CITY OF SUISUN CITY

701 Civic Center Blvd.
Suisun City, California 94585

Incorporated October 9, 1868

September 30, 2016

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

Attention: Ms. Selina Louie, Water Resources Control Engineer

Reference: Fairfield-Suisun Urban Runoff Management Program - FY 2015-2016 Annual Report

Dear Mr. Wolfe:

The attached FY 2015-2016 Annual Report represents the Fairfield-Suisun Urban Runoff Management Program's responses to the items requested per Provision C.16 of NPDES Permit No. CAS612008 (Permit) as adopted on November 18, 2015 via Order No. R2-2015-0049. This letter also transmits by reference the BASMAA Regional Supplements to the Annual Report for FY 2015-2016.

I certify under penalty of law that this document was 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 who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Timothy McSorley, P.E.
Public Works & Building Director

Attachment

FY 2015-2016 Annual Report
Permittee Name: City of Suisun City
ATTACHMENT B

Table of Contents

Section **Page**

Section 1 – Permittee Information

Background Information					
Permittee Name:	City of Suisun City				
Population:	28,900				
NPDES Permit No.:	CAS612008 (San Francisco Bay RWQCB Permit)				
Order Number:	R2-2015-0049 (San Francisco Bay RWQCB Permit)				
Reporting Time Period (month/year):	July , 2015 through June 30, 2016				
Name of the Responsible Authority:	Tim McSorley			Title:	Director of Building & Public Works
Mailing Address:	701 Civic Center Blvd.				
City: Suisun City		Zip Code:	94585	County:	Solano
Telephone Number:	707-421-7316		Fax Number:		707-429-3758
E-mail Address:	tmcsorley@suisun.com				
Name of the Designated Storm water Management Program Contact (if different from above):	Lee Braddock Evans			Title:	Associate Engineer/ Project Manager
Department:	Engineering				
Mailing Address:	701 Civic Center Blvd.				
City: Suisun City		Zip Code:	94585	County:	Solano
Telephone Number:	707-421-7343		Fax Number:		707-429-3758
E-mail Address:	levans@suisun.com				

Section 2 - Provision C.2 Reporting Municipal Operations

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

Summary:
See FSURMP Annual Report and BASMAA's Regional Annual Report for FY 2015-2016 for a summary of activities conducted program wide and on regionally on the City's behalf.

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 storm water
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: **None.**

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 storm water
Y	Implementation of the BASMAA Mobile Surface Cleaner Program BMPs

Comments: **None.**

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: **None.**

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

Does your municipality own/maintain rural[1] roads:		Yes	X	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.

NA	Control of road-related erosion and sediment transport from road design, construction, maintenance, and repairs in rural areas
NA	Identification and prioritization of rural road maintenance based on soil erosion potential, slope steepness, and stream habitat resources
NA	No impact to creek functions including migratory fish passage during construction of roads and culverts
NA	Inspection of rural roads for structural integrity and prevention of impact on water quality
NA	Maintenance of rural roads adjacent to streams and riparian habitat to reduce erosion, replace damaging shotgun culverts and excessive erosion
NA	Re-grading of unpaved rural roads to slope outward where consistent with road engineering safety standards, and installation of water bars as appropriate
NA	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: **None.**

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

C.2.f. ►Corporation Yard BMP Implementation

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

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

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

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

Comments: **None.**

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**
Suisun City Corp Yard	**12/15/15**	**Jeff Penrod everything was stocked**	**Nothing needed**

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

C.3.a. ►New Development and Redevelopment Performance Standard Implementation Summary Report

(For FY 15-16 Annual Report only) Provide a brief summary of the methods of implementation of Provisions C.3.a.i.(1)-(8).

Summary:

Guidance: Provide a brief summary for each of the following:

(1) Municipality's legal authority to implement C.3; The NPDES Permit No.CAS612008

(2) Municipality's development review and permitting procedures, including use of conditions of approval or other enforceable mechanisms; To encourage the inclusion of adequate site design measures that might include minimizing land disturbance and impervious surfaces (parking lots); clustering of structures and pavement; directing roof runoff to vegetative areas

(3) How water quality effects and mitigation measures are addressed in environmental reviews (e.g., CEQA); Evaluate potential water quality effects and identify appropriate mitigation measures when conducting environmental reviews.

(4) C.3 training for appropriate departments (Program will report on training at the countywide level); Training adequate to implement the requirements of C.3 provisions for staff, including interdepartmental training.

(5) Outreach/education efforts to staff, developers, contractors, construction site operators and owner/builders; Fairfield- Suisun Urban Runoff Management Program Storm Water C.3 Guidebook is provided early in the planning process. Radio station 95.3 KUIC posts education efforts to keep our streams and rivers clean of trash and it all starts with us.

(6) How your municipality encourages site design measures at unregulated projects subject to Planning/Building Department review; Fairfield- Suisun Urban Runoff Management Program Storm Water C.3 Guidebook is provided early in the planning process that informs the applicant of design mitigation measures, they can implement on their project to comply with Storm Water Regulations.

(7) How your municipality encourages source control measures at unregulated projects subject to Planning/Building Department review; Fairfield- Suisun Urban Runoff Management Program Storm Water C.3 Guidebook is provides early in the planning process . This enables the applicant and encourages source control measures for them to use on their project to meet compliance.

(8) General Plan revisions (if needed) to integrate water quality/watershed protection with water supply, flood protection, habitat protection, groundwater recharge, and other sustainable development principles and policies. Include dates of General Plan revisions. Our General plan was adopted May 2015 and Chapters 3, 7, 8, 9 covers all the above items.

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

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

C.3.c.ii►Design Specifications for Pervious Pavement Systems

(For FY 2015-16 Annual Report only). Submit design specifications for pervious pavement systems that have been developed and adopted on a regional or countywide basis. If design specifications have been adopted and are contained in a Countywide storm water handbook, include a reference to the handbook.

Summary:

The City of Suisun City is following the design specifications included in the BASMAA's Pervious Pavement Fact Sheet.

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

Is your agency choosing to require 100% LID treatment onsite for all Regulated Projects and not allow alternative compliance under Provision C.3.e.?	X	**Yes**		**No**

Comments (optional): **None**

C.3.e.v ► Special Projects Reporting

1. In FY 2015-16, has your agency received, but not yet granted final discretionary approval of, a development permit application for a project that has been identified as a potential Special Project based on criteria listed in MRP Provision C.3.e.ii(2) for any of the three categories of Special Projects (Categories A, B or C)?		**Yes**	x	**No**
2. In FY 2015-16, has your agency granted final discretionary approval to a Special Project? If yes, include the project in both the **C.3.b.iv.(2)** Table, and the **C.3.e.v.** Table.		**Yes**	x	**No**

N/A

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

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

Guidance (all Permittees): Complete the attached Table C.3.h.v(2) or attach your own table including the same information. Include the following text (if applicable). This is an optional section of the Annual Report; however, if a Permittees does not provide the required information in this section, the Permittee must report the information to the vector control agency and Water Board in a separate submittal prior to the wet season.

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

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

Option 1 – Reporting Site Inspections	Number/Percentage
Total number of Regulated Projects (including offsite projects, and Regional Projects) in your agency's database or tabular format at the end of the previous fiscal year (FY14-15)	**5**
Total number of Regulated Projects (including offsite projects, and Regional Projects) in your agency's database or tabular format at the end of the reporting period (FY 15-16)	**5**
Total number of Regulated Projects (including offsite projects, and Regional Projects) for which O&M verification inspections were conducted during the reporting period (FY 15-16)	**2**
Percentage of the total number of Regulated Projects (including offsite projects, and Regional Projects) inspected during the reporting period (FY 15-16)	**40%**[2]
Option 2 – Reporting Stormwater Treatment System Inspections (Note: This option is available during FY 15-16 only)	
Total number of stormwater treatment and HM systems in your agency's database or tabular format at the end of the previous fiscal year (FY 14-15)	**5**
Total number of stormwater treatment systems in your agency's database or tabular format at the end of the reporting period (FY 15-16)	**5**
Total number of stormwater treatment and HM systems inspected in the reporting period (FY 15-16)	**2**
Percentage of stormwater treatment and HM systems inspected in the reporting period (FY 15-16)	**40%**[3]

[2] Based on the number of Regulated Projects in the database or tabular format at the end of the previous fiscal year (FY 14-15), per MRP Provision C.3.h.ii.(6)(b).

[3] Based on the number of stormwater treatment and HM systems database or tabular format at the end of the previous fiscal year (FY 14-15), per MRP Provision C.3.h.ii.(6)(b).

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

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

Summary:

The inspection findings for this year were positive the facilities inspected at Breezewood Apartments a Vortex separator was clean of all debris and looked well maintained. When spot checked The O& M agreement has Asset Management Staff check it quarterly and cleaned once a year when needed. It was clean.

The Cottonwood Apartments has a Bio-retention system and was clean and in good shape plants look good and well maintained. O & M have the maintenance folks clean it every couple of months.

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 Operations & Maintenance (O&M) Program continues to work effectively. As state above, field inspections have shown that there are few, if any maintenance problems with the system. No Suggested changes are proposed at this time.**

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

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

Summary:

BASMAA created four Fact Sheets which contain acceptable standard specifications for site design measurements (listed in Provision C.3.i) which are available as a resource to all Permittees. Local ordinances/policies/procedures/forms & checklists have all been modified so that all applicable projects approved after December 1, 2012 are required to implement at least one of the site design measures listed in Provision C.3.i.

The following Program and BASMAA products are being used for C.3.i implementation:

BASMAA's Site Design Fact Sheets

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

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

Summary:

City staff is in the process of developing a comprehensive presentation on Green Infrastructures to City of Suisun City council, which will take place in a few months.

Please refer to the Countywide Program FY 15-16, Annual Report for a summary of implementation at the Countywide level.

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

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

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

Background Information:

Describe how this provision is being implemented by your agency, including the process used by your agency to identify projects with potential for green infrastructure, if applicable.

City Staff refer to BASMAA guidance on identifying and reviewing potential green infrastructure projects, diverting runoff from existing streets, roofs and parking lots to one of two storm water strategies: 1- Dispersal to vegetated areas, where sufficient landscaped area is available and slopes are not too steep. 2 LID (bio-retention and infiltration) facilities, built according to criteria similar to those currently required for regulated private development and redevelopment projects under provision C.3

Summary of Planning or Implementation Status of Identified Projects: **The City of Suisun City is anticipating more green infrastructure projects in the future using BASMA guidelines, currently the City has not had a lot of projects to implement or one of**

Rail Road Avenue Extension will incorporate Green Infrastructure

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

On an annual basis, report on the goals and outcomes during the reporting year of work undertaken to participate in processes to promote green infrastructure.
City of Suisun City staff working with other co-permittees as part of the BASMAA Development Committee to coordinate and promote Green Infrastructure throughout our region. Refer to Program FY15-16 Annual Report for the summary of efforts conducted at Regional, State, and Federal plan, design and funding of Green Infrastructure into local CIP and Transportation projects.

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

On an annual basis, report progress on development and implementation of methods to track and report implementation of green infrastructure measures and provide reasonable assurance that wasteload allocations for TMDLs are being met.
City staff has been using the Program's FY 15-16 Annual Report for a summary of methods being developed to track and report implementation of green infrastructure measures.

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

Project Name Project No.	Project Location[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 (ft^2)[14]	Total Replaced Impervious Surface Area (ft^2)[15]	Total Pre-Project Impervious Surface Area[16] (ft^2)	Total Post-Project Impervious Surface Area[17] (ft^2)
Private Projects											
McCoy Creek Gray Hawk	Suisun City, McCoy Creek Gray Hawk	Harbor Park LLC	2	5- Residential Homes/ built Finishing up left over parcels from 2006	Suisun Slough	0.42	0.42	14,746	NA	NA	14,746
Zephyr Estates Jubilee	Suisun City, Walters Road & East Tabor Avenue	Seeno Homes	1	Residential Homes- Only 3-Models completed and Right of Way improvements	Suisun Slough	8.6	8.6	97,220	NA	0	97,220
Public Projects											
Lawler Ranch Park Phase II	Suisun City, Lawler Ranch Parkway	City of Suisun	2	Improvements to an existing neighborhood park. The improvements are to additional 8-acres that are adjacent to the park	Suisun Slough	8	8	7980	NA	0	7980

Comments: **None**

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

Project Name Project No.	Application Deemed Complete Date[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										
Zephyr Estates	July 2015	NA	Bio-retention	Yes	Yes	Contractor until completed. Then City will maintain.	yes	NA	NA	NA

[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.iv.(2) ▶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										
Oil Grant	5-24-2016	May 23, 2016	NA	12 Catch Basin Screens w/ oil pigs One Full capture cage for catch basin	5-4-16	City Crew	NA	NA	NA	NA
Comments: **All items were prefab at contractors shop. Installed in one day. For portion of TMA 1 handling about 8.5 acres.**										

[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.h.v.(2). ►Table of Newly Installed[41] Stormwater Treatment Systems and Hydromodification Management (HM) Controls (Optional)

Fill in table below or attach your own table including the same information. **Guidance: The table is intended to 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. Countywide programs (or in some cases, individual permittees) will submit these tables to vector control agencies 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. Do not leave any cells blank.**

Name of Facility	Address of Facility	Party Responsible[42] For Maintenance	Type of Treatment/HM Control(s)
Catch Basin Curb Screen	West side Grizzly Island Rd. across from Anderson Drive	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	North side Anderson Drive /Grizzly Island Rd.	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	South side Anderson Drive /Grizzly Island Rd.	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	North side Anderson Drive 250feet from Grizzly Island Rd.	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	North side of Anderson Drive / West side of Lawler Center	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	North side of Anderson Drive / East side of Lawler Center	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	South side of McCoy Creek Way / West side of Lawler Center	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	South side of McCoy Creek Way / East side of Lawler Center	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	South side of McCoy Creek Way / 100 ft. East side of Lawler Center	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	East side Grizzly Island Rd / North side of McCoy Creek Way	City of Suisun City Public Works	Full Capture screen with oil pig
Catch Basin Curb Screen	East side Grizzly Island Rd / South side of McCoy Creek Way	City of Suisun City Public Works	Full Capture screen with oil pig

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

C.3.h.v.(2). ►Table of Newly Installed[41] Stormwater Treatment Systems and Hydromodification Management (HM) Controls (Optional)

Fill in table below or attach your own table including the same information. **Guidance: The table is intended to 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. Countywide programs (or in some cases, individual permittees) will submit these tables to vector control agencies 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. Do not leave any cells blank.**

Name of Facility	Address of Facility	Party Responsible[42] For Maintenance	Type of Treatment/HM Control(s)
Catch Basin Curb Screen	East side of Grizzly Island / North side of Gray Hawk Lane	City of Suisun City Public Works	Full Capture screen with oil pig
Full Capture Cage installed in Catch Basin	East side of Grizzly Island / South side of Gray Hawk Lane	City of Suisun City Public Works	Sweeper vacuum out trash

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

Reporting Period – July 1 2015 - June 30, 2016
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[43]	Status[44]	Description[45]	Site Total Acreage	Gross Density DU/Acre	Density FAR	Special Project Category[46]	LID Treatment Reduction Credit Available[47]	List of LID Stormwater Treatment Systems[48]	List of Non-LID Stormwater Treatment Systems[49]
Name of the Special Project and Project No. (if applicable)	Name of the Permittee in whose jurisdiction the Special Project will be built	Address of the Special Project; if no street address, state the cross streets	See footnote	See footnote	See footnote	Total site area in acres	Number of dwelling units per acre.	Floor Area Ratio	Category A: Category B: Category C: Location: Density: Parking: See footnote	Category A: Category B: Category C: Location: Density: Parking: See footnote	Indicate each type of LID treatment system and % of total runoff treated. See footnote	Indicate each type of non-LID treatment system and % of total runoff treated. Indicate whether minimum design criteria met or certification received See footnote
NA	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

[43]Date that a planning application for the Special Project was submitted.
[44] 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.
[45]Type of project (commercial, mixed-use, residential), number of floors, number of units, type of parking, and other relevant information.
[46] For each applicable Special Project Category, list the specific criteria applied to determine applicability. For each non-applicable Special Project Category, indicate n/a.
[47]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.
[48]: 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.
[49]List all non-LID stormwater treatment systems proposed. For each type of non-LID treatment system, indicate: (1) the percentage of the total amount of runoff identified in Provision C.3.d. for the Special Project's drainage area, and (2) whether the treatment system either meets minimum design criteria published by a government agency or received certification issued by a government agency, and reference the applicable criteria or certification.

