



ALAMEDA COUNTY
FLOOD CONTROL AND
WATER CONSERVATION
DISTRICT

MEMBER AGENCIES:

Alameda
Albany
Berkeley
Dublin
Emeryville
Fremont
Hayward
Livermore
Newark
Oakland
Piedmont
Pleasanton
San Leandro
Union City
County of Alameda
Alameda County Flood
Control and Water
Conservation District
Zone 7 Water Agency

FISCAL YEAR
2015-2016 ANNUAL
REPORT OF
STORMWATER
PROGRAM
IMPLEMENTATION

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



September 28, 2016

Bruce Wolfe, Executive Officer
San Francisco Regional Water Quality Control Board
1514 Clay Street
Oakland, CA 94612

SUBJECT: Annual Report for Fiscal Year 2015-2016 for the Alameda County Flood Control and Water Conservation District.

Dear Mr. Wolfe:

Enclosed herewith is the subject for the Fiscal Year 2015-2016 (months of July 2015 through June 2016). This is being submitted in accordance with the requirements of our NPDES permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision 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 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.

Yours truly,



Daniel Woldesenbet, Ph.D., P.E.
Director of Public Works

DW:SG
Enc.

FY 2015-2016 Annual Report

Permittee Name: Alameda Flood Control and Water Conservation District

ATTACHMENT B

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Permittee Name: Alameda Flood Control and Water Conservation District

Section 1 – Permittee Information

Background Information				
Permittee Name:	Alameda County Flood Control and Water Conservation District			
Population:	Zero			
NPDES Permit No.:	CAS612008			
Order Number:	R2-2015-0049			
Reporting Time Period (month/year):	July 2015 through June 2016			
Name of the Responsible Authority:	Daniel Woldesenbet	Title:		
Mailing Address:	399 Elmhurst Street			
City:	Hayward	Zip Code:	949544	County: Alameda
Telephone Number:	510-679-5455	Fax Number:		
E-mail Address:				
Name of the Designated Stormwater Management Program Contact (if different from above):	Sharon Gosselin	Title:	Stormwater Program Manager	
Department:	Alameda County Public Works Agency			
Mailing Address:	399 Elmhurst Street			
City:	Hayward	Zip Code:	94544	County: Alameda
Telephone Number:	510-670-6547	Fax Number:	510-670-5247	
E-mail Address:	sharon@acpwa.org			

Section 2 - Provision C.2 Reporting Municipal Operations

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

Summary:
 Staff continued to participate in the CWP M&O subcommittee. District staff attended the CWP SWPPP refresher training workshop on June 30, 2016

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.

NA	Control of debris and waste materials during road and parking lot installation, repaving or repair maintenance activities from polluting stormwater
NA	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.
NA	Sweeping and/or vacuuming and other dry methods to remove debris, concrete, or sediment residues from work sites upon completion of work.

Comments:

Permittee Name: Alameda Flood Control and Water Conservation District

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.

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

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

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

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

Permittee Name: Alameda Flood Control and Water Conservation District

C.2.e. ► Rural Public Works Construction and Maintenance			
Does your municipality own/maintain rural ¹ roads:		<input type="checkbox"/>	Yes
		<input checked="" type="checkbox"/>	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.			
<input type="checkbox"/>	Control of road-related erosion and sediment transport from road design, construction, maintenance, and repairs in rural areas		
<input type="checkbox"/>	Identification and prioritization of rural road maintenance based on soil erosion potential, slope steepness, and stream habitat resources		
<input type="checkbox"/>	No impact to creek functions including migratory fish passage during construction of roads and culverts		
<input type="checkbox"/>	Inspection of rural roads for structural integrity and prevention of impact on water quality		
<input type="checkbox"/>	Maintenance of rural roads adjacent to streams and riparian habitat to reduce erosion, replace damaging shotgun culverts and excessive erosion		
<input type="checkbox"/>	Re-grading of unpaved rural roads to slope outward where consistent with road engineering safety standards, and installation of water bars as appropriate		
<input type="checkbox"/>	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:			

¹Rural 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.

Permittee Name: Alameda Flood Control and Water Conservation District

C.2.f. ► Corporation Yard BMP Implementation

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

<input checked="" type="checkbox"/>	We do not have a corporation yard
<input type="checkbox"/>	Our corporation yard is a filed NOI facility and regulated by the California State Industrial Stormwater NPDES General Permit
<input checked="" type="checkbox"/>	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:

<input checked="" type="checkbox"/>	Control of pollutant discharges to storm drains such as wash waters from cleaning vehicles and equipment
<input checked="" type="checkbox"/>	Routine inspection prior to the rainy seasons of corporation yard(s) to ensure non-stormwater discharges have not entered the storm drain system
<input checked="" type="checkbox"/>	Containment of all vehicle and equipment wash areas through plumbing to sanitary or another collection method
<input checked="" type="checkbox"/>	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
<input checked="" type="checkbox"/>	Cover and/or berm outdoor storage areas containing waste pollutants

Comments:

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

Corporation Yard Name	Inspection Date (1x/year required)	Inspection Findings/Results	Follow-up Actions
Turner Court	4/13/16	No violations found	NA

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:

- The District has legal authority to implement C.3 through County Ordinance 13.08 Stormwater Management and Discharge Control and 6.36 Flood Control and Water Conservation District Use Regulations.
- The District uses the following development review and permitting procedures. While in site development review (Planning approval), projects are routed through multiple review departments for C3 compliance. Conditions of approval (COA) are placed upon C3 regulated projects during this time. After site development review approvals are given, projects are reviewed again during engineering plans check to ensure that COAs are met and to verify the final stormwater treatment design. All regulated projects are then required to attain a Storm Water Permit prior to Building, Road/Flood Encroachment and Grading Permit issuance. The Storm Water Permit regulates the installation of C3 features and C6 best management practices, if applicable.
Public projects are screened during conceptual design. Those that are potentially regulated are further reviewed at later stages of design. Regulated projects are reviewed for final approval by the Storm Water Permit engineering plans checker prior to project bid advertisement.
- When applicable, water quality effects and mitigation measures are addressed in CEQA by describing the potential impacts, type of C3 treatment to be used, and the benefits from that treatment. The CEQA document is routed with project plans as part of the development review process. Additional comments and clarifications are made at that time.
- The District does C.3 training in multiple ways. Larger broad topic trainings are covered biannually through the Countywide program. Smaller scale trainings are given at department meetings and one-on-one settings.
- The District educates staff, developers, contractors, construction site operators and owner/builders through development handouts, the District website and educational booths at street and County fairs.
- The District encourages site design measures on unregulated projects by including encouragement language on C3 handouts and verbally during development review and plans check.
- The District encourages source control measures on unregulated projects by including encouragement language on C3 handouts, including some of the measures into the Building Ordinance and verbally during development review and plans check.
- The County General Plan, which the District follows, was revised in 2012 and included policies for stormwater management.

Permittee Name: Alameda Flood Control and Water Conservation District

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.
 Summary:
 No C3 Regulated Projects were proposed within the District's jurisdiction during the reporting year.

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 stormwater handbook, include a reference to the handbook.
 Summary:
 The District is following the design specifications included in the ACCWP C.3 Technical Guidance Manual.

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.?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
Comments (optional): Onsite treatment is the preferred method. However, the District would allow Alternative or In-Lieu Compliance if it were proposed for a project.				

Permittee Name: Alameda Flood Control and Water Conservation District

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
If you answered "Yes" to either question, 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) stormwater treatment systems and HM controls to the local mosquito and vector control agency and the Water Board. The list shall include the facility locations and a description of the stormwater treatment measures and HM controls installed.
No Regulated Projects have been proposed, approved or constructed within the District's jurisdiction.

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)	0
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)	0
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)	0
Percentage of the total number of Regulated Projects (including offsite projects, and Regional Projects) inspected during the reporting period (FY 15-16)	0% ²
Option 2 – Reporting Stormwater Treatment System Inspections	
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)	x
Total number of stormwater treatment systems in your agency's database or tabular format at the end of the reporting period (FY 15-16)	x
Total number of stormwater treatment and HM systems inspected in the reporting period (FY 15-16)	x
Percentage of stormwater treatment and HM systems inspected in the reporting period (FY 15-16)	x% 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:

To date, no Regulated Projects have been constructed within the District's jurisdiction. Therefore, no O&M inspections were conducted during the reporting year.

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:

To date, no Regulated Projects have been constructed within the District's jurisdiction. Therefore, no O&M inspections were conducted during the reporting year.

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

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

Summary:

BASMAA prepared standard specifications in four fact sheets regarding the site design measures listed in Provision C.3.i, as a resource for Permittees. We have modified local policies/procedures and forms to require all applicable projects approved after December 1, 2012 to implement at least one of the site design measures listed in Provision C.3.i. We are using the following products for C.3.i implementation:

- BASMAA's site design fact sheets
- District forms: Stormwater Requirements Pre-Screening Checklist and Single Family Residential Lot Clean Water Site Measures

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: Not applicable to the District.

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:
Not applicable to the District.

Summary of Planning or Implementation Status of Identified Projects:
See attached Tables C.3.j.ii.(2)-A and C.3.j.ii.(2)-B for the required information.

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.
Not applicable to the District.

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.
Not applicable to the District.

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											
There were no Regulated Projects within the District's jurisdiction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Public Projects											
There were no Regulated Projects within the District's jurisdiction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Comments:											

¹⁰Include cross streets

¹¹If a project is being constructed in phases, indicate the phase number and use a separate row entry for each phase. If not, enter "NA".

¹²Project 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.

¹³State the watershed(s) in which the Regulated Project is located. Downstream watershed(s) may be included, but this is optional.

¹⁴All impervious surfaces added to any area of the site that was previously existing pervious surface.

¹⁵All impervious surfaces added to any area of the site that was previously existing impervious surface.

¹⁶For redevelopment projects, state the pre-project impervious surface area.

¹⁷For 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										
There were no Regulated Projects within the District's jurisdiction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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

¹⁹For private projects, state project application final discretionary approval date. If the project did not go through discretionary review, report the building permit issuance date.

²⁰List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.

²¹List 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.

²²List 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.).

²³List 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.

²⁴See 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).

²⁵For 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.

²⁶For 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.

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

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

²⁹If 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), bioretention unit(s), regional detention basin, or in-stream control).

Permittee Name: Alameda Flood Control and Water Conservation District

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										
There were no Regulated Projects within the District's jurisdiction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Comments: There were no Regulated Projects within the District's jurisdiction.										

³⁰For public projects, enter the plans and specifications approval date.

³¹List source control measures approved for the project. Examples include: properly designed trash storage areas; storm drain stenciling or signage; efficient landscape irrigation systems; etc.

³²List 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.

³³List 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.).

³⁴List 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.

³⁵See 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).

³⁶For 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.

³⁷For 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.

³⁸Note whether a third party was used to certify the project design complies with Provision C.3.d.

³⁹If HM control is not required, state why not.

⁴⁰If 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), bioretention unit(s), regional detention basin, or in-stream control).

Permittee Name: Alameda Flood Control and Water Conservation District

C.3.h.v.(2). ► Table of Newly Installed⁴¹ Stormwater Treatment Systems and Hydromodification Management (HM) Controls (Optional)

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

Name of Facility	Address of Facility	Party Responsible ⁴² For Maintenance	Type of Treatment/HM Control(s)
There were no Regulated Projects within the District's jurisdiction.	N/A	N/A	N/A

⁴¹ "Newly Installed" includes those facilities for which the final installation inspection was performed during this reporting year.

⁴²State the responsible operator for installed stormwater treatment systems and HM controls.

C.3.e.v.Special Projects Reporting Table												
Reporting Period – July 1 2015 - June 30, 2016												
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
There were no Special Projects within the District's jurisdiction.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

⁴³Date 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.

⁴⁵Type 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.

⁴⁷For 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.

⁴⁹List 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- There were no Special Projects within the District's jurisdiction.

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
Not applicable to the District.				

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
Not applicable to the District.			

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:
 N/A

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 stormwater runoff.

N/A

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. **N/A**

<input type="checkbox"/>	Permittee reports multiple discrete violations on a site as one violation.
<input type="checkbox"/>	Permittee reports the total number of discrete violations on each site.

	Number	Percent
Number of businesses inspected		
Total number of inspections conducted		
Number of violations (excluding verbal warnings)		
Sites inspected in violation		
Violations resolved within 10 working days or otherwise deemed resolved in a longer but still timely manner		
Comments: N/A		

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. **N/A**

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

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Comments: N/A

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. N/A

	Enforcement Action (as listed in ERP) ⁴⁹	Number of Enforcement Actions Taken	% of Enforcement Actions Taken⁵⁰
Level 1			
Level 2			
Level 3			
Level 4			
Total		N/A	N/A

⁴⁹Agencies to list specific enforcement actions as defined in their ERPs.

⁵⁰Percentage calculated as number of each type of enforcement action divided by the total number of enforcement actions.

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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. **N/A**

Business Category ⁵¹	Number of Actual Discharge Violations	Number of Potential/Other Discharge Violations

C.4.d.iii.(1)(d) ▶ Non-Fileers

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

C.4.e.iii ▶ Staff Training Summary

Training Name	Training Dates	Topics Covered	No. of Industrial/Commercial Site Inspectors in Attendance	Percent of Industrial/Commercial Site Inspectors in Attendance	No. of IDDE Inspectors in Attendance	Percent of IDDE Inspectors in Attendance

Comments:
N/A

⁵¹List 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:
 District staff participates in the CWP's I&DC subcommittee. Refer to the C.5 Illicit Discharge Detection and Elimination section of countywide program's FY 15-16 Annual Report for description of activities at the countywide level.

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

List below or attach your complaint and spill response phone number

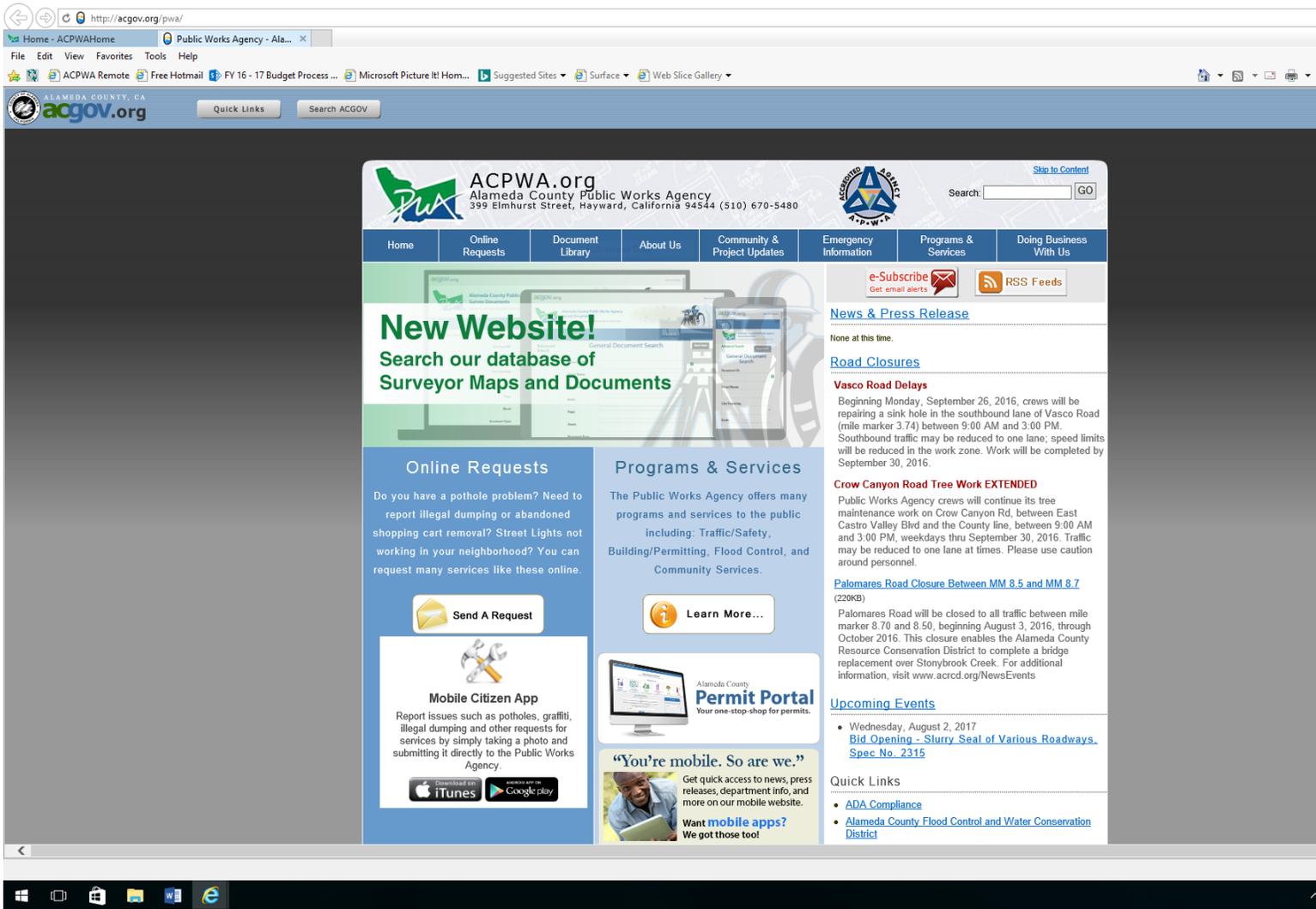
Public Works Agency	Maintenance and Operations Main Number	510-670-5500
---------------------	--	--------------

Provide your complaint and spill response web address, if used

www.acpwa.org in "on-line requests – send a report" section. We also have Citizen App available for download. Both are user friendly methods for the public to report spills and dumping.

