all TMAs due to **Control Measures Other than Trash Full Capture Systems** (as reported in C.10.b.ii)[1]	65.0%
Percent Trash Reduction due to **Jurisdictional-wide Source Control Actions** (as reported in C.10.b.iv)	10.0%
Subtotal for Above Actions	**83.3%**
Trash Offsets (Optional)	
Offset Associated with Additional Creek and Shoreline Cleanups (as reported in C.10.e.i)	0.0%
Offset Associated with Direct Trash Discharges (as reported in C.10.e.ii)	0.0%
Total (Jurisdictional-wide) % Trash Load Reduction through FY 2018-19	**83.3%**

Discussion of Trash Load Reduction Calculation and Attainment of the 80% Mandatory Deadline:

The City attained and reported 84.0% trash load reduction (including trash offsets) in its FY 17-18 Annual Report. During FY 18-19, the City continued to implement a robust trash control measure program, which helped the City maintain its trash load reduction above the mandatory 80% trash load reduction requirement included in the MRP. The total (jurisdiction-wide) percent trash load reduction in FY 18-19 is 83.3%. The most recent version of the City's Baseline Trash Generation Map can be downloaded at http://scvurppp.org/trash-maps/.

[1] See Appendix 10-1 for changes between 2009 and FY 18-19 in trash generation by TMA as a result of Full Capture Systems and Other Measures.

C.10.a.iii ► Mandatory Trash Full Capture Systems

Provide the following:

1) Total number and types of full capture systems (publicly and privately-owned) installed prior to FY 18-19, during FY 18-19, and to-date, including inlet-based and large flow-through or end-of-pipe systems, and qualifying low impact development (LID) required by permit provision C.3.
2) Total land area (acres) treated by full capture systems for population-based Permittees and total number of systems for non-population based Permittees compared to the total required by the permit.

Type of System	# of Systems	Areas Treated* (Acres)
Installed in FY 18-19		
Device installed by bordering Permittees with treatment areas extending into the City of Palo Alto	-	63.4
Installed Prior to FY 18-19		
Hydrodynamic Separators (Public)	2	169.7
Hydrodynamic Separators (Private)	9	15.2
Trash Booms (Matadero and Adobe Creeks)	2	1,685** (25% of treatment area)
Total for all Systems Installed To-date	**11**	**248.3**
Treatment Acreage Required by Permit (Population-based Permittees)		**84**
Total # of Systems Required by Permit (Non-population-based Permittees)		**N/A**

*Areas treated include jurisdictional and non-jurisdictional lands (e.g. public K-12 schools and colleges, and freeways).

In addition to the total acreage reported as treated by traditional full capture systems, a total of **6,740 acres of land is treated by two trash booms operated on Matadero and Adobe Creeks by the City and the Santa Clara Valley Water District (SCVWD). In accordance with the MRP definition of full capture systems, only ¼ of the catchment area treated by trash booms can be credited toward meeting the trash capture requirement in Provision C.10.a. For the City's booms, this area is **1,685** acres. For the purposes of this year's annual reporting, however, the City has opted not to count the associated reductions from trash booms toward its 70% mandatory trash load reduction requirement. The City reserves the right to adjust the reduction accordingly, based on achieving future compliance deadlines according to permit requirements.

C.10.b.i ► Trash Reduction - Full Capture Systems

Provide the following:

1) Jurisdictional-wide trash reduction in FY 18-19 attributable to trash full capture systems implemented in each TMA;
2) The total number of full capture systems installed to-date in your jurisdiction;
3) The percentage of systems in FY 18-19 that exhibited significant plugged/blinded screens or were >50% full when inspected or maintained;
4) A narrative summary of any maintenance issues and the corrective actions taken to avoid future full capture system performance issues; and
5) A certification that each full capture system is operated and maintained to meet the full capture system requirements in the permit.

TMA	Jurisdiction-wide Reduction (%)	Total # of Full Capture Systems	% of Systems Exhibiting Plugged/Blinded Screens or >50% full in FY 18-19	Summary of Maintenance Issues and Corrective Actions
1	0.0%	11	2	The City's full capture systems are inspected a minimum of twice a year and maintained as needed. If there is more than minimal trash and/or sediment, City crews choose to clean the systems out to ensure their maximum efficiency. Typically, the devices are cleaned out once per year, but will be cleaned out more often if needed.
2	0.0%			
3	0.0%			
4	4.0%			
5	0.4%			
6	0.0%			
7	0.0%			
8	0.0%			
9	0.0%			
10	3.8%			
11	0.0%			
12	0.0%			
13	0.0%			
Total	**8.3%***			

Certification Statement:

The City of Palo Alto certifies that a full capture system maintenance and operation program is currently being implemented to maintain all applicable systems in manner that meets the full capture system requirements included in the Permit.

*The total (reported above) jurisdiction-wide reduction for full capture systems represents the 8.3% reduction obtained for traditional full capture associated with Table C.10.a.iii above. The City has opted not to count a 10.3% reduction associated with the 1,685 acres (25% of treatment area) treated by two trash booms on Matadero and Adobe Creeks it maintains (see C.10.a.iii). The City reserves the right to adjust the reduction accordingly, based on achieving future compliance deadlines according to permit requirements.

C.10.b.ii ► Trash Reduction – Other Trash Management Actions (PART A)

Provide a summary of trash control actions other than full capture systems or jurisdictional source controls that were implemented within each TMA, including the types of actions, levels and areal extent of implementation, and whether actions are new, including initiation date.

TMA	Summary of Trash Control Actions Other than Full Capture Systems
1	• **Street sweeping**: Three times per week with dedicated staff walking ahead of sweepers to blow trash and debris from sidewalks and tree wells and behind parking stops into the street. Subarea 1B is swept weekly during leaf season and every other week during the summer months with parking restrictions in place. • **On-land cleanup**: Downtown Streets Team, a City contractor, picks up litter and debris from sidewalks and public parking lots seven days per week in the business improvement district in TMA 1A. Restaurants applying for encroachment permits for outdoor seating areas are required to keep them clean. Landscaping contractor picks up litter and debris in landscaped areas twice per week and in two downtown parks every weekday. Sidewalks are swept using a small scale sweeper daily and pressure-washed by a BASMAA-certified cleaner monthly. • **Oversight and maintenance of trash bin/container management**: The Downtown Streets Team supports the City's trash hauler contractor, Greenwaste, by picking up around large commercial bins throughout the week. Commercial bins are maintained by Greenwaste six days out of the week and cleaned at its maintenance yard upon request. In FY 15016, the City's Zero Litter Initiative Right Size/Right Service pilot area took place in this TMA with increased outreach and enforcement for overflowing containers. • **Partial capture**: City's diversion structure to its Regional Water Quality Control Plant is partially located in this TMA. • **Smoking Ordinance**: Prohibition to smoke in downtown business district became effective in 2015. Follow-up ordinance in 2017 adopted revisions to the City's existing Smoking and Tobacco Regulations to prohibit smoking in designated public spaces, including outdoor dining areas, entryways, public events, recreation areas, and service areas and multi-family residential units. Signs were installed in FY 17-18 to inform the public about these regulations. • **Restaurant reusable takeout container program**: City's Zero Waste staff is working with contractor Go Box to implement its membership-based, reusable takeout container program. Thus far, eight restaurants have signed up to participate.
2	• **Street sweeping**: Three times per week (except for a small primarily residential area); parking lots swept weekly. • **On-land cleanup**: City staff and contractors pick up litter and debris in landscaped areas twice per week, medians at California Avenue daily, tree wells weekly, and the Caltrain Station roundabout weekly. A park in the area has daily litter pickup. • **Smoking Ordinance**: Prohibition to smoke in business district became effective in 2015. Signs were installed in FY 17-18 to inform the public about these regulations.
3	• **Street sweeping**: Street sweeping weekly during leaf season; every other week during summer months. • **On-land cleanup**: Weekly in landscaped areas at perimeter of shopping center. Shopping Center staff picks ups trash daily within the property. • **Partial capture**: Wet well located at Embarcadero Road and C.3 devices at shopping center help to keep trash from entering the City's storm drain system. • **Oversight and maintenance of trash bin/container management**: Trash enclosures were built as part of new development at the site. Litter bins well maintained by shopping center staff. In FY 15-16, extensive effort on right size/right service was conducted to improve management of shopping center waste.