Special Projects Narrative No Commment

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

Project Name and Location[44]	Project Description	Status[45]	GI Included?[46]	Description of GI Measures Considered and/or Proposed or Why GI is Impracticable to Implement[47]
NA	NA	NA	NA	NA

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

Project Name and Location[48]	Project Description	Planning or Implementation Status	Green Infrastructure Measures Included
NA	NA	NA	NA
NA	NA	NA	NA
NA	NA	NA	NA

[44] List each public project that is going through your agency's process for identifying projects with green infrastructure potential.
[45] Indicate status of project, such as: beginning design, under design (or X% design), projected completion date, completed final design date, etc.
[46] Enter "Yes" if project will include GI measures, "No" if GI measures are impracticable to implement, or "TBD" if this has not yet been determined.
[47] Provide a summary of how each public infrastructure project with green infrastructure potential will include green infrastructure measures to the maximum extent practicable during the permit term. If review of the project indicates that implementation of green infrastructure measures is not practicable, provide the reasons why green infrastructure measures are impracticable to implement.
[48] List each planned (and expected to be funded) public and private green infrastructure project that is not also a Regulated Project as defined in Provision C.3.b.ii. Note that funding for green infrastructure components may be anticipated but is not guaranteed to be available or sufficient.

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

Program Highlights and Evaluation

Highlight/summarize activities for reporting year:

Summary:

The Program contracts with the Solano County Department of Resource Management to conduct storm water inspections of industrial, commercial and food handling businesses within the Program area. The Program updates the Business Inspection Plan as necessary to keep the document current. Changes are made to facilities lists upon observations of facilities closing or a change in compliance status resulting in a reduction or increase in inspection frequency. Specific information on the number of facilities inspected, types of violations incurred and resolution of violations within reasonable time periods is included in each city's 2015-2016 Annual Report as required by the Water Board.

Three training events for the Industrial and Commercial Inspectors were held this fiscal year. The Solano Health Inspector training was performed on February 12, 2016. The focus of the training was consistency in enforcement levels, enforcement authority; trash hot spots and outreach; city storm water ordinances; high-priority facilities needed to be inspected during the fiscal year and enforcement levels associated with illegal discharges.

Additionally, in an attempt to increase efficiencies, the responsibility for follow up inspections has been transferred to city staff. As a result of this change two additional training sessions occurred during the year. On April 5, 2016, the City of Suisun's Chief of Police and the Code Enforcement Division were trained for follow inspections. Subsequently, on May 31, 2016 the Fairfield Public Works Department and a member of the Code Enforcement Division were trained for follow up inspections.

The Program Management team meets on a monthly basis to discuss important Program issues including commercial, industrial and restaurant inspections. The Program also participates in the Municipal Operations Committee meeting on a regional level, which was originally intended to discuss Industrial and Commercial Site Controls.

C.4.b.iii ► 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 storm water runoff.

The Potential Facilities List is attached as required.

C.4.b.iii.(1) - Potential Facilites List - Suisun City

No	Facility Name	Address	Zip Code	Phone No	SIC
1	7-Eleven - Sunset Ave	801 Sunset Ave	94585	399-9028	5921
2	7-Eleven, Gawfco	115 Sunset	94585	429-0461	5541
3	A & E Automotive Sales	631 Railroad Ave, Ste G	94585	422-2323	5541
4	AFC Sushi	270 Sunset Ave	94585	426-1023	5812
5	Allen Simmons Heating & Sheet Metal	9320 W Cordelia Rd	94585	864-0392	1711
6	Arco AM PM Mini Mart - Marina	299 Marina Blvd.	94585	421-0819	5411
7	Asian Market	311 Marina Center	94585	43-4884	5411
8	Athenian Grill	750 Kellogg St	94585	425-0500	5812
9	Auto Zone Corporation	288 Sunset Ave	94585	428-3994	5531
10	Babs Delta Diner	770 Kellogg St	94585	421-1674	5812
11	Bay Area Electric Railroad	5848 State Hwy 12	94585	374-2978	5812
12	Bertha's Restaurant	413 Marina Center	94585	399-8507	5812
13	Black Bear Diner	111 Sunset Ave	94585	422-4386	5812
14	Body Craft	50 Main Street B,C,D	94585	399-0363	7532
15	Bonfare Market #37	1500 Walters Rd	94585	425-1284	5541
16	Bonfare Market #37 - Petersen Rd	1500 Petersen Rd	94585	428-1212	5541
17	Burger King - Anderson Dr	1260 Anderson Dr	94585	428-7185	5812
18	California Marine Sports	1240 Kellogg St	94585	864-2500	5551
19	Cast Iron Grill	700 Main St, Ste 104	94585	425-1700	5812
20	Chalden Industries	519 Railroad Ave	94585	422-4557	7538
21	Cheese Steak Shop	284 Sunset Ave "A"	94585	437-3020	5812
22	Chevron - Sunset Center	113 Sunset Center	94585	421-9323	5541
23	Chevron Mini Mart	113 Sunset Ave	94585	421-9323	5541
24	Chevron Mini Mart/Togo's/Baskin Robbins	1200 Anderson Dr	94585	423-1956	5411
25	Chicken Express	1240 Anderson Dr, #101	94585	421-1100	5812
26	Chocolate Mexican Café	700 Main St	94585	399-8815	5812
27	City of Suisun City (PD)	701 Civic Center Blvd.	94585	421-7300	9221
28	Crescent Elementary school	1101 Anderson Rd	94585	435-2771	8211
29	Crystal Middle School	400 Whispering Bay	94585	435-5891	8211
30	Dan O' Root Elem. School	820 Harrier Dr	94585	421-4002	8211
31	Del Taco - Sunset Ave	282 Sunset Ave	94585	425-1863	5812
32	Dimitri's Lounge	700 Main Street #106	94585	419-5204	5812
33	Dollar Tree #3973	250 Sunset Ave #A	94585	422-5122	5719
34	DWR - Cordelia Dumping Plant	235 Mangels Blvd	94585	437-5105	4941
35	Dynasty Chinese Restaurant	254 Sunset Ave "B"	94585	426-6222	5812
36	Equilibrium Tuning	631 Railroad Ave, Ste A	94585	425-2137	7538
37	F.P. Smith Equipment	3190 Ramsey Rd	94585	864-1121	3714
38	Fairfield Construction Supply	405 A Railroad Ave	94585	421-8008	5211
39	Fairfield U-Save Liquor	1240 Anderson Dr, #104	94585	425-3277	5921
40	Family Cookie Co. Outlet Store	304 Spring St	94585	373-5379	5812
41	FSSD LS - Lawler Ranch 2	1159 Lawler Ranch	94585	429-3233	4619
42	FSSD PS - Suisun	755 Civic Center Blvd	94585	429-3233	4619
43	Garton Tractor, Inc.	4088 Russell Rd	94585	430-3609	7538

C.4.b.iii.(1) - Potential Facilites List - Suisun City

No	Facility Name	Address	Zip Code	Phone No	SIC
44	Golden Grill Mongolian Bar BBQ	121 Sunset Ave "A"	94585	425-6555	5812
45	Hampton Inn & Suites	2 Harbor Center	94585	429-0900	7011
46	Hi Tech Auto Services	237 Benton Ct	94585	427-5220	7538
47	Hollywood Video - Sunset	278 Sunset Ave	94585	425-1036	7841
48	Il Florello Olive Oil Co.	2625 Mankas Corner Rd	94534		5812
49	Independence Auto, Inc.	110 Railroad Ave., Suite E		428-0554	5541
50	Jack in the Box - Suisun	499 Grizzly Island Rd "C"	94585	426-6119	5812
51	Joy of Eating #2	535 Solano St	94585	426-1147	5812
52	K Thai Palace	603 Main St	94585	428-0888	5812
53	Kentucky Fried Chicken/Pizza Hut	173 Sunset Ave	94585	427-2521	5812
54	La Cabana	325 Main St	94585	438-1845	5812
55	Lechon Station	303 Marina Center	94558	290-3960	5812
56	Main Street Bar & Grill	627 Main Street	94585	428-6270	5812
57	Marina Market & Deli	101 Marina Center	94585	425-6660	5411
58	McDonald's - Sunset Ave	109 Sunset Ave	94585	426-6235	5812
59	Meals on Wheels of Solano	95 Marina Center	94585	426-3079	5812
60	Meals on Wheels of Suisun Senior Center	318 Merganser	94585	426-3079	8361
61	Metro PCS - Wigeon	586 Wigeon Way	94585		4812
62	Munchies	274 Sunset Ave, "G"	94585	427-2673	5812
63	NorCal Concrete	Pennsylvania & Cordelia	94585	425-6144	3531
64	Northbay Auto Body Shop	631 Railroad Ave B	94533	427-0220	7532
65	P & M Auto Repair	50 Main St	94585	435-8318	7549
66	Panda Express - Lawler Center Dr	402 Lawler Center Dr	94585	421-1156	5812
67	Pane E Vino	201 Main St #A	94585	421-0500	5812
68	Papa Murphy's Pizza	131 Sunset Ave #D	94585	434-9999	5812
69	Park Place Cleaners	258 E Sunset Ave	94585	427-1478	7212
70	Pit Stop Auto Repair	108 F Railroad Ave	94585	426-6400	7538
71	Popeye's Chicken & Bisquits	1210 Anderson Dr	94585	423-1929	5812
72	Port of Subs	274 Sunset Ave, Ste C	94585	442-7762	5812
73	Puerto Vallarta Restaurant	301 Main St	94585	429-9384	5812
74	Qwest Communications	95 Cordelia Rd	94585	421-9471	4812
75	Raley's #330	270 Sunset Ave	94585	426-1023	5411
76	Ramirez Towing	1502 Humphrey Dr	94585	422-0974	7538
77	Rite Aid	135 Sunset Ave	94585	426-4242	5912
78	Round Table Pizza - Sunset Ave	288 Sunset Ave, Ste J	94585	421-0155	5812
79	Rudy's Auto Body & Frame	1502 Humphrey Dr	94585	422-1072	7538
80	Smoke Paradise	141 Sunset Ave	94585	386-2326	5993
81	Solano Irrigation District (Suisun Sports Complex)	4555 Petersen Rd	94585	455-4028	7941
82	Starbread	1240 Anderson Dr., #103	94585	422-9786	5461
83	Starbucks - Sunset Ave	193 Sunset Ave, "A"	94585	429-1867	5812
84	Subway #42620	700 Main St #108	94585	434-0204	5812

C.4.b.iii.(1) - Potential Facilites List - Suisun City

No	Facility Name	Address	Zip Code	Phone No	SIC
85	Suisun City Corp. Yard	4555 Peterson Rd	94585	421-7349	9621
86	Suisun City Flyers	200 Sunset Ave	94585	421-0384	5541
87	Suisun City Lambrecht Sports	4479 Peterson Rd	94585	421-7200	5812
88	Suisun City Marina	1240 Kellogg St	94585	421-7313	4493
89	Suisun Community Center	611 Village Dr	94585	421-7200	8322
90	Suisun Elem. School	725 Golden Eye Way	94585	399-5017	8211
91	Suisun Oriental Store	108 Sunset "D"	94585	421-0555	5411
92	Suisun Port of Call	715 Main St	94585	429-5016	5812
93	Suisun Roofing Supply, Inc.	260 Benton Ct	94585	425-1026	1761
94	Suisun Seafood Center	303 Lawler Center Dr	94585	399-9229	5812
95	Suisun Valley Joint School District	4985 Lambert Rd	94585	435-2883	8211
96	Suisun Wine & Spirits	141-A Sunset Avenue	94585	290-8530	2084
97	Sukho Thai Cuisine	258 Sunset Ave "C"	94585	399-8833	5812
98	Sunset Donuts	141 Sunset Ave "C"	94585	422-5577	5812
99	Sunset Flyers	200 Sunset Dr	94585	421-0384	5541
100	Sunset Shell - Sunset Ave	200 Sunset Ave,	94585	421-0384	5541
101	Suruki's Sushi & Teriyaki Grill	121 Sunset Ave, G	94585	427-2633	5812
102	T.O.E. Performance	211 Driftwood Dr	94585	425-2996	7538
103	Taco Bell #2915	109 Sunset Ave	94585	426-5490	5812
104	Taqueria El Farolito	131 Sunset Ave	94585	422-3390	5812
105	Taqueria Tepa	501 Main St, #D	94585	429-0120	5812
106	Tasuke Restaurant	314 Spring St	94585	427-1221	5812
107	T-Mobile West - Petersen	4479 Petersen Rd	94585		4812
108	T-Mobile West - Sunset	333 Sunset Ave	94585		4812
109	Tower Mart #99	4155 Suisun Valley Rd	94585	864-1608	5541
110	TruGreen LandCare	393 Watt Dr, #D	94585	864-5594	782
111	Union Pacific Railroad	110 Cordelia Rd	94585	891-7862	3743
112	Upper Echelons	96 Railroad Ave., Ste. C	94585	421-2800	5513
113	Verizon	300 Main Street	94585	372-0022	3663
114	Virgil's Bait Shop	201 Main St	94585	425-5518	5411

Facilities Scheduled for Inspection - Suisun City

No	Facility Name	Address	ZipCode	Phone	SIC	SW Permit
1	Lawler Chevron	1200 Anderson Dr	94585	423-1956	5541	No

C.4.d.iii.(1)(a) ►Facility Inspections

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

X	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	83	
Total number of inspections conducted	85	
Number of violations (excluding verbal warnings)	1	
Sites inspected in violation	1	
Violations resolved within 10 working days or otherwise deemed resolved in a longer but still timely manner	0	

Comments:

1) **the Program industrial-commercial and restaurant inspection forms have been designed so when a facility is seen as being free of violations and without threat to the environment all the of the inspection form line items are checked "yes" and the "In Compliance with Pollution Control requirements" box is checked "yes".**

   Where the inspection box is not checked "yes" and the "no" box is marked the facility is seen as not being "In compliance with pollution control requirements" they are incorporated into the "Number of violations" totaled above. The level of enforcement of the offense is delineated in an annual training given to the inspectors.

2) **All violations were resolved within 10 days as required by the MRP.**

C.4.d.iii.(1)(b) ►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)	0
Potential discharge and other	1

Comments:

All violations were resolved within 10 days as required by the MRP.