Is a screen shot of your website showing the central contact point attached?

Yes No



X

If No, explain:

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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.

The staff who field call from the public are informed as part of their training to forward spill response calls directly M&O dispatch, our response phone. The Citizen App was rolled out to the staff at AC Public Works via email introducing the app and information describing where and how to download and use the app. The spill response phone number for the District and the ACPWA website address are included on our outreach materials we make available at events to the public.

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))	14	
Discharges reaching storm drains and/or receiving waters (C.5.d.iii.(2))	3	21%
Discharges resolved in a timely manner (C.5.d.iii.(3))	14	100%

Comments:
 Complaints/Spill/Discharge incidents and follow-up are tracked by Maintenance and Operations Department using Work Order software and "Mainstar" database. Service requests are given to a C.5 field inspector in our M & O department for first response, inspection, and follow-up. Activities are tracked using ACCESS database. Summary report is generated by sampling Mainstar database using activity code unique to spill and illicit discharges.

C.5.f.iii ► MS4 Map Availability

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

The [Alameda County Flood Control District](#) has created a full-featured, interactive map of every watershed in western Alameda County on the "Explore Watersheds" section of the website. Using the map, you can select a zone to find information on its creeks, culverts and storm drains, and explore points of interest. Alternatively, you can view this map on Google Maps or download for use with Google Earth. Links are available on the District's webpage.

The District conducted extensive outreach for the Explore Watersheds section of the website during FY 15-16. Multiple e-blasts were sent to local school teachers, city staff, environmental consultants, and watershed/friends groups to explain and advertise the watershed education program. A flyer advertising the new watershed education section of the website and program was distributed to middle and high school teachers throughout Alameda County. The District presented the Explore Watersheds program at the State of the Estuary Conference poster session in September, 2015. On-line Google ads were also run during FY 15-16 to advertise the website and program, and push online traffic to the site.

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?	<input type="checkbox"/>	Local criteria such as maps of hillside development areas or other written criteria	<input checked="" type="checkbox"/> The permit definition of projects on sites with $\geq 15\%$ slope
Attach a copy of hillside development area maps or provide your written criteria below, if applicable.			
Description: NA			

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)
1	2	13
Comments:		

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	0	0
Run-on and Run-off Control	0	0
Sediment Control	1	50%
Active Treatment Systems	0	0
Good Site Management	1	50%
Non Stormwater Management	0	0
Total⁵⁴	2	100%

⁵²Count 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.

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

⁵⁴The 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.

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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 Issued⁵⁶
Level 1 ⁵⁷	Verbal Warning	2	66.67%
Level 2	Written Warning	1	33.33%
Level 3	Notice of Violation	0	0.00%
Level 4	Stop Notice	0	0.00%
Total			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

⁵⁵Agencies should list the specific enforcement actions as defined in their ERPs.

⁵⁶Percentage calculated as number of each type of enforcement action divided by the total number of enforcement actions.

⁵⁷For 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)	1	100% 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 year⁶⁰	1	100%
<p>Comments: One violation was identified during the inspections. However, this violation was corrected within 10 business days and prior to any qualifying storm event.</p>		

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:
During the inspection period, 13 inspections were conducted on (3) three different sites. The few violations found were quickly corrected within 10 business days. Overall, the data continues to show a decreasing trend. While there was no violation last year, only 4 inspections were conducted on 2 different sites. The generally low BMP violations can be attributed to many construction projects being completed prior to the rainy season which starts on October 15 as well as impacts from the inspections, improved stormwater awareness, and increased involvement of the site's construction supervisors and the project managers.

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:
Currently our stormwater compliance program is very effective and running smoothly. The District has participated in the countywide program's subcommittee/work groups for BMP training. Please refer to the C.6 Construction Site Control section of countywide program's FY 15-16 Annual Report for a description of activities at the countywide or regional level.

⁵⁸Calculated 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.

⁵⁹Calculated 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.

⁶⁰The 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	
Inspecting C.6 BMPs & Installation Demonstration	March 5, 2015	<ul style="list-style-type: none"> Review of key inspection elements, including common problems and corrective actions, and a field demonstration of installed erosion and sediment BMPs. 	2	50%
QSD/QSP Qualified Stormwater Pollution Prevention Plan (SWPPP) Developer/ Qualified SWPPP Practitioner	March 23 – 25, 2015	<ul style="list-style-type: none"> Construction General Permit Significant Changes between the New and Old CGP Risk Level 1,2 and 3 Stormwater Sampling BMPs Preparation of SWPPP Plans Inspections 	2	50%

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 refer to the Countywide Program's 2015-16 Annual Report.

C.7.c. Stormwater Pollution Prevention Education

Please refer to the countywide program report to publicize stormwater points of contact (e.g. program website, hotline, outreach materials, etc.).

Local Effort:

Explore Watersheds

The ACFC&WCD has completed a new section of the Alameda County Flood Control website called "Explore Watersheds" where the public can access a lot of information about the geography, creeks and flow, hydrology and geology, flora and fauna, and volunteer and recreational opportunities throughout Western Alameda County watersheds. A revised version of the Alameda County Creek and Watershed Map Version 2.0 (a KMZ file that is downloadable in Google Earth) was also completed and is stored on the Explore Watersheds site as well. The new website can be found at <http://acffloodcontrol.org/resources/explore-watersheds>. This site includes an email address for public feedback on the program.

The ACFC&WCD is continuing to use a smart phone application called "Mobile Citizen" to make it easier for local residents to report illegal dumping and spills and send photos of the incident s. The application has GPS functionality, so it simultaneously maps the location and generates a work request for the Maintenance and Operations Department.

Creek Care Guide

The ACFC&WCD began creating a creek care guide for property owners living on creekside properties. The guide will be completed during the 2016-17 FY and will be available on the ACFC&WCD website. The guide focuses on what both rural and urban property owners can do to prevent pollution of the storm water that runs from their property into local creeks. The guide will include links to many helpful resources.

Local stormwater phone number(s)	510-670-5500
Local/Regional stormwater website(s)	Local- http://acffloodcontrol.org/home/contact-us Regional - www.cleanwaterprogram.org

Outreach:

Please Refer to Countywide Program's C.7 Public Information and Outreach section of Program's FY 15-16 Annual Report for efforts conducted by the countywide program to publicize stormwater points of contact.

Local Effort:

The ACFC&WCD conducted extensive outreach for the Explore Watersheds section of the website during FY 15-16. Multiple e-blasts were sent to local school teachers, city staff, environmental consultants, and watershed/friends groups to explain and advertise the watershed education program. A flyer advertising the new watershed education section of the website and program was distributed to middle and high school teachers throughout Alameda County. The ACFC&WCD presented the Explore Watersheds program at the State of the Estuary Conference poster session in September, 2015. On-line Google ads were also run during FY 15-16 to advertise the website and program, and push online traffic to the site.

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., Enviroscene presentation, pesticides, stormwater 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: <ul style="list-style-type: none"> • 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
Stormwater Exhibit at the Alameda County Fair: The Fair is running from June 15 to July 4, 2016. Setting up the exhibit and producing the outreach materials are Countywide Program efforts. Staffing the exhibit is an effort conducted by individual Permittees.	County Fair, open to the general public. Outreach message focused on how residents could make improvements around their home and garden to prevent stormwater pollution - "6 Ways to a Cleaner Bay."	Several hundred thousand residents attend the fair each year. A more detailed description of the exhibit is included in Section C.7 Public Information and Outreach of the ACCWP FY 15/16 Annual Report.
Stormwater Exhibit at the Alameda County Fair – The ACFC&WCD Staffed the Fair Booth on 7/4/15, 7/5/15, 6/17/16, 6/18/16, 6/19/16 and 6/26/16. The ACFC&WCD played a major role in: exhibit concept development; coordinating and providing staffing of exhibit during the Fair; booth construction and breakdown; and acted as coordinator between Countywide and Fair Staff.	County Fair, open to the general public. Outreach message focused on how residents could make improvements around their home and garden to prevent stormwater pollution - "6 Ways to a Cleaner Bay."	This year the Fair had 450,806 attendees, a 1% increase from last year. Very good opportunity to speak to homeowners about how they can reduce storm water pollution around their home and garden. Handout materials included stormwater activity guides, non-toxic pest control recipes label for water bottles, Detain the Rain brochures, stormwater pollution prevention brochures and mood pencils. The non-toxic recipe label was a great conversation piece to start the discussion on pesticides.

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<p>Alameda Creek Niles Canyon Roll and Stroll Event, Niles (Fremont) Litter cleanup of canyon during road closure of state route 84 for the first bike and hike thru the canyon event on 10/11/15.</p> <p>Coordinated by the ACFC&WCD's Hands-On Conservation (tabling at event).</p>	<p>Litter cleanup through the 6 mile long canyon road, with the Hands-On Conservation program in coordination with the Alameda Creek Alliance (ACA) organization during an 8- hour one-time-only road closure.</p> <p>Many walkers and bicyclists remarked on need for the litter cleanup and expressed appreciation that it was being done that day.</p> <p>ACA provided educational materials to participants as to protecting creek habitat for native fish in Alameda Creek.</p>	<p>6 miles of roadside above the Alameda Creek bank was thoroughly cleaned up over a 5 hour period.</p> <p>Very large turnout, with perhaps 20-25 participating in the Hands On Conservation litter pick up in regard to the roving litter cleanup; this includes Alameda Creek Alliance member volunteers.</p> <p>Excellent opportunity to interact with public and demonstrate stewardship.</p> <p>Debris/ trash approx. 1 cu yd</p> <p>Litter and recyclables (in bags) total volume: 2.5 cu yds (includes ACA bags collected)</p>
<p>Community Service/ Volunteer Fair Logan High School, Union City 3/22/16</p> <p>Coordinated by the ACFC&WCD's Hands-On Conservation (tabling at event).</p>	<p>High School lunchtime fair event for students, teachers: Hands-On Conservation staff tabled with "Creek Care" and anti-littering display for 1.5 hours during the school day lunchtime fair and discussed with interested students how to protect creek water quality and wildlife habitat. Urged students to sign up to volunteer for the nearby Hands-On Conservation 4/24/16 and 4/30/16 Earth Day cleanup events.</p>	<p>100-125 students visit the approximately 15 tables at the event. At the Hands-On Conservation table, interacted with approx.. 30-40 high schools students, two other environmental organization tablers, and several teachers. 80 mini flyers with details on nearby Hands-On Conservation stewardship activities for Earth Day were handed out.</p> <p>Excellent opportunity to connect with students directly and the school's student volunteer coordinator. Students can receive community service credits for participating in HOC workdays.</p>
<p>Alameda Creek Niles Canyon Roll and Stroll – 10/11/15 – Sunol</p>	<p>This event was a one-time opportunity for the public to walk or bike through Niles Canyon. Very well attended event, with many families, children and cyclists.</p>	<p>Approx. 25,000 Alameda County Residents attended event. Detain the Rain brochures, Keeping it all in Tune, and storm water pollution prevention brochures were featured at the booth. The booth message was focused on reducing litter that goes down the storm drain</p>

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<p>The ACFC&WCD created a Clean Water Program booth concept, did all set-up and breakdown of the booth and staffed the event.</p>		<p>and ends up in the Bay. A life-sized, interactive storm drain model was featured at our booth to show the public how litter that goes down the storm drain ends up in the creek. Some interactive games were played with families, including a "True or Rubbish" game, which focused on trash true and false questions. Native seed packets, CWP reusable bags, mood pencils and activity guides were given away to residents who interacted with us at the booth.</p>
<p>Alameda County Fall Home and Garden Show, 10/2, 10/3 & 10/4/15 – Alameda County Fairgrounds, Pleasanton</p> <p>The ACFC&WCD created the booth concept, did all set-up and breakdown of the booth and staffed the event.</p>	<p>Event is open to the general public, focusing on homeowners and gardeners. Our booth message focused on reducing the amount of litter that ends up in our local creeks and the Bay.</p>	<p>Approx. 6300 Alameda County Residents attended event. Detain the Rain brochures, Keeping it all in Tune, and storm water pollution prevention brochures were featured at the booth. The booth message was focused on reducing litter that goes down the storm drain and ends up in the Bay. A life-sized, interactive storm drain model was featured at our booth to show the public how litter that goes down the storm drain ends up in the creek. Some interactive games were played with families, including a "True or Rubbish" game, which focused on trash true and false questions. Native seed packets, CWP reusable bags, mood pencils and activity guides were given away to residents who interacted with us at the booth.</p>
<p>Alameda County Spring Home and Garden Show, 2/12, 2/13, 2/14/14 – Alameda County Fairgrounds, Pleasanton</p> <p>The ACFC&WCD created the booth concept, did all set-up and breakdown of the booth and staffed the event.</p>	<p>Event is open to the general public, focusing on homeowners and gardeners. Our booth message focused on reducing pesticides in the yard and chemicals around the house by using less toxic alternatives.</p>	<p>Approximately 10,000 Alameda County Residents attended the event. Materials available to the public included: Keeping it all in Tune, native seed packets, mood pencils and storm water pollution prevention brochures. Interactive games were featured at the booth to engage the public on stormwater pollution prevention.</p> <p>To promote the use of non-toxic methods in the home and garden to control pests in order to reduce stormwater pollution, CWP spray bottle</p>