	• **Smoking Ordinance**: Prohibition to smoke in business district became effective in 2015.
4	• **Street sweeping**: Weekly on El Camino Real and during leaf season; every other week during summer months in remaining area. • **On-land cleanup**: Along El Camino Real, contractor picks up trash from landscaped areas and Los Robles Park weekly.
5	• **Street sweeping**: Entire area weekly. • **On-land cleanup**: Contractors pick up litter from landscaped areas along El Camino Real weekly. • **Oversight and maintenance of trash bin/container management**: Bus stop litter cans maintained by VTA. • **Smoking Ordinance**: Prohibition to smoke in business districts became effective in 2015. Follow-up ordinance in 2017 adopted revisions to the City's existing Smoking and Tobacco Regulations to prohibit smoking in designated public spaces, including outdoor dining areas, entryways, public events, recreation areas, and service areas and multi-family residential units. New non-smoking signs were installed in highly-visited areas of TMA 5.
6	• **Street sweeping**: Weekly during leaf season; every other week during summer months. • **On-land cleanup**: Shopping center staff/contractors maintain the shopping center. City contractors maintain landscaped area at the electrical substation on Quarry Rd.
7	• **Street sweeping**: Weekly during leaf season; every other week during summer months except when early leaf fall requires weekly. • **On-land cleanup**: Parks department contractors perform cleanups at TMAs 7b and 7d. Shopping centers have staff conducting trash clean-up. • **Oversight and maintenance of trash bin/container management**: C.3 features capture trash and are inspected annually.
8	• **Street sweeping**: Weekly during leaf season; every other week during summer months except when early leaf fall requires weekly. • **On-land cleanup**: Janitorial staff picks up litter on school grounds. For non-jurisdictional public middle and elementary schools, City staff collects trash and empties trash bins from playing fields at 16 elementary and middle schools twice a week. • **Partial treatment**: several private schools have C.3 devices, including a vortex separator. • **Oversight and maintenance of trash bin/container management**: GreenWaste, the City's hauler works with schools on 'right size' bins and waste sorting. City staff inspects all middle and high schools every five years. • **Outreach**: City's contractor conducts extensive outreach program at schools, including several programs focused on litter, visits to science fair, and participation in "litter walks."
9	• **Street sweeping**: Weekly for larger public parking lots; streets swept weekly during leaf season and every other week during summer months. • **On-land cleanup**: Contractors and City staff maintain Parks on a daily basis on weekdays or three times per week, depending on usage. Mayfield soccer fields are cleaned by the Downtown Streets Team. • **Oversight and maintenance of trash bin/container management:** Trash enclosure installed at the Art Center.
10	• **Street Sweeping**: Weekly during leaf season; every other week during summer months except when early leaf fall requires weekly. • **On-Land Cleanup**: Areas 10 a, b, and g have weekly litter pick up. One of the City's hot spot area located in this TMA (10E) is cleaned twice a year. Other portions are cleaned as needed. • **Oversight and maintenance of trash bin/container management**: Clean Bay Business program for automotive facilities, trash enclosure requirements for new development, commercial inspection program • **Oversight and maintenance of trash bin/container management**: A portion of this TMA drains to the City's diversion structure, which diverts stormwater to the POTW.

11	• **Street sweeping**: Weekly during leaf season; every other week during summer months. Municipal Service Center is swept weekly. • **On-land cleanup**: One of the City's hot spot area located in this TMA is cleaned twice a year. The remainder of the area is cleaned as needed. • **Oversight and maintenance of trash bin/container management**: Municipal Service Center is maintained via its Stormwater Pollution Prevention Plan and is inspected once per year. The automotive maintenance facility is inspected two additional times annually. Staff outreach has been conducted regarding litter.
12	• **Street sweeping**: weekly during leaf season; every other week during other months. • **On-land cleanup**: A portion of TMA is cleaned monthly; other portions as needed. • **Parking restrictions**: Parking restrictions were established to reduce litter from parked vehicles. • **Municipal collaboration**: City collaborates with neighboring East Palo Alto to address issues of street trash and illegal dumping.
13	• **Street sweeping**: Weekly during leaf season; every other week for the summer months. • **On-land cleanup**: Some landscaped medians maintained by Parks Division weekly.
All TMAs	• **Storm drain Inlet cleaning**: Inlets are cleaned annually in October and during pipeline cleaning on a year-round basis. • **Uncovered loads**: City's Municipal Code requires covered loads. Trash hauling contract requires covered loads. Tarp distribution program is conducted at SMaRT station in Sunnyvale. • **Anti -Littering and Illegal Dumping response**: The City has implemented PaloAlto311, a multi-platform solution to report issues, including illegal dumping. Requests are tracked and resolved through this App. • **Trash enclosure requirement**: Trash enclosures are required at all new commercial and multi-family facilities. • **Oversight and maintenance of trash bin/container management**: City's Fats, Oil & Grease Inspector investigates restaurants and their outdoor trash management areas on a regular basis to improve the compliance and management of these areas. In addition, commercial facility inspectors conduct stormwater/trash inspections according to associated inspection frequency identified in the City's Business Inspection Plan. • **Outreach**: City staff conduct an extensive outreach program, including school outreach and tabling events. • **Smoking Ordinance**: Ordinance in 2017 adopted revisions to the City's existing Smoking and Tobacco Regulations to prohibit smoking in designated public spaces, including outdoor dining areas, entryways, public events, recreation areas, and service areas and multi-family residential units. • **Plastics Reduction Ordinance**: In June 2019, City Council adopted an ordinance to limit the use of disposable (plastic) foodware items, which will become effective January 1, 2020. The banned items include plastic straws, utensils, stirrers, beverage plugs and produce bags. All food establishments and farmers markets are affected as well as retail service establishments that use produce bags. • **Rethink Disposable Program**: In 2016, the City contracted with Clean Water Action and Clean Water Fund to have the organizations implement their Rethink Disposable program, a technical assistance program that helps food businesses implement best practices to reduce waste and cut costs by minimizing disposable product usage. Thus far, eight food service establishments have joined the Rethink Disposable Program and have significantly reduced their waste. For more information, please refer to: cityofpaloalto.org/news/displaynews.asp?NewsID=3895&TargetID=145. TMAs that include restaurants: #s 1, 2, 3, 5, 7, 8 and 13.

C.10.b.ii ► Trash Reduction – Other Trash Management Actions (PART B)

Provide the following:

1) A summary of the on-land visual assessments in each TMA (or control measure area), including the street miles or acres available for assessment (i.e., those associated with VH, H, or M trash generation areas not treated by full capture systems), the street miles or acres assessed, the % of available street miles or acres assessed, and the average number of assessments conducted per site within the TMA; and
2) Percent jurisdictional-wide trash reduction in FY 18-19 attributable to trash management actions other than full capture systems implemented in each TMA; OR
3) Indicate that no on-land visual assessments were performed.

If no on-land visual assessments were performed, check here **and state why:**	X	**Explanation:** No OVTAs were conducted in TMAs 7, 8, 11, 12, or 13 in FY 18-19 because either limited street lengths are available for assessments or no additional/enhanced other control measures have been implemented yet by the City. No OVTAs were conducted in TMA 4 because the all moderate, high or very high trash generating areas are treated by full capture systems.

