LIVERMORE
CALIFORNIA

September 16, 2013

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

Attention: Selina Louie

Subject: Annual Report of Stormwater Program Implementation for FY 2012/2013

Dear Mr. Wolfe:

Enclosed is the City of Livermore's Annual Report of Stormwater Program Implementation for the FY 2012/2013.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or 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 of violations.

If you have questions regarding this report, please contact Steven Aguiar, Environmental Compliance Supervisor, at 925-960-8126.

Sincerely,

Darren Greenwood
Assistant Public Works Director
Water Resources Division, Public Works Department
Phone number: 925-960-8120
Fax number: 925-960-8105

cc: Dan McIntyre, Director of Public Works

Member Agencies:

Alameda

Albany

Berkeley

Dublin

Emeryville

Fremont

Hayward

Livermore

Newark

Oakland

Piedmont

Pleasanton

San Leandro

Union City

Alameda County

Alameda County Flood Control and Water Conservation District (District)

Zone 7 of the District

City of Livermore

Fiscal Year 2012-2013 Annual Report of Stormwater Program Implementation

cleanwater PROGRAM

Submitted to:
California Regional Water Quality Control Board
San Francisco Bay Region

September 2013

ATTACHMENT B

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Section 1 – Permittee Information

Background Information					
Permittee Name:	City of Livermore				
Population:	83,325				
NPDES Permit No.:	CAS612008				
Order Number:	R2-2009-0074R				
Reporting Time Period (month/year):	July 2012 through June 2013				
Name of the Responsible Authority:	Darren Greenwood			**Title:**	Assistant Public Works Director
Mailing Address:	101 W. Jack London Blvd.				
City:	Livermore	**Zip Code:**	94551	**County:**	Alameda
Telephone Number:	925-960-8100	**Fax Number:**			925-960-8105
E-mail Address:	dggreenwood@cityoflivermore.net				
Name of the Designated Stormwater Management Program Contact (if different from above):	Steven Aguiar	**Title:**	Environmental Compliance Supervisor		
Department:	Public Works- Water Resources Division				
Mailing Address:	101 W. Jack London Blvd.				
City:	Livermore	**Zip Code:**	94551	**County:**	Alameda
Telephone Number:	925-960-8126	**Fax Number:** 925-960-8105			
E-mail Address:	smaguiar@cityoflivermore.net				

Section 2 - Provision C.2 Reporting Municipal Operations

Program Highlights and Evaluation

Highlight/summarize activities for reporting year:

Summary: See Section C.2 Municipal Operations of the Countywide Program's FY 12/13 Annual Report for a summary of Program activities.

The City of Livermore participates in the Alameda Cleanwater Program's Municipal Maintenance Subcommittee. Mike Wells, Collection System Supervisor represents the City and attends these meetings. Please refer to the C.2. Municipal Operations section of the Alameda Cleanwater Program's FY 12-13 Annual Report for details of the 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:

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:

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:

C.2.d. ►Stormwater Pump Stations

Does your municipality own stormwater pump stations: [X] Yes [ ] No

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

Complete the following table for dry weather DO monitoring and inspection data for pump stations[1] (add more rows for additional pump stations). If a pump station is exempt from DO monitoring, explain why it is exempt.

Pump Station Name and Location	First inspection Dry Weather DO Data		Second inspection Dry Weather DO Data	
	Date	mg/L	Date	mg/L
Murietta Pump Station: Stanley Blvd. and Murietta Blvd.	Pump stations exempt from monitoring as the discharge remains in a stormwater collections system, infiltrates into a dry creek, and/or does not reach the stream flow.			
P Street Pump Station: Railroad Ave and P Street				
North Livermore Pump Station: Railroad Ave. and North Livermore Ave				

Summarize corrective actions as needed for DO monitoring at or below 3 mg/L. Attach inspection records of additional DO monitoring for corrective actions:

Summary: None

Attachments: **See C.2 Attachments.** Section C.2.d.ii (4) of the Municipal Regional Permit states that "Starting in fall 2010, inspect pump stations a minimum of two times during the wet season in the first business day after ¼-inch and larger storm events after a minimum of a two week antecedent period with no precipitation ." As can be seen from the attached rainfall data (See C.2 Attachments) for the FY 2012/2013 wet season no storm events qualified according to the parameters established in Section C.2.d.ii(4) of the Municipal Regional Permit.

Complete the following table for wet weather inspection data for pump stations (add more rows for additional pump stations):

Pump Station Name and Location	Date (2x/year required)	Presence of Trash (Cubic Yards)	Presence of Odor (Yes or No)	Presence of Color (Yes or No)	Presence of Turbidity (Yes or No)	Presence of Floating Hydrocarbons (Yes or No)
Murietta Pump Station: Stanley Blvd. and Murietta Blvd	9/20/2012	None*	No	No	No	No
P Street Pump Station: Railroad Ave and P Street	9/20/2012	None*	No	No	`No	No
North Livermore Pump Station: Railroad Ave. and North Livermore Ave	9/20/2012	None *	No	No	No	No

[1] DO monitoring is exempted where all discharge from a pump station remains in a stormwater collection system or infiltrates into a dry creek immediately downstream.

Murietta Pump Station: Stanley Blvd. and Murietta Blvd	9/26/2012	None*	No	No	No	No
P Street Pump Station: Railroad Ave and P Street	9/26/2012	None*	No	No	No	No
North Livermore Pump Station: Railroad Ave. and North Livermore Ave	9/26/2012	None*	No	No	No	No
*Notes: Murietta Pump Station annual cleaning performed on 8/9/2012; Maintenance staff did not record volume of trash/debris removed. P Street Pump Station annual cleaning performed 8/16/20112; Maintenance staff did not record volume of trash/debris removed. North Livermore Pump Station annual cleaning performed 8/23/2012; Maintenance staff did not record volume of trash/debris removed.						

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

Does your municipality own/maintain rural[2] roads:	x	**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: No additional comments

[2] 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:

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	**Inspection Date** (1x/year required)	**Inspection Findings/Results**	**Follow-up Actions**
Maintenance Service Center	06/28/2012	BMPs implemented; Facility in compliance with stormwater requirement	None
Maintenance Service Center	08/12/2013	BMPs implemented; Facility in compliance with stormwater requirements	None

The MSC is permitted under the City's Pretreatment Program and is required to be inspected annually during the calendar year. During this inspection, a stormwater inspection is also performed. As indicated in the City's 01/08/2013 response to the RWQCB Notice of Deficiency , future inspections will be performed annually on August 11th to insure that the City meets the Boards reporting requirement to annually inspect such facilities prior to the rainy season.

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

C.3.b.v.(2)(a) ►Green Streets Status Report

(All projects to be completed by December 1, 2014)

On an annual basis (if applicable), report on the status of any pilot green street projects within your jurisdiction. For each completed project, report the capital costs, operation and maintenance costs, legal and procedural arrangements in place to address operation and maintenance and its associated costs, and the sustainable landscape measures incorporated in the project including, if relevant, the score from the Bay-Friendly Landscape Scorecard.

Summary:

The C.3 New Development and Redevelopment section of the Countywide program's FY 12-13 Annual Report includes a description of activities conducted at the countywide or regional level.

C.3.b.v.(2)(c) ►Summary of Green Street Projects Completed by January 1, 2013

(For FY 12-13 Annual Report only) Provide a summary of all green street projects completed by January 1, 2013.

Summary:

BASMAA has prepared a regional summary of all green street pilot projects. The Green Street Pilot Project Summary Report is being submitted by BASMAA, on behalf of the MRP permittees, in BASMAA's MRP FY 12-13 Regional Supplement – New Development and Redevelopment. The Green Streets Pilot Project Summary Report contains all of the required elements listed in Provision C.3.b.v.(2)(c) for all green street projects completed by January 1, 2013, as well as information on projects not yet completed.

C.3.b.v.(1) ►Regulated Projects Reporting

Fill in attached table **C.3.b.v.(1)** or attach your own table including the same information. See attached C.3.b.v tables

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

(For FY 11-12 Annual Report and each Annual Report thereafter) 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):				

C.3.e.vi ► Special Projects Reporting

1. 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. Has your agency granted final discretionary approval of a project identified as a Special Project in the March 15, 2013 report? If yes, include the project in both the C.3.b.v.(1) Table, and the C.3.e.vi. Table.		**Yes**	x	**No**

If you answered "Yes" to either question,

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

C.3.h.iv. ► Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

(1) Fill in attached table **C.3.h.iv.(1)** or attach your own table including the same information. See attached table C.3.h.iv.

(2) On an annual basis, 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 of Livermore conducted 55 operation and maintenance verification inspection of facilities with stormwater treatment measures during this reporting period. Additionally, the City performed 9 initial inspections of newly installed stormwater treatment measures during this reporting period. Please refer to table C.3.h.iv.of this report for details regarding the findings and observations from these inspections.

(3) On an annual basis, 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 Livermore has been requiring new development projects to install stormwater treatment measures since approximately the year 2000. The initial stages of our O & M inspection program were focused on developing an inventory of these measures and their locations. Currently, with the adoption of the MRP, our efforts have been focused on performing the required inspections to comply with the MRP. During this reporting period, City staff performed a total of 64 inspections of stormwater treatment measures.

(4) During the reporting year, did your agency:

• Inspect all newly installed stormwater treatment systems and HM controls within 45 days of installation?	X	**Yes**		**No**		**Not applicable. No new facilities were installed.**
• Inspect at least 20 percent of the total number of installed stormwater treatment systems or HM controls?[3]	X	**Yes**		**No**		**Not applicable. No treatment measures**
• Inspect at least 20 percent of the total number of installed vault-based systems?	X	**Yes**		**No**		**Not applicable. No vault systems.**

If you answered "No" to any of the questions above, please explain:

[3] If there is only 1 treatment measure in the jurisdiction, the agency must inspect it every year.

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 Co-permittees. We are using the BASMAA site design fact sheets for C.3.i implementation. We have modified local ordinances/policies/procedures and forms/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.

C.3.b.v.(1) ▶ Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Project Location[i], Street Address	Name of Developer	Project Phase No.[ii]	Project Type & Description[iii]	Project Watershed[iv]	Total Site Area (ft^2)	Total Area of Land Disturbed (ft^2)	Total New Impervious Surface Area (ft^2)[v]	Total Replaced Impervious Surface Area (ft^2)[vi]	Total Pre-Project Impervious Surface Area[vii] (ft^2)	Total Post-Project Impervious Surface Area[viii] (ft^2)
Private Projects - Anticipated											
Kibler Harris	Railroad Ave	City	None	Multi-Family Housing	G-Arroyo Mocho	12,500	12,500	0	12,500	12,500	12,500
DT Hotel Site	Railroad Ave	Sonnenblack	None	Hotel	G-Arroyo Mocho	47,500	42,500	0	42,500	47,500	47,500
Regional Theater	Railroad Ave	LVPAC/City	None	Theatre	G-Arroyo Mocho	51,890	50,000	0	50,000	51,890	50,000
FBO site Airport	Airport	Five Rivers Aviation	None	Hangars, Airport Services	H – Arroyo Las Positas	130,000	130,000	32,000	26,000	26,000	58,000
Primrose School	Las Positas Avenue	Jeff Hardy, Design Build Concepts	None	Day Care	H – Arroyo Las Positas	45,000	45,000	40,000	0	0	0
Private Projects – Planning Entitlement											
Ironwood Apartments APN: 099A-1441-050-00	5643 Charlotte Way @ East Ave.	Jeff Ratto	None	New apartments and parking lot	P-Arroyo Seco	662,343	343,100	69,100	0	343,100	412,200
Meritage Tract	Morning Glory Circle @ Wattenburger Park	Meritage Homes	None	Residental subdivision	H-Arroyo Las Positas/Arroyo Seco	242,600	242,600	195,000	0	0	195,000
Garavanta Hills SUB13-001	North of Garaventa Ranch Road	RL Communities	None	50 Residential Homes	H – Arroyo Las Positas	450,000	250,000	180,000	0	0	180,000
Old Town Village-First & Inman	2375 Old First Street	Taylor Morrison	Phase 1	45 unit single-family residential homes	G-Arroyo Mocho	218,954	218,954	142,339	0	0	142,339
Old Town Village-First & Inman	2375 Old First Street	Mike Serpa	Phase 2	90 dense single -family residential homes	G-Arroyo Mocho	50,094	50,094	17,840	0	4,000	32,254
Paragon II	ECSP - Outlet Mall Expansion	Mike Liberatore	None	Outlet Mall Expansion	H – Arroyo Las Positas	1,200,000	1,200,000	882,384	83,706	83,706	966,090
Brisa Np Environmental	Brisa Street and Vasco Road	Ageno Trust John Steinbuch	None	High Density Multi-family residential TOD	P – Arroyo Seco	1,501,054	2,000,000	1,500,000	0	0	1,500,000

C.3.b.v.(1) ▶ Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Project Location[i], Street Address	Name of Developer	Project Phase No.[ii]	Project Type & Description[iii]	Project Watershed[iv]	Total Site Area (ft^2)	Total Area of Land Disturbed (ft^2)	Total New Impervious Surface Area (ft^2)[v]	Total Replaced Impervious Surface Area (ft^2)[vi]	Total Pre-Project Impervious Surface Area[vii] (ft^2)	Total Post-Project Impervious Surface Area[viii] (ft^2)
Metal Pole Barn APN: 099 -0750-007-22 SPDR 12-020	3200 Robertson Park Road	LAPRD John Lawerance	None	Barn Structure	G-Arroyo Mocho	2,968,324	60,000	3,750	0	60,000	63,750
Mitchell Katz Winery. APN: 099 -0460-006-00, CUP 12-005	1888 Hansen Road	Dirk Lorenz	None	Winery	Arroyo Del Valle	131,130	0	42,085	0	0	42,085
Private Projects – Engineering Final Map											
Toyota APN: 099B 535101605 PM 9707	Northfront Road	Toyota	None	Auto Dealership	H – Arroyo Las Positas	134,420	134,420	54,100	0	0	54,100
Hexcel APN: 099 137500304, T8075	75 Mines Road, North	Hexcel Corporation	None	Convert to Residential	P – Arroyo Seco/Arroyo Las Positas	645,124	645,124	0	293,270	580,612	293,270
Meritage APN:099B 535100900, T8075	6412 Scenic avenue	Manny Silva (Meritage Homes)	None	22 single family homes	H – Arroyo Las Positas	217,800	217,800	48,046	0	0	48,046
Vinsanto Phase 1, T8045	Caldera and San Vicente Dr.	Ponderosa Pam Hardy Jeff Schroeder	1	10 Lot Residential Subdivision	G-Arroyo Mocho	58,022	58,022	4,620	0	0	4,620
Vinsanto Phase 2, T8091	Caldera and San Vicente Dr.	Ponderosa Pam Hardy Jeff Schroeder	2	41 Lot Residential Subdivision	G-Arroyo Mocho	499,677	499,677	60,180	19,780	19,780	79,960

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

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The Grove Phase 2 APN: 099 137800305 T7552	Sonia St off N Mines Road, Old Hexcel site	Northbrook Homes Gary Brooks	2	Residential Homes	P – Arroyo Seco	43,560	43,560	20,530	0	0	20,530
The Grove Phase 3 –T7552 APN: 099 137800305	Sonia St off N Mines Road, Old Hexcel site	Northbrook Homes Gary Brooks	3	Residential Homes	P – Arroyo Seco	43,560	43,560	20,530	0	0	20,530
Mc Grath APN:099004001033 099004001047 099132686 PM9992	5699 Las Positas Avenue	Mc Grath	None	Commercial site	H – Arroyo Las Positas	985,600	985,600	809,900	19,200	19,200	829,100
Macedo APN: 099B 507500608 T8061	1000 Vasco Road, North	Eugene & Shirley Macedo (Macedo Development)	None	Subdivide land into 50 single-family detached residential lots	H – Arroyo Las Positas	253,083	253,083	9,917	139,477	139,477	149,394
Crosswinds PM9497	100 Freisman Road	Crosswinds	None	Church and daycare	H – Arroyo Las Positas	1,801,206	1,500,000	650,000	10,000	10,000	650,000
Positano FNLMP08014 T7840	North L Street and Chestnut Street	David Edgington DHE Homes, Inc.	None	10 Condominium Buildings Units	G-Arroyo Mocho	225,020	225,020	9,917	139,477	139,477	149,394
Coyatano Park FNLMP05018 –Shea Homes T7610	Portola Ave and Campus Hill Drive	Shea Homes Northern Cal Dave Best	None	Sports Fields and Parks	H – Arroyo Las Positas	514,880	103,043	9,917	0	0	9,917
SUB13-005 Sunset Development	Holmes Street and Concannon Blvd.	Sunset Development	None	87 single family and multi-family homes	G-Arroyo Mocho	586,427	586,427	258,420	64,937	328,000	323,357

C.3.b.v.(1) ▶ Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Project Location[i], Street Address	Name of Developer	Project Phase No.[ii]	Project Type & Description[iii]	Project Watershed[iv]	Total Site Area (ft^2)	Total Area of Land Disturbed (ft^2)	Total New Impervious Surface Area (ft^2)[v]	Total Replaced Impervious Surface Area (ft^2)[vi]	Total Pre-Project Impervious Surface Area[vii] (ft^2)	Total Post-Project Impervious Surface Area[viii] (ft^2)
SUB13-006 Catalina Crossings	Catalina Drive and Bartilonia Drive	Sunset Development	None	31 single family and multi-family homes	G-Arroyo Mocho	94,400	94,400	45,590	10,477	84,430	56,067
SUB12-007 Morning Glory (Tract 8125)	Morning Glory Circle	Meritage Homes	None	26 single family homes	H – Arroyo Las Positas	242,011	242,011	97,605	9,474	9,474	107,079
Private Projects – Building Permits											
Paragon Outlets	2800 Paragon Outlets Drive	Peter Sandholdt, Craig & Grant Flynn	1	Commercial Building Construction	H-Arroyo Las Positas	1,801,258	1,801,258	1,020,022	0	0	1,020,022
Airport Admin Bldg	636 Terminal Circle	COL – Dahlin Group	None	Airport Operations office	H-Arroyo Las Positas	38,125	38,125	12,839	0	0	12,839
Silver Oaks II Skilled Nursing Facility APN: 097 009002909 CB11001	752 Holmes Street	Anelli Stamm (Freanel & Son Som. LLC)	None	CUP and LLA for Nursing Facility	G – Arroyo Mocho	18,056	18,056	1,758	13,063	13,063	14,821
Toyota Grading and Utilites APN: 099B 535101605 G12003	Northfront Road	Toyota	None	Grading and Underground utilties	H – Arroyo Las Positas	524,300	524,300	320,700	38,170	38,170	358,870
Toyota Mass Grading and Frog Wall	Northfront Road	Toyota	None	Environmental Mitigation	H – Arroyo Las Positas	524,300	43,560	100	0	0	100
Aero Precision APN: 904 000401606	30 Lindbergh Avenue	Evren Ergin (EEMD LLC)	None	Add Exterior Generator for Aero Precision Industries	H – Arroyo Las Positas	72,310	140	140	52,460	52,460	52,600
Cal Water APN: 099 018806700	1519 Juniper St	California Water Service, Kenji Teshirogi	None	Construct 8'x16' Building	G – Arroyo Mocho	7,514	0	0	128	128	128

C.3.b.v.(1) ▶ Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Project Location[i], Street Address	Name of Developer	Project Phase No.[ii]	Project Type & Description[iii]	Project Watershed[iv]	Total Site Area (ft^2)	Total Area of Land Disturbed (ft^2)	Total New Impervious Surface Area (ft^2)[v]	Total Replaced Impervious Surface Area (ft^2)[vi]	Total Pre-Project Impervious Surface Area[vii] (ft^2)	Total Post-Project Impervious Surface Area[viii] (ft^2)
Charter HS APN: 905 0018101300	3142 Constitution Drive	Douglas Roth (Tri-Valley Learning Corp.)	None	Construct Amphitheater	M – Collier Creek/Arroyo Las Positas	NA	NA	NA	NA	NA	NA
Hindu Temple Addition APN: 099B 51250054 099B51250055 099B51250056 CB12004	1240 Arrowhead Ave	Arvind Lyer ,Hindu Temple Representative	None	Church – building office addition	H – Arroyo Las Positas	361,670	361,670	0	134,800	134,800	9,190
Hindu Community and Cultural Center APN: 099B510000701	1232 Arrowhead Ave	Arvind Lyer ,Hindu Temple Representative	None	Parking Lot	H – Arroyo Las Positas	174,434	174,434	129,995	1,600	1,600	131,595
Meritage APN:099B 535100900	6412 Scenic avenue	Manny Silva (Meritage Homes)	None	22 single family homes	H – Arroyo Las Positas	217,800	217,800	62,603	0	0	62,603
Protein Research G13004	1852 Rutan Drive	Kier & Wright Engineer. -RW & N Matheson 2012 Trust	None	Demolish existing and addition of new loading dock . Includes AC and concrete paving, landscaping, walls, storm drain	H – Arroyo Las Positas	150,000	40,000	14,968	25,032	120,000	134,968
Wheelworks APN: 099 001505800 PMW 10054	2852 Las Positas	Paul Smith	None	Auto Repair	H – Arroyo Las Positas	63,641	63,641	44,316	0	0	44,316
US Foods APN: 009B811000302	300 Lawrence Drive, Livermore & 6800 Preston Ave	ESI Construction, INC –Pete Peterson	None	Industrial	H – Arroyo Las Positas	836,797	836,797	16,792	608,368	608,368	632,470

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

Project Name Project No.	Project Location[i], Street Address	Name of Developer	Project Phase No.[ii]	Project Type & Description[iii]	Project Watershed[iv]	Total Site Area (ft²)	Total Area of Land Disturbed (ft²)	Total New Impervious Surface Area (ft²)[v]	Total Replaced Impervious Surface Area (ft²)[vi]	Total Pre-Project Impervious Surface Area[vii] (ft²)	Total Post-Project Impervious Surface Area[viii] (ft²)
752 Kalthoff Common APN: 099 -1343-027-00	752 Kalthoff Common	Hawk Builders Inc Dba Hawk. -Barry & Joan Wright	None	New SFD 7,059sf, attached guest house 991sf and attached garage 1329.5sf.	H – Arroyo Las Positas	764,913 (17.56 AC)	764,913 (17.56 AC)	25,426	0	0	25,426
Public Projects											
El Charro CIP APN: 904 000100905	El Charro CIP	City of Livermore, Various Others	Phase 1	Construct the new Paragon Outlets Livermore	H – Arroyo Las Positas	13,068,000	4,909,000	957,452	0	0	957,452
Isabel Interchange, Portola APN: 099 026001204	Isabel (SR-84), Airway, Kitty Hawk	City of Livermore	None	Utility Relocation, Road Extension	H – Arroyo Las Positas	1,088,969	823,284	146,015	677,269	653,386	969,299
Trail CIP 2007-15, Segment H-2+F APN: 099 080000200	East side of Wente, South side of Mariana	City of Livermore	None	Trail Improvements	G – Arroyo Mocho	110,000	110,000	96,800	0	0	96,800
Galaxy Ct Flood Protection	Altamont Creek to Bluebell		None	Culvert Replacement	H – Arroyo Las Positas	80,000	80,000	0	800	800	800
Livermore Village Plaza	Old downtown Lucky's site	City of Livermore	None	Civic Plaza	G – Arroyo Mocho	16,350	16,350	0	16,350	16,350	34,000
Isabel I/C Projects 1992381 and 1992382 (Projects 1&2) APN: 099 026001204	Isabel (SR-84), Airway, Kitty Hawk	City of Livermore	None	Utility Relocation, Road Extension	G – Arroyo Las Positas	1,088,969	823,284	146,015	677,269	653,386	969,299
El Charro Specific Plan (Project 2007201) APN: 904 001300100	El Charro Specific Plan South of I 580; East of El Charro Road	City of Livermore, Various Others	Phase 1	Construct the new Paragon Outlets Livermore and Infrastructure	G – Arroyo Las Positas	13,068,000	4,909,000	957,452	0	0	957,452

C.3.b.v.(1) ▶ Regulated Projects Reporting Table (part 1) – Projects Approved During the Fiscal Year Reporting Period

Project Name Project No.	Project Location[i], Street Address	Name of Developer	Project Phase No.[ii]	Project Type & Description[iii]	Project Watershed[iv]	Total Site Area (ft²)	Total Area of Land Disturbed (ft²)	Total New Impervious Surface Area (ft²)[v]	Total Replaced Impervious Surface Area (ft²)[vi]	Total Pre-Project Impervious Surface Area[vii] (ft²)	Total Post-Project Impervious Surface Area[viii] (ft²)
Iron Horse Trail Bridge (201040)	N, Livermore Ave	City of Livermore	None	Trail and bridge	H-Arroyo Las Positas/ G-Arroyo Mocho	11,000	7,900	3,100	0	7,900	11,000
East Vineyard Realignment (199660)	Vineyard @ Vallecitos	City of Livermore	None	Realignment Road	Arroyo Del Valle	41,750	0	41,750	0	0	41,750
Trail Segment L19 under the Portola Overcrossing (200655)	Portola Overcrossing to Shea Site	City of Livermore	None	Trail	H-Arroyo Las Positas	100,000	0	100,000	0	0	100,000
Forecourt Plaza at the Regional Performing Arts Theater (580002)	Railroad Ave.	City of Livermore	None	Theatre	G-Arroyo Mocho	16,345	16,345	0	10,000	16,345	10,000
The Regional Performing Arts Theater Infrastructure (583018)	Railroad Ave.	City of Livermore	None	Infrastructure for Theatre	G-Arroyo Mocho	51,890	51,890	0	50,000	51,890	50,000
Project Name Project No.	Project Location[10], Street Address	Name of Developer	Project Phase No.[11]	Project Type & Description[12]	Project Watershed[13]	Total Site Area (Acres)	Total Area of Land Disturbed (Acres)	Total New Impervious Surface Area (ft²)[14]	Total Replaced Impervious Surface Area (ft²)[15]	Total Pre-Project Impervious Surface Area[16] (ft²)	Total Post-Project Impervious Surface Area[17] (ft²)

[10] Include cross streets
[11] 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".
[12] 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.
[13] State the watershed(s) in which the Regulated Project is located. Downstream watershed(s) may be included, but this is optional.
[14] All impervious surfaces added to any area of the site that was previously existing pervious surface.
[15] All impervious surfaces added to any area of the site that was previously existing impervious surface.
[16] For redevelopment projects, state the pre-project impervious surface area.
[17] For redevelopment projects, state the post-project impervious surface area.