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		sticker labels and fact cards were given out to event participants. The labels and fact cards contained recipes for non-toxic pest controls which could be used instead of store-bought chemicals.
<p>EarthEXPO, Downtown Oakland – 4-6-16.</p> <p>This Event was Organized Through Oakland's Clean Creeks Program. The ACF&WCD is a major funding source for this program, and provides on-going support through which many public outreach activities are conducted.</p>	<p>An environmental fair in downtown Oakland, open to the public.</p>	<p>The EXPO attracted about 2,000 attendees. Staff highlighted stormwater protection, volunteer creek and shoreline cleanups and ecological restoration. The overall theme of the event was environmental sustainability. Exhibitors presented various ways Oakland residents can be sustainable: alternative transportation, solar energy, local food supply, promoting urban nature, volunteering, recycling, composting, buying recycled goods, Bay-friendly landscaping, and many more.</p>
<p>Friends of San Leandro Creek (FSLC) Environmental Forum, San Leandro Public Library, San Leandro – 11/7/15</p> <p>These booths and speakers drew people from the entire Bay Area.</p> <p>The ACFC&WCD is a major funder of this program.</p>	<p>Environmental Expo: Representatives from local organizations are invited to present information to community members attendees regarding issues that impact the environment. The topic this year was <u>Rethinking your Lawn the Bay Friendly Way</u></p>	<p>Approximately 80 people attended this event. Booths and speakers made it easy for environmentalists present to make professional connections. Exhibit groups included: Native Here, Bee Friendly San Leandro, Wilma Chan's office, 350 Bay Area, Ever Green Nursery, EBMUD (Water Conservation team), and San Leandro High School Interact Club.</p>
<p>FSLC Earth Day/Watershed Festival, Root Park, San Leandro – 4/9/16</p> <p>The ACFC&WCD is a major funder of this program.</p>	<p>This annual event brings local residents to San Leandro Creek to learn more about the watershed and ecological issues. A variety of organizations host display tables for public education. The event also includes a creek cleanup, where 32 volunteers collected trash and recyclables for an art project and to be weighed.</p>	<p>Total number of participants was around 200 for the Clean Up and Festival. <u>Booths included:</u> Stepping Stones Growth Center (community center for adults with special needs), Merritt College, StopWaste, City of San Leandro; Rails to Trails; Oakland Zoo & Zoo Mobile, Mosquito Abatement, Davis Street, EBMUD, SLZHS "Earth Team", Hayward Shoreline Interpretive Center; "Native Here", Interact Club- Arroyo High School, Master Gardeners of Alameda County, Solar City, Life Chiropractic School, City of San Leandro Environmental Services Section. The</p>

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		booths featured riparian animals, games, art projects, and information.
<p>FSLC Member Meetings, San Leandro Library – 10/10/15/, 2/2/16 and 5/24/16.</p> <p>The ACFC&WCD is a major funder of this program.</p>	<p>Quarterly, the <i>Friends</i> invite guest speakers to talk about pertinent environmental issues for members and the general public</p>	<p>About 20 members of the community participate in each meeting.</p> <p>On October 10, 2015 Beckie Zisser from <i>Save The Bay</i> spoke. Beckie is the Climate Change Policy Campaign Manager at <i>Save The Bay</i> where she promotes wetlands restoration as a means of adapting to flooding and sea level rise. Beckie did a Power Point Presentation about current projects on SF Bay.</p> <p>On February 2, 2016 Mitch Avalon, Consultant for the Contra Costa County Public Works Department discussed current projects and activities in Contra Costa County, including their plan to convert concrete channels to natural stream systems on Walnut Creek, "The Lower Walnut Creek Project" and the Contra Costa Watershed Forum. He discussed important activities occurring in the Bay Area, including planning for sea level rise, and integrated water management efforts. He wrapped up with a discussion about Proposition 1 grants and a statewide ballot measure that would provide funding for stormwater programs.</p> <p>On May 24, 2016, film maker Stan Dodson shared movie, <i>Trial Head</i>. The 20-minute film features the City of Oakland's largest wildland trail system that connects neighborhoods to redwood forests and more than five hundred miles of trails that span the entire East Bay. Trail users, historians, creek restoration experts, local merchants, and park volunteers are among those interviewed during a typical park day that begins predawn in Oakland's Dimond District, and concludes at sunset from a Joaquin Miller Park ridge overlooking downtown</p>

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		Oakland and San Francisco Bay. Stan had a Q & A period after the movie.
<p>Please see Attachment C.7.4 for Additional Friends of San Leandro Creek Public Outreach Events Summary.</p> <p>The ACF&WCD funds and provides on-going support to this program through which many public outreach activities are conducted.</p>	<p>Please see Attachment C.7.4 for Friends of San Leandro Creek Outreach Events Summary.</p>	<p>Please see Attachment C.7.4 for Friends of San Leandro Creek Outreach Events Summary.</p>
<p>Friends of Sausal Creek (FOSC) Public Outreach Events in Oakland – 7/1/15-6/31/16</p> <p>The ACF&WCD funds and provides on-going support to this program through which many public outreach activities are conducted.</p>	<p>Many outreach events held Oakland open to the general public to educate community members on the efforts of the FOSC, as well as creek and watershed restoration efforts.</p>	<p>FOSC tabled at the Dimond Park Picnic, Dimond Oaktobertfest, Glenview Water-Wise Fair, Piedmont Pines Neighborhood Association annual meeting, Fruitvale Community Career & Resource Fair, <i>TRAILHEAD</i> film premier, Oakland's EarthEXPO, and an Ecofaction event at Ashkenaz. FOSC also had informational tables at our three annual Dimond Park events: Creek to Bay Day (70 volunteers), Winter Solstice Planting Day (29 volunteers), and Earth Day 88 (volunteers). Our 10th annual Native Plant Sale and Open House (300 attendees) included a FOSC informational table as well as tablers on raptors, arachnids, pollinators, and gardening; face painting; and live music.</p> <p>Tours were led at Dimond Park Native Plant Demonstration Garden for 309 people as part of the Bringing Back the Natives Garden Tour. During the day-long event, they hosted two talks ("Gardening and Birds" and "How to Design a Local Native Plant Garden") and led two group tours of the Sausal Creek Restoration Project in Dimond Park.</p>
<p>Tule Ponds at Tyson Lagoon, Fremont, Open House Events – 9/25/15, 10/23/15, 11/20/15, 12/4/15, 2/26/16, 3/18/16, 4/15/16, 4/22/16 and 5/20/16.</p>	<p>Events are open to the general public. The open house events start as self-led tours, followed by a lecture to learn how the tule ponds help stormwater pollution</p>	<p>Approximately 400 local residents attended these events. Please see Attachment C.7.2 for Tule Ponds Public Outreach Events Summary</p>

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<p>The ACFC&WCD owns the facility and also provides additional funding for education.</p>	<p>prevention.Please see Attachment C.7.2 for Tule Ponds Public Outreach Events Summary</p>	
<p>Environmental Education Workshops at Tule Ponds at Tyson Lagoon, 10/28/15, 2/23/16, 6/17/16 and 6/24/16 – Fremont</p> <p>ACF&WCD owns the Tule Ponds at Tyson Lagoon, and funds the programs and events that are held at the facility.</p>	<p>Open to teachers and community members involved in environmental service. Both of the workshops focused on the ecological and restoration benefits of the Tule Ponds at Tyson Lagoon. Please see Attachment C.7.2 for Tule Ponds Public Outreach Events Summary</p>	<p>A total of 100 teachers attended. The feedback from attendees was very positive.</p>
<p>Bringing Back the Natives Garden Tour Sunday, 5/1/16 - Held at 36 gardens and nurseries located throughout Alameda and Contra Costa counties.</p> <p>The ACFC&WCD is a major funder of this program.</p>	<p>Native plant garden tour and Native plant sales. Workshops on sheet mulching, how to install drip irrigation, how to garden sustainably, and how to design a native plant garden.</p> <p>Participants were primarily homeowners, but professional garden designers and landscape maintenance staff also attend this event.</p> <p>Messages: reduce or eliminate pesticide use; conserve water in the garden by selecting California native plants; garden for wildlife by including California native plants in your garden</p>	<ul style="list-style-type: none"> • 36 gardens and nurseries were showcased on the Tour • 50 + talks and demonstrations were given • 120 volunteers made the tour possible • 5,500 registrants • \$19,000 worth of natives sold through the spring Native Plant Sale Extravanzas • 10,644 garden visits were made <p>The tour and workshops were well-attended. The number of participants on the garden tour was down from 6,000 to 5,500. Effectiveness statistics (behavior change) can be found in the full report (please see attachment C.7.6).</p>
<p>Community Stewardship Program (CSG)</p> <p>In addition to contributing grant funding, the ACFC&WCD also coordinates the CSG Program for the Countywide Group.</p>	<p>The Countywide Program sponsors the Community Stewardship Grants (CSG) Program. The CSG Program provides approximately \$25,000 annually in \$1,000 to \$5,000 increments to individuals and community groups to support stormwater improvement/outreach projects throughout the County.</p>	<p>See Section C.7 of the ACCWP FY15/16 Annual Report for a summary.</p>

<p>Urban Farms Conservation Mini-Grant Program. The following 7 organizations received mini-grants (with a term of one year) for storm water management and conservation improvements at their urban farm or garden sites. This was an increase of 2 grants from the prior year:</p> <ul style="list-style-type: none"> • Acta Non Verba, Oakland • City Slicker Farm, Oakland • Eden International Rescue Committee's • New Roots Program, Oakland • Fremont LEAF, Fremont • Tennyson High School Farm and Community Garden, Hayward • West Oakland Woods Flower Farm, Oakland <p>This is an ACF&WCD program.</p>	<p>Mini-grant program funded a range of water quality improvement practices on urban farms and gardens with a focus on underserved communities. These practices include soil stabilization practices (mulching and cover crop planting), practices to limit application of synthetic fertilizer (enhancement of compost systems, compost creation and application and cover crop), practices to keep rainwater and excess irrigation on-site and out of storm drains and creeks (creation of berms, swales, rain gardens, and rainwater catchment systems), and practices to help minimize excess irrigation and related erosion and run-off (installation of drip systems, mulching). Additional practices included construction of hedgerows and other native and insectary plantings to support integrated pest management in lieu of pesticide.</p>	<p>The following run-off prevention and conservation benefits were derived from these collaborations:</p> <ul style="list-style-type: none"> • Collaborated with 7 farm/garden managers at 8 different sites throughout the ACFCWCD service area, • Engaged more than 700 volunteers at more than 10 different public events and workdays as well as numerous informal classes, workshops, and meetings • Anticipated on-site capture of more than 140,000 gallons of run-off that otherwise would exit the farm site to roads, streams and/or storm drains. • 1100 gallons of rainwater captured through rain barrel systems for re-use. • Avoided use of more than 1800 lbs of synthetic fertilizer and 20 gallons of liquid fertilizer; one site reduced its N leaching potential by 50% • 30 cubic yards of compost applied • Hundreds of native, drought tolerant plants planted as part of hedgerows, berms or other erosion-prevention mechanisms • Installation or improvement of drip irrigation systems at three sites to replace sprinkler or other less efficient and run-off inducing irrigation techniques. <p>Other program partners included the USDA's Natural Resource Conservation Service (NRCS), UC Cooperative Extension and Project EAT.</p>
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<p>Friends of San Leandro Creek Citizen Involvement Events, Root Park, San Leandro – 8/29/15, 9/24/15 and 2/6/16.</p> <p>The ACF&WCD funds and provides on-going support to this program through which many volunteer activities are conducted.</p>	<p>Cleaned up stretch of San Leandro Creek that runs through Root Park in San Leandro. Each year the public is invited to assist FSLC in removing litter from the creek, clearing non-native plant species and planting native riparian species to restore the creek to a more natural state.</p>	<p>Creek cleanups over this past year were conducted with the help of approximately 200 volunteers who donated about 600 hours of service.</p>
<p>Friends of Sausal Creek (FOSC) Volunteer Events, Many Different Locations Throughout the Watershed (Please see Attachment C.7.3 for details)</p> <p>The ACF&WCD funds and provides on-going support to this program through which many volunteer clean up activities are conducted.</p>	<p>FOSC community volunteer events are held year-round at restoration sites throughout the watershed. Some of the workdays are led by FOSC staff and interns, others are led by neighborhood volunteers</p>	<p>Please see Attachment C.7.3 for Friends of Sausal Creek Citizen Involvement Events Summary.</p>
<p>Oakland Clean Creeks Program – Adopt a Spot Program, Creek to Bay Day and Earth Day, Oakland.</p> <p>The ACF&WCD is a major funding source for this program, and provides on-going support through which many volunteer activities are conducted.</p>	<p>The ACFC&WCD supports the 35-42 adopt a spot locations, and two large community clean up events that were coordinated through this program this year.</p>	<p>The City hosts two citywide cleanup events per year, Creek to Bay Day and Earth Day. Creek to Bay Day brought together 1,401 volunteers to clean up 38 creek and shoreline locations throughout Oakland. Oakland volunteered a total of 4,801 hours picking up 15,500 pounds of trash from Oakland's creeks, Lake Merritt and the estuary and removing 46,514 pounds of green waste (mostly non-native) to allow native plants to flourish.</p> <p>On Earth Day, over 2,334 volunteers participated in this citywide beautification effort, putting in a combined 7,855 volunteer hours at 90 volunteer sites throughout Oakland. Thirty nine of the volunteer sites were at creeks</p>

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		<p>and shorelines. 1,241 volunteers assisted in cleanup and beautification activities at creek sites and Lake Merritt. Volunteers picked up 64,455 pounds of trash from Oakland's creeks, Lake Merritt, estuary and streets and removed 133,800 pounds of green waste (mostly non-native) to allow native plants to flourish.</p> <p>Please see Attachment C.7.5 for a full description of the program.</p>
<p>Tule Ponds at Tyson Lagoon Community Service Days and Eagle Scout Projects - Many On-Going Projects from 7/1/15 – 6/30/16 (Every Saturday)</p> <p>The ACFC&WCD owns the facility and also provides additional funding for education.</p>	<p>Conducted community service every Sat from 9:30-12:30 and had approximate 1500 students provide 3 hours of community service (4500 hours). Also hosted "special days" for community groups including 10 weeks with California State University East Bay, Freshman Day of Service with 20 students for 4 hours each with a total of 720 hours.</p> <p>5 Eagle projects were completed with a total of 100 helpers with an approximate total of 500 hours (see attached report C.7.2). We had 1 Silver Award projects with 40 hours per girl with approximately 320 hours.</p>	<p>Please see Attachment C.7.2 for the Tule Ponds Citizen Involvement Events Summary.</p>
<p>Union City Civic Center Park, Union City- "Creek Care" stewardship workdays with the ACFC&WCD Hands-On-Conservation Program. Workday support from Union City Parks Dep't.</p> <ul style="list-style-type: none"> -Earth Day creek and park trails clean up 4/24/16 -Make A Difference Day conducted with Union City Parks -tree planting workday and park litter cleanup on 10/24/15 -Martin Luther King National Day of Service- creek cleanup on 1/18/16 	<p>Hands-On Conservation "Creek Care" volunteer workdays included riparian vegetation planting and maintenance, spreading mulch, invasive plant removal, and extensive trash cleanups along the flood control channel and adjacent walking trail, and along park trails.</p> <p>"Creek Care" practices were discussed informally with volunteers to engage them</p>	<p>1200' linear feet of creek banks along park trails cleaned (4 times =4800') of litter and debris. 12 native trees, and many milkweed plants planted on Make A Difference Day and Earth Day along park trails next to the channel.</p> <ul style="list-style-type: none"> -Earth Day events each attracted over 30 volunteers each, including Girl and Boy Scouts. -Make a-Difference Day attracted 40 including a class of middle school students.

<p>- Union City Earth Day LDS group on 4/30/16. Mulching trees, planting milkweed, litter cleanup.</p>	<p>in the process of helping improve water quality in their neighborhood creeks. The duck pond in the park and adjacent flood control channel provide opportunities for pointing out storm water pollution impacts and some mitigating efforts to improve the water quality for the wildlife that live there year- round. HOC participants really see the impact of litter on wildlife at the park.</p>	<p>-MLK Day had 15 volunteers, with additional support from Union City Parks staff and a City Council member for milkweed planting. Volunteers included high school students and local residents, several teachers, and members of a youth group, and a large LDS group on 4/30. Total trash/recycling volume: 2.5 cu yds All volunteers received CWP re-usable shopping bags, or other CWP materials. Excellent arrangement for workdays, due to support from Union City Parks. Continued good turnouts when large groups come.</p>
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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:

Local Watershed Collaborative Efforts:

The ACFC&WCD continues to provide major funding and support to The Friends of Sausal Creek and Friends of San Leandro Creek (please see section C.7 below for activities conducted by these groups with the help of ACFC&WCD funding)

Google Earth Creek and Watershed Map Program for Western Alameda County – Version 2.0

The ACFC&WCD sought to increase access and use of watershed information. Maps and information had only been available on paper or in certain watersheds, some digital resources were online, but difficult to find and use. To increase access, the ACFC&WCD took advantage of Google Earth technology to create a dynamic map of watersheds in Western Alameda County, featuring details on creeks, culverts, channels, storm drains, geographical features, roads and points of interest. To create the map, we engaged map professionals to design a layered file, giving users the ability to turn features on and off. Each mapped watershed is accompanied by information on the area; including lists of waterbodies, flora, fauna, restoration projects, recreation opportunities, and ways that volunteers can get involved. To support access, the map and the watershed information is hosted on the ACFC&WCD website, <http://acfloodcontrol.org/resources/explore-watersheds>. The content for each watershed is hosted on its own page, which increases search optimization.