TMA ID or (*as applicable*) Control Measure Area	**Total Street Miles[2] Available for Assessment**	**Summary of On-land Visual Assessments[3]**			**Jurisdictional-wide Reduction (%)**
		Street Miles Assessed	**% of Available Street Miles Assessed**	**Avg. # of Assessments Conducted at Each Site[4,5]**	
1	6.18	2.19	35.5%	6.0	10.7%
2	3.75	0.78	20.9%	6.3	6.0%
3	0.42	0.59	100.0%	7.0	4.1%
4*	0.00	NA	NA	NA	NA
5	3.44	0.78	22.6%	6.3	8.3%
6	0.96	0.75	78.1%	7.0	2.6%
7	0.84	NA	NA	NA	NA
8	1.80	NA	NA	NA	NA
9	2.42	0.39	16.0%	6.0	10.9%
10	6.76	1.01	14.9%	6.6	22.4%
11	0.13	NA	NA	NA	NA
12	0.27	NA	NA	NA	NA
13	0.15	NA	NA	NA	NA
	Total	**6.49**	**-**	**-**	**65.0%**

[2] Street miles are defined as the street lengths and do not include curbs associated with medians.
[3] Assessments conducted between July 2017 and July 2019 are assumed to be representative of trash levels in FY 18-19 and were therefore used to calculate the jurisdictional-wide reductions reported in this section.
[4] Each assessment site is roughly 1,000 feet in length.
[5] Based on analyses conducted as part of the BASMAA Tracking California's Trash project (BASMAA 2017) funded by the State Water Resources Control Board, the optimal number of assessment events to detect an improvement from baseline trash levels at a site is between 4 and 6 per site.

C.10.b.iv ► Trash Reduction – Source Controls

Provide a description of each jurisdictional-wide trash source control action implemented to-date. For each control action, identify the trash reduction evaluation method(s) used to demonstrate on-going reductions, summarize the results of the evaluation(s), and estimate the associated reduction of trash within your jurisdictional area. Note: There is a maximum of 10% total credit for source controls.

Source Control Action	Summary Description & Dominant Trash Sources and Types Targeted	Evaluation/Enforcement Method(s)	Summary of Evaluation/Enforcement Results To-date	% Reduction
Single-Use Bag Ordinance	Description: Ordinance to ban single-use plastic checkout bags originally banned plastic bags at grocery stores (2009) and was expanded to include all retail, including restaurants and a fee for paper bags at retail establishments (approved May 2013). Dominant Sources and Types: Single-use plastic check out bags from pedestrian and vehicular sources as well as inadequate container management.	1. Store Exit Surveys: Bag surveys at grocery stores and pharmacies (FY 2014-15) 2. Large store compliance audits at 31 stores (FY 2014-15) 3. Field observations during clean-ups: Counting bags at creek and boom cleanups. 4. Random inspections: A sampling of retail stores were audited (in FY 2017-18) by a City contractor.	1. Store Exit surveys show that no customers use plastic bags, 41% use no bag, and 35% use reusable bags with the remainder using paper. 2. Large store compliance audits showed stores are no longer distributing plastic bags and charging for reusable or paper. 3. The bags found at clean-up events have significantly decreased. For the May 2016 event, only 3 bags were found. According to the BASMAA "San Francisco Bay Area Stormwater Trash Generation Rates" Report finalized on June 20, 2014, single use carry-out bags contribute about 8% of the total litter loading to local receiving waters by municipal storm drain systems. Results from the SCVURPPP Study, which characterized of trash in full trash capture systems pre- and post-ordinance in the Santa Clara Valley, indicate that 72% fewer single-use bags are observed in stormwater since ordinances have gone into effect.	5.8%

			For additional details on results of the study, see the SCVURPPP FY 15-16 Annual Report – Section 10 Trash Controls. Based on the results of the SCVURPPP study, the City estimates an approximate 72% reduction in the number of single use bags in stormwater, which equates to a 5.8% (i.e., 72% x 8%) reduction of trash discharged from the City's storm drain system. 4. A compliance check of 91 restaurants and retailers was conducted in June 2018 to confirm that no single-use plastic bags are distributed by retail/grocery stores at check-out (paper bags may be provided for a charge).	
Expanded Polystyrene Food Service Ware Ordinance	Description: Expanded Polystyrene (EPS) Restriction Ordinance effective since April 2010 bans all food vendors from providing prepared food in disposable food service containers made from expanded polystyrene. The City's Long-Term Trash Management Plan provides additional information. Dominant Sources and Types: Expanded polystyrene food service ware from pedestrian and vehicular sources, as well as inadequate container management.	1. Compliance Rate: Initial survey, routine inspections at food service establishments, and complaints. 2. Random inspections: A sampling of retail stores were audited (in FY 2017-18) by a City contractor.	1. In 2016, three food service establishments were found to have EPS on-site. According to the BASMAA "San Francisco Bay Area Stormwater Trash Generation Rates" report finalized on June 20, 2014, expanded polystyrene food service ware contributes about 6% of the total litter loading to local receiving waters by municipal storm drain systems. 2. Results from the Santa Clara Urban Runoff Pollution Prevention Program (SCVURPPP) Study, which characterized trash in full trash capture systems pre- and post- ordinance in the Santa Clara Valley, indicate that 74%	4.4%

			less expanded polystyrene food service ware is observed in stormwater since ordinances have gone into effect. 3. For additional details on results of the study, see the SCVURPPP FY 15-16 Annual Report – Section 10 Trash Controls. Based on the results of the SCVURPPP study, the City estimates an approximate 74% reduction in the volume of polystyrene food service ware in stormwater, which equates to a 4.4% (i.e., 74% x 6%) reduction of trash discharged from the City's storm drain system. 4. A compliance check of 91 restaurants and retailers was conducted in June 2018 to confirm that: 5. There is no sale nor distribution of foam packaging, foam egg cartons, foam foodware or foam ice chests from grocery stores, convenience stores and drugstores; 6. Mailing service stores do not use/reuse plastic foam peanuts or other packaging.	

C.10.b.v ► Trash Reduction – Receiving Water Monitoring

Report on the progress of developing and testing your agency's trash receiving water monitoring program.

In FY 18-19, the City continued implementing the BASMAA Regional Receiving Water Trash Monitoring Program Plan that was approved by the Water Board's Executive Officer. Implementation included preparing for and conducting qualitative assessments and quantitative monitoring in receiving water locations within the City of Palo Alto. Implementation occurred through both the City's own efforts and participation in the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). Consistent with MRP requirements, a preliminary report describing data results and findings to-date was submitted to the Water Board via BASMAA on July 1, 2019 on behalf of all Permittees. The final report for the development and testing of the Bay Area trash receiving water monitoring program will be submitted by BASMAA by July 1, 2020, consistent with the MRP requirements, following peer review.

In addition to implementing the BASMAA Monitoring Plan, the City coordinated (via SCVURPPP) on the Statewide Trash Monitoring Methods Project, which is funded by the California Ocean Protection Council and State Water Board and administered via the Southern California Coastal Water Research Project (SCCWRP) and San Francisco Bay Estuary Institute (SFEI). SCVURPPP Progress Report included in the SCVURPPP FY 18-19 Annual Report.

C.10.c ► Trash Hot Spot Cleanups

Provide the FY 18-19 cleanup date and volume of trash removed during each MRP-required Trash Hot Spot cleanup during each fiscal year listed. Indicate whether the site was a new site in FY 18-19.

Trash Hot Spot	New Site in FY 18-19 (Y/N)	FY 18-19 Cleanup Date(s)	Volume of Trash Removed (cubic yards)				
			FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
PA0-01	N	9/15/2018	0.4	0.1	2.6	1.4	0.7
PA0-02	N	9/15/2018	0.7	0.1	1.4	0.4	1.3

C.10.d ►Long-Term Trash Load Reduction Plan

Provide descriptions of significant revisions made to your Long-term Trash Load Reduction Plan submitted to the Water Board in February 2014. Describe significant changes made to primary or secondary trash management areas (TMA), baseline trash generation maps, control measures, or time schedules identified in your plan. Indicate whether your baseline trash generation map was revised and if so what information was collected to support the revision. If your baseline trash generation map was revised, attach it to your Annual Report.