C.3.b.v.(1) ▶ Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (private projects)

Project Name Project No.	Application Deemed Complete Date[ix]	Application Final Approval Date[x]	Source Control Measures[xi]	Site Design Measures[xii]	Treatment Systems Approved[xiii]	Type of Operation & Maintenance Responsibility Mechanism[xiv]	Hydraulic Sizing Criteria[xv]	Alternative Compliance Measures[xvi/xvii]	Alternative Certification[xviii]	HM Controls[xix/xx]
Private Projects - Anticipated										
Kibler Harris	Pre-appliation	None	A,D & G	a	None yet	None yet	None yet	NA	NA	None yet
DT Hotel Site	Pre-appliation	None	A,D & G	a	None yet	None yet	None yet	NA	NA	None yet
Regional Theater	Pre-appliation	None	A,D & G	a	None yet	None yet	None yet	NA	NA	None yet
Ironwood Apartments APN: 099A-1441-050-00	Application submitted	None	A,D & G	a	None yet	None yet	None yet	NA	NA	None yet
FBO site Airport		None	A,D & G	a	None yet	None yet	None yet	NA	NA	None yet
Old Town Village VTTM8114V Phase 2	Application submitted	None	A,D & G	a	None yet	None yet	None yet	NA	NA	None yet
Primose School	Pre-appliation	None	A,D & G	a	None yet	None yet	None yet	NA	NA	None yet
Private Projects – Planning Referrals										
Ironwood Apartments APN: 099A-1441-050-00	Application submitted	None	A,D & G	a	None yet	None yet	None yet	NA	NA	None yet
Meritage Tract	5-15-13	8-6-13	A,D & G	a	Bio-retention	O&M Agreement	None yet	NA	NA	Bio-retention
Garavanta Hills	July 2012	None	A,D & G	a	None yet	O&M Agreement	None yet	NA	NA	None yet
Old Town Village-First & Inman Phase 1	5-15-12	7-23-12	A,D & G	a	Bio-retention	O&M Agreement				Bio-retention
Paragon II	5-13-12	7-23-12	A,B,C,D,E,F & G	a,b	Bioretention	O&M Agreement	Volume – 1.b.	NA	NA	Bioretention &

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

Project Name Project No.	Application Deemed Complete Date[ix]	Application Final Approval Date[x]	Source Control Measures[xi]	Site Design Measures[xii]	Treatment Systems Approved[xiii]	Type of Operation & Maintenance Responsibility Mechanism[xiv]	Hydraulic Sizing Criteria[xv]	Alternative Compliance Measures[xvi/xvii]	Alternative Certification[xviii]	HM Controls[xix/xx]
					swales and Detention Basins		Swales also used – Flow 2.c.			Detention – BAHM model verification
Brisa Np Environmental	11/15/12	None	A,D & G	a	Bioretention swales and Detention Basins	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention & Detention – BAHM model verification
Metal Pole Barn APN: 099 -0750-007-22 SPDR 12-020	7/2012	7/2012	A,D & G	a, b	NA	NA	NA	NA	NA	NA
Mitchell Katz Winery APN: 099 -0460-006-00 CUP 12-005	8/2012	9/2012	A,B,C,D,E,F & G	a, b	Bioretention Swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention – BAHM model verification
Private Projects – Engineering Final Map										
Toyota APN: 099B 535101605 PM 9707			A,B,C,D,G,H,I & J	a&b	Bioretention	O & M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention – BAHM model verification
Hexcel APN: 099 137500304, T8075	Deemed Incomplete (01/07/2011)	NA	Standard Source Control Measures Required as Conditions of Approval	Standard Site Design Measures Required as Conditions of Approval	Bioretention Swales	O&M Agreement / LMD	Flow – 2.c Volume – 1.b	NA	NA	Bioretention – BAHM model verification
Meritage APN:099B 535100900, T8075	03/31/2011	06/13/2011	Standard Source Control Measures Required as Conditions of Approval	Standard Site Design Measures Required as Conditions of Approval	Bioretention Swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention – BAHM model verification

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

Project Name Project No.	Application Deemed Complete Date[ix]	Application Final Approval Date[x]	Source Control Measures[xi]	Site Design Measures[xii]	Treatment Systems Approved[xiii]	Type of Operation & Maintenance Responsibility Mechanism[xiv]	Hydraulic Sizing Criteria[xv]	Alternative Compliance Measures[xvi/xvii]	Alternative Certification[xviii]	HM Controls[xix/xx]
Vinsanto Phase 1, T8045	02/05/2011	03/14/2011	Standard Source Control Measures Required as Conditions of Approval	Standard Site Design Measures Required as Conditions of Approval	Bioretention Basins	O&M Agreement / LMD	Volume – 1.b	NA	NA	Bioretention – BAHM model verification
Vinsanto Phase 2 T8091			A,D & G	a	Bioretention swales and Detention Basins	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention & Detention – BAHM model verification
The Grove Phase 2 - T7552 APN: 099137800305			A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
The Grove Phase 3 –T7552 APN: 099 137800305			A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Mc Grath APN:09900400103 3 PM9992			A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Macedo APN: 099B 507500608 T8061			A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Crosswind APN:09900400103 3			A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Positano FNLMP08014 T7840	2005	2009	A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification

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

Project Name Project No.	Application Deemed Complete Date[ix]	Application Final Approval Date[x]	Source Control Measures[xi]	Site Design Measures[xii]	Treatment Systems Approved[xiii]	Type of Operation & Maintenance Responsibility Mechanism[xiv]	Hydraulic Sizing Criteria[xv]	Alternative Compliance Measures[xvi/xvii]	Alternative Certification[xviii]	HM Controls[xix/xx]
Coyatano Park FNLMP05018 T7610			A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Paragon Outlets PM9393	2007	2009	A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Private Projects – Building Permits										
Paragon Outlets APN: Multiple SUBA 10-001	12/14/10	2/14/11	A,B,C,D,E,F & G	a,b	Bioretention swales and Detention Basins	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention
Airport Admin Bldg	Deemed Incomplete (01/07/2011)	NA	A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Silver Oaks II Skilled Nursing Facility APN: 097 009002909	Deemed Complete 6/30/2011	10/10/11	A,D & G	a	Bioretention swales	O&M Agreement	Flow – 2.c. Volume – 1.b	NA	NA	Bioretention
Toyota Grading and Utilites G12003	2011	2012	A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Toyota Mass Grading and Frog Wall	2011	2012	A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Aero Precision APN: 904 000401606	07/28/2011	08/04/2011	A,D & G	a	Bioretention Swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention
Cal Water APN: 099 018806700	02/04/2011	04/18/2011	A & D	a	landscaping	None required	None required	NA	NA	< acre - none required

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

Project Name Project No.	Application Deemed Complete Date[ix]	Application Final Approval Date[x]	Source Control Measures[xi]	Site Design Measures[xii]	Treatment Systems Approved[xiii]	Type of Operation & Maintenance Responsibility Mechanism[xiv]	Hydraulic Sizing Criteria[xv]	Alternative Compliance Measures[xvi/xvii]	Alternative Certification[xviii]	HM Controls[xix/xx]
Charter HS APN: 905 0018101300	Deemed Incomplete	NA	A,D& G	a	Bio-retention	O&M Agreement	Flow – 2.c. Volume – 1.b	NA	NA	Flow – 2.c. Volume – 1.b
Hindu Temple Addition	Application submitted		A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Hindu Community and Cultural CenterTemple Addition	Application submitted		A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Meritage APN: 099B 535100900	03/31/2011	06/13/2011	Standard Source Control Measures Required as Conditions of Approval	Standard Site Design Measures Required as Conditions of Approval	Bioretention Swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention – BAHM model verification
Protein Research G13004	03/31/2011		A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
Wheelworks PMW 10054			A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
US Food Service	03/31/2011		A,D & G	a	Bioretention swales	O&M Agreement	Volume – 1.b. Swales also used – Flow 2.c.	NA	NA	Bioretention– BAHM model verification
752 Kalthoff Common D120209	03/13/2012	05/15/2012	A,D & G	a	Infiltration	None required	None required	NA	NA	None required

C.3.b.v.(1) ▶ Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (private projects)

Project Name Project No.	Application Deemed Complete Date[18]	Application Final Approval Date[19]	Source Control Measures[20]	Site Design Measures[21]	Treatment Systems Approved[22]	Type of Operation & Maintenance Responsibility Mechanism[23]	Hydraulic Sizing Criteria[24]	Alternative Compliance Measures[25/26]	Alternative Certification[27]	HM Controls[28/29]
Private Projects										

Comments:

Guidance: If necessary, provide any additional details or clarifications needed about listed projects in this box. Note that MRP Provision C.3.c. contains specific requirements for LID site design and source control measures, as well as treatment measures, for all Regulated Projects. Entries in these columns should not be "None" or "NA". Do not leave any cells blank.

[18] For private projects, state project application deemed complete date. If the project did not go through discretionary review, report the building permit issuance date.

[19] 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.

[20] 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.

[21] 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.

[22] 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.).

[23] 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.

[24] 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).

[25] 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.

[26] 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.

[27] Note whether a third party was used to certify the project design complies with Provision C.3.d.

[28] If HM control is not required, state why not.

[29] 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.v.(1) ▶ Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (public projects)

Project Name Project No.	Approval Date[30]	Date Construction Scheduled to Begin	Source Control Measures[31]	Site Design Measures[32]	Treatment Systems Approved[33]	Operation & Maintenance Responsibility Mechanism[34]	Hydraulic Sizing Criteria[35]	Alternative Compliance Measures[36/37]	Alternative Certification[38]	HM Controls[39/40]
Public Projects										
El Charro CIP APN: 904 000100905	Yes	June 2011	Standard Source Control Measures Required as Conditions of Approval	Standard Site Design Measures Required as Conditions of Approval	Hydromodification Basins serving El Charro Specific Plan Area and swales along roadway and between mass fill area and trail	Operation and Maintenance Argreement with private property owners funded through a landscape maintenance district.	Flow – 2.c Volume 1.b	NA	NA	Hydromodification Basins and bio-retention swales
Isabel Interchange, Portola APN: 099 026001204	Yes	October 2009	Standard Source Control Measures Required as Conditions of Approval	Standard Site Design Measures Required as Conditions of Approval	Swales	City	Flow – 2.c	NA	NA	Bioretention Swales

[30] For public projects, enter the plans and specifications approval date.
[31] 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.
[32] 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.
[33] 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.).
[34] 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.
[35] 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).
[36] 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.
[37] 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.
[38] Note whether a third party was used to certify the project design complies with Provision C.3.d.
[39] If HM control is not required, state why not.
[40] 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.v.(1) ►Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (public projects)

Project Name Project No.	Approval Date[30]	Date Construction Scheduled to Begin	Source Control Measures[31]	Site Design Measures[32]	Treatment Systems Approved[33]	Operation & Maintenance Responsibility Mechanism[34]	Hydraulic Sizing Criteria[35]	Alternative Compliance Measures[36/37]	Alternative Certification[38]	HM Controls[39/40]
Trail CIP 2007-15, Segment H-2+F APN: 099 080000200	Yes	October 2010	Standard Source Control Measures Required as Conditions of Approval	Standard Site Design Measures Required as Conditions of Approval	Swales	LARPD	Flow – 2.c	NA	NA	Bioretention Swales
Galaxy Ct Flood Protection	Yes	September 2012	D	a	Infiltration to MEP for Culvert Removal & Creek Restoration	City	NA	NA	NA	NA
Livermore Village Plaza	No	NA		a, b	NA	City	NA	NA	NA	NA
Isabel I/C Projects 1992381 and 1992382 (Projects 1&2) APN: 099 026001204	Yes	October 2009	A&D	a. & b.	Swales	City	Flow – 2.c	NA	NA	Bioretention Swales
El Charro Specific Plan (Project 2007201) APN: 904 001300100	Yes	June 2011	A & D	a. & d. a portion of vineyard buffer used for infiltration	Hydromodification Basins serving El Charro Specific Plan Area and swales along roadway and between mass fill area and trail	Operation and Maintenance Argreement with private property owners funded through a landscape maintenance district.	Flow – 2.c Volume 1.b	NA	NA	Hydromodification Basins and bio-retention swales
Iron Horse Trail Bridge (201040)	Yes	9/2012		a, b	Infiltration	City	NA	NA	NA	NA
East Vineyard Realignment (199660)	Yes	Spring 2013		a, b	NA	City	NA	NA	NA	NA
Trail Segment L19 under the Portola Overcrossing (200655)	No	NA		a, b	NA	City	NA	NA	NA	NA

C.3.b.v.(1) ▶ Regulated Projects Reporting Table (part 2) – Projects Approved During the Fiscal Year Reporting Period (public projects)

Project Name Project No.	Approval Date[30]	Date Construction Scheduled to Begin	Source Control Measures[31]	Site Design Measures[32]	Treatment Systems Approved[33]	Operation & Maintenance Responsibility Mechanism[34]	Hydraulic Sizing Criteria[35]	Alternative Compliance Measures[36/37]	Alternative Certification[38]	HM Controls[39/40]
Forecourt Plaza at the Regional Performing Arts Theater (580002)	No	NA		a, b	NA	City	NA	NA	NA	NA
Performing Arts										
Project Name Project No.	Approval Date41	Date Construction Scheduled to Begin	Source Control Measures42	Site Design Measures43	Treatment Systems Approved44	Operation & Maintenance Responsibility Mechanism45	Hydraulic Sizing Criteria46	Alternative Compliance Measures47/48	Alternative Certification49	HM Controls50/51

[41] For public projects, enter the plans and specifications approval date.
[42] 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.
[43] 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.
[44] 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.).
[45] 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.
[46] 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).
[47] 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.
[48] 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.
[49] Note whether a third party was used to certify the project design complies with Provision C.3.d.
[50] If HM control is not required, state why not.
[51] 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.iv. ►Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

Fill in table below or attach your own table including the same information. **Guidance: The table is intended to help permittees meet two requirements of the MRP. The table is intended to (1) report on the inspections of installed stormwater treatment systems, and (2) provide a list of all newly installed treatment measures and HM controls to vector control agencies on an annual basis before the wet season, i.e., October 1. Individual Permittees will submit these tables to their vector control agency to fulfill this requirement. The facility name, address, responsible party and type of treatment/HM control should be provided for all facilities installed during this fiscal year. If a newly installed facility has not yet had an inspection because the 45-day time frame for inspecting the newly-installed facility extends into the next fiscal year include the facility in the table, so that it will be reported to the applicable vector control district. In those cases, indicate in columns pertaining to inspection information that the 45-day inspection will be reported in the subsequent fiscal year. Do not leave any cells blank.**

An agency may choose to report inspections conducted in early FY 13-14 for facilities installed in late FY 12-13 .

Name of Facility/Site Inspected	Address of Facility/Site Inspected	Newly Installed ? (YES/NO)[52]	Party Responsible[53] For Maintenance	Date of Inspection	Type of Inspection[54]	Type of Treatment/HM Control(s) Inspected[55]	Inspection Findings or Results[56]	Enforcement Action Taken[57]	Comments/Follow-up
Meritage APN: 099B 535100900 T8075	6412 Scenic Avenue	YES	Meritage Home Joshua Roden	1/4/13	45-day	Swales	Installed Properly	None	
Vinsanto Phase 1, T8045	Caldera and San Vicente Dr.	YES	Ponderosa Jeff Shaffer	6/30/13	45-day	Swales	Installed Properly	None	
Vinsanto Phase 2, T8091	Caldera and San Vicente Dr.	YES	Ponderosa Jeff Shaffer	6/30/13	45-day	Swales	Installed Properly	None	
The Grove, Phase 2 APN: 099 137800305 T7552	Sonia St off N Mines Road, Old Hexcel site	YES	Northbrook Homes, Gary Brooks	6/30/13	45-day	Swales	Installed Properly	None	
Magnolia APN: 099B 507500608 T8061	1000 Vasco Road, North	YES	Standard Pacific, Aaron Ross-Swain	7/26/13	45-day	Swales	Installed Properly	None	

[52] Indicate "YES" if the facility was installed within the reporting period, or "NO" if installed during a previous fiscal year.
[53] State the responsible operator for installed stormwater treatment systems and HM controls.
[54] State the type of inspection (e.g., 45-day, routine or scheduled, follow-up, etc.).
[55] State the type(s) of treatment systems inspected (e.g., bioretention facility, flow-through planter, infiltration basin, etc…) and the type(s) of HM controls inspected, and indicate whether the treatment system is an onsite, joint, or offsite system.
[56] State the inspection findings or results (e.g., proper installation, improper installation, proper O&M, immediate maintenance needed, etc.).
[57] State the enforcement action(s) taken, if any.

C.3.h.iv. ►Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

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Hexcel APN: 099 137500304	75 Mines Road, North	YES	Northbrook Homes, Gary Brooks	6/30/13	45-day	Swales	Installed Properly	None	
Wheelworks APN: 099 001505800 PMW 10054	2852 Las Positas	YES	Las Positas Partners, LLC, Paul B. Smith	6/30/13	45-day	Swales	Installed Properly	None	
Hindu Temple Addition APN: 099B 51250054 099B51250055 099B51250056 CB12004	240 Arrowhead Ave	YES	Arvind Lyer ,Hindu Temple Representative	6-30-13	45-day	Swales	Installed Properly	None	
Meritage APN:099B 535100900	6412 Scenic avenue	YES	Josh Roden, Meritage Homes	6-30-13	45-day	Swales	Installed Properly	None	
Livermore Gas & Shop	816 N. Vasco Rd.	NO	J. Yanoff 59 Elizabeth Cir. Greenbre, CA 94904	06/11/13	Scheduled	Extended Detention Basin	Compliant	None	None
National Food Laboratory	2441 Constitution Place	NO	Lyell Fork, LLC 1300 Industrial Rd. #2 San Carlos, CA 94070	05/21/13	Scheduled	Vegetated Swale	Compliant	None	None
Livermore Audi	3400 Las Positas Rd.	NO	Same	05/09/13	Scheduled	Vegetated Swale (3)	CDS unit needed maintenance	Verbal Notice	Maintenance by 6/25/13

C.3.h.iv. ▶Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

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Name of Facility/Site Inspected	Address of Facility/Site Inspected	Newly Installed ? (YES/NO)[52]	Party Responsible[53] For Maintenance	Date of Inspection	Type of Inspection[54]	Type of Treatment/HM Control(s) Inspected[55]	Inspection Findings or Results[56]	Enforcement Action Taken[57]	Comments/Follow-up
						CDS Unit			
Livermore Jaguar	3500 Las Positas Rd.	NO	Same	05/06/13	Scheduled	Vegetated Swale (2)	Compliant	None	None
Livermore Porche	3100 Las Positas Rd.	NO	Same	05/06/13	Scheduled	Vegetated Swale(2) CDS Unit	Compliant	None	None
Livermore Subaru	3600 Las Positas Rd.	NO	Same	05/09/13	Scheduled	Vegetated Swale(2)	Compliant	None	None
Livermore Honda	3200 Las Positas Rd.	NO	Same	05/09/13	Scheduled	Vegetated Swale CDS Unit (2)	Compliant	None	None
Form Factor	7545 Longard Rd.	NO	Same	05/01/13	Scheduled	Vegetated Swale (12) Drain Inserts (12)	Compliant	None	None
Form Factor	501 Lawrence Rd.	NO	Same	06/01/13	Scheduled	Vegetated Swale (12) Drain Inserts (10)	Compliant	None	None
Livermore Sanitation	7000 National Drive	NO	Same	05/07/13	Scheduled	Vegetated Swale	Erosion/Scouring Excessive Sediment	Verbal Notice	Required to remove sediment build up and develop plan to prevent this from occurring in future.
Las Positas Business Park	6553 to 6589 Las Positas Road	NO	Same	04/02/13	Scheduled	Vortex Separator (2)	Both separators requires service (full of materials)	Written Notice	Follow-Up Inspection Required
Las Positas Business Park	6553 to 6589 Las Positas Road	NO	Same	04/26/13	Follow-Up	Vortex Separator (2)	Both separators had been serviced. Less than 5% of material in each separator.	None	None
Rossiter Relocation Service	6475 Las Positas Rd.	NO	Same	04/02/13	Scheduled	Vortex Separator (2)	Separator on western side requires service (full of materials)	Written Notice	Follow-Up Inspection Required

C.3.h.iv. ►Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

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Rossiter Relocation Service	6475 Las Positas Rd.	NO	Same	04/26/13	Follow-Up	Vortex Separator (2)	Both separators had been serviced. Less than 5% of material in each separator.	None	None
Golden Gate Environmental	4542 Contractors Place	NO	Same	04/10/13	Scheduled	Vortex Separator (Stormceptor) Vegetated Swale	Compliant	None	None
Sensor Concepts	606 Enterprise Ct.	NO	Michael/Michelle Sanders Trust P.O. Box 2192 Livermore, CA 94551	04/09/13	Scheduled	Vegetated Swale (3)	Compliant	None	None
Sensor Concepts	672 Enterprise Ct.	NO	672 Enterprise Court LLC 672 Enterprise Ct. Livermore, CA 94551	04/09/13	Scheduled	Vegetated Swale (1)	Compliant	None	None
Ratermann Manufacturing, Inc.	601 Pinnacle Place	NO	Same	04/09/13	Scheduled	Vegetated Swale (2)	Compliant	None	None
Advanced Doorways	648 Enterprise Ct.	NO	Same	04/09/13	Scheduled	Vegetated Swale (2)	Compliant	None	None
One Source LED	622 Pinnacle Place	NO	Same	04/09/13	Scheduled	Vegetated Swale (2)	Inlet Outlet Condition/ Outlet is too high	None	None
Vinatage 99	611 Enterprise Ct.	NO	Same	04/09/13	Scheduled	Vegetated Swale (2)	Compliant	None	None

C.3.h.iv. ▶Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

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Labels Mfg.									
Key Refrigeration Company	747 Enterprise Ct.	NO	Same	04/09/13	Scheduled	Vegetated Swale (3)	Compliant	None	None
Vanguard Construction	651 Enterprise Ct.	NO	Same	04/04/13	Scheduled	Vegetated Swale	Compliant	None	None
J&M Inc.	6700 National Drive	NO	Same	03/14/13	Scheduled	Vegetated Swale	Compliant	None	None
Zone 7 Water Agency	100 North Canyons Parkway	NO	Zaballos Enterprises 22320 Foothill Blvd. #660 Hayward, CA 94541	03/14/13	Scheduled	Vegetated Swale	Compliant	None	None
Business Park	7600-7640 National Avenue	NO	Same	03/14/13	Scheduled	Vortex Separator	Inlet/Outlet Condition: Outlet too high	None	None
Peninsula Building Materials Company	6610 Brisa Street	NO	Same	03/12/13	Scheduled	Vegetated Swale (8)	Compliant	None	None
Vasco Road ACE Transit Station	South Vasco Road	NO	Same	03/12/13	Scheduled	Vegetated Swale (3)	Compliant	None	None
Livermore Amador Valley Transit Authority	875 Atlantis Court	NO	Same	02/12/13	Scheduled	Infiltration Basin	Compliant	None	None
Clark Pest Control	2313 Research Drive Livermore, CA 94550	NO	Same	02/06/13	Scheduled	Vegetated Swale	Compliant	None	None
Fabco	151 Lawrence Drive	NO	Same	12/5/12	Scheduled	Vegetated Swale	Compliant	None	None
Boatmasters	5162 Preston Ave.	NO	Same	11/27/12	Scheduled	Vegetated Swale	Compliant	None	None

C.3.h.iv. ►Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

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Interstate Storage	1800 Sutter Street	NO	Same	11/20/12	Scheduled	Vegetated Swale	Compliant	None	None
Livermore Honda	3200 Las Positas Rd.	NO	Same	11/1/12	Scheduled	Vortex Separator	Separator needs service	None	Follow-Up Inspection required
Livermore Honda	3200 Las Positas Rd.	NO	Same	11/19/12	Follow-Up	Vortex Separator	Compliant/ Separator has been serviced as required	None	None
Livermore Porsche	3100 Las Positas Rd	NO	Same	11/1/12	Scheduled	Vortex Separator	Separators need service	None	Follow-up Inspection required
Livermore Porsche	3100 Las Positas Rd	NO	Same	11/19/12	Follow-UP	Vortex Separator	Compliant/ Separators have been service as required	None	None
California Dept. of Transportation	6153 Southfront Rd.	NO	Same	11/8/13	Scheduled	Water Quality Inlets-Oil/Grit /Water Separator	Compliant	None	None
Livermore Pleasanton Fire Department-Station 10	330 Airway Blvd.	NO	Same	10/30/12	Scheduled	Vegetated Swale	Compliant	None	None
Livermore Pleasanton Fire Department-Station 8	5750 Scenic Ave.	NO	Same	10/30/12	Scheduled	Drain Inserts	Compliant	None	None
Pleasanton Truck & Equipment Repair	6175 Southfront Rd.	NO	Same	10/26/12	Scheduled	Drain Inserts	Compliant	None	None
Heritage Paper	6850 Brisa Street	NO	Same	10/24/12	Scheduled	Drain Inserts	Compliant	None	None

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Penske Truck Leasing	6211 Las Positas Rd.	NO	Same	10/25/12	Scheduled	Vegetated Swale	Poor Design: Not proper slope from parking lot to swale area	None	None
Livermore Subaru	3600 Las Positas Rd.	NO	Same	10/12/12	Scheduled	Vegetated Swale	Compliant	None	None
Livermore Jaquar	3500 Las Positas Rd.	NO	Same	10/12/12	Scheduled	Vegetated Swale (3)	Compliant	None	None
Livermore Audi	3400 Las Positas Rd.	NO	Same	10/12/12	Scheduled	Vegetated Swale (3) Vortex Separator	Compliant	None	None
Harris Salinas Rebar	355 South Vasco Rd.	NO	Same	10/12/12	Scheduled	Media Filter Drain Inserts	Compliant	None	None
Condon Johnson & Associates	7770 Hawthorne Ave.	NO	Same	10/9/12	Scheduled	Drain Inserts	Inserts require maintenance	Verbal Notice	Maintenance by 10/31
Packaging Innovators	6650 National Drive	NO	Same	10/8/12	Scheduled	Drain Inserts	Inserts require maintenance	Verbal Notice	None
National Food Laboratory	2441 Constitution Place	NO	Lyell Fork, LLC 1300 Industrial Rd. #2 San Carlos, CA 94070	8/30/12	Scheduled	Vegetated Swale (3)	Compliant	None	None
Form Factor 7545	7545 Longard Rd.	NO	Greenville Holding Company, LLC 675 Hertz Ave. #300 Danville, CA 94526	7/18/12	Scheduled	Vegetated Swale Media Filters (13)	Compliant	None	None
Livermore Gas & Shop	816 N. Vasco Rd.	NO	J. Yanoff 59 Elizabeth Ave Cir. Greenbriar, CA 94909	7/2/12	Scheduled	Extended Detention Basin	Compliant	None	None

C.3.h.iv. ►Table of Installed Stormwater Treatment Systems Operation and Maintenance Verification Inspection Program Reporting

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Form Factor	501 Lawrence Drive	NO	Greenville Holding Company, LLC 675 Hertz Ave. #300 Danville, CA 94526	6/22/12	Scheduled	Vegetated Swale Drain Inserts	Compliant	None	None
Zone 7 Water Agency	100 North Canyons Parkway	NO	Zaballos Enterprises 22320 Foothill Blvd. #660 Hayward, CA 94541	04/4/12	Scheduled	Vegetated Swale	Compliant	None	None
Clark Pest Control	2313 Research Drive	NO	Same	02/14/12	Scheduled	Vegetated Swale	Compliant	None	None

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

Reporting Period – January 1 – June 30, 2013

Guidance: Provide all information indicated in the table. Do not leave blank cells in the table. If any of the indicated information is not available, please explain (for example, "Information is not yet available due to the preliminary phase of design.")

Project Name & No.	Permittee	Address	Application Submittal Date[58]	Status[59]	Description[60]	Site Total Acreage	Density DU/Acre	Density FAR	Special Project Category[61]	LID Treatment Reduction Credit Available[62]	List of LID Stormwater Treatment Systems[63]	List of Non-LID Stormwater Treatment Systems[64]

[58] Date that a planning application for the Special Project was submitted.
[59] 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.
[60] Type of project (commercial, mixed-use, residential), number of floors, number of units, type of parking, and other relevant information.
[61] For each applicable Special Project Category, list the specific criteria applied to determine applicability. For each non-applicable Special Project Category, indicate n/a.
[62] 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.
[63]: 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.
[64] 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.

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

Program Highlights

Provide background information, highlights, trends, etc.

See Section C.4 Industrial and Commercial Site Control of the Countywide Program's FY 12/13 Annual Report for a summary of Program activities.

C.4.b.i. ► Business Inspection Plan

Do you have a Business Inspection Plan?	x	Yes		No

If No, explain:

C.4.b.iii.(1) ► Potential Facilities List

List below or attach your list of industrial and commercial facilities in your Inspection Plan to inspect that could reasonably be considered to cause or contribute to pollution of stormwater runoff.

The City of Livermore developed a 5-Year Inspection Plan in 2010 to comply with the requirements as prescribed in Section C.4.b. of the Municipal Regional Stormwater Permit. Please refer to the attached document entitled "Stormwater Industrial and Commercial Inspection Plan" (C.4 Attachment). Prior to the start of each fiscal year, City of Livermore Source Control Staff query the City's Business License Data Base to insure the most accurate facility inspection list for the specific types of facilities designated for inspection during the reporting period.

C.4.b.iii.(2) ► Facilities Scheduled for Inspection

List below or attach your list of facilities scheduled for inspection during the current fiscal year.

During the Fiscal Year 2013/2014, the City of Livermore plans to perform 210 stormwater facility inspections comprised of the following:

1. All industrial/commercial facilities permitted under the City's Pretreatment Program (91 Facilities)
2. All NOI Facilities (17 facilities)
3. All Facilities listed under SIC 5812 (Restaurants/Food Service) that have an in-ground grease interceptor or that have no grease removal device at all (Approximately 102 facilities)

C.4.c.iii.(1) ► Facility Inspections

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

	Permittee reports multiple discrete violations on a site as one violation.
	Permittee reports the total number of discrete violations on each site.

	Number	Percent
Number of businesses inspected	137	
Total number of inspections conducted	146	
Number of violations (excluding verbal warnings)	12	
Sites inspected in violation	11	8%
Violations resolved within 10 working days or otherwise deemed resolved in a longer but still timely manner	11	100%

Comments:
Violations that were classified as an illicit discharge to the storm sewer system were corrected on the day the event was observed. Other violations, such as failure to implement BMPs or inadequate BMP implementation, were corrected within 10 working days.

C.4.c.iii.(2) ► Frequency and Types/Categories of Violations Observed

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

Type/Category of Violations Observed	Number of Violations
Actual discharge (e.g. active non-stormwater discharge or clear evidence of a recent discharge)	5
Potential discharge and other	3

Comments:
The five documented illicit discharge were one occurrence per non-compliant site. The associated illicit discharge was to one site storm drain inlet.

C.4.c.iii.(2) ► 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)[59]	Number of Enforcement Actions Taken	% of Enforcement Actions Taken[60]
Level 1	Verbal Warning	12	50%
Level 2	Warning Letter	2	8.3%
Level 3	Notice of Violation	10	41.67%
Level 4	Notice of Violation with Administrative Citation	0	0.0 %
Total			

C.4.c.iii.(3) ► Types of Violations Noted by Business Category

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

Business Category[61]	Number of Actual Discharge Violations	Number of Potential/Other Discharge Violations
Commerical/Retail	1	1
Winery/Tasting Room		1
Industrial/Manufacturing	2	8
Construction	1	1
Gasoline Station		1
Livermore Municipal Airport		1
Warehouse/Transportation	2	3
Food Service	1	
Automobile Dealership		1

[59] Agencies to list specific enforcement actions as defined in their ERPs.
[60] Percentage calculated as number of each type of enforcement action divided by the total number of enforcement actions.
[61] List your Program's standard business categories.