As mentioned in section C.7.c, The ACFC&WCD has done extensive outreach to the watershed, professional and education communities regarding the online watershed map program. During the 2015-16 FY, edits and updates were completed on the program to keep the information current.

Alameda Creek Watershed Forum (acwForum)

The ACFC&WCD funds, administers and serves on the steering committee for the Alameda Creek Watershed Forum, which is a group of stakeholders who are interested in protecting and enhancing water-related beneficial uses and resources within the Alameda Creek watershed.

Events:

TECHNICAL SYMPOSIUM 1/26/16 Synchronizing watches: Working smarter—together—to bring grant dollars to Alameda Creek Watershed, @ Castro Valley Library

- Participation: 34 including 3 guest presenters and special moderator, Carl Morrison. Attendees included acwForum signatory member agencies, agency staff, the public, local organizations, researchers, and students.

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- Topics: Overview of federal, state, and local grant opportunities that support watershed restoration, stewardship, habitat enhancement, etc. (Carl Morrison, Zone 7; Morrison & Associates). Special presentation of State Coastal Conservancy's Bay Program and Prop 1 grant funding (Kelly Malinowski, SCC). Grant-writing tips and technicalities (James Muller, SFEP).
- Break out groups discussed: (1) types of projects/planning/programs that need grant funding; (2) challenges to securing grants; (3) potential partners for grant proposals and funded work; (4) sources of matching funds; (5) ways to support the acwForum as an information-sharing component of grant proposals.
- Event planning conducted with Steering Committee members. Feedback received from participants via break out group worksheets.
- Website: www.acwForum.org used for calendar updates & information sharing.
- Outreach: e-mail list updated regularly to include new contacts who sign up via www.acwForum.org and at events.

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
Provide the following information: Name Grade or level (elementary/ middle/ high)	Brief description, messages, methods of outreach used	Provide number or participants	Provide agency staff feedback. Report any other evaluation methods used (quiz, teacher feedback etc.). Attach evaluation summary if applicable.
See the Section C.7 of the Countywide Program's FY 15/16 Annual Report for a summary of the Program's School-Age Outreach Program.	See the Section C.7 of the Countywide Program's FY 15/16 Annual Report.	See the Section C.7 of the Countywide Program's FY 15/16 Annual Report.	See the Section C.7 of the Countywide Program's FY 15/16 Annual Report.
Hands-On Conservation Program. Grades 6-College Age Students. The ACF&WCD is a major funding source for this program.	The Hands-On Conservation Program provides opportunities for outdoor stewardship activities to increase students' knowledge of natural resources and the protection of watersheds. Please see <i>Attachment C.7.1</i> for a full program summary.	Please see Attachment C.7.1 for a full program summary.	Please see Attachment C.7.1 for a full program summary.
Tule Ponds at Tyson Lagoon Education Programs, Grades 1-6.	Schools visit the Center for a hands-on education program focusing on the	3000 children and 650 adults that	A survey (example included in attached report) conducted with 100 teachers gave a

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<p>In addition to owning and funding the Tule Ponds facility, the ACF&WCD provided additional funding for 110 free Tule Pond Center education programs to schools throughout Alameda County during the 2015-16FY.</p>	<p>following topics: Stormwater and Wetland Chemistry, Exploring Wetlands, Plant and Animal Environments, Plant and Animal Life Cycles, Tule Pond Changes Through Time, Earth Quakes and Ecology (and how they have affected the Tule Ponds). The curriculums provide students with background information on each topic, and include science lab work and nature walks for each program.</p>	<p>attended the free programs funded by the ACFC&WCD. 150 college students with 5 teachers also visited the center for field trips, as well as an additional 5 student interns at the Tule Ponds Center. Please see Attachment C.7.2 for a full program summary.</p>	<p>very good to excellent rating of the overall content and tour that the Math Science Nucleus staff provided. Many pointed out the ability to touch and feel nature in a closed and safe environment. All felt the classes fulfilled their science requirements.</p>
<p>Friends of Sausal Creek School-Age Education Programs.</p> <p>The ACF&WCD is a major funding source for this program.</p>	<p>FOSC staff led 36 field trips this past school year, and FOSC volunteers led an additional 14 field trips. In addition to these field trips, student service organizations volunteered for weekend workdays year-round. Youth activities included a discussion of the Sausal Creek Watershed, stormwater pollution prevention, stream restoration strategies, and native and nonnative plant identification. The programs also included a hands-on restoration component such as removal of invasive, nonnative plants; vegetation monitoring; planting of native plants; or propagating plants in our native plant nursery. We also developed new curriculum on native pollinators at our pollinator garden, and aquatic insect observation and water quality testing along the creek. Many students also enjoyed naturalist-led hikes through the woods and</p>	<p>Please see Attachment C.7.3 for Friends of Sausal Creek School-Age Education Summary</p>	<p>Please see Attachment C.7.3 for Friends of Sausal Creek School-Age Education Summary</p>

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	along the creek, and silent reflection activities.		
<p>Friends of San Leandro Creek Chabot Day Camp, Sulphur Creek Day Camp, and Local School Field Trips.</p> <p>The ACF&WCD is a major funding source for this program.</p>	Age appropriate hand-on science lessons on insects and watershed care.	Please see Attachment C.7.4 for Friends of San Leandro Creek School-Age Education Summary.	Please see Attachment C.7.4 for Friends of San Leandro Creek School-Age Education Summary.
<p>Oakland Clean Creeks Program. Please see Attachment C.7.5 for the School-Age Education Summary.</p>	Oakland Clean Creeks Program. Please see Attachment C.7.5 for the School-Age Education Summary.	Oakland Clean Creeks Program. Please see Attachment C.7.5 for the School-Age Education Summary.	Oakland Clean Creeks Program. Please see Attachment C.7.5 for the School-Age Education Summary.

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?					<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	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 Used⁶¹								
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								
Product or Pesticide Type A	0							
Product or Pesticide Type B	0							
Pyrethroids								
Product or Pesticide Type X	0							
Product or Pesticide Type Y	0							
Carbamates								
Product or Pesticide Type X	0							
Product or Pesticide Type Y	0							
Fipronil								
Product or Pesticide Type X	0							
Product or Pesticide Type Y	0							

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

⁶²Weight 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.

Indoxacarb	Reporting 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:						

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.	6
Enter the number of these employees who received training on your IPM policy and IPM standard operating procedures within this reporting year.	6
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: Papa training July 2015 for all six applicator and one manager.	

C.9.c ▶ Require Contractors to Implement IPM

Did your municipality contract with any pesticide service provider in the reporting year?	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
If yes, briefly describe how contractor compliance with IPM Policy/Ordinance and SOPs was monitored				

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,	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
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If yes, summarize the communication. If no, explain.

Did your municipality report any observed or citizen-reported violations of pesticide regulations (e.g., illegal handling and applications of pesticides) associated with stormwater management, particularly the California Department of Pesticide Regulation (DPR) surface water protection regulations for outdoor, nonagricultural use of pyrethroid pesticides by any person performing pest control for hire.	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
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If yes, provide a summary of improper pesticide usage reported to the County Agricultural Commissioner and follow-up actions taken to correct any violations. A separate report can be attached as your summary.

C.9.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:
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 (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 Program's Annual Report and 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)	
Percent Trash Reduction in all TMAs due to Control Measures Other than Trash Full Capture Systems (as reported in C.10.b.ii)	
Percent Trash Reduction due to Jurisdictional-wide Source Control Actions (as reported in C.10.b.iv)	
SubTotal for Above Actions	NA
Trash Offsets (Optional)	
Offset Associated with Additional Creek and Shoreline Cleanups (as reported in C.10.e.i)	
Offset Associated with Direct Trash Discharges (as reported in C.10.e.ii)	
Total Estimated % Trash Load Reduction in FY 15-16	NA
Discussion of Trash Load Reduction Estimate:	
NA for District	

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		
Full trash capture is NA for ACFC&WCD The ACFC&WCD operates/maintains partial trash capture devices at 18 of its 22 pump stations	18	
Installed in FY 15-16		
	0	
Total for all Systems Installed To-date		18
Treatment Acreage Required by Permit (Population-based Permittees)		NA
Total # of Systems Required by Permit (Non-population-based Permittees)		9

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
NA	NA	NA	NA	
Total	NA			

Certification Statement: NA

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
	NA for District

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 (%)
Single-use Plastic Bag Ordinance or Policy	The Alameda County Waste Management Authority adopted the Single-Use Bag Ban. As of January 1, 2013, all grocery stores, supermarkets, mini-marts, convenience stores, liquor stores, pharmacies, drug stores or other entities that sell milk, bread, soda and snack foods (all four items) and/or alcohol (Type 20 or 21 license) in Alameda County must comply with the Single-Use Bag Ban Ordinance. Affected stores may no longer provide customers with single-use bags at check-out. A copy of the Ordinance is available on the Alameda County Waste Management Authority’s website: http://reusablebagsac.org/ordinancetext.html	See Section C.10 of the ACCWP FY 15-16 Annual Report.	See Section C.10 of the ACCWP FY 15-16 Annual Report.		NA for District
Expanded Polystyrene Food Service Ware Ordinance or Policy		For those with Polystyrene Food Service Ware bans, insert: “See Section C.10 of the ACCWP FY 15-16 Annual Report.” Add text regarding any additional assessment as appropriate. If you do not have a ban in place, delete this row.	For those with Polystyrene Food Service Ware bans, insert: “See Section C.10 of the ACCWP FY 15-16 Annual Report.” Add text regarding any additional assessment results as appropriate. If you do not have a ban in place, delete this row.		

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
ala_sem_1 Rainbow Rec. Cntr 5800 International Blvd.Oakland 94621	No	11/04/15 8/16/16	7	29	38	11	16 3
ala_per_1 5401 Coliseum Way.Northside Oakland 94601	No	8/16/16	8	32	43	9	2
ala_sem_2 5401 Coliseum Way. South side, Oakland 94601	No	2/25/16 3/01/16 3/03/16	14	22	64	18	8 4 8
ala_san_1 u/s and d/s of Hegenberger, Rd Oakland	No	3/3/16	80	14	68	13	8
ala_san_2 U/s and d/s of 98th Ave., Oakland.	No	2/19/16 3/29/16	99	139	24	9	8 6
ala_san_2 u/s and d/s of Washington Ave. San Leandro	Yes	4/01/16	0	0	0	0	6
ACF Zone 3 A 300ftupstream of 20 tide gate structure Veasyst Union city.	No	10/21/15 3/22/16 3/24/16	15	4	6	69	2 2 3
ACF Zone3A downstream Folsom Ave Hayward	No	7/7/15 11/13/15 12/15/15 3/23/16 3/24/16	15	4	6	26	2 6 10 3 12

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C.10 – Trash Load Reduction

Permittee Name: Alameda Flood Control and Water Conservation District

ACF Zone 5 Upstream Logan Dr Fremont	No	11/18/15 3/23/16	6	4	9	5	20 2
ACF Zone 5 Upstream of Line B, Mowry Ave Fremont	No	9/3/15	10	10	3	17	2

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
NA for ACFC&WCD	

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)			
Direct Trash Discharge Controls (Max 15% Offset)			

Permittee Name: Alameda Flood Control and Water Conservation District

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 <u>and</u> Other Control Measures					Jurisdiction-wide Reduction via Other Control Measures (%)	Jurisdiction-wide Reduction via Full Capture <u>AND</u> Other Control Measures (%)
	L	M	H	VH	Total	L	M	H	VH	Total		L	M	H	VH	Total		
Totals																		N/A

Section 11 - Provision C.11 Mercury Controls

- C.11.a ► Implement Control Measures to Achieve Mercury Load Reductions**
- C.11.b ► Assess Mercury Load Reductions from Stormwater**
- 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 countywide 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 Stormwater**
- 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 Permittee, Countywide 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

<p><i>(For FY 15-16 Annual Report only)</i> 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?</p>	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
<p><i>(For FY 15-16 Annual Report only)</i> Provide a summary of how copper architectural features are addressed through the issuance of building permits.</p>				
<p>Summary: NA for District</p>				
<p><i>(FY 15-16 Annual Report and each Annual Report thereafter)</i> 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.</p>				
<p>Summary: NA for District</p>				

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? 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:
NA for District

(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.

NA for District

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:
NA for District

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:

Refer to the C.7. Public Information and Outreach and C.9. Pesticide Toxicity Control sections of the ACCWP's FY15-16 Annual Report and section C.7 of this report

Section C.5 Attachments

C-5 Complaint Discharge Tracking Table

Complaint Information																Investigation Information														Follow Up Information									
Date and Time of Complaint Receipt		Source of Complaint Enter "1" for source of complaint			Threat to Water Quality		Type of Pollutant(s) Enter "1" for each type reported							Date Investigation Started	Time Investigation Started	Type of Pollutant(s) Enter "1" for each type found										Type of Enforcement Enter "1" for each type			Response Times Enter number of days										
Date of Complaint	Time of Complaint	Public	Another Public Agency	Own Agency Staff	Enter "1" if discharge reported threat to water quality	Enter "1" if no threat to water quality	Washwaters	Sewage	Construction Materials	Vehicle Fluids	Food Wastes	Paint	Sediment and/or Silt	Industrial Wastes	Litter and/or Debris	Other	Date Investigation Started	Time Investigation Started	Washwaters	Sewage	Construction Materials	Vehicle Fluids	Food Wastes	Paint	Sediment and/or Silt	Industrial Wastes	Litter and/or Debris	Other	Enter "1" if Discharge Entered Storm Drain and/or receiving water	Enter "1" if there is nothing needing abatement	None	Warning Notice	Written Warning/ Notice of Violation	Notice to Comply	Legal Action	Call to Investigate	Investigate to Abate	Call to Abate	Enter "1" if Resolved in Timely Manner
Summary Discharge Information																Summary of Types of Pollutants Discharged														Summary of Sources of Complaints									
Number of discharges reported																Number														Number									
Number of discharges reaching storm drains and/or receiving waters																Washwater														Public									
Number of discharges resolved in a timely manner																Sewage														Another Public Agency									
Percentage of discharges resolved in a timely manner																Const. Mat.														Own Public Agency									
																Vehicle Fluids														Total									
																Food Wastes																							
																Paint																							
																Sed./Silt																							
																Ind. Wastes																							
																Litter/Debris																							
																Other																							
																Total																							
																Percentage														Percentage									
																0														71%									
																7%														14%									
																0%														14%									
																36%														100%									
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																100%																							

C.7.1 Alameda County Resource Conservation District FY 15/16 Final Report

7/31/16 draft

Final Report for Fiscal Year 2015/16

ACRCD Contract C-11979

*Submitted by Amy Evans, Resource Conservationist,
Alameda County Resource Conservation District*

The Alameda County RCD contracted with the Alameda County Flood Control and Water Conservation District during FY 2015/16 for work to be accomplished on a number of tasks, including:

- Task 1- Hands-On Conservation, an ongoing program of the ACRCD that supports on-the-ground stewardship/education activities for middle school through college age youth, and additional community volunteers. Amy Evans leads this task.
- Task 2- A ongoing multi-faceted, creek-based watershed education program at Palomares Elementary School in Castro Valley that serves the school and wider community. Sherry Johnson leads this education program at the school.
- Task 3- Support for the annual Bringing Back the Natives garden tour (subcontract with Kathy Kramer, originator and operator of the tour).
- Task 6- Support for the Alameda Creek watershed Forum, a watershed group in Alameda County that works to improve the health of the watershed through an informative website, information sharing and enhanced partnerships. Ian Howell leads this task.
- Task 9- Administration of the Community Stewardship Grants program for the Alameda Countywide Clean Water Program. Amy Evans leads this administrative task in collaboration with the CSG workgroup.
- Task 10- Cynthia Butler, RCD staff, works in conjunction with Sharon Gosselin to coordinate the Clean Water Program's Public Information and Outreach Program for the ACFC&WCD and the Unincorporated Area.
- Task 12- Cynthia Butler serves as project manager and reports to Sharon for the update and enhancement of the Google Earth Watershed Map Program for Western Alameda County. This included managing subcontracts, overseeing the research needed for this task, and launching and publicizing the program.
- Task 14- Conservation at Urban Farms Mini-Grant Program, a new project was successfully implemented in FY15 by Susan Ellsworth, AC RCD staff member.