C.4.d.iii.(1)(b) ▶ Frequency and Type of Enforcement Conducted

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

	Enforcement Action (as listed in ERP)[49]	Number of Enforcement Actions Taken	% of Enforcement Actions Taken[50]
Level 1	**Verbal Notice**	**1**	**100%**
Level 2	**Notice to Comply**	**0**	**0%**
Level 3	**Notice of Violation**	**0**	**0%**
Level 4	**Stop Work / Administrative Fine**	**0**	**0%**
Total		**1**	**100%**

[49]Agencies to list specific enforcement actions as defined in their ERPs.
[50]Percentage calculated as number of each type of enforcement action divided by the total number of enforcement actions.

C.4.d.iii.(1)(c) ►Types of Violations Noted by Business Category

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

Business Category[51]	Number of Actual Discharge Violations	Number of Potential/Other Discharge Violations
Automotive and Gasoline Service Station	0	1

C.4.d.iii.(1)(d) ►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:

No non-filers were discovered this year.

C.4.e.iii ►Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Industrial/ Commercial Site Inspectors in Attendance	Percent of Industrial/ Commercial Site Inspectors in Attendance	No. of IDDE Inspectors in Attendance	Percent of IDDE Inspectors in Attendance
Solano County Annual Refresher Training for Storm and Sewer	2/23/2016	Enforcement authority; City storm water ordinances: High-priority facilities needed to be inspected this fiscal year; enforcement levels associated with illegal discharges. High priority areas for trash	12	92	12	-50
Suisun City Code Enforcement Training	4/5/2016	Enforcement authority; City storm water ordinances: High-priority facilities needed to be inspected this fiscal year; enforcement levels associated with illegal discharges. High priority areas for trash	5	62	5	-50

Comments:

The responsibility for follow up inspections has been transferred to City staff. As a result of this change two additional training sessions occurred during the year. On April 5, 2016, the City of Suisun's Police Chief and code enforcement were trained for follow up inspections. May 31, 2016 Fairfield Public Works and a member of code enforcement were trained for the follow up inspections.

[51] List your Program's standard business categories.

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

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

Provide background information, highlights, trends, etc.

Summary:

The Program Manager participates in BASMAA's monthly Municipal Maintenance and Commercial / Industrial Controls meetings. Plus attending the Stormwater Management meetings are held at the Program level to discuss illicit discharge detection and elimination and screening protocol. Suisun City uses the programs Illicit Discharge Detection and Elimination Program Manual to assist them in identification, detection, and elimination of illicit discharges throughout the City of Suisun City.

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

List below or attach your complaint and spill response phone number

Tim McSorley	**Building and Public Works Director**	**707-421-7316**
Dave Martinez	**Public Works Supervisor**	**707-421-7349**

Provide your complaint and spill response web address, if used

WWW.suisun.com

Is a screen shot of your website showing the central contact point attached? [x] **Yes** [ ] **No**

If No, explain: It list a line of concerns water conservation is or illicit discharge is the other

Provide a discussion of how the central contact point (complaint and spill response phone number and, if used, web address) is being publicized to your staff and the public.

Scott Corey coordinates all updates to our web site and updates City Staff of anything new on to be aware of that has changed or has been added to the City of Suisun City web site.

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

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

	Number	Percentage

Discharges reported (C.5.d.iii.(1))	**0**	
Discharges reaching storm drains and/or receiving waters (C.5.d.iii.(2))	**0**	**0%**
Discharges resolved in a timely manner (C.5.d.iii.(3))	**0**	**0%**

Comments:

The implementation of our agency's illicit discharge complaint and response program we have a mandatory 1hr response time and when arriving on the scene the paper work begins and photos are taken immediately and paper trail begins in the field. Crews are trained to protect discharges and prevented them from reaching storm drains/receiving waters. This last period there was zero call outs for illicit discharges for 2015-2016.

C.5.f.iii ►MS4 Map Availability

Discuss how you make your MS4 map available to the public and how you publicize the availability of the MS4 map.

Suisun City of Suisun City Public Works is still working creating and developing MS4 map so it can be available to the public

Section 6 – Provision C.6 Construction Site Controls

C.6.e.iii.(1) ►Hillside Development Criteria

What criteria is your agency using to determine hillside development areas?		Local criteria such as maps of hillside development areas or other written criteria	x	The permit definition of projects on sites with ≥ 15% slope
Attach a copy of hillside development area maps or provide your written criteria below, if applicable.				
Description: We have no hillside development.				

C.6.e.iii.2.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)
#	**#**	**#**
3	**1**	**48**

Comments: **The Three High Priority sites Zephyr Estates 8.6 acres new 56 home subdivision, Gray Hawk Subdivision has had ¾ of subdivision completed for several years and just came back to life and built out seven more homes located along the Suisun marsh, Lawler Park Phase II is the second phase of park developing 8 acres that is located along the Suisun marsh. The one acre site along the Central County Bike way a P.G.& E. site above ground gas valve sub- station**

C.6.e.iii.2.d ►Construction Activities Storm Water Violations

BMP Category	Number of Violations[52] excluding Verbal Warnings	% of Total Violations[53]
Erosion Control	9	22.5%
Run-on and Run-off Control	0	0%
Sediment Control	20	50%
Active Treatment Systems	0	0%
Good Site Management	10	25%
Non Storm water Management	1	2.5%
Total[54]	40	100%

[52]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.

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

[54]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.2.e ►Construction Related Storm Water Enforcement Actions

	Enforcement Action (as listed in ERP)[55]	Number Enforcement Actions Issued	% Enforcement Actions Issued[56]
Level 1[57]	Verbal Warning	**20**	**100%**
Level 2	Notice to Comply	**0**	**0%**
Level 3	Notice of Violation	**0**	**0%**
Level 4	Stop Work maybe Fine	**0**	**0%**
Total		**20**	**100%**

C.6.e.iii.2.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**

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

C.6.e.iii.2.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**	**0%**[58]
Violations (excluding verbal warnings) not fully corrected within 30 days after violations are discovered (C.6.e.iii.1.i)	**0**	**0%**[59]
Total number of violations (excluding verbal warnings) for the reporting year[60]	**0**	**100%**
Comments: **Most of the incidents were cleaned up in a couple of days nothing exceeds the 10 business days.**		

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

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

Description: **The number of problems encountered in the field is considered to be, "none or very low". Due to efficient training and MRP efforts by the City of Suisun City Staff is well prepared. The City considers this a high priority to ensure that the BMP's are being installed correctly and maintained by the contractors. Including holding contractors accountable to maintain SWPPP standards on all work sited within City of Suisun City limits.**

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

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

Description:

A training session was held during the reporting period. In attendance were all Building and Public Works inspectors as well as supervisors and managers. The inspection form was reviewed and discussed. The discussion of storm water quality inspections in general with the C.6 Construction Site Control The training ensured consistency in field inspections and in completing the inspection form.

[58]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.

[59]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.

[60]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
C.6 Construction Site Control Training	March 10, 2016	Construction Site inspection form data to record Erosion control measures Sediment Control Measures Run-on and Runoff Control Good Site Management Non-Storm water Management Enforcement/ Follow-Up Resolution	23

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

C.7.b.i.1 ►Outreach Campaign

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

Summary:

Please see BASMAA's separate report summarizing regional activities entitled: Regional Supplement for Training and Outreach.

In addition to participating in local events the Program has also participated in the 95.3 KUIC Hometown Green Environmental Campaign. Program members on a regular basis have recorded segments which are played daily on KUIC and focus on environmental messages. Messages include: the connectedness of our streets to our local creeks; recycling mercury containing products; trash and litter; proper car washing; recycling; and the reduction of waste by reusing items.

In addition the program has also participated in an array of local school education programs, public outreach activities, public involvement activities, trash and pesticide reduction actions. Please see below and report attachments for further explanations.

C.7.c. Stormwater Pollution Prevention Education

Local storm water phone number(s)	**Suisun City: 707-421-7340**
Local/Regional storm water website(s)	http://www.fssd.com/stormwater-management/

Outreach:

The Fairfield-Suisun Sewer District, acting as the management agency for the Fairifeld-Suisun Urban Runoff Program provides the links on its website to the permitee's storm water locations. See link shown above. Each city has a website that contains information relative to storm water quality and the storm water Program.

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

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

Event Details	**Description** (messages, audience)	**Evaluation of Effectiveness**
Provide event name, date, and location. Indicate if event is local, countywide or regional.	Identify type of event (e.g., school fair, creek clean-up, storm drain stenciling, farmers market etc.), type of audience (school children, gardeners, homeowners etc.) and outreach messages (e.g., Enviroscape presentation, pesticides, storm water awareness)	Provide general staff feedback on the event (e.g., success at reaching a broad spectrum of the community, well attended, good opportunity to talk to gardeners etc.). Provide other details such as: • Success at reaching a broad spectrum of the community • Number of participants compared to previous years. • Post-event effectiveness assessment/evaluation results • Quantity/volume of materials cleaned up, and comparisons to previous efforts
Coast and Creek Cleanup; September 19, 2015; 16 cleanup sites throughout Fairfield and Suisun City; this is a Program event that is also world-wide	**The Program lead volunteer cleanup of local creeks, marsh and open space areas.**	**A record 692 volunteers (12% increase over last year) picked up 9,102 pounds of trash along 28 miles of waterway at 16 sites. This was a very successful event. See attached summary attached to the end of this section.**
Home Depot Events; June 27, 2016 and June 29, 2016; 2121 Cadenasso Dr. Fairfield, CA; this is a Program event. Sore visits were also made by the Program Advocate on 7/31, 9/19, 10/14, 12/15, 1/18, 2/15, 3/9, 4/20, 5/3, 5/19 and 6/22	**IPM Consultant Annie Joseph and IPM advocate Theresa Travers provided IPM training for Home Depot customers on safe gardening practices at the local Home Depot store.**	**Discussions were held with many Home Depot customers regarding alternatives to toxic pesticides. Customers were very engaged.** **See attached OWOW and BASMAA's Regional Supplement for Training and Outreach. There was a 20% increase in**

		less toxic product shelf space over the prior year. Also attached are pre and post training surveys for Home Depot Employee trainings.
Fairfield- Suisun Farmers Market; Thursdays from May 3 through October 4; the event is held in downtown Fairfield at the intersection of W. Texas St. and Jefferson Street; this is a Program event.	Program members contract with Valcore Recycling to attend the weekly farmers market and man the Recycling and Environmental booth. Messages include the connectedness of our streets to our local creeks; less toxic alternatives to pesticides and only clean storm water should be flowing to our local storm drain system. The booth also features information about reporting illegal discharges and free grease scrapers to avoid sanitary sewer overflows.	Starting in May and ending October an average of 16 visitors per week that stop and engage at the Fairfield Recycles and storm water booth. Crewmembers also quiz guests and give out prizes went questions are answered correctly. Attendance has remained constant over the past few years at this booth.
Earth Day - April 23, 2016; Fairfield Civic Center This is a Program event.	The Program shared information with approximately 300 people of all ages and nationalities in attendance at the event. Quilt squares were drawn and decorated by those who stopped by the booth.	Our booth gave away reusable bags, brochures, trash pickers and plate scrapers. Booth stayed busy throughout the event and the children receiving the scrapers were engaging while receiving our message.
Earth Day Cleanup of local creeks- April 23, 2016; Ledgewood Creek at Highway 80 behind Home Depot, Lower Union Avenue Creek and Suisun Marsh Cleanup along Grizzley Island Trail in Suisun City. This is a Program event.	The Program led these cleanups of our local waterways with approximately 63 people of all ages participating.	63 volunteers (a 75% increase over the previous year) picked up 2,082 pounds of trash along 3 miles of waterway. This was a new and very successful event.

Solano Community College Earth Day - April 19, 2019; The Program participated in this event located at Solano Community College. The event included earth friendly vendors. This is a Program event.	The Program shared information with participants of all ages and nationalities in attendance at the festival.	About 100 people (decrease of 33%) of all ages visited our booth, including college students interested in: careers in environmental fields; and our environmental messages regarding the difference between waste and storm waters. Students generally had a good understanding of the difference between storm water and wastewater. This was a moderately successful evet with attendance decreasing from previous years.
Community Service Days; on the last Saturday of every month (weather permitting); this is a local event in Fairfield	These are volunteer events that involve picking up litter in various locations throughout the city of Fairfield.	Numbers were not kept, only approximations. Throughout the year, at five different locations throughout the city, there were over 100 people that participated and collected over 240 yards of trash throughout the streets of Fairfield. This is through the Matt Garcia Foundation.

C.7.e. ►Watershed Stewardship Collaborative Efforts

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

Evaluate effectiveness by describing the following:

- Efforts undertaken
- Major accomplishments

Summary:

The Program conducts an array of activities which qualify for watershed stewardship collaborative efforts. These efforts are also mentioned in other portions of this Annual Report. Efforts directed toward Coast and Creek Cleanup result in watershed stewardship collaboration. Presentations were made to schools and clubs in the Fairfield Suisun Unified School District which resulted in an increased number of participants in our creek cleanup events. Creek Captains meetings are also used to encourage public involvement in watershed volunteer efforts.

C.7.f. ►School-Age Children Outreach

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

Program Details	Focus & Short Description	Number of Students/Teachers reached	Evaluation of Effectiveness
Suisun Marsh Watershed and Wetland Education Program; the classes available to middle schools throughout Solano County.	**The Program provides place-based environmental education for underserved middle school students in Solano County. The central Program themes include: watersheds, wetlands, marsh functions, native and non-native plants, storm runoff, endangered and threatened species, and watershed connections between their**	**13 classes of approximately 431 students from schools throughout Fairfield and Suisun City participated in the Program.**	**See attached Suisun Marsh Watershed and Wetland Education Program 2015 Year End Report**

	residential communities, Suisun marsh, the San Francisco Bay, and the Pacific Ocean.		

2015 California Coastal Cleanup Day

CCD Coordinator Report Form

People, Pounds & Miles

County: Solano County **Organization: FSSD**

Cleanup Information

Site Name	Coastal or Inland	Site Captain	Phone/E-mail Address	# of People	Weight of Trash Collected	Weight of Recyclables Collected	Distance Cleaned	# of Sites	Zero Waste Sites	# of ppl w/ reusables	# of vessels	# of Bags	Unusual Finds
Fairfield/Suisun City													
Ledgewood Creek	Inland	Sandra Gonzalez	sgonzalez@ci.fairfield.ca.us	25	120	1	3.00	1	1	20	0	25	lawn mower
SuisunBoat Ramp/Peytonia Preserve	Coastal	Connie Gordon	Constance.Gordon@anheuser-busch.com	57	450	50	1.25	1	0	21	0	45	sleeping bag
Belden's Landing	Coastal	Gregg Walter Goodman	ggoodman@att.net	21	132	40	2.25	1	0	15	0	15	foam
Upper Laurel Creek	Inland	Ariana Ponce	ArianaPonce10@yahoo.com	89	100	200	1.25	1	0	15	0	30	scooter
Mid Laurel Creek	Inland	Layne Ryan	Layneryana@yahoo.com	73	400	2	2.00	1	0	30	0	27	car bumper
Lower Laurel Creek	Inland	Nicholas Santos	DavidAv@fsusd.org	61	500	200	1.25	1	o	20	0	25	Rollerskate
Hill Slough/Rush Ranch	Coastal	Ken Poerner	ken@solanolandtrust.org	30	3000	200	1.50	1	0	1	0	33	Engine with transmission
American Canyon Creek (Silverado Dr. off Oakwood)	Inland	Robyn Morris	Morris20102020@hotmail.com	30	75	100	2.00	1	0	30	0	35	fake $1000 bill
Dan Wilson Creek	Inland	Meg Herston	Mherston@fssd.com	52	200	50	2.00	1	0	25	0	60	car parts
Serpas	Inland	Teri Luchini	tluchini@ci.fairfield.ca.us	10	45	60	1.20	1	0	6	0	14	hub cap
Union Avenue	Inland	Ben from City Hope	Jandreau5@Comcast.net	47	1000	200	1.50	1	0	15	0	50	Bike Frame
Lower Union Ave	Inland	Adrian Antoo	Aantoo@fssd.com	21	130	50	0.50	1	0	10	0	32	cushion from couch
Upper Dan Wilson	Inland	Ken Williams	Kwilliams@Solano.edu	83	400	20	2.50	1	0	10	0	60	car bumper
Mic Coy Creek	Inland	Nellie	Ndimalanta@fssd.com	45	300	20	2.00	1	0	20	0	32	no pollution sign
Grizzly Island Trail	coastal	Amanda Dam	adum@suisun.com	8	50	0	1.25	1	0	20	0	5	hub cap
Lower Ledgewood Creek	Inland	Justen Nunes	JNunes@EParkway.com	40	2200	600	2.00	1	0	30	1	50	washing machine drum
TOTALS				**692**	**9102**	**1793**	**27.5**	**16**	**1**	**288**	**1**	**538**	

Fairfield Suisun Sewer District OWOW Report 2015/2016
July 2015 through June 2016

August 11, 2016

Annie Joseph
Ann Joseph Consulting

Home Depot information on less toxic products and shelf space 2016

- **Increase in shelf space for less toxic products in their pesticide aisle 20% over last year.**
- **Increase in sales of the Scott's Miracle Gro line of Nature's Care Pesticides in Home Depot in Northern California average between 30-92% over last year's sales.**

Store visits: Teresa Lavell IPM Advocate covered the store visits and several outreach events. Annie Joseph helped cover the Water wise event on March 19th and helped in the store training on June 27th. Store visits by Advocate Teresa Lavell were on the following dates: 7/31,9/15,10/14,12/15,1/18,2/15,3/09,4/20,5/03,5/19,6/22.