C.4.c.iii.(4) ► 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:

Livermore Amador Valley Transit Authority located at 875 Atlantis Court was notified that they are subject to the General Industrial Stormwater Permit. Please note, this is a new facility and has not commenced operations out of this facility. The City of Livermore will follow-up on the status of this facility's NOI filing status when the facility is occupied and operational.

C.4.d.iii ► Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Inspectors in Attendance	Percent of Inspectors in Attendance
Stormwater Business Inspectors Workshop: Recognizing and Responding to Illicit Discharges	November 15, 2012	Recognizing Illicit Discharges PCB-Containing Equipment Identification MRP Requirements for Responding to Illicit Discharges Coordinating with the District Attorney's Office State Industrial Permit	4	100%
CWEA Annual Conference	April 2013	Stormwater Illicit Discharge, Facility Inspection, LID/New Development	Section Supervisor	
CWEA P3S Annual Conference	February 2013	Stormwater Illicit Discharge, Facility Inspection, LID/New Development	Section Supervisor	
CWEA NRTC Conference	September 2012	Stormwater Illicit Discharge, Facility Inspection, LID/New Development	Section Supervisor 1	25%
NACWA Annual Conference	May 2013	Stormwater Regulations, LID/New Development	Section Supervisor 1	25%

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

Program Highlights

Provide background information, highlights, trends, etc.

See Section C.5 Illicit Discharge Detection and Elimination of the Countywide Program's FY 12/13 Annual Report for a summary of Program activities.

The City of Livermore has established a priority screening list of outfalls to routinely inspect for illicit discharge activities. Inspections are documented using the City's "Storm System Screening Form". The following is the priority list of Outfalls to survey for illicit discharge activity:

OUTFALL ID#	SIZE	LOCATION
OF2G01	48"	N. Vasco / Garaventa Ranch
OF2G02	36"	Broadmoore St.
OF3C01	66" x2	Collier Canyon Rd. / Heligan Ln.
OF3F01	42"	Redwood Rd. / Autumn Oak Rd.
OF3G01	36"	Hollyhock St. / Golf Course
OF3G02	42"	Bluebell Dr. / Golf Course
OF3G03	36"	Central Ave. / Lobelia Wy.
OF3G04	54"	Vasco Rd.
OF3G05	42"	Vasco Rd.
OF3H01	48"	Northfront Rd.
OF4C01	72" x2	Collier Canyon Rd. / Portola Ave.
OF4C02	48"	Constitution Dr.
OF4C03	36"	Airway Blvd.
OF4C04	48"	Airway Blvd. / Kitty Hawk Rd.
OF4C05	36"	Airway Blvd. / Kitty Hawk Rd.
OF4C06	30"	Airway Blvd. / Starbucks
OF4C07	36"	Off Ramp of Airway Blvd.
OF4C08	24"	Off Ramp of Airway Blvd. / Zone 7
OF4D01	60"	Shea Center
OF4D02	48"	East Airway Blvd.
OD4D03	60"	Paseo Laguna Seco
OF4E01	48"	N. Livermore
OF4E02	42"	Las Positas / Kaiser Buiding
OF4E03	27"	Las Positas / Post Office
OF4F01	60"	First St. / Las Positas

OF4G01	48"	Arroyo Vista
OUTFALL ID#	SIZE	LOCATION
OF4G02	36"	Arroyo Vista
OF5G01	54"	Charlotte Way / Lucille St.
OF5G02	42"	Patterson Pass / Arlene Way
OF5G03	42"	Patterson Pass / Joyce St.
OF5G04	84"	Las Positas / Contractors
OF5G05	60"	Patterson Pass / Maureen Cir.
OF5G06	30"	Patterson Pass / Shelly St.
OF5G07	30"	Contractors / Railroad Bridge
OF5H01	60"	Patterson Pass / Vasco
OF5H02	48"	Vasco overpass at Patterson Pass
OF6D10	12"	Summer Tree Ct.
OF6D11	12"	Summer Tree
OF6D13	12"	Summer Tree / Cottonwood Ct.
OF6D16	12"	Summer Tree / Eucalyptus Ct.
OF7D01	54"	El Padro/ Ontario Dr.
OF7E03	30"	Robertson Park Rd.
OF7F01	48"	Robertson Park Rd.
OF9D01	36"	Siena Rd.

In addition to this, Source Control Inspection staff routinely survey commercial and business parks for illicit discharge activity during the performance of normal duties.

C.5.c.iii ▶ Complaint and Spill Response Phone Number and Spill Contact List

List below or attach your complaint and spill response phone number and spill contact list.

Contact	Description	Phone Number
LWRP	Livermore Water Reclamation Plant	925-960-8100
LPFD/LPD	Emergency Services	911

C.5.d.iii ► Evaluation of Mobile Business Program

Describe implementation of minimum standards and BMPs for mobile businesses and your enforcement strategy. This may include participation in the BASMAA Mobile Surface Cleaners regional program or local activities.

Description:

The City of Livermore requires mobile cleaners to implement the BMPs recommended by the BASMAA Mobile Surface Cleaners Program. Please refer to Section C.5 Illicit Discharge Detection and Elimination of the Countywide Program's FY 12/13 Annual Report for a summary of Program activities.

C.5.e.iii ► Evaluation of Collection System Screening Program

Provide a summary or attach a summary of your collection screening program, a summary of problems found during collection system screening and any changes to the screening program this FY.

Description:

The City's collection screening program consist of (1) storm drain inlet,s (2) channel sections and outfalls, and/or (3) an industrial/commercial area. Storm drain inlets throughout the city are routinely surveyed for illicit discharges by municipal maintenance staff through the course of their routine storm drain inlet maintenance activities. As a significant volume of our illicit discharges are identified by Source Control staff through routine inspections and surveys of industrial and commercial business parks, a decreased emphasis is placed on surveying belowground storm drain structures, channel sections, and outfalls. However, periodically these areas are surveyed for illicit discharges. As detailed in previous reports, the vast majority of illicit discharges are discovered to be occurring in industrial and commercial areas; as a result, the majority of staff time and resources for illicit discharge survey activities are concentrated in these areas. The City of Livermore documents all illicit discharges with the ACCWP Illicit Discharge Report form and track inspection data with the City's Illicit Discharge Report database

As noted in the FY 11/12 Stormwater Report, in November 2011, Maintenance staff preformed some "emergency work" at a creek outfall to prevent flooding in nearby neighborhoods. The affected neighborhoods had a history of flooding and its drainage outfall to the creek was obstructed due to the accumulation of vegetation and other debris. After performing the required maintenance to remove the obstruction and prevent upstream flooding, the RWQCB, Department of Fish and Game, and the U.S. Fish and Wildlife service informed the City that they did not believe the potential for flooding met their definition of "emergency", and therefore, in these agencies' opinion, the City was in violation for the work performed at the creek outfall without the appropriate permits and approvals. In response to this incident, the City began working on a "Stream Maintenance Plan" with the RWQCB, Department of Fish and Game, and U.S. Fish and Wildlife Services. Due to the enforcement actions resulting from this November 2011 incident, the City's Assistant Public Works Director and the City Engineer instructed staff not to enter or perform any activities within the creeks or creek outfalls until the "Stream Maintenance Plan" is approved by all the regulatory agencies involved. During this reporting period, City staff continued work on getting this plan approved. As final approval of the City's Steam Maintenance Plan has not been received, City staff did not perform Screening inspections during this reporting period.

C.5.f.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	Percentage
Discharges reported (C.5.f.iii.(1))	37	
Discharges reaching storm drains and/or receiving waters (C.5.f.iii.(2))	18	48.65%
Discharges resolved in a timely manner (C.5.f.iii.(3))	37	100%

C.5.f.iii.(4) ► Summary of major types of discharges and complaints

Provide a narrative or attach a table and/or graph.

Type of Discharge	Frequency	Percentage
Pool/Spa	3	8.1%
Paint	1	2.7%
Building Sidewalk Washwater	2	5.4%
Vehicle Washwater	2	5.4%
Trash/Broken Glass	1	2.7%
Other Washwater	2	5.4%
Sand Blasting Media	1	2.7%
Mud/Sediment	1	2.7%
Construction Debris	2	5.4%
Sewage	1	2.7%
Fire Fighting Foam	1	2.7%
Automotive Fluids	4	10.8%
Potable Water	2	5.4%
Industrial Wastewaters	2	5.4%
Food Wastes/Cooking Oil	5	13.5%
Concrete/Concrete Slurry	5	13.5%
Water Purification Media	1	2.7%
Fluorescent Bulbs	1	2.7%
Total	37	

The City of Livermore took the following enforcement actions for these illicit discharge incidents:

Issued 11 verbal warnings.

Issued 3 warning notices.

Issued 9 notices of violations.

Issued 4 notices of violations with administrative penalties totaling $12,278.52. (One facility was issued a citation including cost recovery for a total of $8,268.27. One facility was issued a citation for $300.00. One facility was issued a citation for $200.00. One facility was issued a citation including cost recovery totaling $3,510.25.)

Section 6 – Provision C.6 Construction Site Controls

C.6.e.iii.1.a, b, c ▶Site/Inspection Totals

Number of High Priority Sites (sites disturbing < 1 acre of soil requiring storm water runoff quality inspection) (C.6.e.iii.1.a)	Number of sites disturbing ≥ 1 acre of soil (C.6.e.iii.1.b)	Total number of storm water runoff quality inspections conducted (include only High Priority Site and sites disturbing 1 acre or more) (C.6.e.iii.1.c)
#	#	#
0	**1**	**48**
Comments: None		

C.6.e.iii.1.d ▶Construction Activities Storm Water Violations

BMP Category	Number of Violations[62] excluding Verbal Warnings	% of Total Violations[63]
Erosion Control	0	0
Run-on and Run-off Control	0	0
Sediment Control	0	0
Active Treatment Systems	0	0
Good Site Management	0	0
Non Stormwater Management	0	0
Total[64]	**0**	**100%**

[62] Count one violation in a category for each site and inspection regardless of how many violations/problems occurred in the BMP category. For example, if during one inspection at a site, there are 2 erosion control violations, only 1 violation would be counted for this table.

[63] Percentage calculated as number of violations in each category divided by total number of violations in all six categories.

[64] The total number of violations may count more than one violation per inspection, since some inspections may result in violations in more than one category. For example, during one inspection of a site, there may have been both an erosion control violation and a sediment control violation. For this reason, the total number of violations in this table may not match the total number of enforcement actions reported in Table C6.e.iii.1.e.

C.6.e.iii.1.e ▶ Construction Related Storm Water Enforcement Actions

	Enforcement Action (as listed in ERP)[65]	Number Enforcement Actions Issued	% Enforcement Actions Issued[66]
Level 1[67]	No enforcement actions were taken during this reporting period.	0	0
Level 2		0	0
Level 3		0	0
Level 4		0	0
Total		**0**	**100%**

C.6.e.iii.1.f, g ▶ Illicit Discharges

	Number
Number of illicit discharges, actual and those inferred through evidence at high priority sites and sites that disturb 1 acre or more of land (C.6.e.iii.1.f)	0
Number of sites with discharges, actual and those inferred through evidence at high priority sites and sites that disturb 1 acre or more of land (C.6.e.iii.1.g)	0

[65] Agencies should list the specific enforcement actions as defined in their ERPs.
[66] Percentage calculated as number of each type of enforcement action divided by the total number of enforcement actions.
[67] For example, Enforcement Level 1 may be Verbal Warning.

C.6.e.iii.1.h, i ▶ Violation Correction Times

	Number	Percent
Violations (excluding verbal warnings) fully corrected within 10 business days after violations are discovered or otherwise considered corrected in a timely period (C.6.e.iii.1.h)	0	%[68]
Violations (excluding verbal warnings) not fully corrected within 30 days after violations are discovered (C.6.e.iii.1.i)	0	%[69]
Total number of violations (excluding verbal warnings) for the reporting year[70]	0	100%
Comments: None		

C.6.e.iii.(2) ▶ 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 of Livermore utilizes the "Inspection Checklist for Construction Stormwater Control" to document the stormwater inspections conducted by Building and Engineering Inspection staff. Completed inspection forms are entered into a database which tracks inspections, violation types, and frequencies.

C.6.e.iii.(2) ▶ 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:

Refer to the C.6 Construction Site Control section of countywide program's FY 12-13 Annual Report for a description of activities at the countywide or regional level. The following City of Livermore staff attended the ACCWP's New Development Annual Training: Bob Follenfant, Bob Tingley and Pam Lung. Pam Lung and Bob Follenfant participated as active members of the work group who presented the training. The following staff received less formal-internal training on Section C.6 permit requirements: Mike Pato, Hamm Inthavong, Debblie Salgado, Kevin Duffus, Joel Waxdeck, Mike Mikasa, Mike Cavalieri, Cheri Sheets, Joe Kuderca.

[68] Calculated as number of violations fully corrected in a timely period after the violations are discovered divided by the total number of violations for the reporting year.

[69] Calculated as number of violations not fully corrected within 30 days after the violations are discovered divided by the total number of violations for the reporting year.

[70] The total number of violations reported in the table of Violation Correction Times equals the number of initial enforcement actions. I.e., This assumes one violation is issued for several problems during an inspection at a site. The total number of violations in the table of Violation Correction Times may not equal the total number of enforcement actions because one violation issued at a site may have a second enforcement action for the same violation at the next inspection if it is not corrected.

C.6.f ► Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Inspectors in Attendance	Percent of Inspectors in Attendance
Construction Stormwater C.6 Training	June 11, 2013	Review of Provision C.6 Requirements How the State Construction General Permit Relates to the MRP Proper Use of Construction BMPs Review of Inspection Tools Enforcement Options	3	16%

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

C.7.a ►Storm Drain Inlet Marking (existing storm drains)

(For FY 12-13 Annual Report only) Report prior years' estimated annual percentages of municipality maintained storm drain inlet markings inspected and maintained as legible with a no dumping message or equivalent. At least 80% of municipality-maintained storm drain inlet markings shall be inspected and maintained at least once per 5-year permit term.

Summary:

Estimated annual percentage of stenciled municipality storm drain inlets that were inspected and maintained as legible:

2009-10: 100%

2010-11: 100%

2011-12: 100%

2012-13: 100%

C.7.a ►Storm Drain Inlet Marking (newly-constructed, privately-maintained streets)

(For FY 12-13 Annual Report only) Report prior years' annual number of projects accepted after inlet markings were verified. For newly-approved, privately-maintained streets, permittees shall require inlet marking by the project developer upon construction and maintenance of markings through the development maintenance entity. Markings shall be verified prior to acceptance of the project.

Summary:

Annual number of newly-constructed, privately-maintained streets for which inlets were marked:

2009-10: 3 projects

2010-11: 0 projects

2011-12: 0 projects

2012-13: 0 projects

Private storm drain inlets on private streets are and have been marked and inspected by City inspectors prior to project acceptance. The City is formalizing a procedure for documenting this. No private streets with storm drain inlets have been constructed since 2010.

C.7.b.ii.1 ►Advertising Campaign

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

Summary:

See Section C.7 Public Information and Outreach of the Countywide Program's FY 12/13 Annual Report for a summary of Program activities.

The following separate report developed by BASMAA summarizes the activities of the Regional Youth Litter Campaign

- BASMAA Be the Street Campaign Report

The City of Livermore Water Resources Division helped advertise the Be the Street Anti-Litter Video Contest on its web page and on the Adopt a Creek Spot Program's Facebook page, and on flyers posted in all City facilities including the libraries.

C.7.b.iii.1 ►Pre-Campaign Survey

(For the Annual Report following the pre-campaign survey) Summarize survey information such as sample size, type of survey (telephone survey, interviews, etc.) Attach a survey report that includes the following information. If a survey was done regionally, refer to a regional submittal that contains the following information:

Information on the pre-campaign survey for the BASMAA Regional Youth Litter Campaign was provided in the FY 11/12 Annual Report. A copy of the pre-campaign survey for the countywide Program's outreach efforts is included in the Program's FY 12/13 Annual Report. Place an **X** in the appropriate box below:

	Survey report attached
X	Reference to regional submittal: Alameda Countywide Clean Water Program FY 12-13 Annual Report

C.7.c ►Media Relations

Summarize the media relations effort. Include the following details for each media pitch in the space below, AND/OR refer to a regional report that includes these details:

Topic and content of pitch
Medium (TV, radio, print, online)
Date of publication/broadcast

Summary:

The following separate report developed by BASMAA summarizes media relations efforts conducted during FY 12-13:

- BASMAA Media Relations Final Report FY 12-13

This report and any other media relations efforts conducted countywide is included within the C.7 Public Information and Outreach section of the

Countywide Program's FY 12-13 Annual Report.

The City of Livermore Water Resources Division promotes pollution prevention messages such as proper Fats, Oil and Grease (FOG), drug and household hazardous waste disposal; proper car, pool and spa maintenance; proper car and pavement washing; pesticide reduction; and litter prevention in its water and sewer bill messages, and on its web page.

The Water Resources Division works with its solid waste and recycling hauler, Livermore Sanitation, to promote the following pollution prevention messages on its website and in its monthly, Residential Newsletter, which targets 24,000 residents, proper FOG, drug and household hazardous waste disposal; and litter prevention. During FY 12-13, the Water Resources Division published an article titled, *Recycle Fats, Oil and Grease (FOG)*, in the Newsletter's October 2012 issue, and an article titled, *You Can Minimize Stormwater Pollution*, in the Newsletter's January 2013 issue.

C.7.d ► Stormwater Point of Contact

Summary of any changes made during FY 12-13:
See Section C.7 Public Information and Outreach of the Countywide Program's FY 12/13 Annual Report for a summary of Program activities.

No changes made during FY 12-13 to City of Livermore Point of Contact.

C.7.e ► Public Outreach 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

Event Details	**Description** (messages, audience)	Evaluation of Effectiveness
Stormwater Exhibit at the Alameda County Fair: July 1 through July 8, 2012 and June 19 through June 30, 2013. Setting up the exhibit and producing the outreach materials are Countywide Program efforts. Staffing the exhibit is an effort conducted by individual Permittees.	The County Fair is attended by a wide range of residents from throughout the County. The primary message of the exhibit and outreach materials is to encourage residents to reduce their use of pesticides or when necessary use less-toxic pesticides. The exhibit also illustrates the basic watershed awareness/stormwater pollution message.	Several hundred thousand residents attend the fair each year. A more detailed description of the exhibit is included in Section C.7 Public Information and Outreach of the Countywide Program's FY 12/13 Annual Report.

City of Livermore (COL)Bag-It Documentary Screening, 10/25/2012	To help residents learn more about Alameda County Waste Management Authority's plastic, grocery bag ban, and the health and environmental impacts of plastic and plastic bags, the City of Livermore's Environmental Services and Water Resources Divisions, and Livermore Sanitation hosted a free Bag-It Documentary Screening. The informational materials distributed: Alameda Creek Watershed Map, Stormwater Pollution and Pollution and Prevention Brochures, Litter Prevention Brochure, and Clean Water Activity Booklets.	Positive interaction and feedback with approximately one-hundred (100+) residents visiting the City booth. More than one-hundred and fifty (150+) residents participated in the event. This trend is not consistent with last year's event since more residents visited the booth and participated in the event.
Livermore Valley Joint Unified School District (LVJUSD) Science Odyssey, 2/28/2013	The Water Resources Division/Adopt a Creek Spot Program booth at the LVJUSD Science Odyssey was used to educate faculty members, students and their families about litter pollution, minimizing litter pollution (and other pollutants) to Livermore storm drains and creeks, and improving and protecting water quality and aquatic habitat in the Tri-Valley Creek Watershed. The informational materials distributed: Alameda Creek Watershed Map, Stormwater Pollution and Pollution and Prevention Brochures, Litter Prevention Brochure, and Clean Water Activity Booklet.	Positive interaction and feedback with approximately one-hundred and forty (140+) residents and faculty members visiting the Water Resources Division/Adopt a Creek Spot Program booth. More than one-thousand (1000+) residents and faculty members participated in the event. This trend is not consistent with last year's event since fewer residents and faculty members visited the booth.

Livermore Area Recreation and Park District (LARPD) Run for the Parks, 4/14/2013	The Water Resources Division/Adopt a Creek Spot Program booth at the LARPD Run for the Parks was used to educate residents about litter pollution, minimizing litter pollution (and other pollutants) to Livermore storm drains and creeks, and improving and protecting water quality and aquatic habitat in the Tri-Valley Creek Watershed. The informational materials distributed: Alameda Creek Watershed Map, Stormwater Pollution and Pollution and Prevention Brochures, Litter Prevention Brochure, and Clean Water Activity Booklet.	Positive interaction and feedback with approximately sixty (60+) residents visiting the Water Resources Division/Adopt a Creek Spot Program booth. This event is LARPD's the third Run but the first event where the Water Resources Division/Adopt a Creek Spot Program tabled.
Livermore Wine Festival, 5/4 – 5/5/2013	The Water Resources Division booth at the Livermore Wine Festival is used to educate residents (and their families) about proper FOG handling, proper medicine disposal, Integrated Pest Management, litter minimization, non-point source pollution and pollution prevention. The informational materials distributed: Fat Free Sewers Brochure, Options for Proper Drug Disposal Hand-out, Livermore Drug Take-Back Event Flyer, Where Does Your Water Go? Brochure, Grow It! Guide, Control It! Guide, Healthy Home and Garden Booklet, Pest Bugging You? Pocket Guide, The 10 Most Wanted Bugs in Your Garden Brochure, Don't Plant a Pest Brochure, A Kid's Guide to Backyard Bug Guide, Pest or Pal? Activity Guide, Stormwater Pollution and Pollution Prevention Brochures, Litter Prevention Brochure, Detain the Rain Brochure, and Clean Water Activity Booklets.	Positive interaction and feedback with approximately three-hundred (350+) residents visiting the Water Resources Division booth. More than four-thousand (4000+) residents participated in the event. This trend is consistent with previous years' events.

COL Bag-It Documentary Screening, 4/24/2013	To help residents learn more about Alameda County Waste Management Authority's plastic, grocery bag ban, and the health and environmental impacts of plastic and plastic bags, the City of Livermore's Environmental Services and Water Resources Divisions, and Livermore Sanitation hosted a free Bag-It Documentary Screening. The informational materials distributed: Alameda Creek Watershed Map, Stormwater Pollution and Pollution and Prevention Brochures, Litter Prevention Brochure, and Clean Water Activity Booklets.	Positive interaction and feedback with approximately twenty (20+) residents visiting the City booth. More than twenty-three (23+) residents participated in the event. This trend is not consistent with last year's event since fewer residents visited the booth and participated in the event.
City, LARPD and LVJUSD Employee Health and Safety Fair, 6/19/2013	The Water Resources Division/Adopt a Creek Spot Program booth at the City, LARPD and LVJUSD Health and Safety Fair is used to educate employees (and their families) about proper FOG handling, proper medicine disposal, Integrated Pest Management, litter prevention, non-point source pollution, and pollution prevention. The informational materials distributed: Fat Free Sewers Brochure, Livermore Drug Take-Back Event Flyer, Options for Proper Drug Disposal Hand-out, Where Does Your Water Go? Brochure, Grow It! Guide, Control It! Guide, Healthy Home and Garden Booklet, Pest Bugging You? Pocket Guide, The 10 Most Wanted Bugs in Your Garden Brochure, Don't Plant a Pest Brochure, A Kid's Guide to Backyard Bug Guide, Pest or Pal? Activity Guide, Stormwater Pollution and Pollution Prevention Brochures, Litter Prevention Brochure, Detain the Rain Brochure, and Clean Water Activity Booklets.	Positive interaction and feedback with approximately fifty (50+) employees visiting the Water Resources Division/Adopt a Creek Spot Program booth. More than one-hundred (100+) employees participated in the event. This trend is consistent with previous years' events.

C.7.f. ►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: See Section C.7 (Public Outreach and Involvement) of the Countywide Program's FY 12/13 Annual Report for a summary of the *Bringing Back the Natives*, and the *Bay Friendly Garden* tours that are sponsored by the Program.

Friends of the Arroyos' Integrated Pest Management (IPM)Presentation after Bringing Back the Natives Tour, 6/9/2013: The Water Resources Division provided the Friends of the Arroyos (FOTA) IPM literature and seed packets for its 30 attendees.

C.7.g. ►Citizen Involvement Events

List the types of events conducted (e.g., creek clean up, storm drain inlet marking, native gardening etc.). Use the following table for reporting and evaluating citizen involvement events.

Event Details	Description	Evaluation of effectiveness
Community Stewardship Program	The Countywide Program sponsors the Community Stewardship Grants (CSG) Program. The CSG Program provides approximately $20,000 annually in $1,000 to $5,000 increments to individuals and community groups to support stormwater improvement/outreach projects throughout the County.	See the Countywide Program's FY 12/13 Annual Report for a summary.

Tri-Valley Creeks to Bay Day, 9/15/2012 Creek Clean-up at six Livermore Adopt a Creek Spots including: 1. Arroyo Las Positas @ Northfront Road 2. Arroyo Las Positas @ N. Livermore Avenue Bridge 3. Arroyo Seco @ First Street 4. Arroyo Mocho in Robertson Park 5. Arroyo Mocho @ Holmes Street 6. Arroyo Mocho @ Stanley Boulevard Bridge Creek Evaluations at two Livermore Adopt a Creek Spots including: 1. Arroyo Las Positas @ Northfront Road Arroyo Mocho in Robertson Park	Tri-Valley Creeks to Bay Day not only helped to commemorate Coastal Cleanup Day, but also served as a kickoff event for a year-round effort coordinated by the Adopt a Creek Spot Program. (Adoptees of creek spots are asked to sign up for a one year commitment with at least one work day to the adopted spot. Additional information about the ongoing Adopt a Creek Spot Program is available at www.trivalleycreeks.org.) Sponsors providing supplies and refreshments for the event included Home Depot, Wal-Mart, Starbucks, Noah's Bagels, Checker's Catering, Togo's Sandwiches and the City's Water Resources Division. (The Adopt a Creek Spot Program is a partnership between the Water Resources Division, Zone 7 Water Agency, Livermore Area Recreation and Park District, Alameda County Resource Conservation District, Alameda Creek Watershed Council, Livermore Valley Joint Unified School District and Friends of the Arroyos. The Program's mission is to promote healthy Tri-Valley creeks through active community participation and education.)	Over two-hundred (200+) Tri-Valley residents helped collect and properly dispose of 1,037 pounds of trash and 288 pounds of recyclables from six Livermore Creek Spots. Approximately forty (40+) students from Christensen Middle School, and Livermore and Granada High Schools evaluated the health of two Livermore Creek Spots. A Tri-Valley Creeks to Bay Day Survey was received from six Livermore residents/groups. Below is summary of their survey results as they pertain to stormwater pollution: 1. Five of Six residents/groups feel that creek pollution is a significant problem in the Tri-Valley 2. Volunteers liked the clean-up; community spirit, educational programs and excellent support; teaching our family to clean the environment; and why it's important to keep the creek clean. 3. Volunteers thought that the sign-in process could be streamlined; and that the Coastal Commission's tally process could be better explained. Volunteers would like to see more volunteers and more trash picked up next year. 4. All groups would participate in Tri-Valley Creeks to Bay Day next year. 5. All groups are interested in adopting a Creek Spot. A Creek Evaluation Activity Pre-and Post-test was developed to measure the Activity's effectiveness for Tri-Valley Creeks to Bay Day 2013. Attached are the Stream Evaluation Activity Sheet, Pre and Post-test for your reference. The event was the first annual event.

C.7.h. ▶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.

Program Details	Focus & Short Description	Number of Students/Teachers reached	Evaluation of Effectiveness
See the Section C.7 of the Countywide Program's FY 12/13 Annual Report for a summary of the Program's School-Age Outreach Program			
Trinity Baptist Daycare Stormwater Presentation: 4 presentations provided to 2 year-old, 3 year-old, 4-year and Kindergarten students, 10/2/2012	The Presentation includes information on the watershed and water cycle, the differences between storm drains and sewers, and non-point source pollutants and pollution prevention. This information is presented with a Sewer versus Storm Display Board, Mr. Ball Video and a Watershed Diorama Activity.	38	Teacher Surveys are used to evaluate the effectiveness of outreach. Survey results have been submitted in previous FY reports for the same teachers. This year's "Great Program!" results are consistent with previous years.
Livermore High School Sewer Science Lab: 3 labs provided to biology and green engineering classes, 12/10 – 12/15/2012, 12/17-12/22/2012 and 6/3-6/7/2013	Although the Lab focuses on the wastewater process and what not to put down the sewer drain, it does provide information on the watershed and water cycle, the differences between storm drains and sewers, and non-point source pollutants and pollution prevention. The information is presented with a Where Does Our Water Go Poster and an Alameda County Watershed Map.	88	Student Pre-assessments and Post-tests are used to evaluate the effectiveness of outreach. Both Teacher Surveys and Student Assessments and Test results have been submitted in previous FY reports for the same teacher. This year's pre-assessment scores remain consistent with previous years, and post-tests scores have improved by a couple of percentage points.