The activities undertaken for these tasks have been organized into the following four sections, which are the same as those in the MRP Section C.7 report:

- Public Outreach Events
- Citizen Involvement Events
- School-Age Children Outreach
- Watershed Stewardship Collaborative Efforts

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Public Outreach Events

Watershed Science Expo at Palomares School (Task 2)

The Watershed Science Expo was held at Palomares School, Castro Valley, on Friday 5/20/16, from 8:30-2:30 PM. Local schools in the San Lorenzo Creek watershed attended, along with teachers, principals and many parent volunteers. Students in 39 3rd grade classes from 12 schools in Castro Valley, Hayward and San Lorenzo participated. 1,004 students, 3 principals, 42 teachers, 280 chaperones, and 52 parent/community and PTA members attended and assisted with the event. Sherry Johnson, a retired credentialed science teacher from the school who originated the watershed education program at the school, once again expertly organized and oversaw the Expo.

The watershed education-focused day featured 26 watershed/hands-on science -focused activity stations for 3rd grade students from schools in the San Lorenzo Creek watershed, which includes Palomares Creek. The 15 Expo exhibitors, representing agencies, special districts, colleges and non-profit organizations throughout the East Bay, donated their time to run hands-on activity stations on natural resources and watershed science themes, and learning activities at the creek. Groups of students rotated through the exhibitors' stations during the course of the day. ACRCDD staff hosted a "creek critters" station alongside the creek at which students could practice identifying aquatic insects that are typically found in Palomares Creek, and also learn about watersheds and water quality protection by interacting with a watershed diorama.

A highlight of the Expo was the presentation of three consecutive Wildlife Associates outdoor assemblies which feature trained naturalists introducing several wild animals that are native to the area. Every class attending the Expo got to experience the program, which really engages the students in understanding the importance of healthy habitats needed to support the animals.

Another important element of the Expo were the 75 creek tours conducted by the 34 Palomares 3rd-5th grade students who were trained as "Creek Tour Guides" by Sherry Johnson during the Palomares School afterschool program. The Tour Guides also devised and ran 3 water-themed activity stations at the Expo. This is described further in the School Age Children Outreach section below. Palomares teachers also led 8 additional mini-stations at the Expo, with 4th and 5th grade students, with simple, hands-on science activities, to alleviate crowding at peak hours of the Expo.

Students from all six grade levels from Palomares Elementary participated in the Expo activities. Also, all students at the Expo helped pick up litter in the immediate areas surrounding each of the activity stations, and also throughout the campus during the course of the Expo. This effort, developed and led by ACRCDD staff as part of their work at the Expo, is described below under Citizen Involvement Events.

Donations of materials for the Expo came from the Castro Valley Sanitary District, stores, small businesses, adult school, and Palomares Parent Club. The Palomares Parent Club organized and presented a lunch for the exhibitors, with most of the food donated.

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Classes attending the Expo donated a total of \$750 towards the cost of the event. The Alameda County Flood Control and Water Conservation District provide road closure materials and assistance, and once again, parking on an adjacent property was generously allowed by the landowner.

Evaluation: the teachers who received funding from the program to cover the cost of their classes being bussed to the Expo were especially appreciative, saying that they and their classes would not have been able to attend without that support. All 14 teacher responses were positive and cited the hands-on learning, science & creek education, and the fact that the activities were linked to the 3rd grade science standards.

(Unincorporated Area)

Castro Valley Parent University- Resource Fair, a Castro Valley Unified School District-sponsored event (Task 1)

The Hands-On Conservation program was featured at an outreach table at the Saturday 10/17/15 Parent University- an annual parent education and resource fair for Castro Valley parents. Display materials depicted the stewardship efforts of the HOC program at creekside areas in the Castro Valley area at which litter cleanups and habitat enhancement plantings are done. Re-usable containers were also highlighted, especially school lunch options- in contrast to throwaways which contribute to litter around schoolyards.

The resource fair takes place as one busy hour within the full day event that offers multiple workshops and talks for local parents. Approximately 70-80 parents attended the resource fair, with around 25-30 parents and youth group leaders visiting the HOC table, actively inquiring about local stewardship opportunities for youth. 45-50 copies of handouts for the upcoming HOC workday (11/7/15) at nearby BayTrees Park were taken, and custom wildflower seed packs were provided, since wildflower seeding would be taking place on the 7th.

This event is an excellent opportunity to make contacts with Scout and other youth organization leaders for involving their groups in HOC workdays in the Castro Valley area. Definitely worth attending annually, as these are engaged parents who live in the community near our HOC workday sites.

(Unincorporated Area)

Community Service and Volunteer Fair, Logan High School, Union City (Task 1)

ACRCD staffed one of about 15 tables at the Fair, a high school lunchtime event for 100-125 students and teachers, on 3/22/16. Display materials focused on Hands-On Conservation "Creek Care" and anti-littering messages. HOC program staff talked informally with 30 -40 students about volunteer opportunities at the nearby Union City Civic Center Park, a HOC adopted spot in Union City. Students were encouraged to sign up to volunteer for the HOC 4/24 and 4/30 Earth Day cleanup events at the nearby park, and about 80 mini-flyers for the events were handed out to interested students. HOC staff also talked with other environmental organization tablers, and several school staff members who were interested in the program for their students.

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This event is an effective venue for publicizing the close-by stewardship opportunities available to students and to inform teachers of the program. Students need to earn Community Service hours and the HOC programs near the school help students with meeting these requirements; the school staff person who manages the Community Service Program also manages the event, so it is an opportunity to thank her for her support of the program over the past 5 years.

(Flood Control District)

Sunol AgPark- on-farm events for the public (Task 1)

The Sunol AgPark hosted two large- scale events open to the public, the Harvest Festival on 9/27/15 and the Plant Sale/ hedgerow workday event on 5/7/16. The AgPark is an organic farm on SFPUC watershed land in Sunol, operated by Sustainable Agriculture Education. The Hands-On Conservation program staffed an activity table at each event, which attracted event participants who learned about suitable native and edible plants for hedgerows, made custom wildflower seed packets and learned how to protect the beneficial insects that visit the hedgerow. The HOC program works with SAGE during the school year, helping to lead service-learning hedgerow planting and monitoring activities to students and community members who visit the farm.

The AgPark Harvest Festival attracted more than 300 people, with the HOC activity table staffed by HOC having 30- 35 visitors, including a number of children, who enjoyed the seed packet project. The AgPark Plant Sale event attracted nearly 100 people, and 20 CSUEB students worked in the hedgerow that day. CWP Wildflower seed packets were given out at both events. 15-20 spray bottle labels with non-toxic pest repellent recipes (a CWP give-away) were popular with visitors to the table, as many attendees were interested in non-toxic approaches to gardening.

Kathy Kramer's Bringing Back the Natives Garden Tour (Task 3)

This project is a subcontract through ACRCDC. The annual native plant garden tour for the public was held on 5/1/16. Gardens featuring drought tolerant and wildlife-friendly plants were showcased. Kathy provided an annual report to Cynthia Butler with details of the tour and results.

Citizen Involvement Events

Conservation at Urban Farms Mini-Grant Program (Task 14)

The 2015/16 mini-grant program funded a range of water quality improvement practices on urban farms and gardens with a focus on underserved communities. These practices include soil stabilization practices (mulching and cover crop planting), practices to limit application of synthetic fertilizer (enhancement of compost systems, compost creation and application and cover crop), practices to keep rainwater and excess irrigation on-site and out of storm drains and creeks (creation of berms, swales, rain gardens, and rainwater catchment systems), and practices to help minimize excess irrigation and related erosion

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and run-off (installation of drip systems, mulching). Additional practices included construction of hedgerows and other native and insectary plantings to support integrated pest management in lieu of pesticides.

The following 7 organizations received mini-grants (with a term of one year) for storm water management and conservation improvements at their urban farm or garden sites. This was an increase of 2 grants from the prior year:

- Acta Non Verba, Oakland
- City Slicker Farm, Oakland
- Eden Gardens, San Lorenzo
- International Rescue Committee's New Roots Program, Oakland
- Fremont LEAF, Fremont
- Tennyson High School Farm and Community Garden, Hayward
- West Oakland Woods Flower Farm, Oakland

The following run-off prevention and conservation benefits were derived from these collaborations:

- Collaborated with 7 farm/garden managers at 8 different sites throughout the ACFCWCD service area,
- Engaged more than 700 volunteers at more than 10 different public events and workdays as well as numerous informal classes, workshops, and meetings
- Anticipated on-site capture of more than 140,000 gallons of run-off that otherwise would exit the farm site to roads, streams and/or storm drains.
- 1100 gallons of rainwater captured through rain barrel systems for re-use.
- Avoided use of more than 1800 lbs of synthetic fertilizer and 20 gallons of liquid fertilizer; one site reduced its N leaching potential by 50%
- 30 cubic yards of compost applied
- Hundreds of native, drought tolerant plants planted as part of hedgerows, berms or other erosion-prevention mechanisms
- Installation or improvement of drip irrigation systems at three sites to replace sprinkler or other less efficient and run-off inducing irrigation techniques.

Other program partners included the USDA's Natural Resource Conservation Service (NRCS), UC Cooperative Extension and Project EAT

Community Stewardship Grants Program (Task 9)

Alameda County RCD administers the Alameda Countywide Clean Water Program's Community Stewardship Grant program. Work began in March 2015 on the 2016 grant cycle, with \$27,400 in grant funding being awarded to six grantees. RCD tasks included developing the updated RFP and flyer, publicizing the grant, preparing grant summaries and materials for the workgroup, developing the agreements, making payments, providing reports to the PIP committee, providing information on the grant projects for the CWP/CSG webpage and answering grantee questions; all of these activities were done in close coordination with the CSG workgroup. Projects from the 2015 cycle were completed.

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Youth Stewardship - Hands-On Conservation (HOC) (Task 1)

The Hands-On Conservation Program provides opportunities for outdoor stewardship activities for young adults of middle school through college age to increase knowledge of natural resources and protection of watersheds through hands-on activities that include water quality improvement activities at local creeks, stewardship education and creek side habitat restoration. Activities include age-appropriate elements of watershed education and career development; these are described in the School-Age Children Outreach section.

Hands On Conservation workdays are publicized at the www.handsonconservation.org website, which also features event registration and liability waiver form downloads. The HOC workday sites at which plantings have been installed and trash cleanups done have been formally adopted through the ACFC&WCD Adopt A Creek/Spot program. In addition to the workdays with volunteers, the adopted spots are maintained by HOC staff on a regular basis, and coordination with the site landowner occurs on a regular basis. Over the past three years, however, the ongoing drought has somewhat impacted the habitat restoration planting element of the program. Part time HOC staff members help with HOC program events and workdays when a large turnout of the public is expected. HOC staff continued to develop and maintain partnerships and co-host events with other groups such as Earth Team, the Friends of San Lorenzo Creek, the Alameda Creek Alliance, Sustainable Agriculture Education, agency landowners and others, in order to enhance the offerings of the HOC program.

Activities during 2015/16 included these events:

Union City Civic Center Park, Union City (Task 1)

This is an adopted spot through the ACFC&WCD Adopt A Creek/Spot program. The park features a flood control channel with an adjacent paved walking trail that extends beyond the park, following the channel 1/8 mile to Alameda Creek. The site is very close to Logan High School, which is a primary source of volunteers for the Hands-On Conservation workdays.

Workday activities included trash removal from creek banks, planting and maintaining irrigation for native plants in a creek side trail area, applying mulch around plantings, invasive plant removal, and litter/ trash cleanup along the creek trail and throughout the park. A "Monarch Habitat Trail" was initiated this year in conjunction with Union City Parks and planting milkweed therefore became an important new activity at the site. Students from Logan High School, Boy and Girl Scouts, and Cesar Chaves Middle School and other students and community volunteers participated. At the start of each workday, HOC staff briefed the volunteers on safety measure and the importance of reducing litter and other pollutants that impact local creeks.

Coordination was maintained with Union City Parks staff to maintain tools in the shed at the site and to provide plants, trees and wildflower seed for planting at the site. Previous plantings continue to be maintained with weeding, mulching and irrigation gel replacement. Coordination was maintained with Logan High School teachers and the school volunteer/career center to notify students of volunteer opportunities and to confirm student volunteer credits.

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Workdays at the adopted spot in 2015/16 include:

- 1200' linear feet of creek banks along park trails cleaned (5 times =6000') of litter and debris. Many native trees and milkweed plants were planted on Make A Difference Day and Earth Day along park trails next to the channel, with trees being provided by the city.
- Coastal Cleanup Day held on Sunday 9/20/16 included a middle school class, with approximately 35 volunteers total for the day. The Alameda Countywide Clean Water Program's "Luv the Bay" pledge was taken by several volunteers and posted at the website. Volunteers collected litter from the creek banks, creek trail and park trails.
- Two Earth Day events (4/24/16 and 4/30/16) each attracted over 30 volunteers, including Girl and Boy Scouts and a church group.
- Make a-Difference Day attracted 40 including a class of enthusiastic middle school students from Cesar Chavez Middle School and their teacher and chaperones.
- Martin Luther King National Day of Service on 1/18/16 had 15 volunteers, with additional support from Union City Parks staff and a City Council member for the milkweed and tree planting. Volunteers included high school students and local residents, several teachers, and members of a youth group.

Total trash/recycling volume: 2.5 cu yds of trash, litter and recyclables were gathered at this site. Recyclables that were not muddy or contaminated were recycled, and Union City parks hauled the trash away. In addition to the bags there was approximately 1/2 cu yd of bulky items gathered between the three cleanup events.

This partnership is an excellent arrangement for workdays, due to support from Union City Parks and the proximity of the high school to the site. Workday participation is best when groups of volunteers come with their leaders, or classes of students come with their teachers. "Creek Care" practices were introduced informally to volunteers as they worked to engage them in the process of improving creek side habitat and water quality in their neighborhood creeks. The duck pond in the park and adjacent flood control channel in the park provide opportunities for pointing out stormwater pollution impacts and some mitigating efforts to improve the water quality for the wildlife that live there year round.

Volunteers each received reusable CWP shopping bags and/or CWP items such as spray bottle labels or mood pencils.

(Flood Control District)

Sunol Agpark Hedgerows, Sunol (Task 1)

Stewardship workdays were held in Sunol at the Sunol AgPark, an organic farm located along the edge of the Arroyo de la Laguna. Students and community volunteers planted native and drought tolerant flowering plants, herbs and wildflowers in the hedgerows, removed invasive plants and weeds, and applied mulch. The hedgerows provide habitat for pollinators and beneficial insects which directly support the farm's organic program. Volunteers also helped with creating and installing plant signage/labels.