Description of Significant Revision	Associated TMA
In FY 15-16, consistent with all MRP Permittees, all public K-12 schools, college and university parcels were made non-jurisdictional on the City's baseline trash generation maps. Under California Government Code Sections 4450 through 4461, the construction, modification, or alternation of facilities and/or structures on these parcels are under the jurisdiction of the California Division of State Architect and not the City. The public right-of-way (e.g., streets and sidewalks) surrounding these parcels remain as jurisdictional on the City's baseline trash generation maps. The City's revised baseline trash generation map was included as Appendix 10-2 of the FY 15-16 Annual Report.	All Applicable
A school inspection program implemented in FY 14-15, which included wastewater and stormwater inspection components, including trash, found several school sites had "low" trash generation rates rather than "medium," adjusting the baseline trash generation rate for this TMA. Elementary schools were inspected in FY 16-17 to again confirm the low trash generation rate.	8 a, d, f, g, h, j, k, q, s, t, u
The City adopted revisions to a 2009 ordinance to prohibit the retail sale or distribution of plastic foam ice chests, egg cartons, foodware and packaging materials. The update, effective March 1, 2016, prohibits retailers from selling or distributing plastic foam ice chests, foodware, packaging materials or egg cartons. Restaurants must still comply with 2009 ordinance requirements, which prohibit the use or distribution of plastic foam foodware.	Jurisdiction-wide
Installation of a full trash capture device at the Matadero Creek pump station was found to not be feasible due to the low percentage reduction that would be achieved and the high capital and maintenance costs.	Various
In 2016, City's Zero Waste staff is working with contractor Go Box to implement its membership-based, reusable takeout container program. Thus far, eight restaurants have signed up to participate.	1

In 2016, the City contracted with Clean Water Action and Clean Water Fund to have the organizations implement their Rethink Disposable program, a technical assistance program that helps food businesses implement best practices to reduce waste and cut costs by minimizing disposable product usage. Thus far, eight food service establishments have joined the Rethink Disposable Program and have significantly reduced their waste. For more information, please refer to: cityofpaloalto.org/news/displaynews.asp?NewsID=3895&TargetID=145.	TMAs that include restaurants; currently, TMAs 1, 2, 3, 5, 7, 8 and 13
In December 2016, the City of Palo Alto revisions to its existing Smoking and Tobacco Regulations (Ordinance 9.14-Smoking and Tobacco Regulations) to prohibit smoking in designated public spaces, including outdoor dining areas, entryways, public events, recreation areas, service areas and multi-family residential units. Smoking restriction areas in Palo Alto include: • commercial areas (regional and neighborhood); • outdoor dining areas; • outdoor service areas: bus stops, ATMs, ticket lines, etc.; • all public events; • places of employment, including construction worksites; • all parks and open space, including the City's golf course; • multi-family housing; • within 25 feet of enclosed areas; • exceptions: designated smoking areas established and approved by the City that are at least 25 feet from buildings and include a cigarette butt receptacle.	Jurisdiction-wide
Effective January 1, 2018, smoking is restricted at all multi-family residences and common areas to reduce public exposure to secondhand smoke. This ordinance considered a survey input from Palo Alto multi-unit residents in 2015. The survey indicated that 80% of multi-unit residents are bothered by smoking, and 90% favored smoking restrictions in multi-unit housing.	Jurisdiction-wide
In June 2019, City Council adopted an ordinance to limit the use of disposable (plastic) foodware items, which will become effective January 1, 2020. The banned items include plastic straws, utensils, stirrers, beverage plugs and produce bags. All food establishments and farmers markets are affected as well as retail service establishments that use produce bags.	Jurisdiction-wide

C.10.e. ► Trash Reduction Offsets (Optional)

Provide a summary description of each offset program implemented, the volume of trash removed, and the offset claimed in FY 18-19. Also, for additional creek and shoreline cleanups, describe the number and frequency of cleanups conducted, and the locations and cleanup dates. For direct discharge control programs approved by the Water Board Executive Officer, also describe the results of the assessments conducted in receiving waters to demonstrate the effectiveness of the control program. Include an Appendix that provides the calculations and data used to determine the trash reduction offset.

Offset Program	Summary Description of Actions and Assessment Results	Volume of Trash (CY) Removed/Controlled in FY 18-19	Offset (% Jurisdiction-wide Reduction)
Additional Creek and Shoreline Cleanups (Max 10% Offset)	N/A	N/A	N/A
Direct Trash Discharge Controls (Max 15% Offset)	N/A	N/A	N/A

Section 11 - Provision C.11 Mercury Controls

C.11.a ► Implement Control Measures to Achieve Mercury Load Reductions
C.11.b ► Assess Mercury Load Reductions from Stormwater Pam

The following describes the City's activities to reduce mercury loads.

Household Hazardous Waste Program: Reduction of mercury-containing devices

The City of Palo Alto's (City) Household Hazardous Waste (HHW) Program began in 1983, when the City became the second jurisdiction in the State to provide collection of HHW to its residents in response to community concerns about toxic wastes in the environment. On September 19, 2013, the City celebrated the opening of a new HHW drop-off station at its Regional Water Quality Control Plant with added storage capacity and increased hours (now open weekly rather than monthly) to make it more convenient for residents and small businesses to drop off HHW. City HHW Drop-off events for Palo Alto residents and businesses occur every Saturday and on the first Friday of the month. The City runs and operates the HHW program including promotion of HHW drop-off events that provide residents and small businesses the opportunity to drop-off of mercury-containing devices and equipment (e.g., bulbs, thermostats, thermometers and/or switches). Outreach includes HHW station hours, a "recycle where" tool on the City's Zero Waste website, an HHW hotline and a partnership with local hardware stores to serve as drop-off sites for fluorescent bulbs. In FY 18-19, 5,658 pounds of mercury containing lamps (fluorescent bulbs and CFLs), and 40 pounds of other mercury containing waste (including thermostats, thermometers, novelties, etc.) were collected. Some batteries (button cell batteries) also contain mercury and are collected through the HHW program. In addition, an ad was published in the newspaper as well as on garbage and recycling trucks in the City called "Wonder? – What to do with CFLs?"

In addition, City staff actively participates in Countywide and regional efforts to support achieving mercury load reductions to the SF Bay. In FY 18-19 City staff actively participated in SCVURPPP's Pollutants of Concern Ad Hoc Task Group that meets on a regular basis. Finally, please refer to Santa Clara Valley Urban Runoff Pollution Prevention Program's (SCVURPPP) FY 2018-19 Annual Report for updated information on:

- Documentation of mercury control measures implemented in our agency's jurisdictional area for which load reductions will be reported and the associated management areas;
- A description of how the BASMAA Interim Accounting Methodology[1] was used to calculate the mercury load reduced by each control measure implemented in our agency's jurisdictional area and the calculation results (i.e., the estimated mercury load reduced by each control measure);
- Supporting data and information necessary to substantiate the load reduction estimates; and
- For Executive Officer approval, any refinements, if necessary, to the measurement and estimation methodologies to assess mercury load reductions in the subsequent permit."

[1]BASMAA 2017. Interim Accounting Methodology for TMDL Loads Reduced, Version 1.0. Prepared for BASMAA by Geosyntec Consultants and EOA, Inc., September 19, 2016.

C.11.c ► Plan and Implement Green Infrastructure to Reduce Mercury Loads

Please refer to SCVURPPP's FY 18-19 Annual Report for information on the quantitative relationship between green infrastructure implementation and mercury load reductions, including all data used and a full description of models and model inputs relied on to establish this relationship.

C.11.e ► Implement a Risk Reduction Program

A summary of Program and regional accomplishments for this sub-provision are included in the Program's FY 2018-19 Annual Report.

Section 12 - Provision C.12 PCBs Controls

C.12.a ► Implement Control Measures to Achieve PCBs Load Reductions
C.12.b ► Assess PCBs Load Reductions from Stormwater

City of Palo Alto (City) staff actively participates in Countywide and regional efforts to support achieving PCB load reductions to the SF Bay. In FY 18-19 the City's Stormwater Program Manager served as a Steering Committee member on the Bay Area Stormwater Agencies Association's (BASMAA) PCBs Management during Building Demo Project, until fall 2018, when the regional documents were completed. In addition, staff actively participated in SCVURPPP's Pollutants of Concern Ad Hoc Task Group that meets on a regular basis.