Livermore Water Reclamation Plant Tours: 2/7/2013: Cub Scout Troop Pack 915 - nine 2nd graders 3/6/2013: Cub Scouts Troop Pack 942 – ten 2nd graders 4/16/2013: Cub Scout Troop – five 3rd graders 4/17/2013: Girl Scout Troop #31821- ten 1st through 5th graders 5/30/2013: Valley Montessori School – twenty-one 1st through 3rd graders	Although the Tour focuses on the wastewater treatment process and what not to put down the sewer drain, it does provide information on the differences between storm drains and sewers, and non-point source pollutants and pollution prevention.	55	Plant Tour Contact and Plant Tour Guide Surveys are used to evaluate the effectiveness of outreach. This year's "Great Program!" Tour Contact results are consistent with previous years, and Tour Guide results have improved overall.

C.7.i. ►Outreach to Municipal Officials

(For FY 12-13 Annual Report only) Summarize outreach conducted to increase the overall awareness of stormwater and/or watershed messages among municipal officials.

Summary:
During the permit term, the Stormwater Manager updates the Assistant Public Works Director and the Public Works Director on issues pertinent to the permit and permit requirements.

Section 8 - Provision C.8 Water Quality Monitoring

C.8 ►Water Quality Monitoring

State below if information is reported in a separate regional report. Municipalities can also describe below any Water Quality Monitoring activities in which they participate directly, e.g. participation in RMP workgroups, fieldwork within their jurisdictions, etc.

Summary

During FY 12-13, we contributed through the countywide Program to the BASMAA Regional Monitoring Coalition (RMC). In addition, we contributed financially to the Regional Monitoring Program for Water Quality in the San Francisco Estuary (RMP) and were represented at RMP committees and work groups. Monitoring efforts and results are documented in a separate report submitted March 15 of each year, as required in Provision C.8. For additional information on monitoring activities conducted by the Program, BASMAA RMC and the RMP, see the C.8 Water Quality Monitoring section of the Program's FY 12-13 Annual Report.

Section 9 – Provision C.9 Pesticides Toxicity Controls

C.9.b ▶Implement IPM Policy or Ordinance

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, carbaryl, and fipronil. A separate report can be attached as evidence of your implementation.

Trends in Quantities and Types of Pesticides Used[71]

Pesticide Category and Specific Pesticide Used	Amount[72]				
	FY 09-10	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Organophosphates			0		
None Used			0		
Pyrethroids: Talstar Professional- 7.9% Bifenthrin	See FY09-10 Annual Stormwater Report	7.0 oz	38.75 oz	See C.9 attachments for explanation of data for FY12/13	
CyCick Aerosal- 0.1% Cyfluthrin		15.5 oz	4.0 oz		
Cycick CS- 6% Cyfluthrin		3.0 oz	0.5 oz		
Talstar Granuals- 0.2% Bifenthrin		32.0 oz	16.0 oz		
Carbamates: LarvaLur- 2% Phenyl Methylcarbamate		19.5 oz	34.0 oz		
Fipronil: Maxforce Ant Bait Stations- 0.1% Fipronil		1 each	0		

C.9.c ▶Train Municipal Employees

Enter the number of employees that applied or used pesticides (including herbicides) within the scope of their duties this reporting year.	10 Land/ 2 street
Enter the number of these employees who received training on your IPM policy and IPM standard operating procedures within the last 3 years.	13 Land/ 2 street
Enter the percentage of municipal employees who apply pesticides who have received training in the IPM policy and IPM standard operating procedures within the last three years.	100% Land/ 20% street

[71] Includes all municipal structural and landscape pesticide usage by employees and contractors.
[72] Weight or volume of the product or preferably its active ingredient, using same units for the product each year. 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: allethrin, bifenthrin, beta-cyfluthrin, bioallethrin, cyfluthrin, cypermethrin, cyphenothrin, deltamethrin, esfenvalerate, etofenprox, fenpropathrin, gamma-cyhalothrin, imiprothrin, lambda-cyhalothrin, metofluthrin, permethrin, phenothrin, prallethrin, resmethrin, sumithrin (d-phenothrin), tau-fluvalinate, tefluthrin, tetramethrin, tralomethrin, cis-permethrin, and zeta-cypermethrin.

C.9.d ►Require Contractors to Implement IPM

Did your municipality contract with any pesticide service provider in the reporting year?	x	Yes		No

If yes, attach one of the following:

	Contract specifications that require adherence to your IPM policy and standard operating procedures, OR
x	Copy(ies) of the contractors' IPM certification(s) or equivalent, OR
x	Equivalent documentation.

If **Not attached**, explain:

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

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

Summary:

During FY 12-13, we participated in regulatory processes related to pesticides through contributions to the countywide Program, BASMAA and CASQA. For additional information, see the Regional Pollutants of Concern Report submitted by BASMAA on behalf of all MRP Permittees.

C.9.f ►Interface with County Agricultural Commissioners

Did your municipal staff observe any improper pesticide usage or evidence of improper usage (e.g., pesticides in storm drain systems, along street curbs, or in receiving waters) during this fiscal year?		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.

C.9.g. ►Evaluate Implementation of Source Control Actions Relating to pesticides

(For FY 12-13 Annual Report only) Submit a report that evaluates; 1) the effectiveness of control measures implemented, and 2) attainment of pesticide concentration and toxicity targets for water and sediment from monitoring data (Provision C.8.). If needed, the report should include the following:

Improvements to existing control measures and/or additional control measures required.
A plan to implement improved and/or new control measures.

Summary:

An Effectiveness Evaluation is included in Section C.9 Pesticides Toxicity Control of the Countywide Program's FY 12-13 Annual Report

C.9.h.ii ►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:

See the C.9 Pesticides Toxicity Control section of Program's FY 12-13 Annual Report for information on point of purchase public outreach conducted countywide and regionally.

C.9.h.iv ►Pest Control Contracting Outreach

(For FY 12-13 Annual Report only) Document effectiveness of outreach to residents who use or contract for structural or landscape pest control **OR** reference a regional that summarizes these actions.

Summary:

See the C.9 Pesticides Toxicity Control section of the Program's FY 12-13 Annual Report for a report that evaluates outreach to residents.

C.9.h.vi ► 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); **OR** reference a report of a regional effort for outreach to pest control operators and landscapers in which your agency participates.

Summary:

See the C.9 Pesticides Toxicity Control section of Program's FY 12-13 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.

Response to Water Board Staff Comments on Section 9, Provision C.9, of FY 11-12 Annual Report

Use this area to respond to any Water Board staff comments on Section 9 of your FY 11-12 Annual Report, and refer to any required submittals that are attached.

Section 10 - Provision C.10 Trash Load Reduction

C.10.a.iii ▶ Minimum Full Trash Capture (Summary of Actions)

Provide the following:

Descriptions of actions/tasks initiated, conducted or completed in implementing Minimum Full Trash Capture Devices (due July 1, 2014), including numbers of devices, device types and total land area treated to-date by full capture devices;

Descriptions of planned actions/tasks and time schedules for completion;

A map that includes locations of all full capture devices installed (private and public) to-date and associated treatment areas, trash generation rates/areas, creek/shoreline trash hot spots, and trash management areas defined to-date.

A summary of maintenance activities implemented for each device or groups of devices, including descriptions of typical maintenance frequencies and issues associated with maintaining these devices.

Descriptions of Actions/Tasks (Conducted or Planned):

- In June/July 2012, West Coast Storm, Inc. installed 174 "Connector Pipe Screen" full capture devices in the City of Livermore. These devices treat 250.5 acres of "retail/wholesale commercial "land area within the City of Livermore, and are mapped in the attached Livermore Full Capture Device Map. Per MRP requirements, the City was required to provide full trash capture for 127 acres of "Retail/Wholesale Commercial Acres".

Descriptions of Maintenance Activities:

- The City of Livermore Collections Section staff inspected and cleaned 171 full-capture devices in May 2013. These activities were documented in the attached Bay Area-Wide Trash Capture Demonstration Project's *Trash Capture Device Maintenance Report – Small Devices* Form, and will be reported as part of the Bay Area-Wide Trash Capture Demonstration's Project's final report.

- The City of Livermore Collections Section staff will continue to routinely clean the full capture devices and maintain cleaning records in the Full Capture Device Maintenance Binder. The Binder and scanned PDFs of the cleaning records will be made available for review upon request.

- The City of Livermore Collections staff experienced the following performance issues associated with these "Connector Pipe Screen Devices":
  1. Device screen holes are too small causing them to clog easily with sediment and leaves
  2. Clogged screens are causing the water to back-up into the inlet resulting in the following:
     A. Trash blows over the backed-up water
     B. Backed-up water warps and collapses the screen by putting pressure on it
     C. Backed-up water could attract mosquitos

C.10.a.iii ►Minimum Full Trash Capture (List of Devices)

Provide a list of trash full capture devices installed to-date or planned for installation by July 1, 2014 and the land area treated by each device or group of devices.

Applicable Trash Management Area (Preliminary Map ID)	Device Type	Planned or Installed	Maintenance Frequency	Total Number Installed	Total Area Treated (acres)
1	Connector Pipe Screen	Installed		67	149.06
2	Connector Pipe Screen	Installed		22	14.99
3	Connector Pipe Screen	Installed		20	36.90
4	Connector Pipe Screen	Installed		13	49.55
17, 15, 16	Connector Pipe Screen	Installed		52	221.68[73]
			Totals	174	250.50

[73] Includes approximately 13.4 acres in Unincorporated Alameda County

C.10.b.iii ►Trash Hot Spot Assessment

Provide the volume of material removed from each Trash Hot Spot cleanup, and the dominant types of trash (e.g., glass, plastics, paper) removed and their sources to the extent possible. Additionally, include a map that identifies the location(s) of trash hot spots.

Trash Hot Spot	Cleanup Date	FY 2012-13 Volume of Trash Removed (cubic yards)	FY 2011-12 Volume of Trash Removed (cubic yards)	FY 2010-11 Volume of Trash Removed (cubic yards)	Dominant Type(s) of Trash	Trash Sources (where possible)
Arroyo Mocho-Stanley Bridge-Pedestrian Bridge AM-SB-PB #1	9/23/2010		2.5 Cubic Yards	1.25 Cubic Yards	Paper and Plastic bags, Plastic and Glass Beverage Bottles, Beverage Cans, Caps/Lids, Clothing/Shoes, Cups/Plates/ Forks/Knives/Spoons/Napkins, Food Wrappers/Containers, Straws/Stirrers, Paper, Cigarette Filters and Lighters, Tobacco Packaging/Wrappers, Batteries, Building Materials	Trail Pedestrians/Nearby Retail and Commercial Businesses/Moving Vehicles on Murrieta Blvd.
	9/21/2011					
	9/15/2012	0.77 Cubic Yards				
	9/22/2013	0.02 Cubic Yards				
	9/29/2013	0.02 Cubic Yards				
	10/6/2013	0.02 Cubic Yards				
	10/13/2013	0.02 Cubic Yards				
	10/20/2013	0.02 Cubic Yards				
	10/27/2013	0.02 Cubic Yards				
	11/3/2013	0.02 Cubic Yards				
	11/10/2013	0.02 Cubic Yards				
	11/17/2013	0.02 Cubic Yards				
	11/24/2013	0.02 Cubic Yards				
	12/1/2013	0.02 Cubic Yards				
	12/15/2013	0.02 Cubic Yards				
	12/22/2013	0.02 Cubic Yards				
	12/29/2013	0.02 Cubic Yards				
	1/4/2013	0.02 Cubic Yards				
	1/11/2013	0.02 Cubic Yards				
	1/18/2013	0.02 Cubic Yards				
	1/25/2013	0.02 Cubic Yards				
	2/1/2013	0.02 Cubic Yards				
	2/8/2013	0.02 Cubic Yards				
	2/15/2013	0.02 Cubic Yards				
	2/22/2013	0.02 Cubic Yards				
	3/1/2013	0.02 Cubic Yards				

	3/8/2013 3/15/2013 3/22/2013 3/29/2013 4/5/2013 4/12/2013 4/19/2013 4/26/2013 5/6/2013 5/13/2013 5/20/2013 5/27/2013 6/3/2013 6/10/2013 6/17/2013 6/24/2013 Total	0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards 0.02 Cubic Yards **1.55 Cubic Yards**	**2.5 Cubic Yards**	**1.25 Cubic Yards**		
Arroyo Las Positas @ Livermore Avenue Bridge ALP@Livermore Bridge #2	9/24/2010 9/22/2011 9/15/2012 10/27/2013 **Total**	 0.29 Cubic Yards 1.49 Cubic Yards **1.78 Cubic Yards**	0.25 Cubic Yards **0.25 Cubic Yards**	3.25 Cubic Yards **3.25 Cubic Yards**	Paper and Plastic bags, Plastic and Glass Beverage Bottles, Beverage Cans, Caps/Lids, Clothing/Shoes, Cups/Plates/ Forks/Knives/Spoons/Napkins, Food Wrappers/Containers, Straws/Stirrers, Paper, Plastic Sheeting/Tarps, Cigarette Filters and Lighters, Tobacco Packaging/Wrappers, Batteries, Light Bulbs/Tubes, Oil/Lube Bottles, Building Materials, Car Parts, Tires, Toys	Transients/Nearby Retail and Commercial Businesses/ Moving Vehicles on Highway 580

Arroyo Mocho-Holmes-Mocho Park AM-H-MP #3	9/24/2010 9/21/2011 9/15/2012 9/30/2012 1/21/2013 5/13/2013 **Total**	 1.57 Cubic Yards 1.63 Cubic Yards 4.36 Cubic Yards 0.20 Cubic Yards **7.71 Cubic Yards**	0.25 Cubic Yards **0.25 Cubic Yards**	0.25 Cubic Yards **0.25 Cubic Yards**	Paper and Plastic Bags, Plastic and Glass Beverage Bottles, Beverage Cans, Caps/Lids, Clothing/Shoes, Cups/Plates/ Forks/Knives/Spoons/Napkins, Food Wrappers/Containers, Straws/Stirrers, Paper, Plastic Sheeting/Tarps, Cigarette Filters and Lighters, Tobacco Packaging/Wrappers, Batteries, Building Materials, Car Parts, Toys	Trail Pedestrians/ Transients/Nearby Apartment Complexes
Arroyo Las Positas-Northfront Trailhead Park ALP-NTP #4	9/23/2010 9/22/2011 9/15/2012 5/1/2013 **Total**	 0.31 Cubic Yards 0.15 Cubic Yards **0.46 Cubic Yards**	1.5 Cubic Yards **1.5 Cubic Yards**	0.25 Cubic Yards **0.25 Cubic Yards**	Paper and Plastic Bags, Plastic and Glass Beverage Bottles, Beverage Cans, Caps/Lids, Clothing/Shoes, Cups/Plates/ Forks/Knives/Spoons/Napkins, Food Wrappers/Containers, Straws/Stirrers, Paper, Plastic Sheeting/Tarps, Cigarette Filters, Building Materials, Car Parts, Styrofoam Packaging Materials	Trail Pedestrians/Nearby Retail and Commercial Businesses/ Moving Vehicles on Northfront Rd.

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

Provide descriptions of the progress made to-date on the development of Long-term Trash Load Reduction Plans due to the Water Board by February 1, 2014.

Long-Term Plan Task	Summary of Progress
1. Identifying and mapping trash generating areas	The modeled trash generation categories were reviewed and refined by the City of Livermore Source Control Section staff querying knowledgeable municipal staff, reviewing municipal operations data, viewing trash conditions within assessment areas using GIS and Street View, and using on-land visual assessments. Staff focused its review on the parcels and/or groups of parcels depicted as moderate trash generating areas adjacent to parcels depicted as low trash generation; and small parcels depicted as high trash generation adjacent to parcels depicted as low trash generation. Staff performed 52 on-land visual assessments on 6/3/2013, 6/4/2013, 6/6/2013 and 6/17/2013 and determined that some commercial and retail land uses such as churches, community centers and day care centers were assigned higher generation rates than actually exist. On-land visual assessments are filed in a Binder and will be made available upon request.
2. Identifying trash sources (as necessary or feasible) to assist in selecting trash management actions	Various on-land assessment methodologies will be used to assist in selecting trash management actions in Primary Trash Management Areas without existing and planned Full-Capture Devices. (Primary Management Areas with existing Full-Capture Devices include retail Areas that treat runoff from an area equivalent to 30% of Livermore's Retail/wholesale Land (1, 2 and 3); and in retail, commercial, downtown and residential areas with planned Full-Capture Devices (6, 7, 8, 9 and 10).
3. Prioritizing trash generating areas and associated types of trash problems	The Trash Management Areas were delineated by the City of Livermore Source Control Section staff based on the spatial distribution of trash generating areas (i.e., retail, industrial and downtown areas) and the location of specific existing or planned management actions within the City of Livermore (i.e., full capture-devices, street sweeping frequencies and parking enforcement, on-land trash clean-ups and storm drain inlet maintenance). The Trash Management Areas were refined and prioritized by the City of Livermore Assistant Public Works Director, and the Engineering, Collections, Streets and Source Control Sections based on the need for a Full-Capture Devices. Additional information was provided by the City of Livermore Solid Waste and Recycling and Neighborhood Preservation Sections, the Livermore Police Department, the Livermore Valley Joint Unified School District and the Livermore Area Recreation and Park District.

Long-Term Plan Task	Summary of Progress
4. Identifying and selecting trash management actions for specific management areas	The City of Livermore has 16 Primary Trash Management Areas which include the following: 1. Retail, Commercial and Industrial Areas with existing Full-Capture Treatment Devices: Management Areas 1, 2 and 3 2. Industrial, Commercial, Retail and Residential Areas with planned Full-Capture Treatment Devices: Management Areas 6, 7, 8, 9 and 10 3. Retail Area with Detention Basin, On-land Trash Clean-up and Enhanced Street Sweeping: Management Area 5 4. Commercial, Industrial and Retail Areas with Enhanced Anti-littering and Illegal Dumping Enforcement Activities, and planned Full-Capture Treatment Devices, if necessary: Management Areas 11, 12, 13 and 14 5. Schools: Management Area 15 6. Parks: Management Area 16 The City of Livermore has 40 Secondary Trash Management Areas which are based on land-use. Both Primary and Secondary Management Areas are mapped in the attached Livermore Trash Generation Rates Map.

Long-Term Plan Task	Summary of Progress
5. Defining the type of assessment(s) that will be used to demonstrate progress towards goals	Either independently or in collaboration with, or through providing financial support to, the Alameda Countywide Clean Water Program or BASMAA, the City of Livermore is planning to conduct the following activities to assess the effectiveness of its trash reduction activities: 1. Creek Hot-Spot and On-land Cleanup Efforts: Track long-term trends in the volume and dominant types of trash removed though Creek Hot-Spot and On-land Cleanup efforts. 2. Single-Use Bag Ban: The Program in coordination with Stopwaste.org is planning a study to measure the volume of single-use plastic bags in selected full trash capture inlet devices during the fall/winter of 2013/14 and compare it to the volume found during the pre-ban assessment. Stopwaste.org intends to include the results of the study in its assessment of the effectiveness of the bag ban. 3. Using modeled trash generation rates assess the reduction in trash achieved through the installation of full trash capture devices. 4. Through a BASMAA Proposition 84 grant, determine if some combinations of trash management actions and partial capture devices should be considered equivalent to the installation of full trash capture devices. 5. Through a BASMAA Proposition 84 grant, assess the feasibility of using trash flux monitoring to assess long-term trends in the volume of trash discharged to receiving waters. 6. In coordination with the Program, evaluate the feasibility of various on-land assessment methodologies. 7. Through the Program and BASMAA, assess the effectiveness of litter reduction outreach efforts such as the Be the Street campaign and the Program's K-12 environmental education program.

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Trash Management Area Specific Actions				
Full-Capture Treatment Devices	Continued Pre-MRP Actions: None		Moving Vehicles, Parked Cars, Uncovered Loads, Pedestrians, Nearby Commercial Businesses and Bus Stops	Paper, plastic, leaves and sediment material was removed during this reporting period. Most of the material removed was leaves and sediment.
	New/Enhanced Post-MRP Actions Initiated/Planned: Initiated: 174 Connector Pipe Screen, Full-Capture Treatment Devices were installed by West Coast Storm on behalf of the City of Livermore to treat runoff from an area equivalent to 30% of Livermore's Retail/Wholesale Land Planned: Full-Capture Devices will be installed in retail, commercial and residential areas with high and medium trash generating rates	1, 2, 3 6, 7, 8, 9, 10		

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Street Sweeping	Continued Pre-MRP Actions: Large Residential and Commercial Areas, and Schools are swept once a month (6, 7, 9,10, 11, 12, 13, 14 and 15) by the City of Livermore; and Downtown, and Large Retail and Industrial Areas are swept once a week and every 2 weeks during leaf season (1, 2, 3, 4 and 8) by the City of Livermore. Parks are swept more than once a month (16) by Livermore Area Recreation and Park District.	1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 & 16	Moving Vehicles, Parked Cars, Uncovered Loads, Pedestrians, Nearby Commercial Businesses and Bus Stops	294.75 cubic yards of material was removed from 807 miles of street in the industrial/commercial and residential areas during this reporting period. Types of material included gravel, rocks, dirt, and mud left from construction vehicles in the commercial/industrial areas; cups, fast food trash bags, wrappers and leaves on the collector/arterial streets; and leaves and cigarette butts on the residential streets.
	New/Enhanced Post-MRP Actions Initiated/Planned: Large Retail Area (5) will be swept twice a week by the City of Livermore.	5		

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
On-land Trash Cleanups	Continued Pre-MRP Actions: Livermore Area Recreation and Park District and Livermore Valley Joint Unified School District staff and volunteers perform on-land clean-ups at park and school trash hot spots at least once a year.	15, 16	Moving Vehicles, Parked Cars, Uncovered Loads, Pedestrians, Transients, Nearby Commercial Businesses and Bus Stops	Paper and Plastic Bags, Plastic and Glass Beverage Bottles, Beverage Cans, Caps/Lids, Clothing/Shoes, Cups/Plates/ Forks/Knives/Spoons/Napkins, Food Wrappers/Containers, Straws/Stirrers, Paper, Plastic Sheeting/Tarps, Cigarette Filters and Lighters, Tobacco Packaging/Wrappers, Batteries, Building Materials, Oil/Lube Bottles, Tires, Car Parts, Toys, Appliances, Shopping Carts
	New/Enhanced Post-MRP Actions Initiated/Planned: City of Livermore, Livermore Area Recreation and Park District and Livermore Valley Joint Unified School District volunteers perform on-land clean-ups in or near their Adopt-A-Creek Spots at least once a year at the following parks: Mocho Park, Northfront Park, Robertson Park and Altamont Creek Park.	1, 12, 15 & 16		
Partial-Capture Treatment Devices	Continued Pre-MRP Actions: The City of Livermore has three stormwater lift stations at N. P Street, N. Livermore Avenue and Murrieta Blvd. The first two lift stations have trash racks without 5mm mesh screens.	9	Moving Vehicles, Parked Cars, Uncovered Loads, Pedestrians, Nearby Commercial Businesses and Bus Stops	Paper, plastic, leaves and sediment material was removed during this reporting period. Most of the material removed was leaves and sediment.
	New/Enhanced Post-MRP Actions Initiated/Planned: None			

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Enhanced Storm Drain Inlet Maintenance	Continued Pre-MRP Actions: Storm drain inlets in streets are inspected once a year and cleaned as needed by the City of Livermore.	1 - 14	Moving Vehicles, Parked Cars, Uncovered Loads, Pedestrians, Nearby Commercial Businesses and Bus Stops	1,372 tons of material, including paper, plastic, leaves and sediment was removed during this reporting period.
	New/Enhanced Post-MRP Actions Initiated/Planned: Livermore Area Recreation and Park District and Livermore Valley Joint Unified School District maintenance crews clean storm drain inlets in parks and schools once a year.	15 & 16		

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Activities to Reduce Trash from Uncovered Loads	Continued Pre-MRP Actions: The City of Livermore has a franchise agreement with Livermore Sanitation to provide waste hauling services in the City that includes Litter Abatement language; specifically, minimization of spills, clean-up and covering of loads. Additionally, the City of Livermore has formerly adopted specific ordinance language in its municipal code which covers the transportation of trash or debris without a cover, prohibitions against littering and illegal dumping, enforcement and recovery for abating litter nuisances, and enforcement via citations and fines.	1 - 16	Uncovered Loads	Paper and Plastic Bags, Plastic and Glass Beverage Bottles, Beverage Cans, Caps/Lids, Clothing/Shoes, Food Wrappers/Containers, Straws/Stirrers, Plastic Sheeting/Tarps, Styrofoam, Building Materials
	New/Enhanced Post-MRP Actions Initiated/Planned: The City of Livermore Water Resources Division will regularly attend the Caltrans/California Highway Patrol Litter Enforcement Committee Meetings to ensure uncovered loads on Highway 580 are cited during Litter Enforcement Days.	1, 2, 3, 4, 5, 11 &12		

C.10.d ►Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Anti-littering and Illegal Dumping Enforcement Activities	Continued Pre-MRP Actions: The City of Livermore Police Department and Livermore Area Recreation and Park District enforce anti-littering and illegal dumping on city streets and in parks. The City of Livermore Police Department hosts a "Litter-Bug Hotline" where individuals can report incidents of littering and illegal dumping. During this reporting period, the Litter-Bug Hotline generated 10 letters and most were generated for lit cigarettes being thrown out windows. The letters provide the time/location of the violation and what was observed, clean-up cost information, and a warning stating the a citation would be issued for a second violation. The City of Livermore Water Resources Division will regularly attend the Caltrans/California Highway Patrol Litter Enforcement Committee Meetings to ensure the clover leafs off of Highway 580 in Livermore are cleaned as needed.	1 -16	Moving Vehicles, Parked Cars, Pedestrians, Transients, Nearby Commercial Businesses, Bus Stops and Illegal Dumpers	Paper and Plastic Bags, Plastic and Glass Beverage Bottles, Beverage Cans, Caps/Lids, Clothing/Shoes, Cups/Plates/ Forks/Knives/Spoons/Napkins, Food Wrappers/Containers, Straws/Stirrers, Paper, Plastic Sheeting/Tarps, Cigarette Filters and Lighters, Tobacco Packaging/Wrappers, Batteries, Building Materials, Oil/Lube Bottles, Tires, Car Parts, Toys, Bicycles, Home Appliances, Furniture, Shopping Carts

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
	New/Enhanced Post-MRP Actions: Initiated/Planned: The City of Livermore Water Resources Division will help promote the "Litter Bug-Hotline".	1-16		
	The City of Livermore Source Control Section will provide enforcement activities for those Trash Management Areas with Industrial and Commercial Areas and no Full-Capture Treatment Devices.	Parts of 1 and 3; and all of 4, 11, 12, 13 and 14		

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Improved Trash Bins/Container Management	Continued Pre-MRP Actions: Trash Removal from Receptacles – Franchise agreement between was hauler and City requires drivers to clean up any litter resulting from emptying of containers. Free on-call trash pick-ups – Single family residents are entitled to three free on-call clean-ups per year. Service helps to prevent illegal dumping.	1 - 16	Overflowing or Uncovered Receptacles/Dumpsters; and Dispersal of Household Hazardous Trash and Recyclables Before, During and After Collection	Residential, Commercial and Industrial Garbage and Recyclables
	New/Enhanced Post-MRP Actions Initiated/Planned: The City of Livermore Solid Waste and Recycling, Streets and Source Control Sections will relocate litter cans from underused areas and identifying funding sources for new litter cans, and litter can placement and service.	1 - 14		

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Creek, Channel, Shoreline Cleanups	Continued Pre-MRP Actions: The Livermore Area Recreation and Park District and the City of Livermore cleaned up various creek sections as part of the Earth Day Clean-up until 2009 when the Livermore Area Recreation and Park District lost funding for the Clean-up.	2, 3, 8, 15 and 16	Moving Vehicles, Parked Cars, Uncovered Loads, Pedestrians, Transients, Nearby Commercial Businesses and Bus tops	Paper and Plastic Bags, Plastic and Glass Beverage Bottles, Beverage Cans, Caps/Lids, Clothing/Shoes, Cups/Plates/ Forks/Knives/Spoons/Napkins, Food Wrappers/Containers,

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
	New/Enhanced Post-MRP Actions Initiated/Planned: Seven Adopt a Creek Spot Program adoptees and one-hundred and ninety-two Tri-Valley Creeks to Bay Day (Coastal Clean-up Day) volunteers collected 56.34 cubic yards of litter and debris from 9/15/2012 to 6/24/2013 at the following Creek Spots: Arroyo Las Positas @ Northfront Road (Trash Hot Spot: ALP-NTP #4) Arroyo Las Positas @ N. Livermore Avenue (Trash Hot Spot ALP @ Livermore Bridge #2) Arroyo Seco @ First Street Arroyo Mocho in Robertson Park Arroyo Mocho @ Holmes Street (Trash Hot Spot: AM-H-MP #3) Arroyo Mocho @ Granada Native Gardens Arroyo Mocho @ Stanley Boulevard Bridge Trash Hot Spot AM-SB-PB #1) Altamont Creek and Arroyo Las Positas @ Bluebell Drive Arroyo Las Positas @ Heather Lane More information about these activities can be found in C.7.			Straws/Stirrers, Paper, Plastic Sheeting/Tarps, Cigarette Filters and Lighters, Tobacco Packaging/Wrappers, Batteries, Building Materials, Oil/Lube Bottles, Tires, Car Parts, Toys, Appliances, Shopping Carts

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Area/Jurisdictional-wide Actions				

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Single-Use Carryout Bag Policies	Continued Pre-MRP Actions: None New/Enhanced Post-MRP Actions Initiated/Planned: See the C.10 Trash Load Reduction section of the Countywide Program's FY 12/13 Annual Report for a summary of the Countywide single-use bag ban. The City of Livermore Solid Waste and Recycling, and Source Control Sections participated in the Bag-It Documentary Movie Screenings on 10/17/2012 and 4/24/2013, and disseminated 150 and 23 bags to Movie goers, respectively. Additionally, the City of Livermore Source Control Section gave 300 reusable bags to the Zone 7 Water Agency to disseminate to public and private schools from January 2013 to June 2013. Finally, the City of Livermore Source Control Section disseminated 300 reusable bags to Assisted Living residents since many of the residents could not drive to reusable bag give-a-ways in April 2013.	Jurisdiction-wide	Moving Vehicles, Parked Cars, Uncovered Loads, Pedestrians, Transients, Nearby Commercial Businesses and Bus Stops	Plastic Bags

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Polystyrene Foam Food Service Ware Policies	Continued Pre-MRP Actions: None New/Enhanced Post-MRP Actions Initiated/Planned: On July 1, 2011, the City of Livermore adopted an ordinance banning expanded polystyrene disposable foodservice ware by food vendors, and requires food vendors to use disposable service ware that is either recyclable or compostable. During Fiscal Year 2012-2013, the City of Livermore Solid Waste and Recycling Section confirmed that the last 45 Food Service Establishments with Styrofoam were exhausting their supplies and purchasing disposable service ware that is either recyclable or compostable per the ordinance.	Jurisdiction-wide	Food Service Establishments	Polystyrene Foam

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
Public Education and Outreach Programs	Continued Pre-MRP Actions: See the C.10 Trash Load Reduction section of the Countywide Program's FY 12/13 Annual Report for a summary of related outreach activities. In past years, the City of Livermore Water Resources Division disseminated anti-litter information as part of its stormwater pollution prevention message at public events, school presentations, articles in the City Newsletter and on the Water Resources Division Web Page, and in a Sewer Bill Message that basically said, "Don't be a litter bug. Prevent stormwater pollution. Put litter in the trash can."	Jurisdiction-wide	Moving Vehicles, Parked Cars, Uncovered Loads, Pedestrians, Transients, Nearby Commercial Businesses, Bus Stops and Schools	Any and all of the types listed on previous pages

C.10.d ▶ Summary of Trash Reduction Actions

For each trash reduction action (i.e., control measures and best management practices) implemented by your municipality during the reporting period include a full description of the action. Describe actions initiated prior to and continued after the MRP effective date (December 2009), actions initiated after the MRP effective date, and actions planned for future implementation. If a planned action, also include the planned date of implementation. Add rows for actions not listed below as needed. Also identify the dominant source of trash and dominant types of trash removed for each action. To the extent possible, identify the applicable management areas identified on the map created under reporting section C.10.a.iii.