HOC assisted with the planting workdays as well as explaining to workday participants the connection between farm and creek and the conservation and stewardship practices that

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are applied at the farm to protect natural resources.

Hands-On Conservation co-lead and provided tools and equipment for several workdays in collaboration with Sustainable Agriculture Education (SAGE).

2015/16 workdays included:

-On 7/24/15, HOC co-lead a workday with 30 volunteers from a corporate group at which the creekside hedgerow was the focus. Mulch was applied around native plants in the grass filter strip to prevent sediment-laden runoff from the farm fields from entering the creek corridor.

-HOC assisted SAGE staff with leading service learning hedgerow workdays for 3 classes of Head-Royce School Middle students on 10/9/15, 11/13/15 and 3/4/16.

-On 6/7/16, 20 International High School students from Oakland worked at the hedgerow; this was a group of immigrant English language learners, so the program was modified to accommodate their needs. The students were enthusiastic workers, however.

-On 9/23/16 a group of 30 students from Menlo School worked at the hedgerow.

-The "Alternate Spring Break" program for U.S college students brought 7 volunteers on 3/25/16; this was to have been a much larger group, but they had last minute transportation issues so could only send 7 students. They were a big help with spring weeding and very interested in the hedgerow as a conservation practice that supports sustainable agriculture. We hope to get a larger group next year.

-On 5/7/16 a group of 20 volunteers from nearby CSU East Bay worked in the hedgerow despite afternoon rainy and windy conditions during the AgPark spring Plant Sale. The plant labeling activity was reduced in scope due to the conditions.

-At several Hedgerow maintenance work sessions with RCD and SAGE staff, irrigation line assessment and repair and plant monitoring was done in prep for subsequent workdays.

-The HOC program tabled at two AgPark events, the Harvest Festival on 9/27/15 and the Plant Sale and hedgerow workday event on 5/7/16. These are described above under Public Outreach Events.

There is a high level of interest in local, sustainable agriculture among young people, as well as environmental awareness and desire for active participation in stewardship; this site represents the melding of the two and is thus of great interest to teachers for bringing students and for community volunteers.

(Unincorporated and Flood Control District)

Bay Trees Park "Creek Care" workdays, Castro Valley, Hands-On Conservation

"Creek Care" workdays continued in Bay Trees Park, an adopted spot of the Hands-On Conservation program; stewardship activities reflected the actions that residents can take to protect creeks and enhance wildlife habitat around them. High School students and community volunteers worked to repair bender board at the site, planted and monitored native plants, removed weeds, spread mulch, refilled Driwater tubes (irrigation method) and cleaned up trash along the creek trails in the park. The ongoing drought has reduced the ability to continue planting intensely at the site, hence fewer plants installed this year, with a greater focus on wildflower seeding and milkweed plantings for the resident Monarch butterflies.

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Several site maintenance workdays were held at which trees and shrubs were pruned to reduce fire hazard and increase visibility through the plantings for security. Trees planted five years ago are now 20 feet tall and no longer need irrigation; the plan to establish a canopy of native trees at the site has been accomplished... this is very inspiring to the volunteers. Also, shrubs have matured and are now providing seeds and berries to resident birds- another result of the project.

FY 2016 workdays:

-On 11/7/15 a group of 18 volunteers including Boy Scouts and their parents, and various community members planted native milkweed plants, laid down erosion control fabric and seeded wildflowers, replaced DriWater, and cleaned up litter.

-On 3/19/16 a workday was held with 20 students from Castro Valley/Dublin area high schools. Weeding was the primary activity but a litter cleanup was also done.

CWP reusable trash bags were given to volunteers.

Several site maintenance staff workdays were held at which trees and shrubs were pruned to reduce fire hazard and increase visibility through the plantings for security. Bender board along trails was repaired or removed where necessary due to tripping hazard, as park users apparently run down the slopes. Coordination with park maintenance staff was maintained to improve access to irrigation water for the project.

Trash total: A total of approximately 1.5 cubic yards of trash, litter, and recyclables were gathered at this site. Recyclables that were not muddy or contaminated were recycled, and park staff took the trash and the bulky trash items.

(Unincorporated Area)

HOC in collaboration with EarthTeam

San Lorenzo High School - Litter Assessments and Cleanups with HOC and EarthTeam

HOC collaborated with Earth Team to support three workdays. Students met at the San Leandro Marina on 2/16/16 and 2/20/16, and at Weekes Park, Hayward on 5/17/16.

Students planned the litter cleanups and performed litter assessments, then conducted the litter clean-ups on the 20th and 17th. A chalk art installation was also performed by the students on the 17th to bring attention to the underground creek at Weekes Park.

An average of 15 Students participating per event worked to clean up approximately 1 cu yd of litter from the two sites, and they recycled a portion of that. The Saturday clean up at the San Leandro Marina Park was highly visible to park visitors with many trail walkers commenting positively on their work. Clean up results were tallied by student leaders for the day and reported to Zero Waste.

The HOC Program has been collaborating with the San Lorenzo High School students in annual stewardship events with shared leadership by EarthTeam for five years, and it allows both programs to provide a stronger program, so is very beneficial to all. There is an emphasis at EarthTeam on developing student leadership skills, which fits well with our HOC workdays. HOC provided clean up equipment, mentoring on litter cleanup safety, and info sharing on the watershed at the two clean up sites.

Students publicized their efforts on their blog and through their social media outlets. The

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Earth Team organization provided the transportation for the students and facilitated the student-led work for the cleanup and art efforts. EarthTeam has an excellent youth program, and is developing knowledgeable, responsible articulate leaders in the environmental stewardship field at San Lorenzo High School. HOC collaboration with them enhances both programs, and the partnership will continue in FY 2017.

Castro Valley Creek, "Creek Care" workdays, Castro Valley- (Task 1)

Workdays at this location, a highly visible daylighted and restored urban creek adjacent to the community library, which features a widely used creekside trail with interpretive signage and native plantings attract many community members who appreciate the small but beautiful riparian corridor in the heart of downtown Castro Valley. HOC cleanups are done in collaboration with partner organizations, including Friends of San Lorenzo Creek.

It appears that repeat cleanups, at least 3- 4 per year are needed in order to effectively handle the load of litter and accumulation of homeless belongings which gradually build up in the creek channel and along the trail. Cigarette butts are also a problem at the trailside benches, and typically several volunteers focus on these areas at the workdays.

Two HOC cleanups were held in FY2016, and one was carried out as part of a pilot stewardship and education activity led there by HARD staff, a project that HOC advised on and which was managed by Cynthia Butler (Task 10).

-The annual Earth Day creek/trail cleanup event was held at Castro Valley Creek along the trail that extends from the Castro Valley Library to Castro Valley Blvd. on 4/23/16. The creek trail was cleaned up, invasive plants removed and native riparian plants along creek side trail were maintained. Approximately 1000 linear feet of creek bank and trail was cleaned up by 24 student and community volunteers and 6-8 citizens doing community service under county supervision. Bags of litter and recyclables were collected as well as bulky items from small homeless encampment spots. Several large bags of invasive plant material was also removed from the creek banks. Two cubic yards of wood chips were brought in for the event and applied as mulch on the planted areas paralleling the creek trail, which were also weeded.

The Earth Day event included other involved agencies, especially County Supervisor Nate Miley's office, Castro Valley Sanitary District, the local group Friends of San Lorenzo Creek; and Alameda County Flood Control and Water Conservation District, which picked up the bags of trash. A pre-cleanup informal presentation was given by the Friends group on the creek restoration that had taken place at that spot. The Hands-On Conservation program provided tools and equipment and lead groups of volunteers. The Earth Day cleanup at this spot is the Friends of San Lorenzo Creek's primary annual service project, and they express appreciation for the help from the Hands-On Conservation program.

-A Coastal Cleanup Day workday was held on the official day 9/19/16 in conjunction with Friends of San Lorenzo Creek, with 24 volunteers, during which the creek trail and bioswale areas around the library were cleaned up and weeded, and the opposite side of the creek as well, which gets a significant load of trash from the adjacent parking lot. The trash totals were reported to the coastal commission immediately after the event as part of the Coastal Cleanup Day statewide count. They also publicized the event on their website, resulting in a large turnout of community members.

Trash total: approximately 3.5 cubic yards of trash, litter, recyclables and bulky items were

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gathered at the site. Recyclables that were not muddy or contaminated were recycled, and Alameda County Flood Control and Water Conservation District hauled the trash, bulky items and plant material away immediately after the event. Plant material was composted.

(Unincorporated Area)

Earth Day Cleanup at Palomares Creek and School, Castro Valley (Task 2)

A school campus, creek and trail maintenance day was held as part of the Castro Valley Earth Day event on 4/23/16. 57 parent volunteers, students, teachers and community members worked at the school to clean up the campus, apply mulch, to clear debris and provide erosion control along the trail, remove invasive plants and poison oak in preparation for the school's 5/20/16 Watershed Expo event. Approx. 400-500 linear feet of creek area/ trail was improved.

Trash total: 1 cubic yard. Recyclable materials were gathered separately and placed in recycling bins on campus.

(Unincorporated Area)

"Creek Care" stewardship workdays (Task 1)

Alameda Creek, Niles Canyon Roll and Stroll Event, Niles (Fremont)

The Hands-On Conservation program conducted a "Clean Creeks Team" litter cleanup of the 6 mile long canyon's roadsides during a one-time road closure of Niles Canyon Road (state route 84) for a bike and hike thru the canyon event on 10/11/15. HOC staff started at the west end of the canyon, moving along with a wagon to contain the bags of litter as it was picked up. Alameda Creek Alliance (ACA) organization started from the east end; through this collaboration the entire roadway was cleaned up over a 5 hour period.

Many walkers and bicyclists remarked to the volunteers who were picking up the litter on need for the cleanup and expressed appreciation that it was being done that day. ACA provided educational materials to participants as to protecting creek habitat for native fish in Alameda Creek, and HOC had a mini-flyer handout on the "Clean Creeks Team" and also info on how to safely pick up litter. The event was initiated and strongly supported by the Alameda County Board of Supervisors, East Bay Regional Park District and the local water districts ACWD and SFPUC. ACFC&WCD collected the trash at the end of the event. It was a very well organized large-scale event, with an estimated turnout of 15,000 people, primarily bicyclists and families. 20-25 people volunteered briefly in litter pick up or volunteering with the ACA, in regard to the roving litter cleanup; this includes Alameda Creek Alliance member volunteers.

Excellent opportunity to interact with public and demonstrate stewardship.

Debris/ trash approx. 1 cu yd. Litter and recyclables (in bags) total volume: 2.5 cu yds (includes ACA bags collected)

Countywide event.

(Flood Control District)

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School-wide Trash Cleanup by students at Palomares School Watershed Science Expo (Task 2)

A school wide Campus Trash Cleanup was held during the Palomares Watershed Science Expo on 5/20/16 (Expo described above under Public Outreach Event). The trash pickup activity was done by groups of students, exhibitors, teachers and volunteers at each of the 26 stations during the day. Each activity station was given a trash bag with instructions for the exhibitor to have each group of students pick up trash from the area surrounding their station on the campus. Trash was collected at the end of the day from each station and recycled by a team of Jr. Naturalists. The campus and creek area was left clean at the end of the Expo. A storm drain is situated in the schoolyard, which leads directly via a short pipeline to Palomares Creek, so cleanup is critical. The storm drain pipe outfall at the creek was pointed out to students at the "Creek Critters" activity station alongside the creek. Trash total: .015 cubic yards of litter and recyclables was gathered by all in attendance at the Expo

(Unincorporated Area)

Planning for new FY2017 HOC workdays

Planning began in spring 2016 for several new HOC workdays to be held in fall 2016:

-**Logan High School** on-campus stormdrain planting demonstration: will be conducted as an afterschool HOC planting project to demonstrate use of plantings increasing runoff infiltration and reducing erosion in the vicinity of a stormdrain.

-**Plummer Creek, Newark:** litter cleanup and tree planting in Newark in conjunction with Newark Parks Foundation; assessed creek segments to find appropriate clean up spot and tree planting areas. Community workday scheduled for 10/8/16. A map will be created that shows the Plummer Creek watershed and potential clean up areas with public access, in order to develop awareness and interest in the health of the creek.

- **Collaboration with Green Streets Project, Union City:** now planning with HOC a water quality testing demonstration with Logan High School students and city staff at new retention planters at streets adjacent to Logan High School, as afterschool HOC event in Fall 2016.

School-Age Children Outreach

Hands-On Conservation (Task 1)

The Hands-On Conservation Program provides opportunities for outdoor stewardship activities for young adults of middle school through college age to increase knowledge of natural resources and protection of watersheds through hands-on activities that include water quality improvement activities at local creeks, stewardship education and creek side habitat restoration. Activities include age appropriate elements of watershed education and career development.

See the above sections of this report for specific information on 2015/16 HOC workdays and outreach events.

The education-related aspects of the Hands-On Conservation program include:

HOC and partner organization staff communicate with volunteers during the workdays, in two different ways: at the start and conclusion of each workday volunteers are educated

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in the goals and reasons for undertaking the stewardship project, the watershed protection strategies being employed, and the positive impact that the day's work will have. Throughout the events, more informal conversations are had with volunteers to discuss these themes and also the particulars of the stewardship practices being employed during the project. The impact of litter on creeks, lakes and wetlands is a topic that greater attention is given to, which is reinforced as the litter is being picked up during stewardship workdays. Career and education information is also passed on in relation to the level of interest of the group or individual volunteers.

Palomares School Watershed Education, Castro Valley (Task 2)

Through this program, hands-on, site-specific creek and watershed lessons are taught to Palomares students and to classes from schools in the San Lorenzo Creek watershed. Palomares Creek, which flows along the edge of the school campus, was restored by the Alameda County Flood Control District and other partners in 2000-2001. A creek side trail and outdoor classroom area was also developed at that time. A curriculum that met state standards was developed for the program, and it continues to be utilized by Sherry Johnson, a credentialed teacher and ACRCDD staff member. Biweekly creek science lessons are taught at the school, and after-school programs include Junior Naturalists and Palomares Creek Tour Guides; these are discussed below.

One of the elements of the program that involves public participation, the campus-wide cleanup on Earth Day, is covered in that section above. The Palomares School Watershed Expo event is discussed under the Public Outreach Event section above.

(Unincorporated Area)

Bi-Weekly watershed and creek science lessons during the school day at Palomares School (Task2)

-School day creek and watershed lessons were conducted between September and June in the 2015/16 school year for Palomares students in K-5th grades. 108 watershed-based lessons were taught to classes of 24-32 students (1st-5th grade) at the school campus by the credentialed teacher and watershed educator Sherry Johnson. Creek lessons are part of regular science instruction during the school day and meet state standards. Numerous visits are made to the creek for hands-on lessons to reinforce classroom learning. Topics cover water quality studies, creek ecology, soil/geology, wildlife and plants, and bird life in relation to the creek and larger San Lorenzo creek watershed.

-Led by Sherry, the following activities were the focus for the 2016 school year: hands-on stewardship activities by Palomares students at all grade ranges were prioritized, including installation of campus plantings of native plants and grasses and application of erosion control materials (4th and 5th grades), invasive plant removal (3rd, 4th and 5th grades), improving soil in gardens on campus (2nd and 4th), pollinator garden planting (1st grade), butterfly gardens (2nd grade), wildflower seeding on campus (K-3rd grade) continued to be done at the Palomares campus by the students, led by Sherry. 5th graders monitored water quality and reported results to World Water Monitoring day. 3rd graders also raised tree frogs in their classroom and began to study local birds.

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-A CA Dep't. of Fish and Wildlife "Trout In the Classroom" program again took place this year at the school; 1st and 3rd grade students raised and released fingerling trout at a nearby lake; other classes at the school visited the fish in the classroom and learned about their care and ecology. Professionals from CA Dep't of Fish and Game oversee the project, and Mission Peak Fly Fishers Assoc. members assist and teach. The program engaged 75 Palomares students and 3 teachers.