Please refer to Santa Clara Valley Urban Runoff Pollution Prevention Program's (SCVURPPP) FY 18-19 Annual Report for:

- Documentation of PCBs control measures implemented in our agency's jurisdictional area for which load reductions will be reported and the associated management areas;
- A description of how the BASMAA Interim Accounting Methodology[1] was used to calculate the PCBs load reduced by each control measure implemented in our agency's jurisdictional area and the calculation results (i.e., the estimated PCBs load reduced by each control measure);
- Supporting data and information necessary to substantiate the load reduction estimates; and
- For Executive Officer approval, any refinements, if necessary, to the measurement and estimation methodologies to assess PCBs load reductions in the subsequent permit.
- Any alternative method submitted (different from the default population-based method) and supporting information to derive Permittee-specific shares of load reduction value associated with implementation of Provision C.12.f. (Manage PCB-Containing Materials and Wastes during Building Demolition Activities).

C.12.c ► Plan and Implement Green Infrastructure to Reduce PCBs Loads

Please refer to SCVURPPP's FY 2018-19 Annual Report for, as part of reporting for C.12.b.iii(2), an estimate of the amount of PCBs load reductions resulting from green infrastructure implementation during the term of the Permit, including all data used and a full description of models and model inputs relied on to generate the estimate.

[1]BASMAA 2017. Interim Accounting Methodology for TMDL Loads Reduced, Version 1.1. Prepared for BASMAA by Geosyntec Consultants and EOA, Inc., September 19, 2017.

C.12.f. ► Manage PCB-Containing Materials During Building Demolition

On July 1, 2019, was your agency ready to implement a method for identifying applicable structures (buildings built or remodeled between 1950 and 1980, except that single family residential and wood-framed buildings are exempt) that apply for a demolition permit?	X	**Yes**		**No**
On July 1, 2019, was your agency ready to implement a method to manage PCBs during demolition of applicable structures?	X	**Yes**		**No**
Does your agency have a data-gathering method in place to inform reporting on the effectiveness of your agency's program to manage PCBs during demolition of applicable structures (e.g., the number of applicable structures, and the amount and concentration of PCBs in priority building materials in applicable structures)?	X	**Yes**		**No**

C.12.h ►Implement a Risk Reduction Program

The City's staff oversees and maintains six signs at its Baylands (shoreline) at different locations where fishing is allowed. Staff is working to replace one that was removed during a recent boardwalk construction project. Please refer to the SCVURPPP and regional summaries of accomplishments for this sub-provision in the FY 18-19 Annual Report.

Section 13 - Provision C.13 Copper Controls

C.13.a.iii.(3) ►Manage Waste Generated from Cleaning and Treating of Copper Architectural Features

Provide summaries of permitting and enforcement activities to manage waste generated from cleaning and treating of copper architectural features, including copper roofs, during construction and post-construction.

Summary:

Since January 1, 2003, architectural copper has not been permitted for use in the City of Palo Alto (City). Specific Ordinance language is contained in Palo Alto Municipal Code Section 16.09.180:
"On and after January 1, 2003, copper metal roofing, copper metal gutters, copper metal down spouts, and copper granule containing, asphalt shingles shall not be permitted for use on any residential, commercial or industrial building for which a building permit is required. Copper flashing for use under tiles or slates and small copper ornaments are exempt from this prohibition. Replacement roofing, gutters and downspouts on historic structures are exempt, provided that the roofing material used shall be pre-patinated at the factory. For the purposes of this exemption, the definition of "historic" shall be limited to structures designated as Category 1 or Category 2 buildings in the current edition of the Palo Alto Historical and Architectural Resources Report and Inventory."

City staff continues to regularly review plans for submitted development projects to ensure all regulations and Code requirements are met, including the Section mentioned above. A factsheet regarding this requirement is also provided at the City's Development Center, and permit applicants are informed early in the permitting process.

C.13.b.iii.(3) ►Manage Discharges from Pools, Spas, and Fountains that Contain Copper-Based Chemicals

Provide summaries of any enforcement activities related to copper-containing discharges from pools, spas, and fountains.

Summary:

Ordinance language to manage copper-containing chemicals is contained in Palo Alto Municipal Code Section 16.09.205: "It shall be unlawful to discharge water from cooling systems, pools, spas, fountains boilers and heat exchangers to the storm drain system." In addition, for new construction, the following requirement is included in Palo Alto Municipal Code Section 16.09.180: "Discharge drains for swimming pools, spas and fountains shall not be connected directly to the storm drain system or to the sanitary sewer system. When draining is necessary the discharge will be allowed by way of either:

(A) A hose or other temporary system shall be directed into a sanitary sewer (not storm drain system) clean out. A sewer clean out shall be installed in a readily accessible area;
(B) A fixed pipe with an air gap and receiving sink directed to the sanitary sewer."

City staff continues to regularly review plans for submitted development projects to ensure all regulations and Code requirements are met, including the Section mentioned above. Additionally, educational information regarding appropriate pool draining is posted on the City's website at: http://www.cityofpaloalto.org/civicax/filebank/documents/22807, which can be accessed through cleanbay.org. Staff also helps support the drafting of comment letters requiring notification of local stormwater and wastewater agency when draining a pool or spa with

copper containing chemicals. Finally, if a complaint regarding a potential pool discharge is made, the City's Stormwater Inspector or an alternate inspector will respond as soon as is possible and will provide enforcement as needed. No pool related discharges have required enforcement action since 2013.

C.13.c.iii ►Industrial Sources Copper Reduction Results

Based upon inspection activities conducted under Provision C.4, highlight copper reduction results achieved among the facilities identified as potential users or sources of copper, facilities inspected, and BMPs addressed.

Summary:

Industrial facilities and automotive facilities are inspected at minimum annually with particular attention paid to outdoor storage and other potential exposure of copper to storm water or drainage of water that may contain copper (such as cooling towers). There were no associated issues in FY 18-19.

Section 15 -Provision C.15 Exempted and Conditionally Exempted Discharges

C.15.b.vi.(2) ► Irrigation Water, Landscape Irrigation, and Lawn or Garden Watering

Provide implementation summaries of the required BMPs to promote measures that minimize runoff and pollutant loading from excess irrigation. Generally the categories are:

- Promote conservation programs
- Promote outreach for less toxic pest control and landscape management
- Promote use of drought tolerant and native vegetation
- Promote outreach messages to encourage appropriate watering/irrigation practices
- Implement Illicit Discharge Enforcement Response Plan for ongoing, large volume landscape irrigation runoff.

Summary:

The City of Palo Alto's (City) Utilities Department promotes water conservation as well as the use of drought-tolerant and native vegetation through several programs:

- Landscape efficiency requirements for new development and implementation of the State's Water Efficient Landscape Ordinance (cityofpaloalto.org/gov/depts/ds/green_building/outdoor_water_efficiency_.asp).
- Rebates (Landscape Rebate Program, Graywater Laundry to Landscape)and technical assistance (such as Water Wise Outdoor Survey) that promote water conservation, drought-tolerant landscaping, stormwater reuse (cisterns, rain barrels), bay-friendly landscaping and less toxic pest management.
- A new Utility Portal where customers can access and monitor their water, gas, and electric usage.
- Workshops on water conservation, pest control, rainwater harvesting, and other related topics. The following lists attendance for the respective Fall 2018 and Spring 2019 workshops (ityofpaloalto.org/gov/depts/utl/news/details.asp?NewsID=3143&TargetID=235,310):
    - 'Landscape Water Use Efficiency' - 47 (10/27/18);
    - 'Designing Native Gardens' - 60 (12/01/18);
    - Two 'Maintaining Native Gardens and Leak Detection' – 40 and 25 (12/08/18 and 6/01/19);
    - 'Rainwater Harvesting: Rain Gardens, Rain Barrels, and Cisterns' - 49 (3/09/19);
    - 'Irrigation Equipment Upgrades and Landscape Water Use Efficiency' - 27 (5/11/19).
- Demonstration Gardens at Lucie Stern Community Center and Palo Alto City Hall, both City facilities.
- Outreach tabling events, including the City's yearly Great Race for Saving Water (social media with the hashtags #BaylandsEarthDay and #GreatRaceforSavingWater)event with 1000 attendees in 2019.
- Outreach materials, including a website (cityofpaloalto.org/gov/depts/utl/default.asp), pictures (smugmug), Utilities e-newsletter(updates on programs, events and important news), Facebook, Twitter, Instagram, utility bill inserts, and tabling events.