Action	Description	Trash Management Area(s) (Preliminary Map ID)	Dominant Sources	Dominant Types
	New/Enhanced Post-MRP Actions Initiated/Planned: See the C.10 Trash Load Reduction section of the Countywide Program's FY 12/13 Annual Report for a summary of related outreach activities. During this reporting period, the anti-litter information was developed into an anti-litter message which defined the Bay Area trash Problem, explained how long litter lasts, listed 12 easy ways to prevent litter, and discussed the City and Adopt a Creek Spot Program's effort to keep litter out of waterways. This information was presented in a display at public events (e.g., Tri-Valley Creeks to Bay Day) and school presentations, in a Power Point presentation at group meetings and conferences, and on the Water Resources Division web page and Adopt a Creek Spot Program's website. Moreover, a Creek Assessment Activity was developed for middle and high school students that included a pollution vulnerability exercise. A Tri-Valley Creeks to Bay Day Volunteer Survey and a Creek Assessment Activity Pre and Post-test was developed to gauge anti-litter message knowledge, etc			

Section 11 - Provision C.11 Mercury Controls

C.11.a.i ►Mercury Recycling Efforts

List below or attach lists of efforts to promote, facilitate, and/or participate in collection and recycling of mercury containing devices and equipment at the consumer level (e.g., thermometers, thermostats, switches, bulbs).

See the Countywide Program's FY 12/13 Annual Report for a description of related activities.

C.11.a.ii ►Mercury Collection

Provide an estimate of the mass of mercury collected through these efforts, or provide a reference to a report containing this estimate.

Mercury Containing Device/Equipment	Total Amount of Devices Collected	Estimated Mass of Mercury Collected
Fluorescent Lamps[74] (linear feet)	Please refer to the FY 12-13 Countywide Program Annual Report for an estimate of the mass of mercury collected through collection and recycling efforts in the Countywide Program area.	
CFLs[75] (each)		
Thermostats[76] (each)		
Thermostats (lbs)		
Thermometers (each)		
Switches (lbs)		
Total Mass of Mercury Collected During FY 2011-2012:		

[74] Only linear fluorescent lamps should be included

[75] Only compact fluorescent lamps should be included

[76] Thermostats can be reported by quantity or by pounds. Whichever unit is used, please avoid double-counting.

C.11.b ►Monitor Methylmercury
C.11.c ►Pilot Projects to Investigate and Abate Mercury Sources in Drainages
C.11.d ►Pilot Projects to Evaluate and Enhance Municipal Sediment Removal and Management Practices
C.11.e ►Conduct Pilot Projects to Evaluate On-Site Stormwater Treatment via Retrofit
C.11.f ►Diversion of Dry Weather and First Flush Flows to POTWs
C.11.g ►Monitor Stormwater Mercury Pollutant Loads and Loads Reduced
C.11.h ►Fate and Transport Study of Mercury In Urban Runoff
C.11.i ►Development of a Risk Reduction Program Implemented Throughout the Region
C.11.j ►Develop Allocation Sharing Scheme with Caltrans

State below if information is reported in a separate regional report. Municipalities that participate directly in regional activities to can provide descriptions below.

Summary

A summary of countywide Program and regional accomplishments for these sub-provisions are included within the C.11 Mercury Controls section of Program's FY 12-13 Annual Report and/or the BASMAA Regional POC Report.

Section 12 - Provision C.12 PCBs Controls

C.12.a.ii,iii ►Ongoing Training

(For FY 10-11 Annual Report and Each Annual Report Thereafter) List below or attach description of ongoing training development and inspections for PCB identification, including documentation and referral to appropriate regulatory agencies (e.g. county health departments, Department of Toxic Substances Control, California Department of Public Health, and the Water Board) as necessary.

Description:

See the FY 12-13 Program Annual Report for a description of training provided countywide.

C.12.b ►Conduct Pilot Projects to Evaluate Managing PCB-Containing Materials and Wastes during Building Demolition and Renovation Activities
C.12.c ►Pilot Projects to Investigate and Abate On-land Locations with Elevated PCB Concentrations
C.12.d ►Conduct Pilot Projects to Evaluate and Enhance Municipal Sediment Removal and Management Practices
C.12.e ►Conduct Pilot Projects to Evaluate On-Site Stormwater Treatment via Retrofit
C.12.f ►Diversion of Dry Weather and First Flush Flows to POTWs
C.12.g ►Monitor Stormwater PCB Pollutant Loads and Loads Reduced
C.12.h ►Fate and Transport Study of PCBs In Urban Runoff
C.12.i ►Development of a Risk Reduction Program Implemented Throughout the Region

State below if information is reported in a separate regional report. Municipalities that participate directly in regional activities to can provide descriptions below.

Summary

A summary of countywide Program and regional accomplishments for these sub-provisions are included within the C.12 PCB Controls section of Program's FY 12-13 Annual Report and/or the BASMAA Regional POC Report.

Section 13 - Provision C.13 Copper Controls

C.13.a.iii.(2) ►Training, Permitting and Enforcement Activities

(FY 11-12 Annual Report and each Annual Report thereafter) Provide summaries of activities implemented to manage waste generated from cleaning and treating of copper architectural features, including copper roofs, during construction and post-construction including. :

Development of BMPs on how to manage the water during and post construction

Requiring the use of appropriate BMPs when issuing building permits

Educating installers and operators on appropriate BMPs

Enforcement actions taken again noncompliance

The City of Livermore distributes the applicable BMP brochures developed with the BAPPG to contractors as necessary. These BMPs cover proper copper pipe installation, treating of copper architectural features, etc.

C.13.a.iii.(3) ►Evaluation of Effectiveness

(FY 12-13 Annual Report) Evaluate the effectiveness of measures the agency has undertaken to prevent discharge of wastewater to storm drains during the installation, cleaning, treating, and washing of the surface of copper architectural features. The discussion of the effectiveness of these measures should include BMP implementation and may propose additional measures to address this source of pollutants.

The City of Livermore distributes the applicable BMP brochures developed with the BAPPG to contractors as necessary. These BMPs cover proper copper pipe installation, treating of copper architectural features, etc.

C.13.c ►Vehicle Brake Pads

Reported in a separate regional report.

A summary of the countywide Program's participation with the Brake Pad Partnership (BPP) is included within the C.13 Copper Controls section of Program's FY 12-13 Annual Report and/or the BASMAA Regional POC Report.

C.13.c.iii ►Water Quality Issues Associated with Automobile Brake Pads

(FY 12-13 Annual Report Only) – Assess status of copper water quality issues associated with automobile brake pads and recommend brake-pad related actions for inclusion in subsequent permits if needed.

An assessment of copper water quality issues associated with automobile brake pads and recommend brake-pad related actions for inclusion in subsequent permits is included within the C.13 Copper Controls section of Program's FY 12-13 Annual Report and/or the BASMAA Regional POC Report.

C.13.d.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.

The City of Livermore owns and operates a POTW, and maintains an active Pretreatment Program. Under this program, the City regulates industrial dischargers with potential sources of copper under its Pretreatment Permitting Program. Under this program, the City requires any facility that washes vehicles and or equipment to have a designated wash pad area that is plumbed to the sanitary sewer via an oil water separator. This requirement has been in place and enforced since the late 1980s. All of these industrial and commercial users are inspected on an annual basis for compliance with stormwater requirements. The following is a list of these industrial/commercial sites:

Pretreatment Program Permitted Industrial Users with significant volume Cooling Towers:

Permit	Facility	Address
1251	Sandia National Laboratories/CA	7011 East Avenue
1350	Form Factor-501 Lawrence	501 Lawrence Drive
1348	Form Factor-7545 Longard	7545 Longard Road
1272	InPhenix, Inc.	250 North Mines Road
1250	Lawrence Livermore National Laboratory	7000 East Avenue

Pretreatment Program Permitted Industrial Users: Printers

Permit	Facility	Address
1261	Packaging Innovators	6650 National Drive
1374	Golden Bear Packaging	6645 Los Positas Road
1258	Heritage Paper	6850 Brisa Street

Pretreatment Program Permitted Industrial Users: Vehicle/Equipment Wash Racks

Permit	Facility	Address

	1331	B & S Hacienda	6219 Southfront Road	
	1288	Bernard's Mini Mart	1501 Airway Boulevard	
	1364	Boatmasters	5162 Preston Avenue	
	1284	Budget Car and Truck Rental	3841 First Street	
	1303	Cactus Car Wash	2153 Portola Avenue	
	1296	Cal Trans	6153 Southfront Road	
	1290	California Landscape Dimensions	5781 Preston Avenue	
	1338	Clark Pest Control	2313 Research Drive	
	1278	Cresco Equipment	800 E. Airway Boulevard	
	1362	Dun-Rite Excavating	5382 Brisa Street	
	1334	Enterprise Rent-A-Car	3569 First Street	
	1322	First Street-Henderlong	3560 First Street	
	1264	Groth Brothers	59 South L Street	
	1309	Harris Salinas Reinforcing	355 South Vasco Road	
	1342	Hawthorne LLC	7770 Hawthorne Road	
	1325	Hertz Equipment Rental	5237 Southfront Road	
	1311	JCs RVs	958 E. Airway Boulevard	
	1256	L Street Car Wash	220 North L Street	
	1313	Las Positas Shell	4530 Las Positas Road	
	1356	Lassiter Excavating	7000 National Drive	
	1294	LAVTA	1362 Rutan Court	
	1368	Las Positas Golf Course	909 Clubhouse Drive	
	1343	Les Schwab Tire Center #647	2650 Las Positas Road	
	1341	Livermore Audi	3400 Las Positas Road	
	1355	Livermore Auto Group-2232 Kitty Hawk	2232 Kitty Hawk Road	
	1292	Livermore Auto Group-2266 Kitty Hawk	2266 Kitty Hawk Road	
	1328	Livermore Auto Group-2304 Kitty Hawk	2304 Kitty Hawk Road	
	1259	Livermore Car Wash	2855 Old First Street	

	1317	Livermore Chevron	2186 Las Positas Road	
	1276	Livermore Dublin Disposal	6175 Southfront Road	
	1340	Livermore Honda	3200 Las Positas Road	
	1349	Livermore Jaguar	3500 Las Positas Road	
	1369	Livermore Maintenance Service Center	3500 Robertson Park Road	
	1366	Livermore Municipal Airport	636 Terminal Circle	
	1365	Livermore Police Department	1110 S. Livermore Avenue	
	1361	Livermore Porsche	3100 Las Positas Road	
	1353	Livermore Subaru	3600 Las Positas Road	
	1370	LPFD Fire Station #6	4550 East Avenue	
	Permit	Facility	Address	
	1371	LPFD Fire Station #7	951 Rincon Avenue	
	1372	LPFD Fire Station #8	5750 Scenic Avenue	
	1373	LPFD Fire Station #10	330 Airway Boulevard	
	1254	Mathew's Machinery	5340 Brisa Street	
	1293	MidCoast Transportation	5715 Preston Avenue	
	1323	Mountain Cascade	555 Exchange Court	
	1333	AuctionisNow.com	5187 Southfront Road	
	1301	Penske Truck Leasing	6215 Las Positas Road	
	1346	Power Washing Services	35 Rickenbacker Circle	
	1344	Quentin Bammer/Moeller Brothers	539 Lewelling Boulevard	
	1262	R. Lance & Sons	6776 Patterson Pass Road	
	1289	SAB Stanley Shell	809 East Stanley Boulevard	
	1263	SpeeDee Wash	2645 Old First Street	
	1329	Sunbelt Rentals	4977 Southfront Road	
	1335	Top Grade Construction	50 Contractors Street	
	1300	U.S. Foodservice	300 Lawrence Drive	

1326	Western Traction II	5717 Brisa Street
1307	*Vacant*	*3737 First Street*
1359	Vasco 76	816 N. Vasco Road
1282	Vasco Road Chevron	1025 N. Vasco Road
1304	Wal-Mart Tire & Lube Express	2700 Las Positas Road
1357	WB Equipment	5162 Preston Avenue
1308	White Oak Landscaping	5552 La Ribera Street
1285	Yamaha Golf Cars of CA	5605 Southfront Road
1351	Zone 7 Water Agency	100 North Canyons Parkway
1376	Interstate Storage	1800 Sutter Street

Additionally, all other automotive related facilities are inspected under as required by the MRP.

C.13.e ►Studies to Reduce Copper Pollutant Impact Uncertainties

Report on progress of studies being conducted countywide or regionally to reduce copper pollutant impact uncertainties. State below if information is reported in a separate regional report.

Summary

A summary of the countywide Program and/or regional efforts to develop regional studies to reduce copper pollutant impact uncertainties is included within the C.13 Copper Controls section of Program's FY 12-13 Annual Report and/or BASMAA Regional POC Report.

Section 14 - Provision C.14 PBDE, Legacy Pesticides and Selenium Controls

C.14.a ►Control Programs for PBDEs, Legacy Pesticides and Selenium Controls

Report on progress of studies being conducted countywide or regionally to characterize the distribution and pathways of PBDEs, legacy pesticides, and selenium. State below if information is reported in a separate regional report.

Summary

A summary of the countywide Program and regional efforts related to the Control Program for PBDEs, Legacy Pesticides and Selenium is included within the C.14 PBDE, Legacy Pesticides and Selenium section of Program's FY 12-13 Annual Report and/or BASMAA Regional POC Report.

C.14.a.v. ►Control Programs for PBDEs, Legacy Pesticides and Selenium Controls – Load Computation

(For FY 12-13 Annual Report only) Submit a report with information required to compute loading estimates of PBDEs, legacy pesticides and selenium from urban runoff to the Bay.

Summary

Information required to compute loading estimates of PBDEs, legacy pesticides and selenium from urban runoff to the Bay is included within the C.14 PBDE, Legacy Pesticides and Selenium section of Program's FY 12-13 Annual Report and/or BASMAA Regional POC Report.

C.14.a.vi. ►Control Programs for PBDEs, Legacy Pesticides and Selenium Controls – Control Measures

(For FY 12-13 Annual Report only) Submit a report identifying control measures and/or management practices to reduce impacts from discharges of PBDEs, legacy pesticides or selenium in urban runoff.

Summary

A report identifying control measures and/or management practices to reduce impacts from discharges of PBDEs, legacy pesticides or selenium in urban runoff is included within the C.14 PBDE, Legacy Pesticides and Selenium section of Program's FY 12-13 Annual Report and/or BASMAA Regional POC Report.

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

C.15.b.iii.(1), C.15.b.iii.(2) ► Planned and Unplanned Discharges of Potable Water

Is your agency a water purveyor?	x	Yes		No
If **No**, skip to C.15.b.vi.(2):				
If **Yes**, Complete the attached reporting tables or attach your own table with the same information. Provide any clarifying comments below.				

Comments:

The City of Livermore has two water purveyors, which are The City of Livermore and The California Water Company, operating within its service area. This report only includes information pertaining to potable water discharges from the City of Livermore's system.

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:

A summary of the Countywide Program's effort to promote the use of less-toxic pest management and the use of drought tolerant and native vegetation is included within the C.7 Public Information and Outreach section of the Countywide Program's FY 12-13 Annual Report.

Also, the City has part of its requirements for New Development include the following requirements of new development:

All new development projects are required to address the following, and implement when feasible, the following:

Landscaping shall be designed to both minimize irrigation and the runoff of irrigation waters. It shall also be designed to promote surface infiltration where appropriate. Landscaping plans should also consider measures and/or planting selections, which serve to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution.

If a landscaping plan is required as part of a development project application, the plan shall meet the following conditions related to reduction of pesticide use on the project site:

Where feasible, landscaping shall be designed and operated to treat stormwater runoff by incorporating elements that collect, detain, and infiltrate runoff. In areas that provide detention of water, plants that are tolerant of saturated soil conditions and prolonged exposure to water

shall be specified.

Plant materials selected shall be appropriate to site specific characteristics such as soil type, topography, climate, amount and timing of sunlight, prevailing winds, rainfall, air movement, patterns of land use, ecological consistency and plant interactions to ensure successful establishment.

Existing native trees, shrubs, and ground cover shall be retained and incorporated into the landscape plan to the maximum extent practicable.

Unless otherwise specified, proper maintenance of landscaping shall be the responsibility of the property owner.

Integrated pest management (IPM) principles and techniques shall be encouraged as part of the landscaping design. Some examples of IPM principles and techniques include the following:
Select plants that are well adapted to soil conditions at the site.

Select plants that are well adapted to sun and shade conditions at the site. Consider future conditions when plants reach maturity. Consider seasonal changes and time of day.

Provide irrigation appropriate to the water requirements of the selected plants.

Select pest and disease resistant plants.

Plant a diversity of species to prevent a potential pest infestation from affecting the entire landscaping plan.

Use "insectary" plants in the landscaping to attract and keep beneficial insects.

Landscaping shall also comply with City of Livermore's "Water Efficient Landscape Ordinance". However, areas of a site used for bioswales or other landscaped areas that function as a stormwater treatment measure shall be exempt from the Water Efficient Landscaping requirements.

The City as part of its Public Outreach events provides and promotes the following information to the public:
Promotional items and informational materials described IPM and its controls mechanisms, the benefits of using IPM products, and the OWOW Program. The product included labels that identified the control mechanism, active ingredient(s), and the OWOW local store of purchase
Stormwater Pollution Brochure, Bay Begins Brochure, Home Maintenance Tips for a Cleaner Bay Brochure, Grow It! Guides, Control It! Guides, Healthy Home and Garden Booklet, Pest Bugging You? Pocket Guides, The 10 Most Wanted Bugs in Your Garden Brochure, A Kid's Guide to Backyard Bug Guides, and Pest or Pal? Activity Guides.

The information detailed below summarizes The City of Livermore's Water Conservation efforts:

Conservation Program	Description	Implemented	Terminated
ULF/HET Rebates	Current program offers a rebate of up to $150 for replacement of 3.5 gpf toilet with a HET. This program replaced ULF program.	1994(updated 2008)	On-going
HEW Rebates	Rebate program in conjunction with Z7 & PG&E. Rebate amounts have ranged from $50-$100 for water portion of rebate. Rebate is dependent on many factors, including model and water efficiency level.	1999	On-going
Conservation Pricing	The City currently has in place an inverted tiered rate structure to encourage water conservation.	1991	On-going
School Education-COL	Educational programs are offered to the schools in the Livermore Municipal Water service area. This includes support of the Z7 School program and classroom presentations provided by City of Livermore Water Resources Division (WRD) staff.	2005-06	On-going
Conservation Coordinator	The City has designated one or more staff to meet the function of Conservation Coordinator since 1988. Currently three staff members play key roles in the City's conservation efforts.	1988	On-going
Water Waste Prohibition/Water Shortage Contingency Plan	The plan includes water conservation stages of action in response to shortages up to 50%, estimates of minimum 3-year available water supply, preparations for water during catastrophic supply interruptions, mandatory prohibitions and consumption reduction methods, penalties and charges for excessive use, analysis of potential revenue impacts from Plan implementation, and mechanisms for determining water use reductions. A comprehensive revision of the Plan was included as part of the 2010 UWMP.	1992	On-going
Water Use Reduction Plan	Part of the 1990 UWMP. Enacted water conservation measures to address the 20 percent reduction in per capita water use required by the Water Conservation Bill of 2009. Also establishes voluntary and mandatory water conservation practices to address water supply shortages and required demand reductions.	1990	On-going
Public Outreach	Methods include, but are not limited to, Earth Day, Livermore Wine Country Festival, Plant tours, Farmer's Market, Safety Fair, advertising, bill inserts, brochures, notices and dedicated web pages on City website.	1989	On-going

Conservation Program	Description	Implemented	Terminated
WELO	Establishes standards and specifications for all landscaping and landscape irrigation to encourage conservation and limit water use. Updated in 2012.	1992	On-going
Water leak audits	Water resources staff monitors monthly water purchases and monthly water sales in order to quickly detect any system irregularities or excessive water loss. The Water Resources Division contracts with outside vendors for emergency repairs, including leaks, with a 24 hour response time. Smaller leaks are assessed on a case by case basis and repaired by Water Resource Division staff.	1990's	On-going
Large Landscape Irrigation Survey	The highest 20% of non-residential water users are indentified and offered a free irrigation survey on their existing landscape. A list of recommended improvements is provided to the customer along with an offer of up to $5,000 in matching funds as an incentive to implement the recommendations.	2009	On-going
Calif. Youth Energy Svcs.(CYES)	Residents are offered a free CYES house call providing renters and homeowners with a free energy and water conservation assessment, education and mini-retrofit. WRD provides kitchen and bathroom aerators and low flow shower heads for Livermore Municipal Water customers.	2009	On-going
Water Efficient Lawn Rebates	Offering up to $500 in rebates to replace lawn with water-wise alternatives.	2012	On-going
Schools Program-Indoor Outdoor	Provides 100% funding for large landscape surveys, irrigation hardware replacement, indoor water use surveys, and plumbing fixture replacement for schools in the Tri-Valley water retailers' service area.	2010	On-going
Eco Blue Cube	This program is offered to qualifying CII customers to implement this water conservation strategy by converting their water-using urinals to waterless using the Ecoblue Cube microbial technology.	2009	On-going
Direct Install Toilet	This program is offered to residential, commercial and industrial customers. The program includes the direct installation and replacement of older high volume toilets with a HET and/or HEU.	2012	On-going

Conservation Program	Description	Implemented	Terminated
Civic Bay Friendly Landscape Ordinance	This ordinance requires civic projects to incorporate guidelines to achieve the benefits of a Bay-Friendly landscaping including the promotion of water and resource efficiency.	2009	On-going
Recycled water for irrigation	The City has been producing and distributing recycled water and since 1963 and has a relatively well-developed recycled water program that currently distributes an average of about 2 million gallons of recycled water per day.	1963	On-going
Tri-Valley Water Conservation Group	City staff actively participates in this group that provides planning and direction for a variety of regional public outreach efforts.	1980's	On-going
Water Supplier Nursery Council	This committee was created by Stopwaste.org with the goal to encourage residential water conservation by expanding point-of-purchase awareness of comprehensive Bay-Friendly practices and related products and to expand recycled content supply channels for compost and mulch.	2010	On-going
Monthly billings	Monthly bills provide another method for the City to reach out to its water customers with information about their water use and to promote water conservation. The monthly bills include a graph comparing current to previous year consumption and water conservation related notices.	1991	On-going
Water-Wise Gardening Website	Website to promote and encourage water-wise landscaping practices.	2005-06	On-going
Weather Based Irrigation	Rebates of $75 for single-family homes, $100 for multi-family and $3,000 for CII properties to replace standard clock-type controllers with qualifying, self adjusting weather based "smart" controllers.	2011	On-going
Centralized Computer Irrigation System	WRD encourages water-efficient landscape irrigation by utilizing a centralized computer irrigation system.	1998	On-going
Residential Water Audits	WRD staff is currently working to create a self-water audit residential program.	In progress	

C.15.b.iii.(1) ▶ Planned Discharges of the Potable Water System

Site/ Location	Discharge Type	Receiving Waterbody(ies)	Date of Discharge	Duration of Discharge (military time)	Estimated Volume (gallons)	Estimated Flow Rate (gallons/minute)	Chlorine Residual (mg/L)	pH (standard units)	Discharge Turbidity[77] (NTU)	Implemented BMPs & Corrective Actions
7H1-7H3	Flushing	Arroyo Seco	10/18/2012	60 minutes	20,400	340	0.00	7.32	N/A	Dechlorination/Inlet Protection
3G4-6G4	Flushing	Arroyo Seco	10/18/2012	78 minutes	38,200	490	0.01	7.26	N/A	Dechlorinatin/Inlet Protection
6H1-7H1	Flushing	Arroyo Seco	10/17/2012	80 minutes	30,400	380	0.01	7.18	N/A	Dechlorinatin/Inlet Protection
6G4-6H1	Flushing	Arroyo Seco	10/16/2012	125 minutes	43,085	345	0.01	7.20	N/A	Dechlorinatin/Inlet Protection
6C2-6G4	Flushing	Arroyo Seco	10/15/2012	185 minutes	63,305	342	0.02	7.34	N/A	Dechlorinatin/Inlet Protection
2H3	Flushing	Altamont Creek	09/27/2012	45 minutes	21,435	476	0.04	7.35	N/A	Dechlorinatin/Inlet Protection
2H1-2H3	Flushing	Altamont Creek	09/26/2012	45 minutes	21,115	469	0.02	6.7	N/A	Dechlorinatin/Inlet Protection
1G4-3G4	Flushing	Altamont Creek	09/21/2012	208 minutes	63,900	307	0.05	8.0	N/A	Dechlorinatin/Inlet Protection
2H4-3F4	Flushing	Altamont Creek	09/28/2012	70 minutes	23,800	340	0.02	7.07	N/A	Dechlorinatin/Inlet Protection
Altamont #1 and #2	Tank Cleaning	Altamont Creek	09/26-09/28/2012	960 minutes	204,493	213	0.00	7.00	N/A	Dechlorinatin/Inlet Protection
4I1-5G1	Flushing	Arroyo Seco	10/9/2012	95 minutes	35,950	378	0.02	7.21	N/A	Dechlorinatin/Inlet Protection

[77] Monitor the receiving water for turbidity if necessary and feasible. Include data in this column if available.