During the store visits Teresa helped customers in the aisles and guided them to less toxic solutions. She updated shelf talkers and fact sheets and made sure the garden Associates were kept up to date on invasive pests, plants that attract beneficial insects, how their less toxic products work, and a heads up on seasonal pests for the coming month. She also shared the quarterly UCIPM Retail News Letter with the store Associates.

Solano County Master Gardener Outreach: Annie trained the new class of Master Gardeners on Water Quality and Pesticides on **February 18, 2016 at the local Master Gardener office on Texas Street.** There were **13** new class members and she concentrated on the runoff from pyrethroid pesticides and the residues that can end up in wastewater in addition to Suisun Marsh. She also discussed proper disposal of pesticides and how less toxic products work.

Kevin Cullen joined up and was able to meet the class and talk about the vulnerability of the Suisun Marsh to pesticide runoff from home gardeners and answered questions from the audience.
Annie and IPM Advocate Teresa Lavell also helped train the Master Gardeners in sustainable landscaping practices and integrated pest management that align with the Bay Friendly Landscaping practices.
These Master Gardeners will carry this message to their customers that they garden for in addition to their volunteer work tabling events they do at libraries, local Farmers Markets in the communities they serve, and community events. Photos sent

Home Depot: Training June 27th and June 29th

Annie and Teresa conducted a training and tabling on June 27th.
They were able to train 8 Associates and Teresa came back on Thursday the 29th and Trained an additional 2 Associates. Pre and post surveys were taken and results are in a separate attachment.
Associates were trained in the aisle near the pesticides. They were able to gather two merchandize team members who help stock the pesticide aisles in addition to eight store Associates making our total of **10 trainees.**
The Associates learned about storm water, wastewater, hhw, and IPM.
Each also received a folder of resources such as a monthly pest calendar, how their less toxic products work, invasive pests like the Asian citrus psyllid, brown marmorated stink bug, an updated Home Depot Pocket/Product Guide for 2016, a list of all their less toxic products by pest and active ingredient, how to read a pesticide label, what beneficial insects they offer online, how to lose your lawn the Bay Friendly Way, Ten Most Wanted Bugs for Your Garden, native plants that attract the good bugs, local HHW disposal information, and a good bug bad bug chart.
They also received information about the Solano County Mosquito Abatement District and the services they provide for residents.
Photos sent

***Annie had flier made for Home Depot to raise Associates awareness of the beneficial insects they have available for customers to order online. Separate attachment sent to Kevin.**

Store update activities
To follow up in between her visits Teresa spent time outside of the store researching many pest questions from Associates and customers. She got back to them in a timely fashion with thorough answers.
She was viewed by the Home Depot Associates as a tremendous resource for pest information. She is doing an outstanding job.

***Mosquito Abatement – Annie and Debi Tidd created new hand out for stores.**
In early June Annie contacted **Solano County Mosquito Abatement District** to touch bases about services provided by their agency. She was very concerned because of the ZIKA virus outbreak overseas and the customer panic around the potential outbreak here. Her goal was to make a flier for the stores to have on hand. When Annie contacted the district later in the month to get an update on Zika, she spoke again with Richard Snyder the District Manager. He was interested in the one page flier that she created that shows the services offered by the district so customers will utilize their services. Anne e-mailed him the flier and is making sure she and he stay in touch. Annie sent flier in **separate attachment** to Kevin Cullen.

***New partner store:** Suisun Ace Hardware **6/23/16**
Annie visited the store and they wanted her to come back the next day to meet the new store manager and owner. Annie went back on the 24th and met Richard the new store manager and they are interested in having training and setting up their store for OWOW. Annie took photos of their shelves to make tags and scheduled to come back for set up on July 1st. Training date set for later in July so they can schedule a training after hours for employees. This will be a great partner store.

Events:
Annie conducted an outreach event at Home Depot. On March 19th for a Home Depot Waterwise Event.
She contacted **35 customers**. This was an event sponsored by Home Depot to partner in the community to reduce water use outdoors. Annie was contacted by Home Depot corporate to have OWOW participate in the event. Agencies attending the event included Solano County Water Agency, Solano RCD, Republic Services, and Master Gardeners. Also attending were vendors from Scott's Miracle Grow Company, Kellogg's Garden Supply,

Altman Plants, and Hines Nurseries. It was a great opportunity to show the vendors how OWOW partners to showcase their eco-friendly products.
The area for the event was outside in the parking lot out in front of the store. The event was fairly slow because of the cold weather but Annie was able to meet with the store manager Kevin and with the District Manager Tim Gudas. They were very grateful for our participation.
Annie's display included the fact sheets, less toxic products, a large Good Bug poster to help customers to see the good bugs that are helpers in the garden, plants that are waterwise and attract beneficial insects, OWOW handouts on Ten Tips for Water wise Gardening and Protecting Landscapes during a Drought.
When the event was over Annie went into the store to return products from her display and helped customers in the aisles for another hour and a half.
Questions covered were:

- Ants inside –talked caulking and bait stations, ant fact sheet
- Rats and Mice- exclusion and trapping, fact sheet rats and mice
- Aphids on roses- talked about hosing off with water, using organic fertilizers. Gave aphid fact sheet
- Scale on fruit trees – talked about dormant spraying, keeping ants from protecting scale.
- Mosquitoes- repair screens, remove standing water, put screens on rain barrels, clean roof gutters of debris, use mosquito dunks. Gave mosquito fact sheet
- Cockroaches indoors- repair leaking pipes, caulking, clean up kitchen areas, use bait stations, boric acid powder, discouraged fogging with pyrethroids, gave cockroach fact sheets.
- Fertilizing questions – talked advantages of using organic fertilizers vs synthetic.
  Photo of event sent.

On June 26th at Home Depot Teresa set up the table in the pesticide aisle. Teresa helped customers with questions below:

- Fertilizers organic and slow release(benefits of these)
- Whiteflies –she talked cultural practices and different products such as soaps and oils

- Cockroach questions – talked traps, baits, diatomaceous earth, cockroach fact sheet
- Caterpillars- talked about bt
- Silverfish- talked boric acid , diatomaceous earth, roach tablets
- Spiders – talked about the beneficial side, spider fact sheet
- Questions about OWOW resources
- Unidentified critter eating vegetables, she encouraged them to get proper identification and gave them the UCIPM bookmark.
- Aphid infestations on roses- talked about decreasing their habit of weekly fertilizing with synthetic fertilizers, encouraged them to hose off aphids, use insecticidal soaps and oils, use organic fertilizers. Aphid fact sheets
- Aphids on plum trees- talked about dormant spraying in fall and winter next year, control ants by using bait stations, Aphid fact sheet.
- Teresa reached 20 customers that day.

Outreach to the landscape community.

In January Annie contacted the Master Gardener Coordinator Jennifer Baumbach and asked if she would pass on the information to the Master Gardeners for a training class for:
Bay Friendly Training and Qualification for Design of Sustainable Landscapes

To be held at Napa Valley College

Wednesdays March 9TH to March 30, 2016.

The training was sponsored by the City of Napa, County of Napa, Napa RCD, Solano Water Agency, and Napa County Storm Water Pollution Prevention Program.

Many of the Master Gardeners also have gardening design and maintenance businesses in addition to their volunteer activities. They were trained in sustainable gardening practices in our training on February 18th which was a good introduction to the Bay Friendly Gardening Course offered in March.

Summary of Pre-Training Surveys

A total of __10_ Pre-Training surveys were returned.
Here are the results of those surveys

Survey Question	Yes	No	I Don't Know
When water enters a storm drain, does it go to a treatment plant before it reaches a creek?	**10%**	**80%**	**10%**
When water enters a sanitary sewer from a house drain like your sink or toilet, are pesticides removed at the sewage treatment plant before the treated water reaches a creek or Bay?	**20%**	**70%**	**10%**
Do you think it's more effective to treat an ant infestation with a bait station rather than a spray?	**70%**	**10%**	**20%**
Do you know where Where is your local household hazardous waste collection facility located	**60%** (Street address and/or City)		**40%**

Check all that are methods that are used in Integrated Pest Management (IPM)

a. Use of beneficial insects and bacterial based products to control pests. **60%**
b. Forbidding the use of pesticides. **30%**
c. Not over or under watering plants. **70%**
d. Use of traps or barriers to control pests. **100%**

What is the solution to control fleas that is safest for pets and best for the creeks, bays, and ocean?

a. Use room foggers, closing off areas where pets eat.
b. Use sprays outdoors and/or indoors
c. Wash pet with warm soapy water, use flea comb, wash bedding in hot soapy water, vacuum carpets. **90%**
d. Spot on flea treatments applied to the pet's skin. **20%**

Of the following, which is the least toxic (IPM) method of controlling aphids?

a. Apply fast acting fertilizers.
b. Spray insecticidal soaps and/or prevent ants from vegetation with tanglefoot or bait stations. **70%**
c. Prune plants vigorously. **10%**
d. Use products with pyrethroids. **20%**

Summary of End of Training Evaluation Forms

A total of __**10**_ final evaluations were returned.
Here are the results of those surveys

Survey Question	Yes	No	I Don't Know
When water enters a storm drain, does it go to a treatment plant before it reaches a creek?		**100%**	
When water enters a sanitary sewer from a house drain like your sink or toilet, are pesticides removed at the sewage treatment plant before the treated water reaches a creek or Bay?		**100%**	
Do you think it's more effective to treat an ant infestation with a bait station rather than a spray?	**100%**		
Do you know Where is your local household hazardous waste collection facility located?	**100%**		
Where is your local household hazardous waste collection facility located	**100% yes know** (Street address and/or City)		

Check all that are methods that are used in Integrated Pest Management (IPM)

a. Use of beneficial insects and bacterial based products to control pests. **100%**
b. Forbidding the use of pesticides. **10%**
c. Not over or under watering plants. **100%**
d. Use of traps or barriers to control pests**. 100%**

What is the solution to control fleas that is safest for pets and best for the creeks, bays, and ocean?

a. Use room foggers, closing off areas where pets eat.
b. Use sprays outdoors and/or indoors
c. Wash pet with warm soapy water, use flea comb, wash bedding in hot soapy water, vacuum carpets. **100%**
d. Spot on flea treatments applied to the pet's skin.

Of the following, which is the least toxic (IPM) method of controlling aphids?

a. Apply fast acting fertilizers.
b. Spray insecticidal soaps and/or prevent ants from vegetation with tanglefoot or bait stations. **100%**
c. Prune plants vigorously.
d. Use products with pyrethroids.

Training Evaluation Questions	Disagree	Neutral	Agree
I learned at least one less-toxic management method today.	**10%**		**90%**
The training will help me recommend and/or sell less-toxic products.			**100%**
I can comfortably share what I learned with customers and/or co-workers.			**100%**
I can easily use the Our Water Our World shelf-tags and fact sheets to inform customers about less-toxic pest management.			**100%**
	Too much info	Just right	Not enough info
Printed resource materials from this training were....		**100%**	

Please use the back side of this survey and evaluation for additional comments or explanation.	
What part of the Training was most helpful?	**All info , Product info, Learning about product , Learning that wastewater treatment does not take out pesticides, Explanations of which treatments are safe to use, Dog flea info , New product info about the Ortho products that are good for the environment, Reviewing, Learning about organic pesticides**
What part of the Training could be improved?	**More detailed product information, More time needed, Perfect nothing more needed , No improvements needed – 3, N/A**

School Water Education Program

2015-2016 Program Report

July 2016

Program Funding

Cities of Vacaville, Fairfield, Suisun, Vallejo, Benicia, Fairfield-Suisun Sewer District, and Solano Irrigation District

1170 N Lincoln, Suite 110 Dixon, CA 95620
Office 707.678.1655
Solanorcd.org

School Water Education Program (SWEP)

The School Water Education Program Committee is in its 1st year contracting the Solano Resource Conservation District (SRCD) to implement the School Water Education Program (SWEP). This program is supported by cities of Vacaville, Fairfield, Suisun, Benicia, Fairfield-Suisun Sewer District, and Solano Irrigation District.

The curriculum for this program was created by Solano RCD using their own material and resources developed from previous SWEP program coordinators. The curriculum was written in September 2016, and has been revised throughout the year to adaptively manage content to better fit with student style, readiness and funder objectives. The SWEP program includes a basic lesson about Solano County water that can be adapted for kids K-12, a 'Test Your Tap' lesson and lab, Project Water Education for Teachers (W.E.T.), and various booklets and incentives that are distributed to Solano County Teachers. SWEP also participated in Youth Ag Day, an annual festival held for Solano County 3rd graders at the County Fair Grounds in Vallejo.

Marianne Butler manages the program, Laura Morgan is the program coordinator and teaches the majority of in-class lessons, Carla Murphy assists with teaching the in-class lessons, and Jill Buldoc and Wendy Low facilitate the Project W.E.T training. This program is available to K-12 students and teachers on a year round basis.

SWEP Winter/Spring 2016 (January-June 2016) Program Summary

The SWEP program consists of an introductory *Solano County Water* lesson presented in-class by SWEP staff, a two-day "Test Your Tap" lesson on water quality presented in-class by SWEP staff, and a Project W.E.T. teacher training workshop.

The *Solano County Water* lesson teaches K-12 students about water awareness for those living in Solano County. Subjects covered include where student drinking water comes from, storm water pollution in their watershed, and water conservation. From January-June 2016, 3,119 students participated in the SWEP Solano County Water lesson and 827 units of materials were distributed.

Test Your Tap is a two-day, in-class lesson geared toward students in grade levels 6-12. The first lesson compares student city water quality vs. bottled water quality. It also looks at the environmental impacts of bottled water. The second lesson is a water quality lab. Students bring in water from various tap and bottled water sources, comparing the quality of both. The goal of this lesson is to teach students where their water comes from as well promote the use of tap water in Solano County. In spring 2016, 356 students participated in the Test Your Tap lesson and lab.