Finally, please refer to the C.3 New Development and Redevelopment, C.7. Public Information and Outreach and C.9. Pesticide Toxicity Control sections of SCUVRPPP's FY 2018-19 Annual Report as needed.

List of Acronyms

ABAG – Association of Bay Area Governments

BAPPG – Bay Area Pollution Prevention Group

BASMAA – Bay Area Stormwater Management Agencies Association

BMP – Best Management Practice

CASQA – California Stormwater Quality Association

CCAG – Creek Connections Action Group

CDS – Continuous Deflective Separator

CFL – Compact Fluorescent Light

CWEA – California Water Environment Association

DO – Dissolved Oxygen

DPR – Department of Pesticide Regulation

EPA – Environmental Protection Agency

ERP – Enforcement Response Plan

FOG – Fats, Oil, and Grease

FY – Fiscal Year

GPM – Gallons per Minute

HHW – Household Hazardous Waste

HM – Hydromodification Management

ICID – Illicit Connection/Illegal Discharge

IDDE – Illicit Discharge Detection and Elimination

IND AHTG - Industrial and Commercial Ad Hoc Task Group

IPM – Integrated Pest Management

LID – Low Impact Development

MRP – Municipal Regional Permit

MS4 – Municipal Separate Storm Sewer System

N/A – Not Applicable

NOI – Notice of Intent

NPDES – National Pollution Discharge Elimination System

NPS – Nonpoint Source

O & M – Operation and Maintenance

PSA – Public Service Announcement

RWQCB/Water Board – Regional Water Quality Control Board

RWQCP – Palo Alto Regional Water Quality Control Plant

SCVURPPP/Program – Santa Clara Valley Urban Runoff Pollution Prevention Program

SCVWD – Santa Clara Valley Water District

SF – square feet

SIC – Standard Industrial Code

SMaRT – Sunnyvale Materials Recovery and Transfer Station

SOP – Standard Operating Procedure

SWIDS – Storm Water Infiltration Device System

SWPPP – Storm Water Pollution Prevention Program

TBD – To Be Determined

URMP – Urban Runoff Management Plan

VTA – Santa Clara Valley Transportation Authority

WMI – Watershed Management Initiative

WUPPP – Water Utility Pollution Prevention Plan

YCS – Youth Community Service

ZLI – Zero Litter Initiative

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Appendix 4-1. List of Facilities Subject to Periodic Inspections (per C.4.b.iii)

Name	New in FY 18-19
4Less Smog Check	
7-Eleven Food Store	
A Dog's Life	
A G Ferrari Foods	
A-1 Auto Service	
A1 Liquors	
Abundant Air Café	
Acme Bioscience	
Addison	
Adlai E Stevenson House	
Advantage Aviation	
AJ's Quick Clean Center	
Akins Body Shop #2	
Akins Body Shop Inc.	
Alexza Pharmaceuticals	
All Saint Episcopal Church	
Allied Auto Works	
Amarin Thai Cuisine	
Amber Dhara	
American Girl	
America's Tire	
Anacor Pharmaceuticals	
Anatolian Kitchen	
Anderson Honda	
Animal Hospital of Palo Alto	
Antonio's Nut House	
Applied Nanostructures	
Aquarius Theater	
Arco - PS15429	
Aroy Thai Bistro (closed March 2019)	X
Art's Body Craft	
Asian Box	
Audi of Palo Alto	
Auto Pride Carwash	
Avant, The	X
Avenidas Senior Center	
Avis Budget Rent A Car	
Backyard Brew	X
Baja Fresh Mexican Grill	

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Name	New in FY 18-19
Bangkok Thai Cuisine	
Barron Park Elementary School	
Barron Park Nursery and Florist	
Barron Park Shell Service	
Baskin Robbins Ice Cream	
Baume French Cuisine Moderne	
Bay Café	
Beckman Instruments Cafeteria	
Bee Café	
Belcampo Meat Company	
Bill's Café	
Bird Dog	
Bistro Elan	
Bistro Maxine	
Blue Bottle	
Blue Sky	
Bon Appetit	
Bon Vivant Café	
Bowman International School	
Baylands Golflinks Proshop	
Brava Oven	
Brightview/Municipal Golf Course Maintenance	
Buca Di Beppo	
Burma Ruby	
Cabana-Crown Plaza	
Cafa a la Carte	
Café 220	
Café Brioche	
Café del Doge	
Café Piazza	
Café Pro Bono	
Café Venetia	
Café Vie	
Caffe Machiavello	
Caffe Riace	
Cal Spray Inc	
Calafia	
California Avenue Norge	
California Café Bar and Grill	

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Name	New in FY 18-19
California Pizza Kitchen	
Cardinal Sushi	
Casa Isabel	
Castilleja Girls School	
Casual Chic Salon	
Celia's Mexican Restaurant	
Challenger School	
Channing House	
Charleston Cleaners	
Cheesecake Factory	
Chef Zhao's Kitchen	
ChemoCentryx	
Chevron Automotive Center	
Chevron USA	
Chez Franc	
China Delight	
China Mei	
Chipotle	
Chipotle (SSC)	
Cho's Restaurant	
Ciardella's Garden Supply, Inc.	
Cibo Restaurant	
Cine Arts at Palo Alto Square	
City of Palo Alto Art Center	
Classic Residence by Hyatt	
Clement Hotel	
Cloudera	
CMK Automotive	
Cocola Bakery	
Coconuts	
Cold Stone Creamery	
Communications and Power Industries	
Como Esta Taqueria	
Cooper Testing Labs	
Corner Bakery	
Country Sun	
Coupe Café	
Cowper Inn	
CPA Recycling Center	

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Name	New in FY 18-19
Crawfish Fusion	
Cream	
Crepevine	
Crossroads World Market	
Crowne Plaza Palo Alto	
Crustacean	
CSI Chevron	
Curry up Now	
D & M Motors	
Da Sichuan Bistro	
Dan Gordon's	X
Danny Browns	
Darbar Indian Cuisine	
Dave's Auto Repair	
Davids Tea	
DG's GB	
Diffraction Optics	
Dinah's Poolside Coffee Shop	
Domino's Pizza	
Douce D'France	
Driftwood Deli & Market	
Duveneck School	
East Palo Alto Shell	
Eastman Chemical Company	
E-Car Garage	
Edgewood Plaza	
El Camino Hospital	
El Camino Unocal	
El Carmelo School	
Elbe Restaurant and Ruby's Pub	
Elite Auto Performance	
Embarcadero Shell	
Emerson Laundry Center	
Enterprise Rent-A-Car	
EPI (now closed)	
Epiphany Hotel	
Equinox Fitness Club	
European Asian Auto Center	
Evvia	

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Name	New in FY 18-19
Facebook	
Fairmeadow School	
Fambrini's Café	
Fast Tony's Chicken (closed January 2019)	X
Figo	
Fimbres Brothers	
Fine Cleaners	
Fire Oak and Barley	
First Congregational Church	
First Presbyterian Church	
First Republic Bank	X
Fix Auto Palo Auto	
Fleming's Steakhouse	
Foothill College	
Foothill Swim and Tennis Club	
Fowl Play	X
Fran's Market	
Fuki Sushi	
Garden Court Hotel	
Garden Fresh	
Gate Cleaners	
Gateau Et Ganache	
Gelato Classico #2	
Genencor International Inc	
Gideon Hausner Jewish Day School	
Global Steel Fabricators	
Godiva Chocolatier	
Good Earth Café and Bakery	
Good Earth Patio Café	
Google - Golden Castle Adult Day Care	
Google Nest	
Gott's Roadside	
Gourmet Franks	
Gracie Jones Bakery	
Green Elephant Gourmet	
Grocery Outlet Bargain Market	
Guckenheimer	
Gunn High School	
Gyros Gyros	