-The Palomares School principal and teachers consider creek lessons to be a part of their regular science instruction, since creek lessons meet state standards. The creek lessons are featured at an annual presentation to the Castro Valley School Board by the school's teachers, and for the Palomares Open House. Many parents have their children attend this school because of the creek studies program.

This year the Palomares Watershed and Creek Science programs and the Science Expo were a key part of the school application for the Gold Ribbon School Award, which they received.

(Unincorporated Area)

Palomares School after-school programs

A Junior Naturalists after school program for 46 1st-5th grades and a Creek Tour Guides program for 34 3rd-5th graders was held between April and June 2016. They are open to Palomares School students and other schools in the watershed. The program is conducted at Palomares Creek on the school campus at the end of the school day and features hands-on activities that cover water quality studies, creek ecology, conservation activities and stewardship. Tour Guides learn content and methods for leading creek tours at the annual Watershed Expo- and this year led 75 tours. The Tour guides also led 3 activity tables with a creeks theme at the Expo, and the Jr. Naturalists helped with separating the recyclables at the Expo campus litter cleanup.

Two Palomares teachers lead the two after-school programs, and 6 parent volunteers assisted them. The Jr. Naturalist and Tour Guides programs were highlighted at the Palomares Elementary Open House event in May and at an annual presentation to the Castro Valley Unified School District Board of Directors.

(Unincorporated Area)

Palomares School –creek program outreach to community (Task 2)

Sherry Johnson utilizes creek studies materials and expertise from the Palomares program to share with other entities in the watershed who wish to do hands-on learning about creek life and restoration. This is an efficient and appreciated use of the learning resources that have been developed over the years.

Activities included:

-12 Palomares Tour Guides and Sherry Johnson demonstrated creek activity stations for a

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team of visiting summer school teachers on 5/26/16. The tour guides were able to share what they had learned about the watershed and the plants and animals that live there. Visiting teachers were able to determine how to better develop their lessons for summer school.

-The science program at Washington Middle School (San Lorenzo) borrowed and utilized Palomares creek program materials during the week of May 9th 2016 for a field trip to Samuel Taylor State park; water quality testing and other creek investigations were done by students there. 305 students participated in the field trip, along with 6 teachers.

(Unincorporated Area)

Additional information on Contract Tasks 10, 12

Task 10 Storm Water Information and Outreach Assistance

Cynthia Butler, RCD storm water outreach coordinator, works in conjunction with Sharon Gosselin as the Alameda County Clean Water Program Outreach and Public Information Coordinator.

Cynthia's activities include leadership and workgroup activities with the PIP subcommittee, coordination of outreach events and materials, communications activities and event planning, hiring and managing RCD interns to assist with public outreach event staffing and program support and managing outreach projects in coordination with Sharon and Gigantic Ideas Studio for the Flood Control District and Unincorporated Area Clean Water Programs. Cynthia is responsible for reporting on Public outreach and Education for the MRP; her activities are covered in those reports. Cynthia collaborates with various RCD staff in implementing her projects.

Task 12 Interactive Watershed Maps

Cynthia Butler also manages Task 12. In FY16 she completed the task, which involved the development of an interactive watershed map based on Google Earth, two subcontracts to assist with the project, coordination with Flood Control District website consultants who prepared the documents for posting on the county website, and hiring and overseeing staff who wrote and edited watershed information for the map and website. The interactive watershed map project was successfully launched and publicized. Work on integrating the use of the map program with existing youth environmental education programs, and maintaining the information and links on the watershed information pages is ongoing.

Watershed Stewardship Collaborative Efforts

Alameda Creek Watershed Forum (ACWForum) (Task 6)

The objective of this task is to enhance partner coordination, knowledge, and effectiveness, in ways that help improve Alameda Creek watershed conditions.

Work under Task 6 supported the activities of the ACWForum, a watershed group in Alameda County. The group's website is www.acwForum.org, through which ACWForum members can post project and stewardship event information and from which a quarterly

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e-newsletter is sent.

acwForum Activities FY2016

Technical symposium 1/26/16 Synchronizing watches: Working smarter—together—to bring grant dollars to Alameda Creek Watershed, @ Castro Valley Library

- Participation: 34 including 3 guest presenters and special moderator, Carl Morrison.

Attendees included acwForum signatory member agencies, agency staff, the public, local organizations, researchers, and students.

- Topics: Overview of federal, state, and local grant opportunities that support watershed restoration, stewardship, habitat enhancement, etc. (Carl Morrison, Zone 7; Morrison & Associates). Special presentation of State Coastal Conservancy's Bay Program and Prop 1 grant funding (Kelly Malinowski, SCC). Grant-writing tips and technicalities (James Muller, SFEP).

- Break out groups discussed: (1) types of projects/planning/programs that need grant funding; (2) challenges to securing grants; (3) potential partners for grant proposals and funded work; (4) sources of matching funds; (5) ways to support the acwForum as an information-sharing component of grant proposals.

- Event planning conducted with Steering Committee members. Feedback received from participants via break out group worksheets.

ANNUAL CONFERENCE Postponed until fall 2016.

Steering Committee: Email communication throughout the year. Teleconference meetings held in October and March to plan the winter technical symposium and spring/summer conference, respectively. State of the Watershed model developed for consistent annual conference scheduling and content development. In person working meeting held 6/30/16 at Castro Valley Library to review activities of the past two years and to discuss support for a large county-wide watershed symposium in 2017. Steering committee agreed to regular meetings to plan events and explore topics such as the Alameda Creek Watershed Council goals and Letter of Understanding. Increased interest from signatory agencies to participate on the steering committee. Anticipate input from LARPD, RWQCB, ACWD, and EBRPD in FY2017, as well as continued participation from ACFC&WCD, ACRCDD, City of Fremont, City of Livermore, SFPUC, Zone 7

Website: www.acwForum.org used for calendar updates & information sharing. Website upgrades sub-contracted to GreenInfo Network. Enhancements: rotating photos from across the watershed, improved document management for Calendar event attachments. Functional upgrades: text editing glitches resolved. Newsletter sign-up functionality corrected. ACRCDD staff added eight project descriptions to the Projects page, and identified a list of potential projects from stakeholder agencies to be reviewed and verified before uploading in FY2017.

Newsletter: Forum Highlights e-newsletter released quarterly. Contents include: upcoming events, highlights of acwForum events, compilation of litter cleanup results within the watershed for Coastal Cleanup Day and Earth Day-related activities, tools and information for restoration and water conservation, and recognition of individuals making a difference in the watershed. Writing contributed by acwForum stakeholder agencies for some pieces.

Outreach: e-mail list updated regularly to include new contacts who sign up via

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www.acwForum.org and at events.

-acwForum activities were utilized as match/leverage for ACRCDD's USEPA Healthy Watersheds grant, which focuses on application of BMPs in the Alameda Creek Watershed to reduce non-point source pollution.

Report submitted by:
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(925) 371-0154 x 112
Amy.evans@acrcdd.org

Tule Ponds at Tyson Lagoon
Summary July, 2015 – June, 2016
submitted by Math Science Nucleus

School-Age Education Programs

FIELD TRIPS

Throughout this time period 110 field trips of schools throughout Alameda County were conducted for a total of approximately 3000 children and 650 adults that attended in the field trip. The classes ranged from Kindergarten to sixth grade. We also had 5 college classes with a total of 150 students and 5 teachers.

A survey, same as one conducted in last years, had about 50 teachers returning the survey (example of form is given in Appendix I). Overall we had very good to excellent rating of overall content and tour that Math Science Nucleus staff provided. We had more demand for field trips then we could provide. We were fully scheduled by end of October. Many pointed out the ability to touch and feel nature in a closed and safe environment. All felt the classes fulfilled their science requirements in each of their particular grade. All classes sign in with a teacher signature and a copy is provided to Alameda County Flood Control and Water Conservation District. About 40% of the schools were low income (Title 1) and we had about 10% special day or from the School of the Deaf.

The goal of each lesson is listed on our website
(<http://msnucleus.org/classes/fieldtyson.htm>)

COLLEGE CLASSES

Ohlone College (Dr. Rahman) and California State University East Bay (Dr. Michele Korb, Dr. Mary Fortune, and Dr. Mike Massey) took a total of 5 classes with about 250 total students for various water, environmental, or educational themes.

INTERSHIPS

We also had 6 scientific internships this year on microorganisms and chemical analysis of water. The microorganism group was headed by Nicholas Lien, a senior at American High School. He supervised 2 other interns. They kept track of the microorganisms found at 8 stations. Haarika Karthi (Irvington HS Senior) supervised the chemical testing during the year with 2 other interns, Christina Chen and Amrita Nagasuri. Their data was provided to the District (example of data collected attached as Appendix II)

TEACHER WORKSHOPS

Staff conducted 4 workshops throughout the Academic calendar 2014-15.

A total of 18.5 hours with 100 teachers attending. Most of the workshop centered on the field trips that we provide to help teachers have a better experience when they bring their students. Workshops were open to all teachers in Alameda County, but almost 90% are from the southern Alameda Schools.

Open House - Celebration of Water April 15. Times open to the public was 11-5 and included tours every hour of the facility. Unfortunately it was a very wet day (raining continuously) but we managed to get 200 people that braved the tours in the rain. Most of the activities were inside, but was still an enjoyable event by all. (See Appendix III for flyer advertising event.)

Lecture Series - Walk throughout Tule Ponds and enjoy the quiet of this unbelievable treasure in Fremont. Either go on a guided tour with Naturalist James Link or walk on your own. See how the flora and fauna changes throughout the spring. Tour started at 3:30 and goes until 5:00. See the changing of the seasons.

A total of 5 days (Jan 30, Feb 27, March 27, April 10, and May 22), a lecture followed by a tour attracted a variety of people to attend, especially girl and boy scout groups. Average informational packets were provided, was about 35-40 people each event day (approximately 200 people)

Citizen Involvement Events (Community Service/Service Learning)

We conducted community service every Sat from 9:30-12:30 and had approximate 1500 students provide 3 hours of community service (4500 hours). We also had “special days” for community groups including 10 weeks with California State University East Bay, Freshman Day of Service with 20 students for 4 hours each with a total of 800 hours. We also had a Chinese service group for Make a Difference Day with a total of 80 students with 320 hours total.

We also had 5 Eagle projects complete with a total of 135 helpers with an approximate total of 1000 hours (reports below on individual projects). We had 4 girl scouts complete the silver award project with a total of 160 hours for the entire project (report below – Appendix V).

APPENDIX I. Sample of surveys conducted with teachers.



2015 Tule Ponds Field Trip Program Survey Teacher Form

Please help us continue to improve our educational programs and services by taking a few minutes to complete this survey.

1. Which program did you participate in?

1st Grade Plant and Animal Environments 2nd Grade Plant and Animal Changes
 3rd Grade Exploring Wetlands 4th Grade Changes Through Time
 5th Grade Stormwater and Wetlands Chemistry 6th Grade Earthquakes and Ecology
 Other

2. Rate the Presentation:

	Excellent	Very Good	Good	Fair	Poor	N/A
a. Electronic Storybook	●	○	○	○	○	○
b. Outdoor Hike	●	○	○	○	○	○
c. Materials and Activities	●	○	○	○	○	○

3. Rate the Program:

	Excellent	Very Good	Good	Fair	Poor	N/A
a. Educational value for your students	●	○	○	○	○	○
b. Overall quality of lesson and activities	●	○	○	○	○	○
c. Age appropriate materials and activities	●	○	○	○	○	○

4. How likely are you to request a future field trip to Tule Ponds? (circle) Yes No Not Sure

5. How likely are you to recommend the Tule Ponds Field Trip to another teacher? (circle) Yes No Not Sure

6. How did you hear about us? other teachers

Thank you! Great program - students loved! Thx James!

Optional:
 Teacher Name: Jennifer Malone Email: jmalone@pleasantonusa.net
 School: Lydiksen Elementary

Questions? Comments?
 Please contact: msn@msnucleus.org
 (510)790-6284



16
2015 Tule Ponds Field Trip Program Survey
Teacher Form

Please help us continue to improve our educational programs and services by taking a few minutes to complete this survey.

1. Which program did you participate in?

- 1st Grade Plant and Animal Environments 2nd Grade Plant and Animal Changes
 3rd Grade Exploring Wetlands 4th Grade Changes Through Time
 5th Grade Stormwater and Wetlands Chemistry 6th Grade Earthquakes and Ecology
 Other

2. Rate the Presentation:

	Excellent	Very Good	Good	Fair	Poor	N/A
a. Electronic Storybook	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Outdoor Hike	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. Materials and Activities	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. Rate the Program:

	Excellent	Very Good	Good	Fair	Poor	N/A
a. Educational value for your students	<input checked="" type="radio"/>	<input type="radio"/>				
b. Overall quality of lesson and activities	<input checked="" type="radio"/>	<input type="radio"/>				
c. Age appropriate materials and activities	<input checked="" type="radio"/>	<input type="radio"/>				

4. How likely are you to request a future field trip to Tule Ponds? (circle) Yes No Not Sure

5. How likely are you to recommend the Tule Ponds Field Trip to another teacher? (circle) Yes No Not Sure

6. How did you hear about us? past years search

THANK YOU! This is such an amazing opportunity for my students to learn about nature, history and their impact.

Teacher Name: Elyse Farlo

Email: charlo@stzusclo.org

School: Hillside

Questions? Comments?
 Please contact: msn@msnucleus.org
 (510)790-6284

APPENDIX II. FULL DATA PROVIDED TO ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT COLLECTED BY INTERNS.

Example of Station 6.

Date	9/12/2016	24-Oct	28-Nov	26-Dec	30-Jan	19-Mar	28-May
Initial							
pH	6.91	6.91	8.4	8.27	7.55	7.2	7.61
water temperature	23.5	19.9	5.9	9.8	13.6	16.6	25.6
air temperature	17	16	17	14	15	16	16
nitrate	0.4	0.7	0.9	0.3	0.1	0.5	0.8
phosphate	1.65	1.32	2.03	0.44	0.86	0.78	0.47
sulfate	13	17	21	15	12	9	17
Microscopic Autotrophic organisms							
Green Algae with flagella < 0.5mm				A	a-		
Green Algae with flagella 0.5-2 mm							
Green Algae no flagella < 0.5 mm							a-
Filamentous Green Algae							5
Desmids < 0.5 mm			a				
Diatoms < 0.5 mm			a				
					a-		
Protozoa - Heterotrophic only							
Flagellates							
Amoeba 0.02-5 mm			a				
Shelled Amoeba 0.1-4 mm							
Heliozoans 0.01-1 mm							
Ciliates Peritrich < 0.25 mm							
Ciliates suctoria < 0.7 mm							
Ciliates Paramecium 0.01-4 mm							
Ciliates Stentor .01- 4 mm							
Ciliates Coleps 0.01 - 4 mm							
Other Freshwater Plankton							
Blue-green algae (cyanobacteria)							
Euglenoids < 0.4 mm							
Dinoflagellates < 0.4 mm							
Rotifers							
Hydra 2 cm							
Flatworms							
Roundworms	1				2		
Oligochaetes 1.5mm->2 cm		1					
Leeches > 1 cm							
Gastrotrcha							

C.7.2 – Tule Ponds at Tyson Lagoon FY 15/16 Annual Activities Report

Tardigrades < 1 cm							
Arthropods							
Ostracods < 2mm			A+	A	a-		
Copepods 0.5-3 mm			A+	a	a-	3	a-
Water Fleas 0.3-10 mm	1	2	A+	AB	AB	AB	a-
Isopods 5-20 mm							
Water mites 0.5-5 mm							
Alderfly nymph 5-25 mm							
Cadisyfly Larvae							
Stonefly nymph							
Mayfly nymph							
Damselfly nymph							
Dragonfly nymph							
Water boatman			1	1		2	4
Water Beetle							
Mosquito larvae	5				3	2	
Amphipod							
Crayfish (Procambarus)							
Ceratium							

APPENDIX III. CELEBRATION OF WATER FLYER



Tule Ponds at Tyson Lagoon

CELEBRATION OF WATER

APRIL 9, 2016 Sat

Free Event!