Tables 1 and 2 summarize the student participation and material breakdown per city for both the *Solano County Water* and *Test Your Tap* lessons.

Table 1. Solano County student participation by city and grade during spring 2016. Lessons include *Solano County Water* lesson and *Test Your Tap*

January-June 2016 SWEP Lessons					
City	Students K-6	No. of Classes K-6	Students 7-12	No. of Classes 7-12	**Total Lessons**
Vacaville	682	22	0	0	**22**
Benicia	354	12	114	4	**16**
Suisun City	196	7	0	0	**7**
Fairfield	549	20	388	14	**34**
Vallejo	810	29	0	0	**29**
Dixon	310	12	0	0	**12**
Rio Vista	72	3	0	0	**3**
Tot. County	**2973**	**105**	**502**	**18**	**123**

Table 2. Summary of SWEP materials distributed throughout Solano County in spring 2016

January-June 2016 Materials							
City	Water Conserv. Challenge.	SCWA Video. Post/Flier	TYT Worksheet	TYT Test Tabs	Inventory	Fliers for SWEP/Project WET Outreach	**Total Materials**
Vacaville							**0**
Benicia			159	180			**339**
Suisun City							**0**
Fairfield	276	10	20	36	114		**456**
Vallejo	30					2	**32**
Dixon							**0**
Rio Vista							**0**
Total	**306**	**10**	**179**	**216**	**114**	**2**	**827**

Project W.E.T. is a teacher training that provides teachers the resources needed to teach about water related subjects in their classroom. Project W.E.T. was held on February 27th, 2016 with 21 teacher attendees. Table 3 summarizes the number of teachers who attended the training by city; Table 4 provides a breakdown of the types of materials distributed. Materials distributed were not were not recorded by city this year, but we will alter our record keeping to account for this information beginning with the 2016-2017 school year.

Table 3. Summary of Project WET teacher participants by city and age

Project W.E.T Participants		
City	Participants K-6	Participants 7-12
Vacaville		1
Benicia		
Suisun City	1	1
Fairfield	5	4
Vallejo	4	3
Dixon	2	1
Rio Vista		

Table 4. Summary of Project WET distributed materials by type

Project WET Materials 2016	
Type of Material	# of Materials
Incentives	695
Curriculum	10
Work Books	235
Total	**940**

SWEP attended the 14th Annual Youth Ag Day festival at the Solano County Fairgrounds in Vallejo on March 15th, 2016. 325 students attended the SWEP booth, and 1,595 materials were distributed to students, parents and teachers. Laura Morgan coordinated the incoming groups of students while Carla Murphy, Josie Murphy (volunteer) and Shelby Allreed (intern with the Solano County Water Agency) helped distribute materials and conduct enviroscape demonstrations for the students. Educators primarily focused on where student drinking water comes from, storm water pollution and water conservation. Figure 5 summarizes the student breakdown per city, and Figure 6 summarizes the materials distributed during the event. The materials given out were not recorded with notation of the recipients' city. That data will be recorded for future events.

Table 5. Student attendance at Youth Ag Day by city

Youth Ag Day 2016	
City	Students K-6
Vacaville	92
Benicia	5
Suisun City	30
Fairfield	99
Vallejo	95
Dixon	0
Rio Vista	4
County	325

Table 6. Summary of materials distributed during Youth Ag Day 2016

Youth Ag Day Materials 2016	
Type of Material	No. of Items
Incentives	757
SWEP Fliers	200
Water Conservation Challenge Sheets	40
Work Books	598
Total	**1595**

During January-June 2016, 3,800 students participated in SWEP in-class room lessons, labs and festival booths. 3,362 items of water education materials were distributed to students, teachers, and parents during this time period.

Full Year Summary (July 2015-June 2016)

The 2015/2016 school year was the first year Solano RCD was contracted to facilitate SWEP implementation in Solano County Schools. All existing SWEP programs were reviewed and revised by Solano RCD to provide recipients with the most accessible and current information available.

Solano RCD designed the *Solano County Water* lesson with built-in adjustability to ensure applicability to every grade level. This lesson is the foundation for all SWEP programming. Students learn about where their water comes from, basic watershed science, storm water pollution causes and effects, and water conservation strategies and purpose. The *Solano County Water* lesson is now part of Solano RCD's Watershed Explorers program, serving as a "pre field trip" foundational lesson for the program. This new component provides teachers with an option to have their students participate in a water conservation challenge with their families, in which students record and track water usage as they learn the basics of water budgeting. Teachers are provided links to the Solano County Water video and the National Oceanic and Atmospheric Administration (NOAA) Trash Talk video to enrich students' experience and understanding of the water lesson and it's ramifications in their lives. As a result of this strategy, 3,857 students participated in the *Solano County Water* Lesson in the 2015/2016 school year.

Solano RCD also revised the *Test Your Tap* lecture and lab, aligning the information and presentation with science-based learning standards students in grades 6-12. This lesson begins with the environmental and health impacts of bottled water, providing students with science-based reasoning and environmental incentives to use water from their tap for drinking water. The lesson presents *The Story of Stuff: Bottled Water* video from the Story of Stuff Project and shares primary research done on the quantity and sourcing of bottled water brands. In the second session of this 2-part lesson, students complete a hands-on water lab, conducing six tests to measure water quality (including Iron, Copper, pH, Chlorine, Nitrate, and Phosphate) in tap and bottled water samples they have collected. Students receive and follow a lab protocol as they complete a lab worksheet to record results. Evaluation forms were not part of this program this year, but will be added to the program going forward to obtain documented teacher feedback for next year's SWEP annual meeting. 596 students participated in the *Test Your Tap* program and 635 pieces of lab related materials were distributed during the 2015/2016 school year.

The Project WET training program was also reviewed and revised by Solano RCD. The new program uses two Solano RCD educators, Jill Buldoc and Wendy Low, as facilitators and instructors for the all-day teacher training workshop. The event was held on February 27th, 2016 at Solano Community College in Fairfield. 21 teachers attended the event and took home 941 units of materials.

Staff engaged Marc Garman of Lab Rat Pictures to create promotional videos for the SWEP program, created in July 2016. These videos advertise the SWEP *Test your Tab* lesson and Project WET training to Solano County teachers, students and parents, generating awareness of

and interest in the program. These videos are available on the SRCD website (www.solanorcd.org/SWEP).

During the 2015-2016 school year, 4,799 individuals participated in SWEP in-classroom lessons, labs, festival activities, and teacher trainings. 5,242 pieces of educational materials were distributed to students, teachers, and parents. Table 7 summarizes SWEP participants throughout the 2015-2016 year by city and program. Program staff met or exceeded all its classroom presentation goals in the 2015-2016 school year, depicted in Fig 1.

Table 7. Summary of participation in SWEP programs for the 2015-2016 school year, by city and individual SWEP program

SWEP 2015-2016 Participation Summary					
City	*Solano County Water* Lesson	*Test Your Tap*	Project WET	Youth Ag Day	City Totals
Vacaville	802	240	1	92	1135
Benicia	152	316		5	473
Suisun City	196		2	30	228
Fairfield	1059	40	9	99	1207
Vallejo	1231		6	95	1332
Dixon	345		3	0	348
Rio Vista	72			4	76
Grand Total	3857	596	21	325	4799

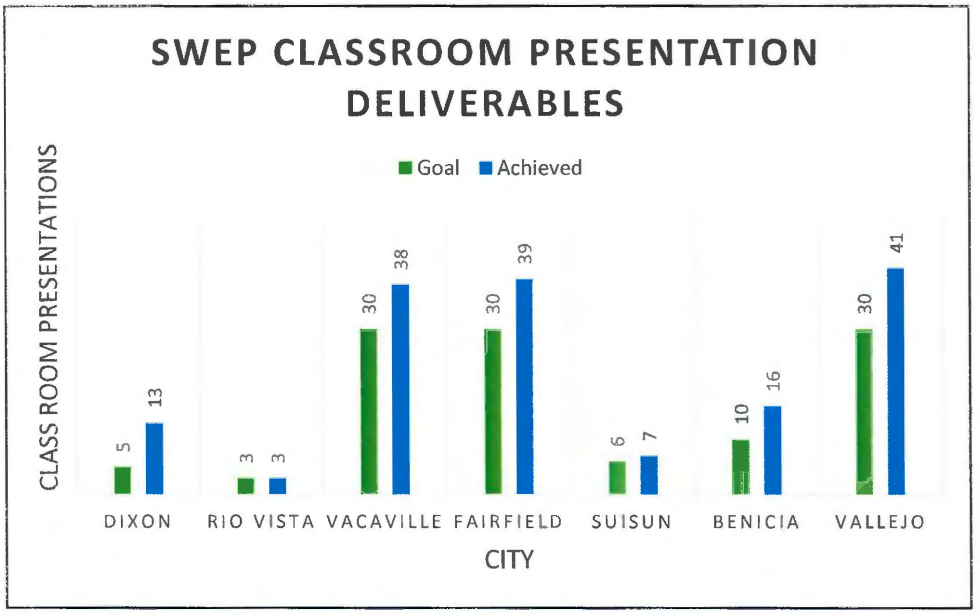

Figure 1. Comparison of the classroom presentation target goals set forth by the SWEP committee with actual achievements during the 2015-2016 school year

2016/2017 Expectations

In the next school year, SWEP staff will work towards exceeding participation goals in water related education activities throughout Solano County. Program review and refinement is ongoing. As part of this general strategy, SWEP will premiere a revised *Test Your Tap* lecture and lab focusing on 5th grade. Henderson Elementary in Benicia has already scheduled their 5th graders to pilot this lesson in August. After review and fine tuning, the *Test Your Tap* lesson will be offered to all Solano County 5th grade classes. SWEP staff are also working with the Benicia Middle School science program to implement a *Test Your Tap* component in all Benicia Middle 7th grade science classes.

In the 2016-2017 school year, Project W.E.T. training will be offered twice (in September 2016 and again in February 2017) to create greater opportunity for Solano County teacher participation.

During summer 2016, SWEP staff is working with Marc Garman of Lab Rat Pictures to create a new Solano County Water video with funding from the Solano County Water Agency (SCWA). The new video will cover all the basic components of SWEP programing, including where Solano County water comes from, watershed awareness and water conservation. The video will be available to Solano County students and teachers in winter 2017.

Solano County Water Education Programs 2015-2016 Summary

There are 9 organizations in Solano County that deliver water related education programs to K-12 students in the form of classroom presentations, field trips, assemblies, and water related contests. These organizations include: SWEP, Solano RCD, Putah Creek Council's Water Ways, Ranger Teri Luchini from Rockville Park in Fairfield, Solano Land Trust, private presenters ZunZun and Rock Steady, Sue Alfeld from the City of Benicia, and the Solano County Water Agency (SCWA). All organizations combined have outreached to 44,479 individuals and handed out 21,072 units of materials. Table 8 summarizes all of the water education programs conducted in Solano County during the 2015-2016 school year by city and type of outreach. Please refer to the data tracking excel document for a breakdown of program specifics.

Table 8. Summary of all water education programs operating in Solano County, by jurisdiction, number of attendees and number and type of activities

City	Presentations	Field Trips	Assemblies	Total
Benicia				
No. of Events	88	31	4	123
No. of Attendees	2,656	1,053	1,004	4,713
Dixon				
No. of Events	38	9	3	50
No. of Attendees	1,054	433	840	2,327
Fairfield				
No. of Events	89	14	13	116
No. of Attendees	2,672	640	3,374	6,686
Rio Vista				
No. of Events	13	5	3	21
No. of Attendees	455	170	455	1,080
Suisun City				
No. of Events	23	11	8	42
No. of Attendees	953	383	2,582	3,981
Vacaville				
No. of Events	81	23	26	130
No. of Attendees	2,223	1,093	8,161	11,477
Vallejo				
No. of Events	133	51	32	216
No. of Attendees	3,815	2,483	7,854	14,152

Photos from 2015-2016 SWEP Outreach

Laura Morgan presents at Youth Ag Day at the Solano County Fairgrounds

Carla Murphy (Solano RCD educator) teaches a SWEP lesson at Laurel Creek Elementary School in Fairfield

21 teachers participate in Project W.E.T training at Solano Community College

Brian Brown, Statewide Project W.E.T coordinator, demonstrates an activity at the Project W.E.T training at Solano Community College

Laura Morgan teaches a SWEP lesson at the Fairfield Suisun Public Safety Academy

Suisun Marsh

Watershed Education Program

2015 Program Summary

February 2016

Program Funding
Solano County Water Agency

Additional Funding
Benicia Sustainability Commission, Solano County Office of Resource Management, Fairfield-Suisun Sewer District & Habitat Conservation Fund

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Solano County Water Agency (SCWA) is in the eighth year contracting the Solano Resource Conservation District (Solano RCD) to implement the Suisun Marsh Watershed Education Program. Additional support provided by Benicia Sustainability Commission, Solano County Office of Resource Management and Fairfield-Suisun Sewer District.

Sections of the curriculum were adapted from the California Coastal Commission's Waves, Wetlands and Watersheds and Our Wetlands, Our World and the teaching objectives are directly linked to California's common core standards. The curriculum was written in August of 2008 and has been revised each year. It includes three pre–field trip classroom lessons, one poster session, a five-hour field trip at Rush Ranch and two post–field trip lessons. Funding through a CalRecycle grant in 2014 and 2015 will allow for the 2nd post lesson to wrap up the program.

Marianne Butler manages the program, Jamie Solomon and Laura Morgan teach the in-class lessons and lead the field trips, and program educators Don Broderson, Carla Murphy, Wendy Low, Deborah Bartens, Anna Kluge and Jill Bolduc assist on the field trips. The program is split into two sessions – Session 1 occurs from late August to mid-October and Session 2 from mid-October to mid-December.

Students

In 2008, 4 classes of 140 students participated from Crystal Middle School in Suisun City.

In 2009, 18 classes of 600 students participated from Crystal Middle in Suisun City, Grange Middle in Fairfield, Sullivan Middle in Fairfield, and Cambridge Elementary in the Travis Unified School District.

In 2010, 18 classes of 626 students participated from Crystal Middle in Suisun City and Grange Middle in Fairfield.

In 2011, 33 classes of 1,129 students participated from Crystal Middle in Suisun City, Grange and Sullivan Middle in Fairfield, Vaca Peña Middle and Orchard in Vacaville, Center Elementary in the Travis District, and Solano Middle in Vallejo.

In 2012, 27 classes of 882 students participated from Crystal Middle in Suisun City, Grange, Tolenas, and Suisun Valley in Fairfield, Vaca Peña Middle and Orchard in Vacaville.

In 2013, 27 classes of 869 students participated from Crystal Middle in Suisun City, Public Safety Academy, Matt Garcia, David Weir, Nelda Mundy, and Suisun Valley Elementary in Fairfield, Vaca Peña Middle and Orchard Elementary in Vacaville.

In 2014, 30 classes of 940 students participated from Crystal Middle in Suisun City, Public Safety Academy, Nelda Mundy, Rolling Hills Elementary, Grange Middle and B Gale Wilson in Fairfield, Vaca Peña Middle and Orchard Elementary in Vacaville.

School	City	Grade	Total Students	Number of Classes
Crystal Middle	Suisun City	6th	187	6
Vaca Peña Middle	Vacaville	7th	172	6
Orchard Elementary	Vacaville	6th	62	2
Public Safety Academy	Fairfield	6th	102	3
Nelda Mundy Elementary	Fairfield	5th	142	4
Benicia Middle	Benicia	6th	396	12
Riverview Middle	Rio Vista	6th	81	3
Gretchen Higgins Elementary	Dixon	6th	93	3
Solano Middle	Vallejo	6th	64	2
2015 TOTAL			**1,299**	**41**

Figure 1 – Students totals

Since 2008, 6,385 students in 198 classes have participated in this program.