C.15.b.iii.(1) ▶Planned Discharges of the Potable Water System

Site/ Location	Discharge Type	Receiving Waterbody(ies)	Date of Discharge	Duration of Discharge (military time)	Estimated Volume (gallons)	Estimated Flow Rate (gallons/minute)	Chlorine Residual (mg/L)	pH (standard units)	Discharge Turbidity[77] (NTU)	Implemented BMPs & Corrective Actions
3H1-4C3	Flushing	Altamont Creek	10/4/2012	165 minutes	62,855	380	0.05	7.37	N/A	Dechlorinatin/Inlet Protection
3G2-3G4	Flushing	Altamont Creek	10/3/2012	115 minutes	48,355	420	0.03	7.19	N/A	Dechlorinatin/Inlet Protection
3F4-3G2	Flushing	Altamont Creek	10/1/2012	130 minutes	48,425	373	0.02	7.38	N/A	Dechlorinatin/Inlet Protection
4D1-4H4	Flushing	Arroyo Seco	10/8/2012	82 minutes	30,000	366	0.02	7.21	N/A	Dechlorinatin/Inlet Protection
5G3-5I2	Flushing	Arroyo Seco	10/12/2012	130 minutes	52,780	406	0.01	7.10	N/A	Dechlorinatin/Inlet Protection
5G1-5G3	Flushing	Arroyo Seco	10/10-10/11/2012	100 minutes	36,350	364	0.01	7.25	N/A	Dechlorinatin/Inlet Protection
3C3	Flushing	Altamont Creek	11/14-11/15/2012	720 minutes	44,300	61.5	0.04	7.00	N/A	Dechlorinatin/Inlet Protection
1G4	Tank Cleaning	Altamont Creek	11/13/2012	360 minutes	27,910	77.5	0.05	7.96	N/A	Dechlorinatin/Inlet Protection

C.15.b.iii(1): City of Livermore Detailed Potable Flushing Report/Total Annual Flushing = **637,355 Gallons**

Blow-off Number	Hydrant	Date	Name Int	Blow Off	Min	Gal/MIN	Total Gal
1G4WBOV501		21-Sep-12	DL/MS	Y	10	250	2,500
1H3WBOV501		21-Sep-12	DL/MS	Y	10	450	4,500
1H3WBOV506		21-Sep-12	DL/MS	Y	10	450	4,500
2F4WBOV105		21-Sep-12	DL/MS	Y	5	750	3,750
2F4WBOV109		21-Sep-12	DL/MS	Y	10	500	5,000
2F4WBOV202		21-Sep-12	DL/MS	Y	10	250	2,500
2F4WBOV304		21-Sep-12	DL/MS	Y	10	350	3,500
2F4WBOV502		21-Sep-12	DL/MS	Y	2	400	800
2F4WBOV505		21-Sep-12	DL/MS	Y	10	400	4,000
2G2WBOV100		21-Sep-12	DL/MS	Y	7	250	1,750
2G2WBOV101		21-Sep-12	DL/MS	Y	7	200	1,400
2G2WBOV202		21-Sep-12	DL/MS	Y	8	300	2,400
2G2WBOV303		21-Sep-12	DL/MS	Y	5	200	1,000
2G2WBOV301		21-Sep-12	DL/MS	Y	6	200	1,200
2G2WBOV306		21-Sep-12	DL/MS	Y	10	350	3,500
2G2WBOV307		21-Sep-12	DL/MS	Y	10	450	4,500
2G3WBOV201		21-Sep-12	DL/MS	Y	10	490	4,900
2G3WBOV503		21-Sep-12	DL/MS	Y	10	350	3,500
2G3WBOV503		21-Sep-12	DL/MS	Y	8	250	2,000
2G4WBOV316		21-Sep-12	DL/MS	Y	7	490	3,430
2G4WBOV522		21-Sep-12	DL/MS	Y	14	330	4,620
3G4WBOV527		21-Sep-12	DL/MS	Y	11	350	3,850
3G4WBOV544		21-Sep-12	DL/MS	Y	10	350	3,500
3G4WBOV545		21-Sep-12	DL/MS	Y	8	350	2,800
							63,900

2H1WBOV121	26-Sep-12	KR/KL	Y	5	360	1,800
2H1WBOV201	26-Sep-12	KR/KL	Y	5	493	2,465
2H1WBOV202	26-Sep-12	KR/KL	Y	5	480	2,400
2H1WBOV207	26-Sep-12	KR/KL	Y	10	493	4,930
2H3WBOV105	26-Sep-12	KR/KL	Y	5	425	2,125
2H3WBOV201	26-Sep-12	KR/KL	Y	15	493	7,395
						21,115
2H3WBOV209	27-Sep-12	KR/KL	Y	5	349	1,745
2H3WBOV315	27-Sep-12	KR/KL	Y	5	493	2,465
2H3WBOV306	27-Sep-12	KR/KL	Y	5	493	2,465
2H3WBOV406	27-Sep-12	KR/KL	Y	5	490	2,450
2H3WBOV411	27-Sep-12	KR/KL	Y	5	493	2,465
2H3WBOV414	27-Sep-12	KR/KL	Y	5	493	2,465
2H3WBOV515	27-Sep-12	KR/KL	Y	5	493	2,465
2H3WBOV569	27-Sep-12	KR/KL	Y	5	493	2,465
2H3WBOV571	27-Sep-12	KR/KL	Y	5	490	2,450
						21,435
2H4 WBOV504	28-Sep-12	MD/MS	Y	5	340	1,700
2H4WBOV503	28-Sep-12	MD/MS	Y	5	340	1,700
3C4WBOV104	28-Sep-12	MD/MS	Y	5	340	1,700
3C4WBOV510	28-Sep-12	MD/MS	Y	5	340	1,700
3D3WBOV310	28-Sep-12	MD/MS	Y	5	340	1,700
3F2WBOV513	28-Sep-12	MD/MS	Y	5	340	1,700
3F2WBOV305	28-Sep-12	MD/MS	Y	5	340	1,700
3F2WBOV103	28-Sep-12	MD/MS	Y	5	340	1,700
3F2WBOV205	28-Sep-12	MD/MS	Y	5	340	1,700
3F2WBOV407	28-Sep-12	MD/MS	Y	5	340	1,700
3F4WBOV413	28-Sep-12	MD/MS	Y	5	340	1,700
3F4WBOV205	28-Sep-12	MD/MS	Y	15	340	5,100

						23,800
3F4WBOV207	01-Oct-12	KL/MS	Y	5	340	1,700
3F4WBOV412	01-Oct-12	KL/MS	Y	10	340	3,400
3G1WBOV203	01-Oct-12	KL/MS	Y	5	340	1,700
3G1WBOV301	01-Oct-12	KL/MS	Y	5	340	1,700
3G1WBOV506	01-Oct-12	KL/MS	Y	10	481	4,810
3G1WBOV507	01-Oct-12	KL/MS	Y	0	0	0
3G2WBOV102	01-Oct-12	KL/MS	Y	10	340	3,400
3G2WBOV105	01-Oct-12	KL/MS	Y	5	340	1,700
3G2WBOV132	01-Oct-12	KL/MS	Y	5	340	1,700
3G2WBOV133	01-Oct-12	KL/MS	Y	5	480	2,400
3G2WBOV207	01-Oct-12	KL/MS	Y	30	340	10,200
3G2WBOV206	01-Oct-12	KL/MS	Y	10	340	3,400
3G2WBOV210	01-Oct-12	KL/MS	Y	5	340	1,700
3G2WBOV209	01-Oct-12	KL/MS	Y	5	340	1,700
3G2WBOV212	01-Oct-12	KL/MS	Y	5	340	1,700
3G2WBOV216	01-Oct-12	KL/MS	Y	5	481	2,405
3G2WBOV219	01-Oct-12	KL/MS	Y	10	481	4,810
						48,425
3G2WBOV220	02-Oct-12	KL/MS	Y	5	465	2,325
3G2WBOV261	02-Oct-12	KL/MS	Y	20	465	9,300
3G2WBOV310	02-Oct-12	KL/MS	Y	5	349	1,745
3G2WBOV317	02-Oct-12	KL/MS	Y	10	349	3,490
3G2WBOV383	02-Oct-12	KL/MS	Y	10	349	3,490
3G2WBOV384	02-Oct-12	KL/MS	Y	5	349	1,745
3G2WBOV401	02-Oct-12	KL/MS	Y	10	465	4,650
3G2WBOV410	02-Oct-12	KL/MS	Y	5	349	1,745
3G2WBOV471	02-Oct-12	KL/MS	Y	5	349	1,745
3G2WBOV505	02-Oct-12	KL/MS	Y	5	349	1,745

3G2WBOV506	02-Oct-12	KL/MS	Y	10	465	4,650
3G2WBOV237	02-Oct-12	KL/MS	Y	10	349	3,490
3G4WBOV301	02-Oct-12	KL/MS	Y	5	349	1,745
3G4WBOV506	02-Oct-12	KL/MS	Y	10	349	3,490
						45,355
3H1WBOV108	04-Oct-12	KL/MS	Y	20	340	6,800
3H1WBOV109	04-Oct-12	KL/MS	Y	20	340	6,800
3H1WBOV112	04-Oct-12	KL/MS	Y	10	493	4,930
3H1WBOV116	04-Oct-12	KL/MS	Y	5	493	2,465
3H1WBOV118	04-Oct-12	KL/MS	Y	5	340	1,700
3H1WBOV119	04-Oct-12	KL/MS	Y	5	340	1,700
3H1WBOV209	04-Oct-12	KL/MS	Y	10	360	3,600
3H1WBOV302	04-Oct-12	KL/MS	Y	10	360	3,600
3H1WBOV405	04-Oct-12	KL/MS	Y	5	340	1,700
3H1WBOV406	04-Oct-12	KL/MS	Y	5	493	2,465
3H1WBOV410	04-Oct-12	KL/MS	Y	10	493	4,930
3H1WBOV526	04-Oct-12	KL/MS	Y	5	500	2,500
3H3WBOV108	04-Oct-12	KL/MS	Y	10	340	3,400
3H3WBOV219	04-Oct-12	KL/MS	Y	10	340	3,400
3H3WBOV202	04-Oct-12	KL/MS	Y	10	360	3,600
4C1WBOV104	04-Oct-12	KL/MS	Y	15	340	5,100
4C1WBOV204	04-Oct-12	KL/MS	Y	5	340	1,700
4C3WBOV303	04-Oct-12	KL/MS	Y	5	493	2,465
						62,855
4D1WBOV329	08-Oct-12	KL/MS	Y	5	500	2,500
4D1WBOV410	08-Oct-12	KL/MS	Y	7	400	2,800
4D2WBOV202	08-Oct-12	KL/MS	Y	10	340	3,400
4G1WBOV303	08-Oct-12	KL/MS	Y	30	340	10,200
4G3WBOV304	08-Oct-12	KL/MS	Y	5	400	2,000

4H3WBOV326	08-Oct-12	KL/MS	Y	10	400	4,000
4H4WBOV109	08-Oct-12	KL/MS	Y	10	340	3,400
4H4WBOV504	08-Oct-12	KL/MS	Y	5	340	1,700
						30,000
4I4WBOV511	09-Oct-12	KL/MS	Y	10	450	4,500
5F4WBOV501	09-Oct-12	KL/MS	Y	25	400	10,000
5F4WBOV319	09-Oct-12	KL/MS	Y	10	340	3,400
5F4WBOV329	09-Oct-12	KL/MS	Y	5	340	1,700
5F4WBOV335	09-Oct-12	KL/MS	Y	5	340	1,700
5F4WBOV345	09-Oct-12	KL/MS	Y	10	340	3,400
5G1WBOV307	09-Oct-12	KL/MS	Y	10	375	3,750
5G1WBOV406	09-Oct-12	KL/MS	Y	10	375	3,750
5G1WBOV414	09-Oct-12	KL/MS	Y	10	375	3,750
						35,950
5G1WBOV502	10-Oct-12	KL/MD	Y	15	340	5,100
5G1WBOV533	10-Oct-12	KL/MD	Y	15	350	5,250
5G1WBOV301	10-Oct-12	KL/MD	Y	20	350	7,000
						17,350
5G2WBOV402	11-Oct-12	KL/MS	Y	5	450	2,250
5G2WBOV502	11-Oct-12	KL/MS	Y	10	340	3,400
5G2WBOV211	11-Oct-12	KL/MS	Y	5	450	2,250
5G3WBOV101	11-Oct-12	KL/MS	Y	15	340	5,100
5G3WBOV401	11-Oct-12	KL/MS	Y	10	400	4,000
5G3WBOV403	11-Oct-12	KL/MS	Y	5	400	2,000
						19,000
5G3WBOV409	12-Oct-12	MD/MS	Y	15	350	5,250
5G3WBOV410	12-Oct-12	MD/MS	Y	10	360	3,600
5G3WBOV504	12-Oct-12	MD/MS	Y	20	340	6,800

5G4WBOV102	12-Oct-12	MD/MS	Y	10	340	3,400
5G4WBOV210	12-Oct-12	MD/MS	Y	10	340	3,400
5G4WBOV541	12-Oct-12	MD/MS	Y	10	350	3,500
5H1WBOV112	12-Oct-12	MD/MS	Y	10	800	8,000
5H1WBOV302	12-Oct-12	MD/MS	Y	15	340	5,100
5H1WBOV319	12-Oct-12	MD/MS	Y	15	340	5,100
5H1WBOV501	12-Oct-12	MD/MS	Y	10	350	3,500
5I2WBOV304	12-Oct-12	MD/MS	Y	5	1026	5,130
						52,780
6C2WBOV406	15-Oct-12	KL/MS	Y	10	340	3,400
6C2WBOV402	15-Oct-12	KL/MS	Y	10	340	3,400
6G1WBOV103	15-Oct-12	KL/MS	Y	10	340	3,400
6G1WBOV109	15-Oct-12	KL/MS	Y	15	349	5,235
6G1WBOV203	15-Oct-12	KL/MS	Y	10	340	3,400
6G1WBOV205	15-Oct-12	KL/MS	Y	20	349	6,980
6G1WBOV403	15-Oct-12	KL/MS	Y	20	340	6,800
6G1WBOV509	15-Oct-12	KL/MS	Y	15	340	5,100
6G2WBOV103	15-Oct-12	KL/MS	Y	10	340	3,400
6G2WBOV125	15-Oct-12	KL/MS	Y	15	340	5,100
6G2WBOV407	15-Oct-12	KL/MS	Y	15	340	5,100
6G2WBOV319	15-Oct-12	KL/MS	Y	15	340	5,100
6G4WBOV313	15-Oct-12	KL/MS	Y	10	340	3,400
6G2WBOV220	15-Oct-12	KL/MS	Y	10	349	3,490
						63,305
6G4WBOV502	16-Oct-12	KL/MS	Y	20	340	6,800
6G4WBOV302	16-Oct-12	KL/MS	Y	20	340	6,800
6H1WBOV404	16-Oct-12	KL/MS	Y	20	349	6,980
6H1WBOV501	16-Oct-12	KL/MS	Y	15	349	5,235
6H1WBOV502	16-Oct-12	KL/MS	Y	10	349	3,490
6H1WBOV503	16-Oct-12	KL/MS	Y	10	349	3,490

6H1WBOV517		16-Oct-12	KL/MS	Y	10	340	3,400
6H1WBOV518		16-Oct-12	KL/MS	Y	10	340	3,400
6H1WBOV523		16-Oct-12	KL/MS	Y	10	349	3,490
							43,085
6H1WBOV524		17-Oct-12	KL/MS	Y	10	400	4,000
6H1WBOV528		17-Oct-12	KL/MS	Y	10	400	4,000
6H3WBOV521		17-Oct-12	KL/MS	Y	10	340	3,400
6H3WBOV512		17-Oct-12	KL/MS	Y	10	450	4,500
7G2WBOV107		17-Oct-12	KL/MS	Y	5	340	1,700
7G2WBOV514		17-Oct-12	KL/MS	Y	15	340	5,100
7G4WBOV101		17-Oct-12	KL/MS	Y	10	400	4,000
7G4WBOV102		17-Oct-12	KL/MS	Y	5	340	1,700
7H1WBOV524		17-Oct-12	KL/MS	Y	5	400	2,000
							30,400
7H1WBOV217		18-Oct-12	KL/MS	Y	10	340	3,400
7H1WBOV218		18-Oct-12	KL/MS	Y	10	340	3,400
7H1WBOV424		18-Oct-12	KL/MS	Y	5	340	1,700
7H3WBOV204		18-Oct-12	KL/MS	Y	10	340	3,400
7H3WBOV212		18-Oct-12	KL/MS	Y	15	340	5,100
7H1WBOV501		18-Oct-12	KL/MS	Y	10	340	3,400
							20,400
6G4WFH203	Y	18-Oct-12	KL/MS		10	500	5,000
6G4WFH203	Y	18-Oct-12	KL/MS		12	500	6,000
6G4WFH	Y	18-Oct-12	KL/MS		25	500	12,500
5G3WFH404	Y	18-Oct-12	KL/MS		16	450	7,200
3G4WFH504	Y	18-Oct-12	KL/MS		15	500	7,500
							38,200
						Total:	**637,355**

C.15.b.iii.(2) ►Unplanned Discharges of the Potable Water System[78]

Site/ Location	Discharge Type	Receiving Waterbody(ies)	Date of Discharge	Discharge Duration (military time)	Estimated Volume (gallons)	Estimated Flow Rate (gallons/day)	Chlorine Residual (mg/L)[79]	pH (standard units)[52]	Discharge Turbidity (Visual)[52]	Implemented BMPs & Corrective Actions	Time of discharge discovery	Regulatory Agency Notification Time[80]	Inspector arrival time	Responding crew arrival time
S.Vasco/Las Positas Rd.	Fire Hydrant Shear	Arroyo Las Positas	08/19/2012	Unknown	95,000	95,000	Not Reported	Not Reported	Not Reported	None	Not Reported	Fax RWQCB 08/21/2012	N/A	Fire Crews turned off water when responding to accident; Water Department repaired hydrant the next day.

[i] Include cross streets
[ii] 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".
[iii] 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.
[iv] State the watershed(s) in which the Regulated Project is located. Downstream watershed(s) may be included, but this is optional.
[v] All impervious surfaces added to any area of the site that was previously existing pervious surface.
[vi] All impervious surfaces added to any area of the site that was previously existing impervious surface.
[vii] For redevelopment projects, state the pre-project impervious surface area.
[viii] For redevelopment projects, state the post-project impervious surface area.
[ix] For private projects, state project application deemed complete date. If the project did not go through discretionary review, report the building permit issuance date.

[78] This table contains all of the unplanned discharges that occurred in this FY.
[79] Monitoring data is only required for 10% of the unplanned discharges. If you monitored more than 10% of your unplanned discharges, report all of the data collected.
[80]. Notification to Water Board staff is required for unplanned discharges where the chlorine residual is >0.05 mg/L and total volume is ≥ 50,000 gallons. Notification to State Office of Emergency Services is required after becoming aware of aquatic impacts as a result of unplanned discharge or when the discharge might endanger or compromise public health and safety.

C.2. Attachments

LIVERMORE WATER RECLAMATION PLANT

RECORD OF CLIMATOLOGICAL OBSERVATIONS

October 2012

Station No. : E50-4996-00

Alameda County

SCADA system updates data at 23:45 hrs.

DATE		Temperature Degree Fahrenheit Max.	Min.	At Obsn.	Precipitation Inch At Obsn.	Evaporation Inch At Obsn.	Wind Speed.(MPH) Max.	Min.	At Obsn.	Direction Deg	Humidity (Relative) % Max.	Min.	At Obsn.	Barometric Pressure mBar	important weather conditions,remarks,etc.
01-Oct	M	101.8	62.4	73.9	0.000	0.256	13	0	1	ENE	58	10	27	998	
02-Oct	T	103.5	62.5	74.8	0.000	0.276	10	0	2	NNE	51	9	23	995	
03-Oct	W	93.4	62.6	62.7	0.000	0.324	18	0	6	WNW	73	14	73	1001	
04-Oct	T	76.3	58.1	58.4	0.000	0.202	21	0	11	WNW	81	43	78	1006	
05-Oct	F	72.2	57.9	59.3	0.000	0.180	21	0	2	SSW	80	46	77	1004	
06-Oct	S	72.3	55.5	57.0	0.000	0.148	17	0	2	SSW	81	39	72	1002	
07-Oct	S	74.3	52.2	57.7	0.000	0.157	16	0	5	SW	83	32	75	1002	
08-Oct	M	72.2	53.8	57.4	0.000	0.157	16	0	2	SSW	80	41	77	1003	
09-Oct	T	74.4	52.0	60.4	0.000	0.144	15	0	2	NE	82	33	71	1000	
10-Oct	W	75.2	53.8	57.5	0.000	0.154	18	0	3	SW	80	34	76	1000	
11-Oct	T	60.9	56.1	57.4	0.000	0.084	16	0	3	SW	78	66	73	1001	
12-Oct	F	64.4	53.7	54.7	0.020	0.048	12	0	3	NW	88	57	75	1010	
13-Oct	S	75.5	49.1	61.3	0.000	0.109	13	0	0	NW	81	39	72	1008	
14-Oct	S	80.6	52.8	62.3	0.000	0.122	12	0	2	NE	89	42	78	1004	
15-Oct	M	83.8	54.3	66.5	0.000	0.135	12	0	0	SSW	88	34	65	1001	
16-Oct	T	83.2	60.5	65.5	0.000	0.154	13	0	0	NNE	83	46	73	999	
17-Oct	W	85.8	57.7	63.8	0.000	0.285	15	0	1	E	81	9	34	998	
18-Oct	T	90.7	55.6	68.3	0.000	0.228	16	0	6	NW	75	17	75	1002	
19-Oct	F	78.0	32.0	58.8	0.000	0.157	17	0	10	NW	85	0	85	1000	
20-Oct	S	70.7	53.2	53.9	0.000	0.148	16	0	5	WNW	86	50	70	997	
21-Oct	S	64.3	51.1	55.7	0.000	0.132	19	0	2	WSW	77	31	70	997	
22-Oct	M	62.8	52.5	53.6	0.180	0.000	20	0	7	WNW	85	41	81	1000	
23-Oct	T	64.0	50.3	50.4	0.060	0.032	16	0	2	ENE	86	32	76	1004	
24-Oct	W	66.2	47.9	58.2	0.000	0.096	18	0	2	SSW	79	37	70	1009	
25-Oct	T	66.6	53.5	53.6	0.000	0.100	14	0	1	SSE	79	45	66	1010	
26-Oct	F	77.3	49.2	59.0	0.000	0.125	11	0	0	NE	73	18	56	1005	
27-Oct	S	82.5	50.7	62.0	0.000	0.125	10	0	0	NW	71	29	62	1001	
28-Oct	S	83.6	53.4	62.1	0.000	0.128	12	0	1	ESE	77	31	69	1003	
29-Oct	M	82.1	53.3	59.6	0.000	0.122	7	0	0	NE	81	34	73	1004	
30-Oct	T	77.3	51.6	58.3	0.000	0.102	12	0	2	WNW	88	39	85	1002	
31-Oct	W	64.7	57.2	60.6	0.010	0.074	15	0	1	ESE	86	63	79	1002	
TOTAL					0.270	4.504			85				2136		
AVERAGE					0.009	0.145			3				69	1002	
MAXIMUM		103.5			0.180	0.324	21		11		89		85	1010	
MINIMUM			32.0		0.000	0.000		0	0			0	23	995	

NO QUALIFYING EVENT PER MRP Requirements

LIVERMORE WATER RECLAMATION PLANT

RECORD OF CLIMATOLOGICAL OBSERVATIONS

November 2012

Station No. : E50-4996-00

Alameda County

SCADA system updates data at 23:45 hrs.

DATE		Temperature Degree Fahrenheit Max.	Min.	At Obsn.	Precipitation Inch At Obsn.	Evaporation Inch At Obsn.	Wind Speed.(MPH) Max.	Min.	At Obsn.	Direction Deg	Humidity (Relative) % Max.	Min.	At Obsn.	Barometric Pressure mBar	Important weather conditions,remarks,etc.
01-Nov	T	68.4	55.7	55.7	0.380	0.000	13	0	2	SSW	88	53	83	1004	
02-Nov	F	70.3	49.6	55.7	0.000	0.077	10	0	0	NNW	90	47	78	1005	
03-Nov	S	75.4	49.2	59.1	0.000	0.112	11	0	0	NNE	83	30	67	1007	
04-Nov	S	78.5	52.2	59.7	0.000	0.131	12	0	1	NE	79	32	70	1008	
05-Nov	M	78.6	53.3	58.4	0.000	0.144	16	0	1	NNE	81	39	72	1004	
06-Nov	T	83.2	52.0	59.6	0.000	0.119	12	0	2	SSW	80	32	71	1003	
07-Nov	W	72.1	52.3	55.2	0.000	0.122	18	0	13	WSW	82	46	71	1001	
08-Nov	T	61.4	48.4	48.7	0.010	0.100	21	0	1	SW	80	42	73	1000	
09-Nov	F	56.4	43.6	45.4	0.180	0.000	15	0	2	W	87	43	79	1003	
10-Nov	S	58.9	42.8	43.6	0.000	0.083	12	0	2	NE	80	33	76	1012	
11-Nov	S	58.2	38.1	44.3	0.000	0.080	12	0	1	NE	84	43	71	1016	
12-Nov	M	60.9	39.3	45.0	0.000	0.087	13	0	1	N	78	34	65	1013	
13-Nov	T	68.4	42.7	50.7	0.000	0.115	16	0	1	NE	74	29	64	1007	
14-Nov	W	67.1	45.5	50.0	0.000	0.093	12	0	0	NW	79	37	74	1004	
15-Nov	T	71.0	43.8	50.7	0.000	0.074	10	0	3	E	81	30	75	1003	
16-Nov	F	66.8	32.0	57.5	0.140	0.000	10	0	2	S	86	0	86	998	
17-Nov	S	63.8	54.2	54.2	0.130	0.000	18	0	8	W	88	63	87	1003	
18-Nov	S	62.7	49.0	54.1	0.310	0.000	15	0	1	E	89	37	73	1008	
[illegible]-Nov	M	68.0	51.0	52.5	0.010	0.102	12	0	1	N	79	38	75	1008	
[illegible]-Nov	T	68.1	49.9	62.2	0.000	2.076	16	0	6	SW	80	55	69	1004	
21-Nov	W	65.0	32.0	49.3	0.190	0.000	14	0	0	NE	88	0	81	1010	
22-Nov	T	66.6	45.2	49.0	0.000	0.089	12	0	1	NNE	86	38	72	1011	
23-Nov	F	65.9	41.3	47.3	0.000	0.083	15	0	2	NE	83	46	79	1010	
24-Nov	S	68.6	43.0	47.4	0.000	0.077	12	0	1	ENE	83	42	78	1005	
25-Nov	S	67.5	41.4	47.0	0.000	0.070	13	0	1	E	85	44	79	1002	
26-Nov	M	66.2	42.3	48.3	0.000	0.067	10	0	2	NE	84	45	82	1005	
27-Nov	T	63.6	44.9	52.7	0.000	0.039	10	0	3	SSE	88	56	79	1003	
28-Nov	W														
29-Nov	T														
30-Nov	F														
TOTAL					1.350	3.942			57				2031		
AVERAGE					0.050	0.146			2				75	1006	
MAXIMUM		83.2			0.380	2.076	21		13		90		87	1016	
MINIMUM			32.0		0.000	0.000		0	0			0	64	998	

LIVERMORE WATER RECLAMATION PLANT

RECORD OF CLIMATOLOGICAL OBSERVATIONS

December 2012

Station No. : E50-4996-00

Alameda County

SCADA system updates data at 23:45 hrs.