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Name	New in FY 18-19
Hammon Plating	
Happy Donuts	
Hassett Hardware	
Heinichen's Garage	
Hengehold Motor Company Inc.	
Hertz Local Edition	
Hewlett Packard Enterprise	
High Street Auto	
Hillview Clinical Labs	
Hilton Garden Inn	
Hilton Homewood Inn	
Hitachi Chemical Diagnostics	
Hobee's Restaurant	
Holiday Cleaners	
Homma's Brown Rice Sushi	
Honey Baked Ham	
Hong Kong Restaurant	
Hoover School	
House of Bagels	
Howie's Artisan Pizza	
Ike's Place	X
Il Forniao	
Indo	
Indochine	
International School of Peninsula	
Izzy's Brooklyn Bagels	
Jack in the Box	
Jade Palace	
Jamba Juice	
Jamba Juice #325	
Jane Lathrop Stanford Middle School	
Janta Indian Cuisine	
Japanese Tapas and Ramen	
Jewish Community Center - Nourish Café	
Jiffy Lube #1283	
Jiffy Lube #1297	
Jim Davis Automotive Valero	
Jin Sho	
Jing Jing Restaurant	

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Name	New in FY 18-19
JLS Middle School	
Joanie's Café	
Joe & the Juice - 240 Hamilton	X
Joe & the Juice - 508 University	
Jordan Middle School	
Joya	
Juana Briones School	
Junior Museum and Zoo	
K. Minamoto	X
Kanpai	
Kara's Cupcakes	
Kehillah Jewish High School	
Keys Middle School	
Khoury's Market	X
Kirk's Steakburgers	
KMAS Inc.	
Kodiak Sciences, Inc.	
Kol Emeth Synagogue	X
Krung Siam Thai Cuisine	
L & L Hawaiian BBQ	
La Baguette	
La Bodeguita	
La Comida	
La Morenita Restaurant	
La Strada	
Lemonade	
Lobster Shack	
Local Union 271	
Lockheed Martin Space Systems Company	
Los Altos Arco AM PM	
Los Altos City Yard	
Los Altos Union	
Lotus Thai Bistro	
Loving Hut	
Lucile Nixon Elementary School	
Lucile Packard Children's Hospital	
Lulu's	
Lunchstop at Lockheed Martin	
Macarthur Park	

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Name	New in FY 18-19
Machine Zone Cafeteria	
Magussen's Toyota of Palo Alto	
Mandarin Roots	
Mango Caribbean Restaurant	
Mathew's - Carlsen Bodyworks	
Max's Opera Café	
Mayfield Bakery and Café	
McDonalds (SSC)	
Mechanica Automotive	
Medimmune Vaccines	
Mediterranean Wraps	
Meissner Automotive	
Mendocino Farms	X
Merck Sharp and Dohme Corporation	
Midtown Veterinary Hospital	
Mike's Café	
Mike's One Hour Cleaner	
Mollie Stone's Market	
Mountain Mike's Pizza	
NASA Ames Research Center	
Neiman Marcus Restaurant	
Nest Hotel	
New Holiday Cleaners	
New York New York	
New York Pizza	
Niche Automotive	
Nine Minute Oil & Lube	
Nola's	
Nordstrom	
O Sushi House	
O'Dori Sushi	
Ohlone Elementary School	
Oil Changers	
Old Pro	
Oned Material	
Ooma	
Opa	
Oren's Hummus Shop	
Osteria	

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Name	New in FY 18-19
Palantir Technologies	
Palo Alto Airport	
Palo Alto Animal Services	
Palo Alto Baking Company	
Palo Alto BMW	
Palo Alto Breakfast House	
Palo Alto Buddhist Temple	
Palo Alto Café	
Palo Alto City Hall Café	
Palo Alto Commons - North	
Palo Alto Elks Lodge	
Palo Alto Fire Station #1	
Palo Alto Fire Station #2	
Palo Alto Fire Station #3	
Palo Alto Fire Station #4	
Palo Alto Fire Station #5	
Palo Alto Fuel Service	
Palo Alto German Car Corporation	
Palo Alto High School	
Palo Alto Hills Golf & Country Club	
Palo Alto Landfill	
Palo Alto Medical Foundation	
Palo Alto Mosque	
Palo Alto MSC Garage	
Palo Alto Nursing Center	
Palo Alto Pizza Co	
Palo Alto Research Center, Building 34	
Palo Alto Research Center, Building 35	
Palo Alto Senior High School	
Palo Alto Shell	
Palo Alto Sol	
Palo Alto Speedometer Service	
Palo Alto Unified School District	
Palo Alto Unocal Service	
Palo Verde School	
Pampas	
Panache Catering	
Panda Express	
Papa John's Pizza	

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Name	New in FY 18-19
Papa Murphy's	
Papasito's Sports Bar and Grill	
Parc	
Paris Baguette	
Parking Company of America	
Patxi's Chicago Pizza	
Peet's Coffee and Tea	
Peninsula Creamery Dairy Fountain	
Peninsula Fountain and Grill	
Peninsula Sanitary Service	
PF Chang's	
Philz Coffee	
Pho Banh Mi	
Piazza's Fine Foods Grocery	
Pink Posy	
Pinkberry Frozen Yogurt	
Pizza Chicago	
Pizza My Heart	
Pizzeria Delfina	
Playground Global	
Pluto's	
Poke Fish Bar	
Poke Love (closed March 2019)	X
Poki Bowl	X
Pressed Juicery	
Printers Café	
Progenitor Cell Therapy	
Quality Metal Spinning & Machining	
R&B Seafood Restaurant	
R.E. Borrmann's Steel	
Rainer's Service Sation	
Ramen Nagi	
Ramona's Pizza	
Rancho Auto Service	
Rangoon Ruby	
Red Mango/Auntie Anne's	
Reitmeir's Werkstatt	
Renzo	
Repasado	

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Name	New in FY 18-19
Rick's Ice Cream	
Rojoz Wraps	
Ronald McDonald House	
Roose House	
Rose & Crown	
Rossi Aircraft Inc.	
Round Table Pizza	
Round Table Pizza #15	
Safeway	
Sam's Chowder House	
Sancho's Taqueria	
SAP Cafeteria-Bon Appetit	
Satiety	
Satura Cakes	
Say Ray Auto Service	
Schaub's Meat Fish & Poultry	
Scoop Microcreamery	
Scotty's Bar	
See's Candies	
Shake Shack	X
Sheraton Palo Alto	
Shoji Sushi	
Shokoolat	
Siam Orchid	
Siam Royal Authentic Thai Cuisine	
Siemens Ultrasound Division	
Sigona Farmer's Market	
Simply Sandwiches	
Skip's Tire & Auto	
Sliderbar Café	
Smog Pros Arco	
So Gong Dong Tofu House	
Sodexho at HP Stanford	
Sodexho at HP3000 Hanover	
Sodexho at Schering Plough Biopharma	
SOS Fine Foods	
Space Systems Loral	
Spago	
Spalti Ristorante	

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Name	New in FY 18-19
Specialty's Café & Bakery	X
Spice Kit	
Sprinkles	
Sprouts	
SSC Bloomingdale's Redevelopment Project	
ST Elizabeth Seton School	
St Michael's Alley the Annex	
Stanford Auto Care	
Stanford Children's Hospital	
Stanford Fleet Service	
Stanford Golf Course Maintenance	
Stanford Health Care	
Stanford Hoover Building - Zoom Café	
Stanford Hospital and Clinics	
Stanford School of Medicine	
Stanford Shopping Center Waste Compactor	
Stanford Terrace Inn	
Stanford Theatre Foundation	
Stanford University	
Stangenes Industries, Inc.	
Starbucks #17011	
Starbucks #2822	
Starbucks #2886	
Starbucks #5541	
Starbucks #5555	
Starbucks #565	
Starbucks #9870	
Starbucks at Edgewood Plaza	
Steam	
Streetfx Customs	
Su Hong	
Su Hong Restaurant	
Subway	
Subway - Piazza's Shopping Center	
Subway #27048	
Subway #30816	
Subway #32950	
Summerwinds Garden Centers of CA	
Sundance Mine Company	