Methods

The program spans August – December. Session one takes place August-October. The second session takes place October- December. Early each session classroom sessions are held. Each class then participates in a poster session at their school followed by the all-day field trip to Rush Ranch Open Space. Field trips are followed with two classroom sessions where students solidify what they've learned and talk about the ramifications of human behaviors on marine and marsh health.

The student field manual is included with this report. Descriptions of the lessons are as follows:

The first lesson discusses California's drought and provides techniques where students can take action to help relieve the pressure on the watershed. The concept of a water conservation challenge is revealed and students are informed of their objective to begin working to save water. Prior to this lesson, students collect their baseline water usage data. From this discussion onward, students start a 3-day challenge of tracking their water use for each of the 3 weeks of program lessons. This data is then compared to their baseline data at the end of the challenge. The second part of the lesson addresses the characteristics of a watershed and demonstrates how storm water pollution affects our creeks, marsh, and ocean. An enviroscape model is presented to visually show students how litter and debris runs off the pavement, flows into the storm drain, to the nearest creek, enters the Suisun Marsh and eventually makes its way to the ocean.

In the second lesson, students review their water usage, discuss what worked well with their conservation practices, and strategize how to save a bit more for the next week. Then, students look at the geography of Solano County as it relates to the Suisun Marsh Watershed through various types of maps. Students travel around the classroom in small groups, visiting different mapping stations and work together in groups to answer questions about each map. Maps for this session include a local area road map, Solano County topographic map, Suisun Marsh watershed map, a nautical chart of Suisun Bay, and an aerial map stretching from Lake Berryessa to Suisun Bay.

The third lesson consists of several central concepts. The students start their final water conservation challenge week and continue the discussion on water saving methods. Following, a power point provides background on native and non-native plants and reveals the significance of plants and animals on the endangered, threatened, and species of concern lists that reside within the Suisun Marsh. Classes participate in a discussion on how human actions dictate whether a species is tipped over the edge to extinction, or brought back to increase in numbers for future generations. Following, students work together to create a wetland model, which demonstrates the buffering and filtering effects of the marsh. The lesson works to bring home the concept that the Suisun Marsh is part of the students' watershed, while demonstrating the important features of a marsh. Finally, this lesson provides instruction for the poster session. Students are broken into eight groups and assigned a species to research. The list of species included: Riparian Woodrat, Chinook Salmon, Soft Birds-beak, Giant Garter Snake, Delta Smelt, Salt Marsh Harvest Mouse, Suisun Thistle, and the California Ridgway's Rail. Each group is provided with a packet of information on their species.

The poster sessions are primarily held prior to each class's field trip. Students research their species and present their findings to the class.

The all-day outdoor excursions at Rush Ranch are held September - December. Each field trip begins with a rotation through three stations centered on the topics of soil, water, and plants. At the soil station, students use a color chart to identify soil composition and use their hands to experience the different textures of soil in the marsh and grassland. At the water station, students test the water from First Mallard Slough for dissolved oxygen, temperature, phosphate, pH, and turbidity. As a small group, they discuss the data from the experiments and theorize how various types of pollution may affect Suisun Marsh and other wetlands. At the plant station, students set up a plant sampling quadrat by using a hula-hoop to randomly select a site. Students analyze the percent cover of plant species (native or non-native) within

the site using plant guides created by Suisun RCD. Following the stations, students enjoy lunch at the picnic tables in the eucalyptus grove.

Next, students explore the Rush Ranch property by taking a nature walk through the different habitats, which include a eucalyptus grove, grassland, and marsh. While on the walk, students look for scat, tracks, plants, and wildlife. Each student is equipped with a pair of binoculars to look for birds and they have the opportunity to view barn owls. An olive tree outside of the barn provides evidence of owls as students observe owl pellets found on the ground by the tree's trunk.

Following the interpretive walk, students sit quietly on top of Overlook Hill and write poetry about their experiences and impressions of the wetland. Teachers submit the poems to River of Words. River of Words is a California-based non-profit organization that connects kids to the watersheds they live in through art and poetry. The organization runs an annual Art and Poetry Contest in conjunction with the Library of Congress. All program participants receive a Watershed Explorers Certificate. In 2010 a student from Grange Middle School was a finalist in the One Block Contest.

After the field trip teachers are asked to play "Our Synthetic Sea," which explains the harmful effects of marine debris, especially plastic, in an easy to understand scientific study by the Algalita Marine Research Foundation. The video prepares students for the final lesson on marine debris.

Lesson four discusses how birds and other marine life are affected by marine debris. A display box of an albatross bolus (consisting of squid beaks and plastic) is past around the class. We want students to feel within them that the land, the plants, and the animals are all part of the same system we are and that their survival and health is not only as important as ours, but that the two are linked. The lesson concludes with the results from the water challenge. Students learn how much water they saved as a class and receive a shower timer donated from SCWA to continue their conservation practices.

For the years 2014 and 2015, students take the post-assessment quiz during a 5th lesson. In 2014 Bilgee the Bilge Pad (Protector of Lake Berryessa) joined each class to request support to help keep storm drains clean and solicited student participation to create a new superhero suit and comic for Bilgee's partner, Petrolia (Used Oil Avenger). In 2015 Petrolia herself asked students to develop a second comic on stormwater runoff.

Deliverables and Results

All deliverables involved in initiating and completing the program were successfully completed. We have met the central program themes that include; watersheds, wetlands, marsh functions, native and non-native plants, storm run-off, endangered and threatened species, origin of Solano County drinking water, and watershed connections between their residential communities, the Suisun Marsh, the San Francisco Bay, and the Pacific Ocean.

We worked with Brandan Hiltman to schedule classes for a North Bay Regional Water Treatment Plant tour. Nearly half (13/30) of the classes took the tour and a quarter of classes participated in 2013.

Water Conservation Challenge

We piloted the water challenge component in the Suisun Marsh Program in 2014. The program was conceived as a 4-part, take-home exercise. As planned, Part 1 asked students to collect baseline household water usage data to find out how much water they typically use on any given day. Students were given a datasheet to take home and record usage data for 7 days. Following three supporting in-class lessons, students were asked to repeat the process each week, using their growing knowledge to alter in-home behaviors and practices with the goal of increasing the amount of water they were able to conserve as the challenge progressed.

At the end of the 4-week challenge, students were asked to take their average daily use from their baseline data, and compare it to their average daily use from week four. We received feedback from nearly all participating teachers that 7 days of recording during 4 separate weeks (including the baseline data) was way too much for students to manage and teachers to facilitate.

In response, we altered the challenge for the second session of classes in 2014. Based on feedback from participating teachers, we revised the challenge to a 3-day per week, 3-week-long challenge.

At the end of the two program sessions, we had full compliance from half of the teachers. The teachers who fully engaged with the program reported saving approximately 3,000 gallons of water in their classroom when subtracting the amount of water used in the 3rd week of the challenge from their baseline data. The winning teachers received a gift certificate for $50 for a student pizza party to celebrate their hard work.

We wanted full program compliance from all participants this year, fall of 2015. Before the start of the 2015-2016 school year, we revised the program again. For session one, we went to a 1-day per week, 4-week-long challenge. During week one, students collected their baseline data by observing water usage on one day. For the subsequent three weeks, students repeated this monitoring for just one day of each week. The baseline data and the date collected during the 4th week of the challenge were compared. Again, a handful of classes did not participate due to time constraints.

In the 2nd session of the program, we reduced the duration of the challenge once again and collected a *baseline water log* and only one *water log savings*. We hoped that with just two homework assignments instead of four, the exercise would divert less time away from each class and still transmit the important message of water conservation. We had nearly 100% teacher compliance rate with this challenge.

We planned our original challenge very carefully, and worked with various models of home water use auditing in the design. We believed and still believe that the original challenge, as conceived, was a meaningful activity that could lead to real understanding about the way we use water, and build a real sense of empowerment in students about what they and their families could do to be more effective stewards of our precious water resources. We believe there are many components to the challenges the exercise has faced:

1. Water conservation is not considered as important as other goals and objectives in the classroom or at home. We know teachers are under enormous pressure to meet state standards and school directives, and until this objective is as important, only a few will ever be willing/able to put the same kind of energy and time toward it.
2. We hoped the water conservation and drought outreach done by local water agencies and municipalities would have penetrated into the general consciousness enough that teachers and students would believe that personal action was both necessary and important. That hope wasn't met. Some teachers and some students did take the challenge as we'd intended, but they were a tiny minority.
3. The challenge necessarily required a high amount of self-reflection on the part of students, which needed to be fostered and supported by both their teachers and their families. In general, there was not the buy-in or the will in either group to generate the needed support for this exercise.

We continue to evaluate and refine the water conservation challenge to develop this exercise into something students and teachers can become excited about and take to heart. Unfortunately, this iteration of the challenge was not able to generate that excitement. The goal to inspire students to improve their water conservation habits for both themselves and their families remains. We hope that as teachers began to see even the incomplete data from this year's challenge, they will be more inspired to fully participate and inspire their students and students' families to do the same.

Program Evaluation

This program took place over an 18-week period during September through December, 2015. 41 classes from 9 schools in every city in the county participated in the program. Student participants were asked to take a five-question assessment quiz at the start of the program and again on the last day of the program. The post assessment asked students to answer three more questions, two of which asked for student responses to the "Water Conservation Challenge" each was asked to participate in, and one which asked students to explain their knowledge of personal waste reduction.

The pre- and post-assessments consisted of the same questions, listed below in italics. Directly below each question is a representative answer from the post-assessment.

1. *Name your watershed?*
   Each city's local watershed
2. *Where does your drinking water come from?*
   Water runs off the roads and paved surfaces, enters the storm drains, flows into creeks, into the Suisun Marsh and eventually drains into the Pacific Ocean.
3. *Where does storm (rain) water go after it hits the pavement?*
   Water runs off the roads and paved surfaces, enters the storm drains, flows into creeks, into the Suisun Marsh and eventually drains into the Pacific Ocean.
4. *What are the main threats to the Suisun Marsh?*
   Non-native invasive plants, development, and pollution (which includes pesticides, fertilizers, oil, litter, pet waste, etc.)
5. *Write down two ways you can help protect the Suisun Watershed.*
   * Throw litter into the garbage can and not on the ground
   * Clean up after your dog
   * Educate your friends and family on where litter goes
   * Fix your car if it's leaking oil and encourage your parents to recycle used oil
   * Attend California Coastal Cleanup

Additional Questions asked on the Post-Assessment instrument

6.a. *Was the Water Conservation Challenge hard?*
   Yes- I/my family use a lot of water and it was hard to track

6.b. *After the Suisun Marsh Program, how will you use water differently?*
   I/we'll use less water now

7. *Define each "R" in "Reduce, Reuse, Recycle". Give one example of how each R works.*
   Reduce means to use less. We don't use throwaway bags when we go to the store.
   Re-use means to use over and over again. We use cloth bags when we buy our groceries.
   Recycle means to turn something into something new. We recycle our aluminum cans to make new cans.

Student answers on the pre-assessment instruments in the 10% sample reflected low to very low knowledge about all the concepts examined in the quiz. Student ability to provide correct or partly correct answers to the 5 questions ranged from 7% to 63%. Students demonstrated the least knowledge about their watershed and the threats to the Suisun Marsh, with just 7% of students able to correctly identify their home watershed, the source of their drinking water or the main threats to the marsh. 32% percent of students could correctly tell us where rainwater goes after it hits the ground, and 32% could identify two ways to protect the Suisun Marsh.

When we looked at partially correct answers—those that identified at least some portion of the concept we were looking for—appropriate responses rose to 32 percent on the rainwater question and to 63% on

the protecting Suisun Marsh question. Overall, 30% of the sample provided correct or partially correct answers to the 5 pre-assessment questions. 70% percent of the sample provided incorrect or no answers to the pre-assessment quiz questions.

Student responses in the sample of post-assessment quizzes showed an average improvement of 60 percentage points when considering correct and partially correct answers.

- 96% percent of students in the sample were able to correctly or partially correctly name their watershed;
- 99% could identify major threats to the Suisun Marsh;
- 96% could identify two stewardship behaviors they could enact to protect the marsh;
- 97% understood the implications of stormwater runoff (improvement of 55 percentage points).

Students improved the least in their responses to the question about where their drinking water comes from. In the pre-assessment, 7% of the sample was able to provide a correct or partially correct answer to this question. In the post-assessment, that number rose to 60% of the sample. This is a marked contrast to student improvement in understanding this concept in year's past.

There were three additional questions asked of students in the post-assessment, intended to assess student response to a Water Conservation Challenge they were asked to complete. The challenge required that they record a baseline water usage log, learn some ways to personally conserve water, and then record a follow up water conservation log. The assessment instrument asked students if the Water Conservation Challenge was hard, and if they would make any personal changes as a result of participating in the challenge. 36% of respondents said the challenge was hard (28% because they normally use a lot of water, 5% because it was hard to record their water usage and 3% said it was hard but gave no reason) and 9% did not provide an answer. 56% of students said the challenge was not difficult (5% said they didn't try hard, 24% said they didn't use a lot of water to begin with, 21% said it was easy to reduce water usage and 6% said the challenge wasn't hard, but provided no explanation). 86% percent of students said they will use water differently as a result of the Water Conservation Challenge, 4% reported they will not change their personal water use, and 11% of the sample did not answer the question.

For the personal waste reduction question, 24% of the sample could correctly define the three Rs, and provide a good example of each. 44% could either define the three Rs or gave a good example, for a total of 67% of correct or partially correct answers.

This year, there were several notable changes to the demographics that supply our assessment sample. For the first time, our population included special needs students. Also for the first time, our assessment population included students who participated as third graders in Solano RCD's Watershed Explorers program. None of these populations was identified on the assessment instruments, so we cannot know if students representing any of these groups were represented in our 10% random sample, though it is probable that they were. We are considering ways to account for these populations in future assessments, with particular emphasis to track performance of the students who were exposed to the Watershed Explorers curriculum in the third grade.

In conclusion, students represented by the sample improved dramatically in their ability to answer every question, indicating an overall gain in understanding of the big concepts we are working with. The 10% sample improved in performance by 278%, an improvement of 60 percentage points and equating with the assignment of a failing grade to the assignment of an A- grade.

Apendix A – Quotes

Teacher Quote

"The kids were really engaged. A lot of them had never been exposed to what a watershed was. They get to actually go out and do some field experiments, like testing water temperature and understanding why temperature is important. They were excited about being able to leave the classroom, and it didn't take them long to figure out they were actually learning some stuff – that it wasn't just a get-out-of-class day." Bruce Vieira, a sixth-grade math and science teacher at Rio Vista's Riverview Middle School, who participated for the first time last fall.