DATE		Temperature Degree Fahrenheit Max.	Min.	At Obsn.	Precipitation Inch At Obsn.	Evaporation Inch At Obsn.	Wind Speed.(MPH) Max.	Min.	At Obsn.	Direction Deg	Humidity (Relative) % Max.	Min.	At Obsn.	Barometric Pressure mBar	Important weather conditions,remarks,etc.
01-Dec	S	65.5	57.1	62.6	0.080	0.070	19	0	13	SSW	83	65	72	999	
02-Dec	S	63.4	47.0	48.2	1.440	0.000	34	0	2	NE	87	65	85	1007	
03-Dec	M	62.7	41.3	52.7	0.000	0.189	9	0	0	ENE	89	46	78	1008	
04-Dec	T	63.9	50.1	58.7	0.000	0.032	7	0	1	ESE	84	55	73	1007	
05-Dec	W	64.5	56.3	56.8	0.490	0.000	10	0	2	SW	88	69	86	1007	
06-Dec	T	58.2	48.5	48.6	0.000	0.054	10	0	1	NE	89	67	85	1007	
07-Dec	F	66.1	40.8	44.8	0.000	0.070	6	0	0	SE	91	36	78	1006	
08-Dec	S	61.5	39.4	50.2	0.000	0.071	13	0	3	SSE	85	32	60	1007	
09-Dec	S	64.3	48.7	53.6	0.000	0.119	14	0	1	SW	62	31	58	1009	
10-Dec	M	66.8	46.4	47.1	0.000	0.093	14	0	2	ESE	78	37	77	1007	
11-Dec	T	66.2	40.9	50.7	0.000	0.074	20	0	7	SW	84	39	79	998	
12-Dec	W	54.5	41.1	41.4	0.030	0.042	17	0	1	NE	86	50	80	1000	
13-Dec	T	55.1	36.4	37.7	0.000	0.039	8	0	2	ENE	89	47	78	999	
14-Dec	F	51.1	34.3	38.4	0.000	0.003	8	0	1	ESE	86	52	85	1005	
15-Dec	S	49.6	32.9	46.1	0.180	0.000	10	0	2	S	90	64	82	1005	
16-Dec	S	57.5	43.3	56.6	0.000	0.003	14	0	13	SSW	89	65	71	1003	
17-Dec	M	57.2	46.1	46.5	0.070	0.000	19	0	4	WSW	86	69	79	1003	
18-Dec	T	51.3	32.0	37.5	0.000	0.087	18	0	1	ENE	82	0	76	1010	
19-Dec	W	52.5	32.3	35.6	0.000	0.051	10	0	0	NE	81	32	76	1012	
20-Dec	T	59.5	31.8	50.5	0.000	0.080	19	0	1	SW	81	0	46	1004	
21-Dec	F	59.6	42.5	55.1	0.190	0.000	23	0	4	WSW	86	46	73	999	
22-Dec	S	57.0	48.6	52.0	0.580	0.000	22	0	2	SSE	86	62	75	1006	
23-Dec	S	56.1	48.3	49.0	0.610	0.000	27	0	6	SSW	87	58	84	1004	
24-Dec	M	56.6	41.3	41.9	0.010	0.183	11	0	1	NNE	89	40	78	1009	
25-Dec	T	53.1	39.5	49.3	0.330	0.000	18	0	5	SSE	87	69	81	999	
26-Dec	W	53.1	44.2	44.7	0.080	0.048	22	0	2	SSW	85	62	82	1007	
27-Dec	T	55.0	39.6	39.7	0.000	0.051	9	0	2	ENE	84	48	80	1010	
28-Dec	F	46.3	35.3	42.9	0.010	0.003	12	0	3	NE	86	69	85	1005	
29-Dec	S	52.6	38.9	39.3	0.070	0.006	17	0	0	E	87	56	81	1007	
30-Dec	S	54.5	35.2	39.8	0.000	0.048	13	0	1	NNE	86	35	71	1010	
31-Dec	M	53.6	33.4	37.1	0.000	0.051	8	0	2	SE	80	30	76	1012	
TOTAL					4.170	1.467			85				2369		
AVERAGE					0.135	0.047			3				76	1006	
MAXIMUM		66.8			1.440	0.189	34		13		91		86	1012	
MINIMUM			31.8		0.000	0.000		0	0			0	46	998	

NO QUALIFYING EVENT

LIVERMORE WATER RECLAMATION PLANT

RECORD OF CLIMATOLOGICAL OBSERVATIONS

January 2013

Station No. : E50-4996-00

Alameda County

SCADA system updates data at 23:45 hrs.

DATE		Temperature Degree Fahrenheit Max.	Min.	At Obsn.	Precipitation Inch At Obsn.	Evaporation Inch At Obsn.	Wind Speed.(MPH) Max.	Min.	At Obsn.	Direction Deg	Humidity (Relative) % Max.	Min.	At Obsn.	Barometric Pressure mBar	Important weather conditions,remarks,etc.
01-Jan	T	50.6	35.2	36.1	0.000	0.064	19	0	1	E	80	51	80	1013	
02-Jan	W	53.3	31.6	35.2	0.000	0.048	12	0	1	WSW	86	48	79	1010	
03-Jan	T	54.0	31.5	39.2	0.000	0.045	12	0	0	E	85	56	82	1013	
04-Jan	F	55.0	34.6	40.2	0.000	0.058	13	0	2	SSE	86	44	83	1012	
05-Jan	S	53.1	35.6	45.2	0.170	0.000	10	0	3	ENE	89	65	89	1006	
06-Jan	S	49.2	37.7	38.6	0.130	0.000	8	0	0	ENE	89	77	89	1010	
07-Jan	M	57.7	33.6	43.8	0.010	0.019	7	0	0	ESE	92	54	86	1010	
08-Jan	T	59.8	32.0	43.0	0.000	0.051	14	0	2	NNE	90	0	85	1009	
09-Jan	W	52.6	38.7	43.3	0.000	0.029	24	0	6	SSW	91	62	71	1006	
10-Jan	T	49.8	32.0	38.6	0.000	0.074	15	0	4	SSW	79	0	71	1010	
11-Jan	F	50.0	33.1	37.7	0.050	0.000	12	0	3	S	86	47	86	1010	
12-Jan	S	49.9	32.2	34.9	0.000	0.058	9	0	2	ENE	88	31	72	1011	
13-Jan	S	50.5	28.1	40.4	0.000	0.057	11	0	4	SSE	76	23	36	1012	
14-Jan	M	49.7	35.0	36.1	0.000	0.087	13	0	0	E	65	24	64	1018	
15-Jan	T	51.1	30.6	38.3	0.000	0.080	13	0	2	NNE	76	30	69	1018	
16-Jan	W	53.6	32.0	36.6	0.000	0.061	14	0	0	WSW	85	41	79	1013	
17-Jan	T	59.4	32.9	39.3	0.000	0.074	15	0	0	SSW	86	33	78	1011	
18-Jan	F	63.3	34.0	40.1	0.000	0.080	12	0	0	SSE	84	28	66	1010	
19-Jan	S	60.5	32.5	40.2	0.000	0.077	15	0	0	ENE	80	38	72	1012	
20-Jan	S	61.5	33.4	39.0	0.000	0.080	17	0	0	NNW	80	25	71	1010	
21-Jan	M	59.5	31.9	41.1	0.000	0.070	14	0	2	SSE	86	43	80	1008	
22-Jan	T	62.6	34.1	47.4	0.000	0.058	15	0	0	NNE	87	43	78	1005	
23-Jan	W	53.5	44.7	49.9	0.060	0.000	11	0	2	N	85	69	85	1006	
24-Jan	T	55.0	49.5	51.5	0.300	0.000	10	0	0	SSW	88	78	88	1010	
25-Jan	F	67.3	50.7	52.7	0.020	0.026	11	0	0	NE	90	64	87	1005	
26-Jan	S	57.6	46.4	46.4	0.000	0.090	20	0	5	SW	91	46	75	1006	
27-Jan	S	56.2	39.5	43.6	0.000	0.077	13	0	3	WSW	83	29	76	1009	
28-Jan	M	57.7	32.0	45.6	0.000	0.080	13	0	1	SSW	81	38	81	1013	
29-Jan	T	59.8	40.2	45.0	0.000	0.051	8	0	3	SSE	85	46	77	1014	
30-Jan	W	66.2	44.1	44.1	0.000	0.113	13	0	2	ENE	80	32	72	1013	
31-Jan	T	62.5	38.4	45.1	0.000	0.083	13	0	1	NNE	80	49	79	1010	
TOTAL					0.740	1.689			46				2385		
AVERAGE					0.024	0.054			1				77	1010	
MAXIMUM		67.3			0.300	0.113	24		6		92		89	1018	
MINIMUM			28.1		0.000	0.000		0	0			0	36	1005	

NO QUALIFYING EVENT

LIVERMORE WATER RECLAMATION PLANT

RECORD OF CLIMATOLOGICAL OBSERVATIONS

February 2013

Station No. : E50-4996-00 Alameda County

SCADA system updates data at 23:45 hrs.

DATE		Temperature Degree Fahrenheit Max.	Min.	At Obsn.	Precipitation Inch At Obsn.	Evaporation Inch At Obsn.	Wind Speed.(MPH) Max.	Min.	At Obsn.	Direction Deg	Humidity (Relative) % Max.	Min.	At Obsn.	Barometric Pressure mBar	Important weather conditions,remarks,etc.
01-Feb	F	64.5	39.6	47.8	0.000	0.077	13	0	0	WSW	86	48	80	1011	
02-Feb	S	64.6	43.2	47.2	0.000	0.048	8	0	1	NNW	85	55	84	1011	
03-Feb	S	62.3	44.1	44.3	0.000	0.061	8	0	3	ESE	87	49	82	1009	
04-Feb	M	67.1	38.7	47.5	0.000	0.057	10	0	4	WSW	89	47	88	1007	
05-Feb	T	56.1	46.3	46.4	0.000	0.068	13	0	0	NNW	88	61	84	1008	
06-Feb	W	61.6	40.1	45.4	0.000	0.080	13	0	3	SSE	86	40	83	1010	
07-Feb	T	55.0	38.8	42.9	0.040	0.016	15	0	3	SSW	85	43	83	1003	
08-Feb	F	53.9	37.9	37.9	0.000	0.032	16	0	1	ENE	85	48	81	1004	
09-Feb	S	58.8	35.4	39.1	0.000	0.077	8	0	1	NE	83	24	66	1007	
10-Feb	S	60.6	32.6	41.5	0.000	0.077	13	0	1	ENE	76	33	73	1006	
11-Feb	M	61.8	32.0	41.3	0.000	0.093	10	0	2	ENE	80	0	65	1012	
12-Feb	T	60.9	32.0	42.9	0.000	0.089	11	0	1	ENE	74	0	71	1015	
13-Feb	W	66.6	36.8	44.9	0.000	0.080	9	0	1	ENE	79	29	75	1011	
14-Feb	T	66.6	39.2	49.1	0.000	0.119	13	0	0	NE	81	35	70	1011	
15-Feb	F	68.7	42.0	48.2	0.000	0.106	10	0	0	NE	75	40	74	1012	
16-Feb	S	67.5	41.6	47.7	0.000	0.077	10	0	1	SSE	79	39	77	1005	
17-Feb	S	67.1	43.3	45.7	0.000	0.084	9	0	0	E	88	34	75	1004	
18-Feb	M	52.2	39.9	47.5	0.000	0.074	19	0	4	SW	82	57	63	1002	
19-Feb	T	49.7	38.3	39.7	0.290	0.000	21	0	3	WNW	85	55	76	998	
20-Feb	W	58.8	34.2	42.6	0.000	0.074	13	0	1	ENE	85	32	83	1006	
21-Feb	T	61.2	38.6	41.9	0.000	0.096	17	0	1	NE	86	26	77	1010	
22-Feb	F	63.6	36.8	48.8	0.000	0.086	15	0	5	SSW	81	30	80	1011	
23-Feb	S	60.7	44.5	45.6	0.000	0.128	14	0	4	SSW	87	25	58	1010	
24-Feb	S	62.0	41.4	42.5	0.000	0.141	14	0	1	NE	64	21	61	1012	
25-Feb	M	64.5	36.5	42.9	0.000	0.093	13	0	1	NE	76	34	76	1011	
26-Feb	T	69.5	37.0	45.2	0.000	0.144	13	0	1	W	82	13	63	1011	
27-Feb	W	71.6	37.8	48.7	0.000	0.109	11	0	2	ENE	74	17	69	1015	
28-Feb	T	70.7	43.6	51.3	0.000	0.102	15	0	1	N	82	44	79	1017	
TOTAL					0.330	2.288			47				2097		
AVERAGE					0.012	0.082			2				75	1009	
MAXIMUM		71.6			0.290	0.144	21		5		89		88	1017	
MINIMUM			32.0		0.000	0.000		0	0			0	58	998	

>1.0 mm

NO QUALIFYING EVENT

LIVERMORE WATER RECLAMATION PLANT

RECORD OF CLIMATOLOGICAL OBSERVATIONS

March 2013

Station No. : E50-4996-00

Alameda County

SCADA system updates data at 23:45 hrs.

DATE		Temperature Degree Fahrenheit Max.	Min.	At Obsn.	Precipitation Inch At Obsn.	Evaporation Inch At Obsn.	Wind Speed.(MPH) Max.	Min.	At Obsn.	Direction Deg	Humidity (Relative) % Max.	Min.	At Obsn.	Barometric Pressure mBar	Important weather conditions,remarks,etc.
01-Mar	F	71.8	44.5	52.3	0.000	0.135	13	0	2	ENE	85	39	73	1011	
02-Mar	S	74.8	48.1	57.4	0.000	0.090	14	0	3	NW	80	34	66	1006	
03-Mar	S	64.5	48.9	49.3	0.000	0.132	17	0	1	WSW	81	42	79	1006	
04-Mar	M	61.1	45.4	46.3	0.000	0.087	18	0	1	NNW	82	55	78	1006	
05-Mar	T	62.1	43.0	51.6	0.020	0.115	30	0	15	SSW	84	35	64	997	
06-Mar	W	55.9	43.7	43.7	0.030	0.019	28	0	2	NNE	82	44	76	1004	
07-Mar	T	57.5	38.6	49.1	0.070	0.013	12	0	2	SSW	86	39	86	999	
08-Mar	F	60.2	44.0	48.6	0.010	0.119	17	0	7	SW	88	39	76	1005	
09-Mar	S	69.4	43.4	45.5	0.000	0.128	16	0	3	ENE	81	20	72	1013	
10-Mar	S	69.6	39.2	49.9	0.000	0.125	11	0	1	E	79	20	65	1012	
11-Mar	M	75.3	41.8	53.1	0.000	0.128	13	0	1	NE	75	27	65	1007	
12-Mar	T	76.4	46.2	55.2	0.000	0.148	11	0	2	NE	75	33	70	1007	
13-Mar	W	77.3	47.4	58.8	0.000	0.157	14	0	2	ENE	80	39	69	1006	
14-Mar	T	75.5	51.8	56.3	0.000	0.141	14	0	2	SE	79	32	67	1007	
15-Mar	F	73.8	46.8	53.2	0.000	0.113	12	0	6	NW	81	34	81	1005	
16-Mar	S	73.9	46.5	54.7	0.000	0.138	16	0	1	ENE	90	25	68	1006	
17-Mar	S	72.0	44.2	51.5	0.000	0.145	17	0	2	NE	81	26	70	1006	
18-Mar	M	68.8	43.4	52.9	0.000	0.119	17	0	0	SSW	80	35	71	1006	
19-Mar	T	73.0	48.2	52.7	0.060	0.048	20	0	4	NE	80	32	80	1006	
20-Mar	W	66.5	51.6	54.6	0.040	0.048	17	0	4	WSW	87	43	78	1007	
21-Mar	T	67.0	46.9	48.4	0.000	0.148	14	0	2	ENE	80	32	73	1005	
22-Mar	F	69.6	41.8	49.2	0.000	0.221	18	0	1	ESE	83	8	39	1006	
23-Mar	S	71.2	42.5	49.7	0.000	0.164	12	0	3	NE	60	17	59	1006	
24-Mar	S	73.8	42.5	50.9	0.000	0.154	13	0	2	WNW	74	27	74	1003	
25-Mar	M	62.0	46.3	49.6	0.000	0.135	20	0	10	WNW	81	46	74	1003	
26-Mar	T	70.2	47.3	52.2	0.000	0.138	15	0	4	WNW	81	36	68	1002	
27-Mar	W	67.1	49.5	56.2	0.000	0.141	20	0	1	W	78	49	78	1003	
28-Mar	T	73.7	55.2	58.2	0.000	0.135	12	0	0	WSW	82	39	72	1005	
29-Mar	F	77.9	51.1	62.0	0.000	0.167	12	0	2	ESE	79	34	66	1003	
30-Mar	S	73.7	56.5	58.2	0.060	0.090	17	0	3	WNW	81	35	81	1003	
31-Mar	S	70.2	52.5	57.1	0.060	0.093	16	0	0	NE	83	37	82	1004	
TOTAL					0.350	3.731			90				2218		
AVERAGE					0.011	0.120			3				72	1005	
MAXIMUM		77.9			0.070	0.221	30		15		90		86	1013	
MINIMUM			38.6		0.000	0.013		0	0			8	39	997	

NO QUALIFYING EVENT

LIVERMORE WATER RECLAMATION PLANT

RECORD OF CLIMATOLOGICAL OBSERVATIONS

April 2013

Station No. : E50-4996-00

Alameda County

SCADA system updates data at 23:45 hrs.

DATE		Temperature Degree Fahrenheit Max.	Min.	At Obsn.	Precipitation Inch At Obsn.	Evaporation Inch At Obsn.	Wind Speed.(MPH) Max.	Min.	At Obsn.	Direction Deg	Humidity (Relative) % Max.	Min.	At Obsn.	Barometric Pressure mBar	Important weather conditions,remarks,etc.
01-Apr	M	66.8	32.0	52.5	0.110	0.009	15	0	2	S	86	0	78	1008	
02-Apr	T	72.5	47.7	52.5	0.000	0.135	14	0	4	NW	83	44	83	1007	
03-Apr	W	78.8	48.5	58.4	0.000	0.173	14	0	2	WNW	89	34	68	1003	
04-Apr	T	68.6	52.7	57.9	0.130	0.000	18	0	3	WNW	82	56	78	1006	
05-Apr	F	65.0	54.3	54.8	0.000	0.132	17	0	4	W	84	51	79	1009	
06-Apr	S	66.1	53.6	53.9	0.000	0.119	16	0	5	W	81	57	80	1009	
07-Apr	S	64.2	51.4	53.1	0.150	0.099	20	0	20	WSW	88	55	87	998	
08-Apr	M	68.2	47.1	54.7	0.000	0.215	26	0	3	NNE	87	16	53	1003	
09-Apr	T	76.1	51.9	61.1	0.000	0.330	21	0	5	SSW	64	13	33	1005	
10-Apr	W	85.6	53.5	57.8	0.000	0.260	20	0	2	W	74	21	74	1004	
11-Apr	T	72.7	50.6	52.1	0.000	0.205	19	0	7	WNW	84	35	74	999	
12-Apr	F	78.9	46.5	51.1	0.000	0.228	18	0	2	NNW	82	25	76	999	
13-Apr	S	69.2	48.4	50.2	0.000	0.199	18	0	5	SW	80	41	74	1000	
14-Apr	S	68.1	45.7	51.6	0.000	0.205	20	0	3	SSW	80	27	79	999	
15-Apr	M	60.7	46.3	47.0	0.000	0.192	26	0	2	SSE	89	38	70	1001	
16-Apr	T	67.7	40.6	56.0	0.000	0.225	19	0	3	NW	75	11	28	1007	
17-Apr	W	69.6	52.7	52.7	0.000	0.304	21	0	0	ENE	46	13	45	1010	
18-Apr	T	77.3	43.8	55.2	0.000	0.234	15	0	1	NE	61	16	55	1010	
19-Apr	F	83.7	49.0	64.5	0.000	0.237	17	0	2	WSW	65	19	51	1005	
20-Apr	S	82.1	51.8	59.2	0.000	0.247	15	0	1	ENE	76	17	54	1003	
21-Apr	S	87.2	50.8	63.6	0.000	0.263	15	0	2	NE	69	11	49	1001	
22-Apr	M	89.6	56.3	65.4	0.000	0.317	13	0	3	WSW	63	11	46	998	
23-Apr	T	84.8	54.5	54.6	0.000	0.337	15	0	5	NW	68	10	67	999	
24-Apr	W	74.8	48.7	53.7	0.000	0.269	22	0	8	WNW	81	26	80	1001	
25-Apr	T	68.6	52.3	53.1	0.000	0.218	22	1	3	SW	83	48	77	1007	
26-Apr	F	78.0	50.9	50.9	0.000	0.205	17	0	6	WNW	81	35	81	1010	
27-Apr	S	85.2	49.3	57.0	0.000	0.205	18	0	4	W	85	24	65	1005	
28-Apr	S	92.1	50.7	68.0	0.000	0.231	15	0	0	NE	81	20	52	998	
29-Apr	M	90.5	59.7	62.3	0.000	0.343	17	0	3	W	70	18	65	995	
30-Apr	T	87.4	55.9	74.3	0.000	0.359	17	0	5	NE	76	7	9	996	
TOTAL					0.390	6.496			113				1909		
AVERAGE					0.013	0.217			4				64	1003	
MAXIMUM		92.1			0.150	0.359	26		20		89		87	1010	
MINIMUM			32.0		0.000	0.000		0	0			0	9	995	

NO QUALIFYING EVENT

C.4. Attachments

Stormwater Industrial and Commercial Inspection Plan

I. On an annual basis, the City shall performs stormwater inspections of all NOI facilities, Categorical Industrial Users permitted under the City's Pretreatment Program (CIU), General Industrial/Commercial Users permitted under the City's Pretreatment Program (GEN), Photo Processor Users permitted under the City's Pretreatment Program (PHOTO), and Wash Rack User permitted under the City's Pretreatment Program. The following table provides a specific list of these facilities:

Table 1.0

Facility Name	Type	Frequency
Harris Salinas Rebar	NOI/CIU	Annually
Inphenix	NOI/CIU	Annually
Packaging Innovators	NOI/CIU	Annually
Livermore Dublin Disposal	NOI/CIU	Annually
Livermore Municipal Airport	NOI/WR	Annually
Livermore Transit Authority	NOI/WR	Annually
Fenestra Winery	NOI	Annually
FormFactor	NOI/CIU	Annually
FormFactor	NOI/CIU	Annually
Wente Vineyards Estate Winery	NOI	Annually
Fabco Automotive Corporation	NOI	Annually
Schiffenhaus CA	NOI/GEN	Annually
U.S. Foods Service	NOI/WR	Annually
USP Structural Connectors	NOI	Annually
Integrated Manufacturing Group	NOI	Annually
Sanmina SCI	NOI	Annually

Facility Name	Type	Frequency
Ames Taping Tool Systems	GEN	Annually
Astro Pak	GEN	Annually
Culligan Water	GEN	Annually
Arrowhead Mountain Springs	GEN	Annually
Heritage Paper	GEN	Annually
National Food Laboratory	GEN	Annually
Packaging Innovators	GEN	Annually
Protein Research	GEN	Annually
E. Turman & Company	GEN	Annually
Golden Bear Packaging	GEN	Annually
Schiffenhaus	GEN	Annually
Costco	PHOTO	Annually
Rite Aid-1350 N. Vasco Rd.	PHOTO	Annually
SAVE Mart	PHOTO	Annually
Budget Car and Truck Rental	WR	Annually
California Landscape Dimensions, Inc.	WR	Annually
Clark Pest Control	WR	Annually
Cresco Equipment	WR	Annually
Enterprise Rent-A-Car	WR	Annually
Lassiter Excavating	WR	Annually
LAVTA	WR	Annually

Facility Name	Type	Frequency
Las Positas Golf Course	WR	Annually
Les Schwab Tire Center #647	WR	Annually
Livermore Chevron	WR	Annually
Livermore Municipal Airport	WR	Annually
MidCoast Transportation	WR	Annually
Penske Truck Leasing	WR	Annually
Power Washing Services	WR	Annually
Top Grade Construction	WR	Annually
Wal-Mart Tire & Lube Express	WR	Annually
Yamaha Golf Cars of CA	WR	Annually
Zone 7 Water Agency	WR	Annually
B & S Hacienda	WR	Annually
Bernard's Mini Mart	WR	Annually
Cactus Car Wash	WR	Annually
Cal Trans	WR	Annually
First Street-Henderlong	WR	Annually
Groth Brothers	WR	Annually
Harris Salinas Reinforcing	WR	Annually
Hawthorne LLC	WR	Annually
LPFD Fire Station 6	WR	Annually
LPFD Fire Station 7	WR	Annually

Facility Name	Type	Frequency
LPFD Fire Station 8	WR	Annually
LPFD Fire Station 10	WR	Annually
L Street Car Wash	WR	Annually
Las Positas Shell	WR	Annually
Livermore Audi	WR	Annually
Livermore Car Wash	WR	Annually
Livermore Dublin Disposal	WR	Annually
Livermore Honda	WR	Annually
Livermore Jaguar	WR	Annually
Livermore Porsche	WR	Annually
Livermore Subaru	WR	Annually
Livermore Police Department	WR	Annually
Mathew's Machinery	WR	Annually
Boat Masters	WR	Annually
City of Livermore, MSC	WR	Annually
Dun-Rite	WR	Annually
Hertz Equipment Rental	WR	Annually
Interstate Storage	WR	Annually
JCs RVs	WR	Annually
Livermore Auto Group-2232 Kitty Hawk	WR	Annually
Livermore Auto Group-2266 Kitty Hawk	WR	Annually

Facility Name	Type	Frequency
Livermore Auto Group-2304 Kitty Hawk	WR	Annually
Mountain Cascade	WR	Annually
Olympic Boat Centers	WR	Annually
Quentin Bammer/Moeller Bros.	WR	Annually
R. Lance & Sons	WR	Annually
SAB Stanley Shell	WR	Annually
SpeeDee Wash	WR	Annually
Sunbelt Rentals	WR	Annually
U.S. Foodservice	WR	Annually
Vasco 76	WR	Annually
Vasco Road Chevron	WR	Annually
White Oak Landscaping	WR	Annually

II. The 5-Year inspection plan detailed below outlines how the City of Livermore will prioritize it's inspection to adequately address the requirements of Provision C.4.b.:

Fiscal Year 2009/2010: All Pretreatment and NOI Facilities identified in Table 1.0 (91 Facilities)

All Facilities Listed under SIC 3599, Industrial and Commercial Machinery and Equipment (19 Facilities)

All Facilities Listed under SIC 3679, Electronic Components Manufacturing (5 Facilities)

All Facilities Listed under SIC 3089, Plastic Products (3 Facilities)

FY 2009/2010: Goal-99 Facility Inspections

Fiscal Year 2010/2011: All Pretreatment and NOI Facilities identified in Table 1.0 (91 Facilities)

All Facilities Listed under SIC 7532, Automotive Body Shops, and

All Facilities Listed under SIC 7538, Automotive Repair Shops (47 Facilities)

All Facilities Listed under SIC 5541, Gasoline Service Stations (27 Facilities)

FY 2010/2011- 165 Facility Inspections

Fiscal Year 2011/2012: All Pretreatment and NOI Facilities identified in Table 1.0 (91 Facilities)

All Facilities Listed under SIC 5812, (149 Facilities)

FY 2011/2012- 240 Facility Inspections

Fiscal Year 2012/2013: All Pretreatment and NOI Facilities identified in Table 1.0 (91 Facilities)

All Facilities Listed under SIC 8711, Engineering Services (17 Facilities)

All Facilities Listed under SIC 8731, R&D Labs-Commercial (5 Facilities)

All Facilities Listed under SIC 8734, Testing Labs (2 Facilities)

All Facilities Listed under SIC 5093, Scrap & Waste Materials (2 Facilities)

All Facilities Listed under SIC 4212, Local Trucking (5 Facilities)

All Facilities Listed under SIC 5261, Retail Nurseries (4 Facilities)

All Facilities Lister under SIC 5211, Lumber and Other Building Material Dealers (7 Facilities)

FY 2012/2013- 133 Facility Inspections

Fiscal Year 2013/2014: All Pretreatment and NOI Facilities identified in Table 1.0 (91 Facilities)

All Facilities Listed under SIC, Restaurant with a Grease Trap or No Grease Removal Device (102 Facilities)

FY 2013/2014- 193 Facility Inspections

The "number" of facilities listed under each SIC in this 5-Year Inspection plan is based upon a query of the City's Business License Database performed in January 2010. Prior to each fiscal year, a new query of the database shall be performed to get the most updated figure for that year's facility type scheduled to be inspected.

C.7. Attachments

BENTHIC MACROINVERTEBRATE (BMI) SAMPLING FORM

Group _____ Team _____ Date: _____ Time: _____ a.m./p.m.

Stream Name: _____ Study Site Location: _____

POLLUTION TOLERANT SPECIES	TOLERATES SOME POLLUTION	INDICATOR SPECIES (Do Not Tolerate Pollution)
_____ Aquatic Worm	_____ Backswimmer	_____ Alderfly
_____ Blackfly	_____ Clam	_____ Caddisfly
_____ Flatworm	_____ Crayfish	_____ Dobsonfly
_____ Leech	_____ Cranefly	_____ Mayfly
_____ Midge Fly	_____ Damselfly	_____ Stonefly
_____ Mosquito	_____ Dragonfly	
_____ Water Snail Eggs	_____ Giant Water Bug	
_____ Water Snail	_____ Scud (Amphipod)	
	_____ Waterboatman	
	_____ Water Beetle Larvae	
	_____ Water Beetle Adult	
	_____ Water Scorpion	
	_____ Water Strider	
Total # Pollution Tolerant Species: _____	Total # of Species That Tolerate Some Pollution: _____	Total # of Indicator Species: _____

Total Number Of Species Found: _____

Name: _____ School: _____ Date: _____

PRE-Test

Multiple Choice

Identify the choice that best completes the statement or answers the question.

____ 1. Which statement best defines turbidity?
   a. Turbidity is a measure of water clarity.
   b. Turbidity measures how acidic or basic a solution is.
   c. Turbidity is the area along the side of the creek typically populated with vegetation.
   d. Turbidity represents the total amount of dissolved solids (salt) in creek water.

____ 2. Most fresh water creeks have a pH range of
   a. 2 - 4
   b. 4 - 6
   c. 6 - 8
   d. 8 - 10

____ 3. Analyze the data in the table to determine a relationship between temperature and dissolved oxygen in water.

Water Temperature (°C)	Dissolved Oxygen (mg/L)
0	14.6
5	12.8
10	11.3
15	10.2
20	9.2
25	8.6
100	0

   a. As water temperature decreases the amount of dissolved oxygen decreases.
   b. As water temperature increases the amount of dissolved oxygen increases.
   c. As water temperature decreases the amount of dissolved oxygen increases.
   d. There is no relationship between water temperature and dissolved oxygen.