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Name	New in FY 18-19
Sunlife Organics	X
Sushi House	
Sushi Tomo	
Sushiritto	
Sweetgreen	
Szechwan Café	
Taco Bell	
Tacolicious	
Tai Pan	
Takara Bio USA	
Tamarine Restaurant	
Tap Room	
Taqueria Azteca	
Taqueria El Grullense	
Taqueria Grullense	
Target Discovery	
Taste	X
Tava Indian Kitchen	
Taverna	
Tea Time - Tea Lovers Shop	
Teagation & Tonic	X
Teaspoon	X
Teleferic Barcelona	X
Tender Greens	
Terman Middle School	
Terrain Café	
Terun Pizzeria	
Tesla Motors	
Teuscher Chocolate of Switzerland	
Thaiphoon Restaurant	
The Ace of Sandwiches	
The Animal Doctors	
The Avenue	
The Car Doctor	
The Counter	
The Fish Market	
The Girls' Middle School	
The Market at Edgewood	
The Melt	

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Name	New in FY 18-19
The Patio at Rudy's	
The Prolific Oven	
The Sea by Alexander's Steakhouse	
The Wine Room	
Three Seasons Restaurant	
Tibco-Bon Appetit	
Timothy Adams Chocolates	
Tin Pot Creamery	
Tofu House	
Tootsies	
Touchatt Trucking	
Tout Sweet	
Town & Country Cleaners	
Trader Joes	
Translucent Photonics	
True Food	
Tut's Bakery	
Umami Burger	
University Club of Palo Alto	
USA Gasoline Shell	
Uzumaki Sushi	
VA Hospital	
VA Palo Alto Health Care System	
Valero USA	
Varian Cafeteria	
Varian Medical Systems	
VCA Palo Alto Animal Hospital	
Vero	
Village Cheese House Inc	
Village Chevron	
Vin Vino Wine	
Vina	
Vino Locale	
VM Ware	
VM Ware Building	
Volvo/McLaren of Palo Alto	
Wahlburgers	
Walgreens #3344	
Walter Hays School	

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Name	New in FY 18-19
West Valley Aircraft Services	
West Valley Flying Club	
Western Dining at CPI	
Westin Palo Alto	
Whole Foods Market	
Wong Electric Inc	
Yayoi	
Yeaman Auto Body	
Yucca De Lac	
Zola	X

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Appendix 7-1. Public Outreach and Citizen Involvement Events (per C.7.d.)

#	DATE	EVENT DESCRIPTION	TYPE OF EVENT	REACH (Approx.)	THEMES
1	9/10/18 - 9/11/18	13th Biennial Bay/Delta Science Conference	Poster/Conference	200	Pollutants of Emerging Concern and proper pharmaceutical disposal
2	9/15/2018	Coastal Cleanup Day: Adobe and Matadero Creeks	Cleanup	20	Trash cleanup; 7 City staff involved
3	9/17/2018	ReThink Disposables Recognition Ceremony-Council Meeting	Recognition Ceremony	20	Stormwater
4	2/11/2019	CWEA P3S Conference	Presentation	50	Outreach program regarding proper pharmaceutical disposal
5	4/13/2019	Great Race to Save Water	Tabling	150	Stormwater pollution prevention using educational games
6	4/14/2019	Westwind Barn Earth Day	Tabling	50	Stormwater pollution prevention (Integrated Pest Management)
7	4/17/2019	Wilson Sonsini Earth Day	Tabling	100	Stormwater pollution prevention using educational games
8	4/19/2019	VM Ware Earth Day	Tabling	150	Stormwater pollution prevention using educational games
9	4/24/2019	Vi Sustainability Day	Tabling	20	Stormwater pollution prevention using educational games
10	5/4/2019	May Fete	Tabling	150	Stormwater pollution prevention using educational games
11	5/18/2019	National River Creek Cleanup Day	Cleanup (volunteer event)	20	Trash cleanup; 6 City staff involved
12	5/12/2018	MSC Open House	Tabling	50	Stormwater (trash wheel), wastewater
		TOTAL		**980**	

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Appendix 7-2. School-Age Children Outreach Summary (per C.7.f.)

DATE	SCHOOL	CLASSES	STUDENTS	PROGRAM
3/13/2019	Nixon Elementary School	3	73	What's Bugging You
3/28/2019	Escondido Elementary School	5	135	What's Bugging You
3/29/2019	Fairmeadow Elementary School	3	81	Watershed Warriors
4/8/2019	Ohlone Elementary School	1	21	Who Dirtied the Bay
4/9/2019	Escondido Elementary School	4	96	Mercury
4/10/2019	Walter Hays Elementary School	3	68	Who Dirtied the Bay
4/11/2019	Escondido Elementary School	5	120	Problem Plastics
4/19/2019	Hoover Elementary School	3	72	What's Bugging You
4/22/2019	Hoover Elementary School	3	72	Watershed Warriors
4/25/2019	Duveneck Elementary School	3	67	Problem Plastics
4/26/2019	Hoover Elementary School	3	72	Problem Plastics
5/9/2019	Ohlone Elementary School	1	24	Problem Plastics
5/10/2019	Hoover Elementary School	3	72	Who Dirtied the Bay
5/29/2019	Nixon Elementary School	3	75	Problem Plastics
	TOTAL	**43**	**1048**	

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Appendix 10-1. Baseline trash generation and areas addressed by full capture systems and other control measures in Fiscal Year 18-19[1] (per C.10.a.i)

TMA	2009 Baseline Trash Generation (Acres)					Trash Generation (Acres) in FY 18-19 After Accounting for Full Capture Systems					Jurisdiction-wide Reduction via Full Capture Systems (%)	Trash Generation (Acres) in FY 18-19 After Accounting for Full Capture Systems and Other Control Measures					Jurisdiction-wide Reduction via Other Control Measures (%)	Jurisdiction-wide Reduction via Full Capture AND Other Control Measures (%)
	L	M	H	VH	Total	L	M	H	VH	Total		L	M	H	VH	Total		
1	32	140	11	0	184	33	139	11	0	184	0.0%	157	27	0	0	184	10.7%	10.7%
2	35	118	1	0	153	35	118	1	0	153	0.0%	120	33	0	0	153	6.0%	6.0%
3	0	2	19	0	22	0	2	19	0	22	0.0%	3	19	0	0	22	4.1%	4.1%
4	129	26	8	0	164	164	0	0	0	164	4.0%	164	0	0	0	164	0.0%	4.0%
5	11	155	4	0	169	13	154	3	0	169	0.4%	127	42	0	0	169	8.3%	8.7%
6	0	72	0	0	72	0	72	0	0	72	0.0%	41	31	1	0	72	2.6%	2.6%
7	0	32	1	0	33	0	32	1	0	33	0.0%	0	32	1	0	33	0.0%	0.0%
8	45	52	0	0	97	45	52	0	0	97	0.0%	45	52	0	0	97	0.0%	0.0%
9	41	184	0	0	225	41	184	0	0	225	0.0%	201	23	0	0	225	10.9%	10.9%
10	15	449	3	0	467	71	394	2	0	467	3.8%	391	76	0	0	467	22.4%	26.3%
11	0	20	0	0	20	0	20	0	0	20	0.0%	0	20	0	0	20	0.0%	0.0%
12	0	0	5	0	5	0	0	5	0	5	0.0%	0	0	5	0	5	0.0%	0.0%
13	12,361	10	0	0	12,370	12,361	10	0	0	12,370	0.0%	12,361	10	0	0	12,370	0.0%	0.0%
Totals	**12,669**	**1,260**	**53**	**0**	**13,982**	**12,765**	**1,175**	**42**	**0**	**13,982**	**8.3%***	**13,609**	**365**	**7**	**0**	**13,982**	**65.0%***	**73.3%***

*The total jurisdiction-wide reduction reported for full capture systems does not include a 10.3% reduction associated with 1,685 acres (25% of treatment area) treated by two trash booms on Matadero and Adobe Creeks it maintains (see C.10.a.iii). The City reserves the right to adjust the reduction accordingly, based on achieving future compliance deadlines according to permit requirements.

[1] Due to rounding, total acres and percentages presented in this table may be slightly different than the sum of the acres/percentages in the corresponding rows/columns (e.g., differ by 1 acre or 0.1%).