Student Quotes

"Thank you for teaching me about the Suisun Marsh. I really enjoyed this entire program. My favorite lesson would have to be that of the marine debris. Now I am making sure that I never accidently let my trash and wrappers fly out of my pockets. I don't want to hurt the cut animals in the pictures and videos EVER." Jarrett, Vaca Peña Middle School, Ms. Olson's class

"Thank you so much for teaching me about oil spills and what we can do to help it from getting in the river. I will do my best to help the river problems. At my house we do all the 3 R's." Lakenthia, Vaca Peña Middle School, Ms. Olson's class

"I learned to not take long showers and to not waste water." Krystianna, Vaca Peña Middle School, Ms. Olson's class

Appendix B – Photo Documentation

Program educator giving soil samples to students

Solano RCD education program staff

Students involved in the poetry writing on Overlook Hill

Ms. Robin Shishido-Baily's class (Benicia) who won the water challenge (all wearing program shirts)

Program educator explaining the significance of the RRR messaging

Many students celebrate the soil station by painting their faces with their soil sample

Section 9 – Provision C.9 Pesticides Toxicity Controls

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

Is your municipality implementing its IPM Policy/Ordinance and Standard Operating Procedures?	x	Yes		No
If no, explain:				

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[61]

Pesticide Category and Specific Pesticide Used	Amount[62]					
	FY 15-16	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Organophosphates	0					
Product or Pesticide Type A	0					
Product or Pesticide Type B	0					
Pyrethroids	0					
Product or Pesticide Type X	0					
Product or Pesticide Type Y	0					
Carbamates	0					
Product or Pesticide Type X	0					
Product or Pesticide Type Y	0					
Fipronil	0					
Product or Pesticide Type X	0					
Product or Pesticide Type Y	0					
Indoxacarb	Reporting					

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

Ow that the amount of trash[62]Weight or volume of the product or preferably its active ingredient, using same units for the product each year. Please specify units used. The active ingredients in any pesticide are listed on the label. The list of active ingredients that need to be reported in the pyrethroids class includes: metofluthrin, bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambdacyhalothrin, and permethrin.

	not required in FY 15-16					
Diuron	Reporting not required in FY 15-16					
Diamides	Reporting not required in FY 15-16					

IPM Tactics and Strategies used:

1) **Pesticides will only be used after careful consideration of non-chemical alternatives and least toxic chemicals that are effective.**
2) **Pest control contractors hired by the City of Suisun City implement IPM.**

C.9.b ►Train Municipal Employees

Enter the number of employees that applied or used pesticides (including herbicides) within the scope of their duties this reporting year.	**3**
Enter the number of these employees who received training on your IPM policy and IPM standard operating procedures within this reporting year.	**3**
Enter the percentage of municipal employees who apply pesticides who have received training in the IPM policy and IPM standard operating procedures within this reporting year.	**100%**

Type of Training:

Employee training is done locally at our facility.

C.9.c ►Require Contractors to Implement IPM

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

If yes, briefly describe how contractor compliance with IPM Policy/Ordinance and SOPs was monitored

The landscape supervisor reviews the City of Suisun City IPM requirements with contractors to ensure compliance with the City of Suisun City policy.

C.9.d ►Interface with County Agricultural Commissioners

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

If yes, summarize the communication. If no, explain.
N/A

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

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

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

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

Summary:

Point-of-purchase outreach occurred at the following stores in the Fairfield-Suisun area:

Lowe's
1500 Oliver Road
Fairfield, CA 94534
707-427-8665

Home Depot
2121 Cadenasso Drive
Fairfield, CA94533
707-426-9600

Ace Hardware
252 Sunset Ave.
Suisun City, CA 94585
707-428-4223

The following information was received from management at Lowe's and Home Depot, the percentage increased in less toxic category are around 30% and 22- 25% in Northern California.
Also, seethe C.9 Pesticides Toxicity Control section of Program FY2015-16 Annual Report for information on point of purchase public outreach conducted countywide and regionally.

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

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

Summary:

See the C.9 Pesticides Toxicity Control section of Countywide Program's FY 15-16 Annual Report for information on point of purchase public outreach conducted countywide and regionally.

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

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

Summary:

See the C.9 Pesticides Toxicity Control section of Program's FY 15-16 Annual Report for a summary of our participation in and contributions towards countywide and regional public outreach to pest control operators and landscapers to reduce pesticide use.

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

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

Summary:

During FY 15-16, we participated in regulatory processes related to pesticides through contributions to the countywide Program, BASMAA and CASQA. For additional information, see the Regional Report submitted by BASMAA on behalf of all MRP Permittees.

Section 10 - Provision C.10 Trash Load Reduction

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

For Population-based Permittees, provide an estimate of the overall trash reduction percentage achieved to-date within the jurisdictional area of your municipality that generates problematic trash levels (i.e., Very High, High or Moderate trash generation). Base the estimate on the information presented in C.10.b i-iv and C.10.e.i-ii. Provide a discussion of the trash estimate below, including whether the applicable trash reduction performance guideline or deadline was attained. If not attained, include a discussion of next steps (e.g., development of a detailed plan or report of non-compliance).

Trash Load Reductions	
Percent Trash Reduction in All Trash Management Areas (TMAs) due to **Trash Full Capture Systems** (as reported C.10.b.i)	**39**
Percent Trash Reduction in all TMAs due to **Control Measures Other than Trash Full Capture Systems** (as reported in C.10.b.ii)	**0**
Percent Trash Reduction due to **Jurisdictional-wide Source Control Actions** (as reported in C.10.b.iv)	**2**
SubTotal for Above Actions	**41**
Trash Offsets (Optional)	
Offset Associated with Additional Creek and Shoreline Cleanups (as reported in C.10.e.i)	**NA**
Offset Associated with Direct Trash Discharges (as reported in C.10.e.ii)	**NA**
Total Estimated % Trash Load Reduction in FY 15-16	**41**

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

For Population-based Permittees, provide an estimate of the overall trash reduction percentage achieved to-date within the jurisdictional area of your municipality that generates problematic trash levels (i.e., Very High, High or Moderate trash generation). Base the estimate on the information presented in C.10.b i-iv and C.10.e.i-ii. Provide a discussion of the trash estimate below, including whether the applicable trash reduction performance guideline or deadline was attained. If not attained, include a discussion of next steps (e.g., development of a detailed plan or report of non-compliance).

Discussion of Trash Load Reduction Estimate: **The City is working on a Full Capture Devise for TMA 1 at Hwy12 and Grizzly Island Road this would eliminate our biggest TMA area, currently with Oil Grant Funding, Fish Game and Wildlife and Cal Trans. We hope to have this installed during the summer of 2017 this would eliminate our highest trash area. This would implementation of additional trash load reduction control actions that will attain 2017 mandatory deadline (i.e., 70%), consistent with MRP 2.0 requirements.**

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

Provide the following:

1) Total number and types of full capture systems (publicly and privately-owned) installed prior to FY 15-16, during FY 15-16, and to-date, including inlet-based and large flow-through or end-of-pipe systems, and qualifying low impact development (LID) required by permit provision C.3.
2) Total land area (acres) treated by full capture systems for population-based Permittees and total number of systems for non-population based Permittees compared to the total required by the permit.

Type of System	# of Systems	Areas Treated (Acres)
Installed Prior to FY 15-16		
Petersen Subdivision CDS	**16**	**260**
Hampton Inn CDS	**1**	**3.1**
Fairfield End Railroad CDS	**1**	**35**
Amberwood CDS	**1**	**7.5**
Amberwood Catch Basin Cage	**2**	**3.5**

Summer Wood CDS	1	12.7
Kellogg Catch Basin Cage	1	.33
Breeze Wood CDS	1	7.5
Driftwood Drive Catch Basin Cage	1	1.2
Gray Hawk Lane CDS	1	7
Seafood CDS	1	1.3
Four Seasons Storage CDS	1	7.3
Installed in FY 15-16		
Gray Hawk / Grizzly Catch Basin Cage	1	1
Wal-Mart CDS	1	20.8
Total for all Systems Installed To-date	30	
Treatment Acreage Required by Permit (Population-based Permittees)		374.23
Total # of Systems Required by Permit (Non-population-based Permittees)		0

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

Provide the following:

1) Jurisdictional-wide trash reduction in FY 15-16 attributable to trash full capture systems implemented in each TMA;
2) The total number of full capture systems installed to-date in your jurisdiction;
3) Since the effective date of MRP 2.0 (January 1, 2016), the percentage of systems that exhibited significant plugged/blinded screens or were >50% full when inspected or maintained;
4) A narrative summary of any maintenance issues and the corrective actions taken to avoid future full capture system performance issues; and
5) A certification that each full capture system is operated and maintained to meet the full capture system requirements in the permit.

TMA	Jurisdiction-wide Reduction (%)	Total # of Full Capture Systems	% of Systems Exhibiting Plugged/Blinded Screens or >50% full	Summary of Maintenance Issues and Corrective Actions
1	61.5%	1	0.0%	TMA 1, just installed 12 curb screens and 1 full capture cage in a catch basin. In June of 2016 treats 4.5 acres. We are working on a full capture devise to take care of the remaining 30.5 acres with oil grant funding, Fish and Wild Life and Cal Trans. TMA 2, no capture device area was really clean just leafs and a
2	0.0%	NA	0.0%	
3	0.0%			
4	0.0%	NA	0.0%	

5	0.0%	NA	0.0%	few cigarettes butts.
6	0.0%	NA	0.0%	TMA 3, no capture devise area clean just leafs and vegetation.
		NA	0.0%	TMA 4, no capture devise area clean just leafs and vegetation.
				TMA 5, no capture devise area clean just leafs and vegetation.
Total	39%			TMA 6, no capture devise area clean just leafs and vegetation.

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

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

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

TMA	Summary of Trash Control Actions Other than Full Capture Systems
1	Street Sweeping, On-land Clean Ups, Storm drain cleaning, Public Education Partial Capture Devices
2	Street Sweeping, On-land Clean Ups, Storm drain cleaning, Public Education
3	Street Sweeping, On-land Clean Ups, Storm drain cleaning, Public Education
4	Street Sweeping, On-land Clean Ups, Storm drain cleaning, Public Education
5	Street Sweeping, On-land Clean Ups, Storm drain cleaning, Public Education
6	Street Sweeping, On-land Clean Ups, Storm drain cleaning, Public Education
7	Street Sweeping, On-land Clean Ups, Storm drain cleaning, Public Education Partial Capture Devices

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

Provide the following:

1) A summary of the on-land visual assessments in each TMA (or control measure area), including the street miles or acres available for assessment (i.e., those associated with VH, H, or M trash generation areas not treated by full capture systems), the street miles or acres assessed, the % of available street miles or acres assessed, and the average number of assessments conducted per site within the TMA; and
2) Percent jurisdictional-wide trash reduction in FY 15-16 attributable to trash management actions other than full capture systems implemented in each TMA.

TMA ID or *(as applicable)* Control Measure Area	Total Street Miles or Acres Available for Assessment	Summary of On-land Visual Assessments			Jurisdictional-wide Reduction (%)
		Street Miles or Acres Assessed	% of Applicable Street Miles or Acres Assessed	Avg. # of Assessments Conducted at Each Site	
1	35	4.5	13%	10	39%
2	2	1	50%	11	0%
3	1	1	100%	6	0%
4	4	2	50%	10	0%
5	1	1	100%	3	0%
6	2	1	50%	3	0%
Total		10.5		48	39%

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

Provide a description of each jurisdictional-wide trash source control action implemented to-date. For each control action, identify the trash reduction evaluation method(s) used to demonstrate on-going reductions, summarize the results of the evaluation(s), and provide the associated reduction of trash within your jurisdictional area. Also include the total % reduction credit for all source controls up to the maximum 10% allowed by MRP 2.0.

Source Control Action	Summary Description & Dominant Trash Sources and Types Targeted	Evaluation/Enforcement Method(s)	Summary of Evaluation/Enforcement Results To-date	% Reduction	Total Reduction Credit (%)
Reduce Trash from Uncovered Loads	The City entered into hauling service contract requiring loads to be covered as part of the latest solid waste hauling agreement. Dominant Trash source is all types of trash.	City staff enforces this measure during their routine project field inspections.	Results show haulers are complying with this requirement to cover loads.	1%	
Public Education and Outreach Programs Targeted at Trash Reduction and Implemented Post MRP Adoption	The City recently installed "Put Trash Where it Belongs" signs around town at locations in the high trash generation rate areas. The same sign has been attached to Solano Garbage Company dumpsters to promote the protection of our local creeks and Suisun Marsh. The Program is also working with Solano Garbage's route drivers to educate facility managers and property owners during garbage pickups. Drivers have been given maps of high trash generation areas and City Trash/ Ordinances cards as well as instructions to pay attention toward maintenance, proper disposal and pick-up. Drivers have been instructed to hand out City Trash/ Ordinance cards to facility managers depicting the deficiencies of the facility's trash disposal. City code enforcement officers may be drawn in to assist ion education and compliance as needed. The program is also working with Solano County Health Inspectors to educate and enforce facility managers and property owners during their normal daily inspections following similar procedures as described above.	City Staff will visually monitor the amount of trash found at the City's hot spots to see if the amount of trash has been reduced.	Monitoring of the Trash found at the City's hot spots appeared to show that the amount has either been reduced or remained consistent with past years	1%	2%

C.10.c ► Trash Hot Spot Cleanups

Provide the FY 15-16 cleanup date and volume of trash removed during each MRP-required Trash Hot Spot cleanup during each fiscal year listed. Indicate whether the site was a new site in FY 15-16.

Trash Hot Spot	New Site in FY 15-16 (Y/N)	FY 15-16 Cleanup Date(s)	Volume of Trash Removed (cubic yards)				
			FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16
The Boat Ramp Area from the fuel trailer south to end parking lot	N		0.5 cubic yards				
The Boat Ramp Area from the fuel trailer south to end parking lot	N			0.25 cubic yards			
The Boat Ramp Area from the fuel trailer south to end parking lot	N				0.5 cubic yards		
The Boat Ramp Area from the fuel trailer south to end parking lot	N					0.5 cubic yards	
The Boat Ramp Area from the fuel trailer south to end parking lot	N	July 7, 2015					0.3 cubic yards

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

Provide descriptions of significant revisions made to your Long-term Trash Load Reduction Plan submitted to the Water Board in February 2014. Describe significant changes made to primary or secondary trash management areas (TMA), trash generation maps, control measures, or time schedules identified in your plan. Indicate whether your trash generation map was revised and is attached to your Annual Report.