Short Answer

4. Name three bodies of water in the Livermore Valley.

_____

_____

_____

5. Water (and garbage!) are flowing downstream from your current location. What is the final destination of the water in your creek?

_____

6. Compare and contrast information presented about sites 1, 2, and 3 to determine which site represents the healthiest creek ecosystem. Justify your answer with at least two facts.

Parameter	**Site #1**	**Site #2**	**Site #3**
Dissolved Oxygen	1ppm	8ppm	2ppm
pH	4.6	7.3	9.6
Turbidity	150 JTU	15 JTU	55 JTU
Temperature	18 °C	12 °C	20 °C
Riparian Zone	There is no riparian zone at this site. The area has been developed and cement boarders the creek on both sides.	There is 30 meters of vegetation on both creek banks. Large trees shade most of the creek water.	There is 5 meters of vegetation on both creek banks. Little to none of the creek is shaded by vegetation.
Pollution	Paved surface surrounds the creek. This increases urban runoff. Also, there are two storm drains located upstream.	Unpaved surface surrounds the creek. This decreases urban runoff. Also, there are no storm drains or point source pollution sites located upstream.	Moderate paved surface Surrounds the creek. This decreases urban runoff. Also, there is one point source pollution source (factory waste water) located upstream.

_____

_____

_____

_____

_____

_____

Name: _____ School: _____ Date: _____

POST-Test

Multiple Choice

Identify the choice that best completes the statement or answers the question.

____ 1. Which statement best defines turbidity?
   a. Turbidity is a measure of water clarity.
   b. Turbidity measures how acidic or basic a solution is.
   c. Turbidity is the area along the side of the creek typically populated with vegetation.
   d. Turbidity represents the total amount of dissolved solids (salt) in creek water.

____ 2. Most fresh water creeks have a pH range of
   a. 2 - 4
   b. 4 - 6
   c. 6 - 8
   d. 8 - 10

____ 3. Analyze the data in the table to determine a relationship between temperature and dissolved oxygen in water.

Water Temperature (°C)	Dissolved Oxygen (mg/L)
0	14.6
5	12.8
10	11.3
15	10.2
20	9.2
25	8.6
100	0

   a. As water temperature decreases the amount of dissolved oxygen decreases.
   b. As water temperature increases the amount of dissolved oxygen increases.
   c. As water temperature decreases the amount of dissolved oxygen increases.
   d. There is no relationship between water temperature and dissolved oxygen.

Short Answer

4. Name three bodies of water in the Livermore Valley.

_____

_____

_____

5. Water (and garbage!) are flowing downstream from your current location. What is the final destination of the water in your creek?

_____

6. Compare and contrast information presented about sites 1, 2, and 3 to determine which site represents the healthiest creek ecosystem. Justify your answer with at least two facts.

Parameter	Site #1	Site #2	Site #3
Dissolved Oxygen	1ppm	8ppm	2ppm
pH	4.6	7.3	9.6
Turbidity	150 JTU	15 JTU	55 JTU
Temperature	18 °C	12 °C	20 °C
Riparian Zone	There is no riparian zone at this site. The area has been developed and cement boarders the creek on both sides.	There is 30 meters of vegetation on both creek banks. Large trees shade most of the creek water.	There is 5 meters of vegetation on both creek banks. Little to none of the creek is shaded by vegetation.
Pollution	Paved surface surrounds the creek. This increases urban runoff. Also, there are two storm drains located upstream.	Unpaved surface surrounds the creek. This decreases urban runoff. Also, there are no storm drains or point source pollution sites located upstream.	Moderate paved surface Surrounds the creek. This decreases urban runoff. Also, there is one point source pollution source (factory waste water) located upstream.

_____

_____

_____

_____

_____

_____

Name(s)_____ Location _____ Date_____

Stream Water Quality Evaluation Sheet

	Measurement	Data	POOR Stream Quality (1)	ADEQUATE Stream Quality (2)	GOOD Stream Quality (3)	EXCELLENT Stream Quality (4)	Score
Physical Properties	**Temperature:** Affects the amount of oxygen that can be dissolved in water, rate of photosynthesis of plants, metabolic rates of animals, and the sensitivity of organisms to toxic wastes, parasites, and diseases.		Above 21°C	18 - 21 °C	14 - 17 °C	Below 14 °C	
	Turbidity (clarity): Turbidity is a measure of cloudiness in water. The more turbid the water, the muddier it looks. Suspended solids in turbid water can clog fish gills, reduce growth rates, decrease resistance to disease, and prevent egg development.		Above 100 JTU	40 – 100 JTU	1 – 39 JTU	0 JTU	
	Total Dissolved Solids: Dissolved solids may include salts, minerals from local geology, and runoff from fertilizers.		Above 530 ppm	271 - 530 ppm	80 – 270 ppm	Below 80 ppm	
Chemical Properties	**pH:** This is a measure of acidity and alkalinity in a solution. Most organisms have adapted to life in water of a specific pH and may die if it changes even slightly.		Below 6.0 or Above 8.0	6.0 - 6.3 or 7.6 - 8.0	6.4 - 6.7 or 7.3 - 7.5	6.8 - 7.2	
	Dissolved Oxygen: Fish, invertebrates, plants, and aerobic bacteria all require oxygen for respiration. Depletions in dissolved oxygen can cause major shifts in the kinds of aquatic organisms found in water bodies.		0 – 1 ppm	2 – 4 ppm	5 – 6 ppm	Above 6 ppm	
Pollution Vulnerability	**Runoff Pollution:** Non-point source pollution comes from diffuse (dispersed) sources such as runoff from chemically fertilized agriculture, and suburban runoff, automotive exhaust, and litter.		All surfaces bordering stream are paved and all land nearby stream is used for agriculture and/or houses.	Moderate amount of paved surface nearby stream with moderate amount of agriculture and/or houses nearby.	Little paved surface nearby stream with little agriculture and/or houses nearby.	No paved surfaces or storm drains nearby stream and no agriculture or houses nearby.	
Biological Properties	**Macroinvertebrates** (water bugs): These are biotic indicators that represent the health of a creek over weeks or months as they spend part or all of their life cycle in the creek.		ONLY pollution tolerant species.	No indicator species.	Indicator species found; less than 10 invertebrate species total.	Indicator species found; 10 or more species of invertebrates found.	
	Riparian Zone: This is the area along the stream banks typically populated with plants that provide crucial habitat for many species.		No plants along stream banks and no trees covering stream.	1 – 10m width of plants on stream banks and 1-33% of stream covered /shaded by trees.	10 – 20m width of plants along steam bank and 34 – 66% of stream covered/ shaded by trees.	More than 20m width of plants along stream bank and more than 66% of stream covered/ shaded by trees	
							Total Score =
Use the total score to rate the overall quality of the stream. To do this find which range your total score falls in and circle that box.			**Overall POOR Stream Quality:** Total Score = 0 – 8	**Overall ADEQUATE Stream Quality:** Total Score = 9 - 16	**Overall GOOD Stream Quality:** Total Score = 17 - 24	**Overall EXCELLENT Stream Quality:** Total Score = 25 - 32	

Describe at least one way to increase the quality of this stream.

Notes:

Parts per million (PPM): This is a way of expressing very dilute concentrations of substances. Just as per cent means out of a hundred, so parts per million or ppm means out of a million. Usually describes the concentration of something in water or soil. One ppm is equivalent to 1 milligram of something per liter of water (mg/l) or 1 milligram of something per kilogram soil (mg/kg).

Total Dissolved Solids (TDS): Includes ***common salts*** of calcium, magnesium, sodium, potassium, bicarbonate, sulfate and chloride; plant ***nutrients*** such as nitrate and phosphate; and ***trace elements*** such as selenium, chromium, and arsenic. The TDS is elevated when water is evaporated. The TDS meter uses electrical conductance to estimate TDS concentration. Electrical conductance is a measure of water's ability to conduct an electrical current. Specific conductance is the electrical conductance of water at 25 degrees Celsius. Furthermore, specific conductance can be used to monitor chemical substances like gas leaking into a groundwater basin from an underground storage tank. The Livermore groundwater basin requires a TDS concentration of 80 to 270 parts per million (ppm) for protection. Typical bottled water has TDS concentration of 80 ppm, and freshwater has a TDS concentration of less than 1,000 ppm.

Turbidity: The Nephelometric Turbidity Unit (NTU) is typically used to measure the clarity of water. The NTU is based on the amount of light that is reflected off particles in the water. The World Water Monitoring Day Kit that you will be using today uses the Jackson Turbidity Unit (JTU) instead of the NTU. The JTU is based on the "inverse measure of the length of a column of water needed to completely obscure a candle flame viewed through it". The NTU measurement is considered a more accurate and updated method.

Tri-Valley Creeks to Bay Day Survey

1 In which city do you live?

- ☐ Livermore
- ☐ Dublin
- ☐ Pleasanton
- ☐ Other (specify):

2 How did you hear about Tri-Valley Creeks to Bay Day?

- ☐ TV
- ☐ Newspaper Ad
- ☐ Radio
- ☐ Internet Search
- ☐ Poster or Flyer
- ☐ Word of Mouth
- ☐ Other (Specify):
- ☐ Livermore Sanitation Newsletter
- ☐ City Community Newsletter
- ☐ City Sewer Bill Message
- ☐ City Employee Email
- ☐ LARPD *Valley Wilds* Newsletter
- ☐ Tri-Valley Conservancy (on-line) Newsletter
- ☐ Lawrence Livermore National Laboratory NewsOnline

3 Do you feel creek pollution is a significant problem in the Tri-Valley?

- ☐ No
- ☐ Yes

4. What did you like best about Tri-Valley Creeks to Bay Day?

5. How could we make Tri-Valley Creeks to Bay Day better next year?

6. Do you plan to participate in Tri-Valley Creeks to Bay Day next year?

7. Are you interested in adopting a site through the Adopt a Creek Spot Program?

C.9. Attachments

COMMERCIAL SERVICES

Orkin Integrated Pest Management Program

Orkin Commercial Services understands your strict need for highly effective *and* environmentally responsible pest control. While other pest control companies may only respond to problems, we take a proactive approach to help keep pests out. Here's a summary of our proposed program, which can help you achieve pest management excellence:

Service: Interior and exterior[1] pest management in accordance with the principles of Integrated Pest Management (IPM). IPM is an environmentally responsible approach to pest management that relies on a combination of practices. By taking advantage of all pest management options, starting with non-chemical techniques, IPM programs proactively manage pests and help minimize any hazard to people, property or the environment.

Service Frequency: An Orkin Commercial Pest Specialist will service your location (checked): x□ 1 time □ 2 times □ 3 times □ 4 times per □ day □ week ⊟ **monthly service for 12 months**

Pest Coverage: Rats, mice, cockroaches, ants and occasional invaders (e.g., beetles, centipedes, slugs). Coverage excludes: flies, fire ants, pharaoh ants, carpenter ants, birds, bed bugs, termites and fumigation treatments. (Excluded pests can be serviced under separate contracts with unique guarantees and service protocols.)

Documentation: Written reports and recommendations will be provided and reviewed with the designated facility representative following each regular service visit. Additional copies will be filed at your local Orkin branch office.

Quality Assurance: Orkin's IPM program is backed by our Quality Assurance program, which guarantees the service you receive meets Orkin's high quality standards – and your own. A follow-up visit by your Orkin Account Manager will be scheduled within 60 days of your initial service. In addition, Orkin's independent Pest and Termite Control Quality Assurance Department regularly audits the services provided by our branch locations to ensure they meet the Orkin standard.

Emergency Service: Included at no extra charge and guaranteed within 24 hours of your call to Orkin, 365 days per year.

Materials: All forms of monitor boards and product formulations, as required, are included.

Insurance: Orkin Commercial Services is fully insured with personal liability and property damage to a limit of $10,000,000.

Triple Guarantee:

- *24-Hour Response Guarantee* – Your request will be responded to within 24 hours, 365 days per year.
- *Satisfaction Guarantee* – Total satisfaction or you don't pay. We'll pay the reasonable cost of initial service by another provider if you're still not satisfied after 60 days of service.
- *Reimbursement Guarantee*[2] – Should your company be fined by a regulatory agency due solely to a pest infestation, Orkin will reimburse you for any fines paid, up to $50,000.

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[1] Exterior coverage extends to property boundaries unless otherwise indicated.

[2] Your account must be current, under contract over 60 days, and your business must be compliant with sanitation and structural requests as noted on Orkin Service Reports.

GREEN PRO CERTIFIED
Eco-Effective Pest Control

GREENPRO
Eco-Effective Pest Control

Presenting this certificate of excellence to

Orkin Pest Control

in acknowledgment of your continuing efforts toward professional excellence and environmental awareness in the pest management industry. You have met the GreenPro testing requirements for eco-effective pest control.

official signature

Orkin Commercial Services understands your strict need for highly effective and environmentally responsible pest control. We take a proactive approach to help keep pests out. Here is a summary of our proposed program, which can help you achieve pest management excellence:

Services: Interior and exterior pest management in accordance with the principles of Integrated Pest Management (IPM). Including attention to the Stipulated Injunction ordered by the U.S. District Court for the Northern District of California, restricting the use of 75 pesticides in eight San Francisco Bay area counties to protect 11 federally listed threatened or endangered species. IPM is an environmentally responsible approach to pest management that relies on a combination of practices, starting with non-chemical techniques (minimizing any hazards to people, property, or the environment). Orkin will inspect the property and work with the designated property manager to investigate the source of the problem – and eliminate it – before applying pesticides by providing recommendations to address education, sanitation/maintenance, exclusion, and trapping where needed. This approach is in accordance with EcoWise, Greenshield, and GreenPro strategies for managing specific pests.

Pesticides: In the rare event that all other methods of pest control have been exhausted and a pesticide must be utilized to eliminate an infestation, pesticides that may be used are in accordance to the San Francisco Reduced Risk Pesticide List, Tier III (least toxic). A list of these pesticides is included below for your reference. All pesticides are applied according to the product label and any pertinent state and federal regulations. Pesticide products are the responsibility of Orkin and are not stored at any client location. At no time shall a pesticide be applied in a waterway or within 100 ft. of a waterway that may subject the waterway to become contaminated by drift or runoff.

Quality Assurance: Orkin's IPM program is backed by our Quality Assurance program, which guarantees the service you receive meets Orkin's high quality standards, GreenPro program standards – and your own. Our service specialists and operations management are licensed by the State of California Structural Pest Control Board. Orkin is certified under the Greenpro standard and is a gold member of the US EPA Pesticide Environmental Stewardship Program. Service specialists at our location are in the process of completing their individual Greenpro certifications at this time.

Documentation: Orkin will provide a copy of a Service Report at each service. This report will include all of the details of the service performed (actions taken, pesticides applied (if any), structural/maintenance/sanitation recommendations to address pest conducive conditions, etc.). We will also provide a quarterly summary of the pesticides used at the following service locations:

Livermore Public Library
1188 S. Livermore Ave.
Livermore, CA 94550

Livermore Police Department
1110 S. Livermore Ave.
Livermore, CA 94550

Livermore City Hall
1052 S. Livermore Ave
Livermore, CA 94550

Livermore Water Treatment Plant
101 W. Jack London Blvd.
Livermore, CA 94551

Fire Station #6
4550 East Ave.
Livermore, CA 94550

Livermore Airport
636 Terminal Circle
Livermore, CA 94551

Livermore Chamber of Commerce
2157 1st St.
Livermore, CA 94550

Fire Station #9
1919 Cordoba St.
Livermore, CA 94550

Springtown Library
998 Bluebell Dr.
Livermore, CA 94551

Old Public Library
1000 S. Livermore Ave.
Livermore, CA 94550

Maintenance Service Center
3500 Robertson Park Rd.
Livermore, CA 94550

City of Livermore
2388 2nd St.
Livermore, CA 94550

City of Livermore
725 Rincon Ave.
Livermore, CA 94550

Fire Station #7
951 Rincon Ave.
Livermore, CA 94550

Fire Station #8
5750 Scenic Ave.
Livermore, CA 94551

Fire Station #10
330 Airway Blvd.
Livermore, CA 94551

Council Chambers
3575 Pacific Ave.
Livermore, CA 94550

Multi Service Center
3311 Pacific Ave.
Livermore, CA 94550

Livermore Gateway Business
101 Pullman St.
Livermore, CA 94551

San Francisco Reduced Risk Pesticide List, Tier III

- **Dupont Advion Ant Bait Arena**, Indoxacarb 0.1%, EPA: 352-664
- **Dupont Advion Ant Gel**, Indoxacarb 0.05%, EPA: 352-746
- **Dupont Advion Cockroach Bait Arena**, Indoxacarb 0.5%, EPA: 352-668
- **Dupont Advion Cockroach Gel Bait**, Indoxacarb 0.6%, EPA: 352-652
- **Prentiss EcoExempt G**, Eugenol (clove oil) 2.9%, EPA: exempt
- **Wellmark Gentrol Point Source Roach Control Device**, Hydroprene 96%, EPA: 2724-469
- **Bayer Maxforce FC Professional Insect Control Roach Killer Bait Gel**, Fipronil 0.01%, EPA: 432-1259
- **Nisus Niban Granular Bait**, Boric Acid 5%, EPA: 64405-2
- **Victor Poison Free Flying Insect Killer**, Mint Oil 4.0%, Sodium Lauryl Sulfate 0.1%, EPA: exempt
- **Victor Poison Free Wasp and Hornet Killer**, Mint Oil 8.0%, Sodium Lauryl sulfate 1.0%, EPA: exempt
- **Zoecon Gentrol IGR Concentrate**, Hydroprene 9%, EPA: 2724-351

Aguiar, Steven

From: Randee J. Geipel <rgeipel@rollins.com>
Sent: Thursday, September 12, 2013 12:09 PM
To: Aguiar, Steven
Cc: Greenwood, Darren; Santiago Avila; Robin Fragosa; Randee J.Geipel
Subject: RE: City of Livermore- Pesticide Use Data

Unfortunately we have not been able to get a hold of that the tickets for the earlier months and so we will no receive those until Monday morning via early morning fed ex from our home office in Atlanta Ga.

I can have this to you by 9 am on Monday.

I am very sorry for the delay.

Randee Geipel - CSS
Orkin Comm'l Branch 664
Livermore Ca

From: Aguiar, Steven [smaguiar@cityoflivermore.net]
Sent: Thursday, September 12, 2013 9:16 AM
To: Randee J. Geipel
Cc: Greenwood, Darren
Subject: RE: City of Livermore- Pesticide Use Data

My deadline is rapidly approaching, and just checking in on the status of the data that I requested. I emailed you last week and left a voice message this morning. If you could please give me an update on the status of things, that would be great. Thanks!

Steve Aguiar
Environmental Compliance Supervisor
Water Resources / Public Works Department
City of Livermore
(925) 960-8126
www.ci.livermore.ca.us

From: Randee J. Geipel [mailto:rgeipel@rollins.com]
Sent: Tuesday, August 27, 2013 11:41 AM
To: Aguiar, Steven
Cc: Randee J. Geipel
Subject: FW: City of Livermore- Pesticide Use Data

Steve, I just wanted to confirm that I heard you correctly, is our deadline 9/15 ?

Randee Geipel - CSS
Orkin Comm'l Branch 664
Livermore Ca

From: Aguiar, Steven [smaguiar@cityoflivermore.net]
Sent: Monday, August 26, 2013 2:28 PM

To: Randee J. Geipel
Subject: FW: City of Livermore- Pesticide Use Data

From: Aguiar, Steven
Sent: Thursday, August 15, 2013 8:16 AM
To: 'branch664@orkin.com'
Subject: City of Livermore- Pesticide Use Data

Attention: Mr. Michael Ware

As we discussed last week while you were out servicing the City of Livermore Water Reclamation Plant, the City is required to submit "pesticide use data" to the San Francisco Bay Regional Water Quality Control Board as part of its annual stormwater program report. Last year, Robin Fragosa supplied me with the attached spreadsheet which satisfied our reporting requirements. I emailed Robin on 07/29/13, but have not heard back from her (I may not have her current email address).

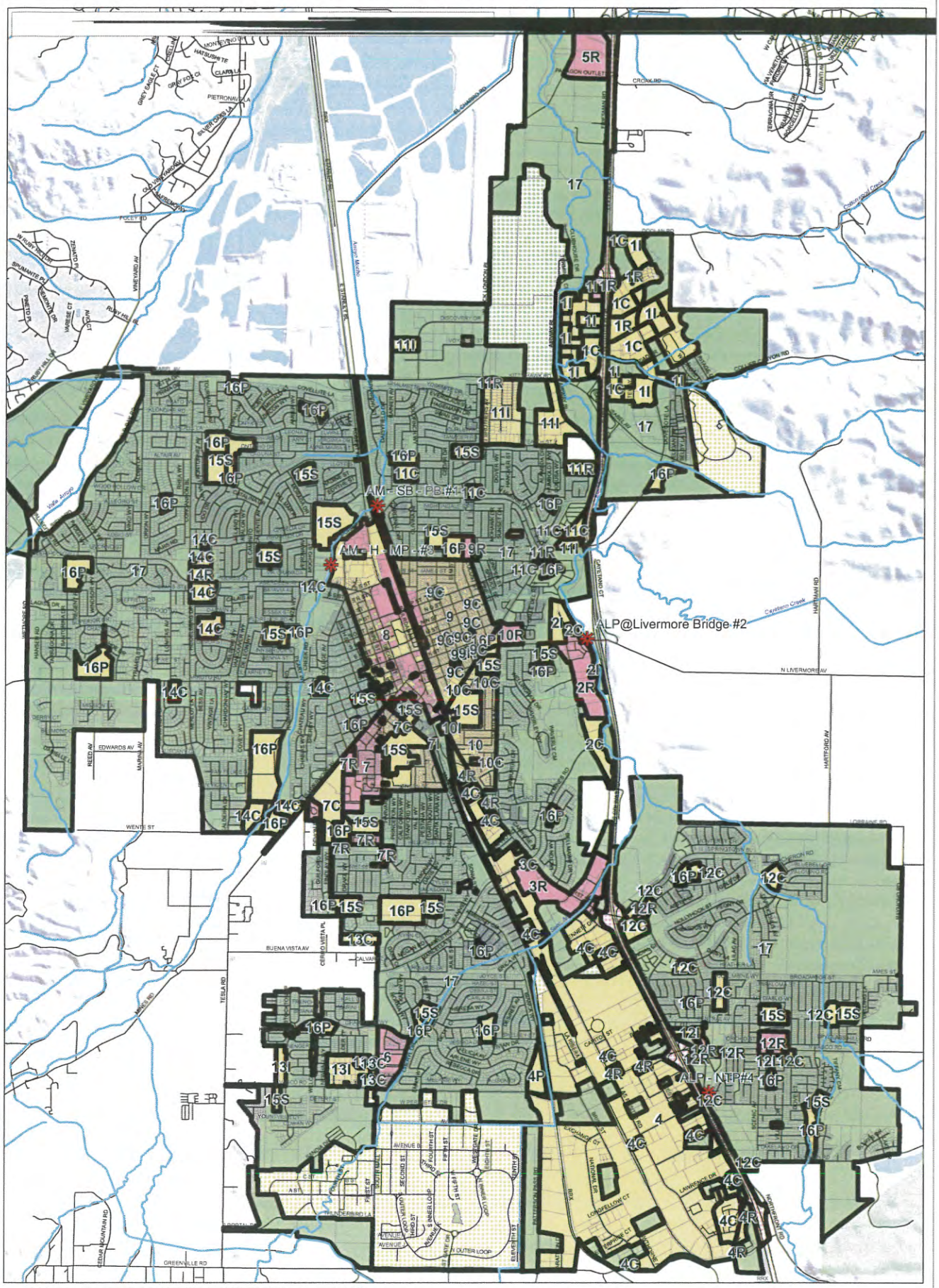
Could you please follow-up or put me in contact with Robin so I can get this data? Specifically, I need "use data" for the period of July 1, 2012 through June 30, 2013. If I could get this information by August 21, 2013, it would be of great assistance.

Thank you for your help!

Steve Aguiar
Environmental Compliance Supervisor
Water Resources / Public Works Department
City of Livermore
(925) 960-8126
www.ci.livermore.ca.us

*** The City of Livermore's anti-virus application (eSafe) scanned this email for malicious content ***
*** IMPORTANT: Do not open attachments from unrecognized senders ***

C.10. Attachments



Legend

Trash Generation Category

- Low
- Medium
- High
- Very High

- Creek/Shoreline Hotspot
- Trash Management Area
- Non-Jurisdictional (Dot color = Generation Category)

- Streets
- Agency Boundary
- Creeks
- Parcel Boundary

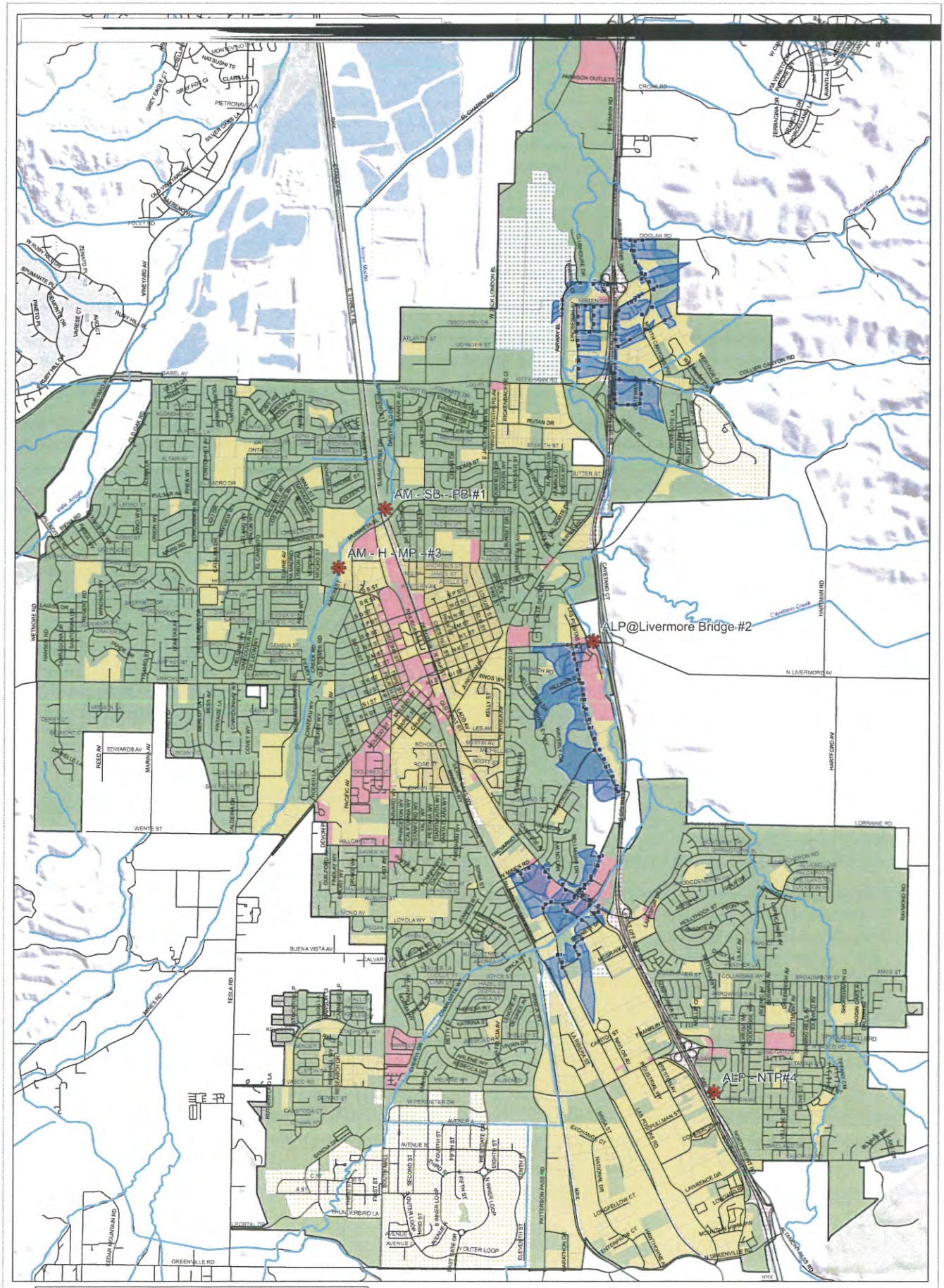
0 0.225 0.45 0.9 Miles

Data Sources:
Roads: Alameda County
City Boundaries: Alameda County
Background: ESRI World Topographic Map

Map Created By:
EOA, Inc.

Date:
September 5th, 2013

[redacted]



Legend

Trash Generation Category

- Low
- Medium
- High
- Very High

- Creek/Shoreline Hotspot
- Full-Capture Location
- Full Trash Capture
- Non-Jurisdictional (Dot color = Generation Category)

- Streets
- Agency Boundary
- Creeks
- Parcel Boundary

N

0 0.25 0.5 1 Miles

Data Sources:
Roads: Alameda County
City Boundaries: Alameda County
Background: ESRI World Topographic Map

Map Created By:
EOA, Inc.

Date:
September 5th, 2013