Description of Significant Revision	Associated TMA
Is approximately 35 acres of area. This area consists of the following commercial services: fast food; gas stations; retail stores; and high volume highway traffic (including garbage trucks heading to landfill) This management area has a trash generation classification of low, moderate, and high. Priority to this trash management area is currently high and is being maintained by the property and business owners. **The City's approach to addressing trash issues is to increase awareness of the Public through outreach to property and business owners. The goal is also for our code enforcement officers to take active roles in pursuing trash generators and containing it at the source. Activities also include the installation of educational signs of "Be the solution to water pollution…The Suisun Marsh is Ours to Protect. Put Trash where it belongs. Our Creeks. Our Water. Ours to Protect" signs with intention to get people involved to make difference. The City also intends to install Full Capture Devises in field inlets and catch basins when funding becomes available.** **We added twelve screens and one full capture cage inside catch basin from Oil Grant to treat 4.5 acres of this TMA this year. Also using Oil Grant funds, working with other agency's Cal Trans and Fish Game and Wild Life on an out fall to have full capture devise. This would be installed at the Grizzly Island turtle pond located at the South West corner of Hwy 12 and Grizzly Island Road in Suisun City this would treat the remaining 30.5 acres of this TMA. The street sweeping and local business owners getting involved with keeping the shopping center clean and having their local service clean more it has made a big difference. We will continue to pursue Grants and Funding to install full capture devises to our storm water system and prevent trash and pollution from entering into the bay. The trash map has not been updated for this TMA.**	**1**
Is approximately a 2 acres area. This area consists of restaurants and retail stores. This management area is currently rated moderate to low and is being maintained by property and business owners. **The City's approach to addressing trash issues is to increase awareness of the Public through outreach to property and business owners. The goal is also for our code enforcement officers to take active roles in pursuing trash generators and containing it at the source. Activities also include the installation of educational signs of "Be the solution to water pollution…The Suisun Marsh is Ours to Protect. Put Trash where it belongs. Our Creeks. Our Water. Ours to Protect" signs with intention to get people involved to make difference. The City also intends to install Full Capture Devises in field inlets and catch basins when funding becomes available. The trash map has not been updated for this TMA.**	**2**
Is approximately 1 acre area. The area consists of a commercial business for sales of boats and boat repair center. This management area is currently rated moderate to low and is being maintained by property and business owners. **The City's approach to addressing trash issues is to increase awareness of the Public through outreach to property and business**	**3**

owners. The goal is also for our code enforcement officers to take active roles in pursuing trash generators and containing it at the source. Activities also include the installation of educational signs of "Be the solution to water pollution…The Suisun Marsh is Ours to Protect. Put Trash where it belongs. Our Creeks. Our Water. Ours to Protect" signs with intention to get people involved to make difference. The City also intends to install Full Capture Devises in field inlets and catch basins when funding becomes available. The trash map has not been updated for this TMA.	
Is approximately 4acre area. The area consists of commercial businesses (lumber) and an industrial railroad yard. Priority to the management area is currently rated moderate to low and is being maintained by property and business owners. The City's approach to addressing trash issues is to increase awareness of the Public through outreach to property and business owners. The goal is also for our code enforcement officers to take active roles in pursuing trash generators and containing it at the source. Activities also include the installation of educational signs of "Be the solution to water pollution…The Suisun Marsh is Ours to Protect. Put Trash where it belongs. Our Creeks. Our Water. Ours to Protect" signs with intention to get people involved to make difference. The City also intends to install Full Capture Devises in field inlets and catch basins when funding becomes available. The trash map has not been updated for this TMA.	4
Is approximately 1 acre area. The area consists of a Arco Gas Station combined with a AM/PM Mini-Market Store. This management area is currently rated moderate to low and is being maintained by property and business owners. This area has a high volume of vehicle traffic from Highway 12. The City's approach to addressing trash issues is to increase awareness of the Public through outreach to property and business owners. The goal is also for our code enforcement officers to take active roles in pursuing trash generators and containing it at the source. Activities also include the installation of educational signs of "Be the solution to water pollution…The Suisun Marsh is Ours to Protect. Put Trash where it belongs. Our Creeks. Our Water. Ours to Protect" signs with intention to get people involved to make difference. The City also intends to install Full Capture Devises in field inlets and catch basins when funding becomes available. The trash map has not been updated for this TMA.	5
Is approximately a 2 acres area. This area consists of a Valero Gas Station and a Bon Fair Mini- Market. This management area is currently rated moderate to low and is being maintained by property and business owners. This area has a high volume of vehicle traffic from Travis Air Base rear gate truck traffic and Highway 12. The City's approach to addressing trash issues is to increase awareness of the Public through outreach to property and business owners. The goal is also for our code enforcement officers to take active roles in pursuing trash generators and containing it at the source. Activities also include the installation of educational signs of "Be the solution to water pollution…The Suisun Marsh is Ours to Protect. Put Trash where it belongs. Our Creeks. Our Water. Ours to Protect" signs with intention to get people involved to make difference. The City also intends to install Full Capture Devises in field inlets and catch basins when funding becomes available. The trash map has not been updated for this TMA.	6

Is approximately 2002 acres in area. This area consists overall of residential areas Of Suisun City. This management area is currently rated low and is being maintained by property owners. The City's approach to addressing trash issues is to increase awareness of the Public through outreach to property and business owners. The goal is also for our code enforcement officers to take active roles in pursuing trash generators and containing it at the source. Activities also include the installation of educational signs of "Be the solution to water pollution...The Suisun Marsh is Ours to Protect. Put Trash where it belongs. Our Creeks. Our Water. Ours to Protect" signs with intention to get people involved to make difference. The City also intends to install Full Capture Devises in field inlets and catch basins when funding becomes available. The trash map has not been updated for this TMA.	7

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

Provide a summary description of each offset program implemented, the volume of trash removed, and the offset claimed in FY 15-16. Also, for additional creek and shoreline cleanups, describe the number and frequency of cleanups conducted, and the locations and cleanup dates. For direct discharge control programs approved by the Water Board Executive Officer, also describe the results of the assessments conducted in receiving waters to demonstrate the effectiveness of the control program. Include an Appendix that provides the calculations and data used to determine the trash reduction offset.

Offset Program	Summary Description of Actions and Assessment Results	Volume of Trash (CY) Removed/Controlled in FY 15-16	Offset (Jurisdiction-wide Reduction %)
Additional Creek and Shoreline Cleanups (Max 10% Offset)	On September 29th, 2015 the program led volunteer cleanup of local creeks throughout both Cities. 692 volunteers picked up 10,895 pounds of trash and recyclable on 28 miles of waterway. On April 23,2016 the Program led volunteer cleanups of Ledgewood Creek in Fairfield, Lower Union Avenue Creek and the Suisun Marsh at Grizzly Island Road. There were 63 volunteers who picked up 10.3 CY of Trash along 3 miles of waterway.	54 10.3	NA
Direct Trash Discharge Controls (Max 15% Offset)	This option is currently not being utilized by the program permitees.	NA	NA

Appendix XX. Baseline trash generation and areas addressed by full capture systems and other control measures in Fiscal Year 15-16.

TMA	2009 Baseline Trash Generation (Acres)					Trash Generation (Acres) in FY 15-16 After Accounting for Full Capture Systems					Jurisdiction-wide Reduction via Full Capture Systems (%)	Trash Generation (Acres) in FY 15-16 After Accounting for Full Capture Systems and Other Control Measures					Jurisdiction-wide Reduction via Other Control Measures (%)	Jurisdiction-wide Reduction via Full Capture AND Other Control Measures (%)
	L	M	H	VH	Total	L	M	H	VH	Total		L	M	H	VH	Total		
1	16.5	10	8.5	0	35	21	10	4	0	35	39%	21	10	4	0	35	39%	39%
2	1.5	0.5	0	0	2	1.5	0.5	0	0	2	0%	1.5	0.5	0	0	2	0%	0%
3	0.8	0.2	0	0	1	0.8	0.2	0	0	1	0%	0.8	0.2	0	0	1	0%	0%
4	3.5	0.5	0	0	4	3.5	0.5	0	0	4	0%	3.5	0.5	0	0	4	0%	0%
5	0.5	0.5	0	0	1	0.5	0.5	0	0	0	0%	0.5	0.5	0	0	1	0%	0%
6	1.5	0.5	0	0	2	1.5	0.5	0	0	0	0%	1.5	0.5	0	0	2	0%	0%
7	2002	0	0	0	2002	2002	0	0	0	2002	0%	2002	0	0	0	2002	0%	0%
Totals	2026.3	12.2	8.5	0	2047	2030.8	12.2	4	0	2047	39%	2030.8	12.2	8.5	0	2047	39%	39%

Section 11 - Provision C.11 Mercury Controls

C.11.a ► Implement Control Measures to Achieve Mercury Load Reductions
C.11.b ► Assess Mercury Load Reductions from Storm water
C.11.c ► Plan and Implement Green Infrastructure to Reduce Mercury Loads
C.11.d ► Prepare Implementation Plan and Schedule to Achieve TMDL Allocations
C.11.e ► Implement a Risk Reduction Program

Summary:

A summary of Program and regional accomplishments for these sub-provisions are included within the C.11 Mercury Controls section of Program's FY 15-16 Annual Report and/or BASMAA regional reports.

Section 12 - Provision C.12 PCBs Controls

C.12.a ►Implement Control Measures to Achieve PCBs Load Reductions
C.12.b ►Assess PCBs Load Reductions from Storm water
C.12.c ►Plan and Implement Green Infrastructure to Reduce PCBs Loads
C.12.d ►Prepare Implementation Plan and Schedule to Achieve TMDL Allocations
C.12.e ►Evaluate PCBs Presence in Caulks/Sealants Used in Storm Drain or Roadway Infrastructure in Public Rights-of-Way
C.12.f ►Manage PCB-Containing Materials and Wastes During Building Demolition Activities So That PCBs Do Not Enter Municipal Storm Drains
C.12.g.►Fate and Transport Study of PCBs: Urban Runoff Impact on San Francisco Bay Margins
C.12.h ►Implement a Risk Reduction Program

Summary:

A summary of Program and regional accomplishments for these sub-provisions are included within the C.12 PCB Controls section of Program's FY 15-16 Annual Report and/or BASMAA regional reports.

Section 13 - Provision C.13 Copper Controls

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

(For FY 15-16 Annual Report only) Do you have adequate legal authority to prohibit the discharge of wastewater to storm drains generated from the installation, cleaning, treating, and washing of copper architectural features, including copper roofs?	X	Yes		No

(For FY 15-16 Annual Report only) Provide a summary of how copper architectural features are addressed through the issuance of building permits.

Summary:

Suisun City has specific requirements in their storm water ordinance for prohibition of copper-containing water to the storm drain system.

The Program has revised its C.3 New Development Guidance Document and BMPs which will reduce the impact of architectural copper features, including copper roofs, during construction and post construction. Because architectural Copper is not a popular feature in the Fairfield Suisun area, discharge of copper laden water from these structures is not seen as a significant source of copper.

In addition, the Program has developed a flyer for the permit counter entitled: Requirements for Architectural Copper. The flyer is based on a similar version from the San Mateo County-wide Water Pollution Prevention Program. The flier (see attached) describes how copper can harm aquatic life and best management practices which must be implemented to prevent prohibited discharges to the storm drain system.

(FY 15-16 Annual Report and each Annual Report thereafter) Provide summaries of permitting and enforcement activities to manage waste generated from cleaning and treating of copper architectural features, including copper roofs, during construction and post-construction.

Summary:

The Program has developed a flyer for the permit counter entitled: Requirements for Architectural Copper. The flyer is based on a similar version from the San Mateo County-wide Water Pollution Prevention Program. The flier (see attached) describes how copper can harm aquatic life and best management practices which must be implemented to prevent prohibited discharges to the storm drain system.

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

(For FY 15-16 Annual Report only) Do you have adequate legal authority to prohibit the discharge to storm drains of water containing copper-based chemicals from pools, spas, and fountains?	X	Yes		No

(For FY 15-16 Annual Report only) Provide a summary of how copper-containing discharges from pools, spas, and fountains are addressed to accomplish the prohibition of the discharge.

Summary:

Suisun has specific requirements in their storm water ordinance for prohibition of copper laden water to the storm drain system. Specifically, all swimming pools, spas, hot codes, and fountains that utilize copper-based chemicals shall not discharge into any storm drain was in the city's jurisdiction.

(FY 15-16 Annual Report and each Annual Report thereafter) Provide summaries of any enforcement activities related to copper-containing discharges from pools, spas, and fountains.

Summary:

There have been no reported discharges of copper containing water from pools, spas and fountains within the program area.

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

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

Summary:

Training of Health Inspectors was performed on February 12, 2016. The focus of the training was consistency in enforcement levels, enforcement authority; city storm water ordinances (including Copper controls); high-priority facilities needed to be inspected during the fiscal year and enforcement levels associated with illegal discharges.

The Program has revised its C.3 New Development Guidance Document and BMPs to reduce the impact of architectural copper features,

including copper roofs, during construction and post construction. Because architectural Copper is not a popular feature in the Fairfield Suisun area, discharge of copper laden water from these structures is not seen as a significant source of copper.

In addition, the Program has developed a flyer for the permit counter entitled: Requirements for Architectural Copper. The flyer is based on a similar version from the San Mateo County-wide Water Pollution Prevention Program. The flier (see attached) describes how copper can harm aquatic life and best management practices which must be implemented to prevent prohibited discharges to the storm drain system.

Requirements for Architectural Copper

Fairfield-Suisun Urban Runoff Management Program

Protect water quality during installation, cleaning, treating, and washing!

Copper from Buildings May Harm Aquatic Life

Copper can harm aquatic life in San Francisco Bay. Water that comes into contact with architectural copper may contribute to impacts, especially during installation, cleaning, treating, or washing. Patination solutions that are used to obtain the desired shade of green or brown typically contain acids. After treatment, when the copper is rinsed to remove these acids, the rinse water is a source of pollutants. Municipalities prohibit discharges to the storm drain of water used in the installation, cleaning, treating and washing of architectural copper.

Building with copper flashing, gutter and drainpipe.

Use Best Management Practices (BMPs)

The following Best Management Practices (BMPs) must be implemented to prevent prohibited discharges to storm drains.

During Installation

- If possible, purchase copper materials that have been pre-patinated at the factory.
- If patination is done on-site, implement one or more of the following BMPs:
  - Discharge the rinse water to landscaping. Ensure that the rinse water does not flow to the street or storm drain. Block off storm drain inlet if needed.
  - Collect rinse water in a tank and pump to the sanitary sewer. Contact your local sanitary sewer agency before discharging to the sanitary sewer.
  - Collect the rinse water in a tank and haul off-site for proper disposal.
- Consider coating the copper materials with an impervious coating that prevents further corrosion and runoff. This will also maintain the desired color for a longer time, requiring less maintenance.

Storm drain inlet is blocked to prevent prohibited discharge. The water must be pumped and disposed of properly.

During Maintenance

Implement the following BMPs during routine maintenance activities, such as power washing the roof, re-patination or re-application of impervious coating:

- Block storm drain inlets as needed to prevent runoff from entering storm drains.
- Discharge the wash water to landscaping or to the sanitary sewer (with permission from the local sanitary sewer agency). If this is not an option, haul the wash water off-site for proper disposal.

Protect the Bay/Ocean and yourself!

If you are responsible for a discharge to the storm drain of non-stormwater generated by installing, cleaning, treating or washing copper architectural features, you are in violation of the municipal stormwater ordinance and may be subject to a fine.

Photo credit Don Edwards National Wildlife Sanctuary

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

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

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

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

Summary:

See Program's annual report, section C.7. This portion of the annual report shows the Program's efforts towards the promotion of the School Water Education Program (SWEP). One of the primary focuses of this Program is water conservation. SWEP provides free water education resources to teach water awareness and conservation to students, teachers and parents in our service areas of Fairfield, Suisun City and Travis Air Force Base. The in-class education Programs include resource materials and assembly Programs are multi-discipline and aligned to the content standards for California public schools. The Programs encourage students and adults to develop a healthy attitude of personal responsibility towards our environment and develop skills needed to contribute meaningfully to decision-making process on issues involving our resources and particularly conserving our most precious resource, water.

See above section C.9 of the Program's annual report. This portion of the annual report shows the Program's efforts toward the promotion of less toxic pest control and landscape management. The Program contracts with consultant Annie Joseph regarding Our Water Our World, including outreach efforts regarding pesticide reduction or the use of less toxic products to pesticides. For additional information on regional efforts, see section C.9.h.i of the Regional Supplement for Training and Outreach for FY2015-2016 submitted by BASMAA on behalf of all MRP Permittees.

Suisun City Council has adopted a water efficient landscaping ordinance. The goal of this ordinance is to promote the conservation and efficient use of water and to prevent the waste of this valuable resource and use water efficiently without waste by setting a maximum applied water allowance as an upper limit for water use and reduce water use to the lowest practical amount. This ordinance, effective January 1, 2010 applied to all new construction and rehabilitated landscapes for public agency projects and private development projects with a landscape area equal to or greater than 2,500 square feet requiring a building or landscape permit, plan check or design review.