Time:
11 am to 4pm

Place:
1999 Walnut Ave,
Behind Fremont BART
Station

(parking within facility
or at Fremont BART)
sign up for a reminder
at
<http://msnucleus.org>



Science of Water

- *Join us for this once a year Open House at Tule Ponds at Tyson Lagoon and learn about water as one of the most important compounds known to humans.*
- *Different experiments will be provided in the classroom so families can experiment with water. Outside we will have bubble stations and learning the importance of wetlands to help naturally clean water.*
- *Come learn and have fun, while enjoying this natural gem in the middle of Fremont including our butterfly gardens and tule forest.*



Managed by
Math Science Nucleus
if any questions call or
email:
Phone: 510/790-6264
Email:
msn@msnucleus.org

For directions go to:
<http://msnucleus.org>
and click on maps

Event Funding provided by Alameda County Flood Control and Water Conservation District

APPENDIX IV. LECTURE SERIES FLYER



Tule Ponds at Tyson Lagoon Lecture Series

Join us for an educational experience at Tule Ponds, Tyson Lagoon. Featured readings will explore Tule Ponds. Recommended for elementary to adult. Free but pre-registration required. Space is limited.
<http://msnucleus.org/classes/tule-lecture.html>



Education Through Restoration

Butterfly Meadow at Tule Ponds

September 25, 2015 Learn the life cycle of butterflies at Tule Ponds. See our newly expanded butterfly meadow. Learn to attract butterflies and restore vital habitat with host plants.



Fall Colors

October 23, 2015 Some leaves change colors while others do not. Learn how chemistry plays a major part in the brilliant display of fall colors.



Native Seeds

November 20, 2015 Seeds are how many plants reproduce, but seeds are also used by animals as food. Learn how seeds are dispersed and how invasive non-native plants sometimes take over.

Migratory Birds

December 4, 2015 Birds migrate to warmer climate and stop by the San Francisco Bay Estuary. Tule Ponds is alive with birds that use the wetland as a stopover. Some live here year round.



Fungi of Tule

February 26, 2016 Moisture during winter and our mild climate create ideal conditions for the growth of fungi. Learn how fungi play a major role in creating healthy ecosystems.

Spring Flowers

March 18, 2016 Native flowers can be found throughout California. See the native flowers that can be found at Tule Ponds.



Water Quality

April 22, 2016 Fish, reptiles, amphibians and insect use Tule Ponds as a source of fresh water. Learn how we measure and monitor water.

How the Ohlone Lived with Nature

May 20, 2016 The Ohlone Indians were inhabitants of this land long ago. They used many native plants to survive. Learn about these Native Americans and how they lived at Tule Ponds.

Time: 3:30pm to 4:30pm Location: 1999 Walnut Ave, Behind Fremont BART

Sponsored by Math Science Nucleus
Phone: (510)790-6284 Email: msn@msnucleus.org
Directions at: <http://msnucleus.org>



funding provided by Alameda County Flood Control and Water Conservation District

APPENDIX V

EAGLE PROJECTS July 1,2015- June 30, 2016

**Retaining walls and
landscaping facing
east of Pond**

C

by

Jason Lau

Troop 111, Fremont



For my Eagle Scout project, I, with the help of others, built six semicircular retention walls using logs with a height of 2 feet and a diameter of around 9 inches. The first step was to dig trenches a foot to a foot and a half deep where we would place the logs. After placing down the logs, we compacted the structure by filling the spaces with soil. Afterwards, we planted small bushes behind the semicircles. Overall, the purpose of this project was to reduce the effect of erosion and prevent sediment from entering the pond.



area before terracing



clearing area

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I would like to thank the following scouts who helped me complete this project: Varun Sridhar, Jacob Koodarappally, Jerry Qin, and Derek Xia. Also, my parents and Mr. Hsu were extremely important in that they helped transport the logs to the project site. Most importantly, I would like to thank Dr. Blueford for giving me the opportunity to benefit the community in such a manner.



installing retaining walls



terracing area

Picnic Benches for Pergola Area near Nursery

by
Lampert Diep
Troop 101 , Milpitas



In order to help young students better understand the environment, I led a group of workers in building four benches for a local school. The benches will act as a learning aid for students to be able to learn outdoors while staying in touch with nature. The benches were created over a course of two weeks and occurred in three phases: cutting/sawing, connecting/drilling together, and applying a waterproof finish.



where to built



dicussing dimensions

C.7.2 – Tule Ponds at Tyson Lagoon FY 15/16 Annual Activities Report

Thank you to everyone who helped out. Thank you to: Andy Diep, Hoan Chau, Amy Chau, Kim Chau, and Connie Diep. Special thanks to Dr. Blueford for approving the project and my parents for supporting me.



measuring



laying out the table

Building retaining wall to bird blind and landscaping

by
Evan Nusaputra
Troop 125 , Fremont



For my eagle project, I was tasked with building a log retaining wall to build a log retaining wall, about 20 foot long and 2 foot wide, to stop dirt from eroding onto a trail and to plant a native tree in the area. The logs are standing vertical, 1 foot in the dirt and about 2 feet sticking out of the dirt. Shrubs were cleared that was above the log retaining wall. After this, we dug a trench to put the logs in. The trench was about 20 feet long and was filled with the logs. The remaining space was filled with dirt to help keep the logs in place. Also, a native plant was planted above the wall. By making the log retaining wall and planting a native tree above the wall, the soil was bound together and helps to prevent erosion.



clearing area

placing logs

Thank you to all the people who showed up and helped me complete my project: Mr. Cooper, Mr. Goli, Phillip, Andrew, and Srinath. I wouldn't be able to complete the project without their help!



preparing retaining walls

finishing touches

Building Garden Benches

*by
Shobhit Asthana
Troop 153,
Fremont*



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I lead my team in building 3 planter stations for Tule Ponds. We built each planter station in three phases. The first was to make the top frame of the planters which consisted of an 8'x 2' frame with 3 supporting cross frames. After, we attached the hardware cloth using a staple gun. We then attached 6 legs to the frames and also attached a supporting cross frame to each pair.



building the frames



installing the top wire mesh

I would like to thank my parents, Kyle Muldoon, Ryen Teo, Shridick Jain, and Daniel Redeker, who helped out on both of my work days. I could not have done it without them. I would also like to thank Dr. Blueford and Art Willams for lending me tools and providing guidance.



checking the model



finished garden benches

Landscaping and Building Planter Beds at Station 2

by
Akhil Bhamidipati
Troop 112, Fremont



My project will improve the condition of the Tule Ponds Wetland in my city. As Fremont expands, it is becoming increasingly hard to find good settings to relax and enjoy nature in. This is why we must preserve the existing ones. Currently, this section of the reserve is very boring and unattractive. That is why we need to clear out this area, landscape it for walking, and put planters on it. With all these improvements, this section of Tule Ponds will once again be a nice place to visit. Although my project directly benefits Tule Ponds, its goal is to benefit the children of our community.



clearing the area



some of bushes for green waste

C.7.2 – Tule Ponds at Tyson Lagoon FY 15/16 Annual Activities Report

I would like to thank Lilly Sravya, Mrs. Brommer, Jamieson Devera, Jonathan Ng, Mohit Shah, Roanak Baviskar, Carlo Duque, Krishnan Arunkumar, Nikhil Nakka, Jamieson Devera, Nate Morjig, Gaurav Seth, Mr. Morjig, Krishnan Arunkumar, Jonathan Ng, Vignesh Pethuraj, Thomas Grass, Ryan Barikdar Mrs. Bhamidipati, and Mr. Bhamidipati. I would like to thank Jay Parry from Lowes for giving me a 25% on the wood and screws. This discount helped cut the cost of my project by about \$100. Jay also helped me select the proper wood and sizes.



RESTORATION OF THE OHLONE HUT

Lavanya Neti, Sneha Anantharaman, Meha Goyal and Divjot Sandhu
silver award project
Troop 30901, Fremont
Lakshmi Anantharaman
(30901 Troop Leader)



This troop is from Fremont with four 7th graders in 2016. The troop members are **Lavanya Neti, Sneha Anantharaman, Meha Goyal and Divjot Sandhu.**

During a fifth grade class field trip, we went on to Tule Ponds. We were really amazed with the beautiful scenery and was amused learning about how tule helped the Ohlone Indians. Since the natural wear and tear over time caused damage to the hut, we thought it would be very helpful to fix the hut, so that future girl scouts could learn more about the Ohlone Indians. As part of our Silver Award project, we cut, weaved, and tied tule around the hut and more. Our project helped restore the hut and create a roof to provide shade in a bird watching shed. Through this project we learned about how flooding can affect the lifestyle of Native Americans and how tule greatly improved the life of the Ohlone Indians.



Putting up Tules to repair damage

C.7.2 – Tule Ponds at Tyson Lagoon FY 15/16 Annual Activities Report



Collecting tules



Display on project



Teaching other students

Annual Program Summary Report for Watershed Awareness Program July 1, 2015 – June 30, 2016

PUBLIC OUTREACH - EVENTS AND PUBLICATIONS

Friends of Sausal Creek Member Meetings were held in September, January, March, and May at the Dimond Library. For July, we hosted our annual Meet & Greet Potluck, this year at Wood Park. In January we held the fifth annual State of the Creek meeting; this year's meeting launched our 20th anniversary year and featured reflections on FOSC's first 20 years, a photo tour of the creek between I-580 and the creek's mouth, and an introduction to the Sausal Creek Walkable Watershed planning effort in this part of the watershed. Topics for the other indoor bimonthly meetings covered gardening for birds; bats (with a follow up observation walk); local cultural history; and the history of East Bay trees. We averaged 48 attendees per indoor meeting this past fiscal year.

In this our 20th anniversary year we focused renewed energy on the watershed between I-580 and the creek's mouth. Because the creek is mostly on private property or buried as it runs parallel to Fruitvale Avenue, this effort involves community engagement to identify potential projects and FOSC's role in these projects. We sought and received technical assistance from the **National Park Service Rivers, Trails, and Conservation Assistance (RTCA) Program**. Supported by RTCA staff we successfully applied to have the Fruitvale neighborhood be the pilot community for the first Bay Area **Walkable Watershed** Concept Plan, receiving consulting help from Skeo Solutions (valued at \$50,000) for visioning and strategy work, technical analysis, community engagement, and the creation of a detailed concept plan. The concept plan is being developed by the local community to increase creek-related awareness and access and to promote neighborhood greening projects and development of recreational opportunities. Throughout the year we worked with a coalition of community leaders and resource partners to generate ideas and shepherd implementation. Project website: <http://www.walkablewatershed.com/sausalcreek/>

Enthusiastic volunteers continued to represent FOSC by **tabling at community events**. FOSC tabled at the Dimond Park Picnic, Dimond Oaktobefest, Glenview Water-Wise Fair, Piedmont Pines Neighborhood Association annual meeting, Fruitvale Community Career & Resource Fair, *TRAILHEAD* film premier, Oakland's EarthEXPO, and an Ecofaction event at Ashkenaz. FOSC also had informational tables at our three annual Dimond Park events: Creek to Bay Day (70 volunteers), Winter Solstice Planting Day (29 volunteers), and Earth Day 88 (volunteers). Our 10th annual Native Plant Sale and Open House (300 attendees) included a FOSC informational table as well as tablers on raptors, arachnids, pollinators, and gardening; face painting; and live music.

We led tours of our Dimond Park Native Plant Demonstration Garden for 309 people as part of the **Bringing Back the Natives Garden Tour**. During the day-long event, we hosted two talks ("Gardening and Birds" and "How to Design a Local Native Plant Garden") and led two group tours of the Sausal Creek Restoration Project in Dimond Park.

We led a **student march against trash and illegal dumping** through the Fruitvale neighborhood, with 48 participants raising awareness by carrying signs and chanting while picking up trash. Students then helped at the monthly workday at Wood Park. To celebrate 20 years of student volunteerism, the FOSC board hosted a picnic lunch following the workday.

We helped California Urban Streams Partnership coordinate a **soil bioengineering workshop** in Shepherd Canyon Park.

A FOSC board member **presented** on the history of Sausal Creek at a Dimond Improvement Association general meeting.

We led a **tour** in the watershed for Court Appointed Special Advocates and a Bentley High School class.

We hosted a **history walk** along the waterfront during the “king tide” in January 2016.

We **spoke** about our organization’s efforts to East Bay Hills Hike participants and at a California Native Plant Society-East Bay field trip/botanical walk.

We updated the *Trails and Tributaries of the Sausal Creek Watershed* **map brochure** and completed a third printing (30,000 copies).

We created and distributed an **educational flyer for dog owners** to help encourage dog owners to pick up after their pets and educate about the sensitivity of rainbow trout habitat.

Stan Dodson produced the documentary *TRAILHEAD: Discovering Oakland’s Gateway to the Redwoods* which highlights FOSC’s volunteer leadership and native plant nursery. The film premiered at the Chabot Space & Science Center on October 7, 2015, and after more than 30 public screenings in 26 Bay Area venues was released online on April 18, 2016 (<http://oaklandtrails.org/watch/>). Links to press on the film can be viewed at: <http://oaklandtrails.org/press/>.

We assisted the Oakland Fire Department with the update of the **Goat Grazing Plan** so that grazing could be best timed with removal of invasive plants prior to seeding and so that native plants could be protected from grazing.

Other forms of public outreach included FOSC's **newsletter**, **listserv**, **website** (www.sausalcreek.org), **Facebook** page (www.facebook.com/FriendsOfSausalCreek), **Instagram** account ([friends_of_sausal_creek](https://www.instagram.com/friends_of_sausal_creek)), and **Twitter** account (FOSC_Field). In January 2016 we began issuing the newsletter every month instead of every other month. For the final newsletter of the year, circulation was 2,494 email recipients. Listserv membership increased from 548 to 617 members. Outreach for member meetings and volunteer events was also done through announcements in digital and print publications, posts on neighborhood listservs, and flyers at trailheads and at tabling events.

East Bay Express published an article written by one of FOSC’s 2015 summer interns on the history of Sausal Creek and FOSC’s volunteer efforts in caring for it: <http://www.eastbayexpress.com/oakland/sausal-creek-an-oakland-watershed-reborn/Content?oid=4499745>.

FOSC was featured in the city’s *Oakland Tribune* **article** promoting Creek to Bay Day: <http://www2.oaklandnet.com/oakca1/groups/pwa/documents/marketingmaterial/oak054923.pdf>.

Bay Area News Group published an **article** on the Walkable Watershed effort following our State of the Creek meeting: http://www.eastbaytimes.com/bay-area-news/ci_29502194/east-oakland-friends-sausal-creek-takes-watershed-rehab.

Inspired by the documentary *TRAILHEAD*, an Oakland resident **blogged** about Dimond Canyon Trail, helping FOSC get the word out about the importance of cleaning up after dogs and keeping dogs on leash to protect sensitive rainbow trout habitat: <http://www.oaklandmomma.com/2016/03/04/appreciation-awareness-oaklands-dimond-canyon/>.

FOSC's success at garnering well-timed donations (which yielded an additional \$5,000 in cash prizes) during East Bay Gives 2015 caused East Bay Community Foundation to **highlight** FOSC for East Bay Gives 2016 (<https://eastbaygives.org/about>).

FOSC continues to maintain relationships with **community partners** including 4-H, AmeriCorps, Boy Scouts of America, buildOn, Chabot Space and Science Center, Civicorps, College of Alameda, CSU-East Bay, Diablo Valley College, EarthTeam, East Bay Academy for Young Scientists, Girl Scouts of the USA, Hands on Bay Area, Holy Names University, KIDS for the BAY, Laney College, Merritt College, Piedmont Community Service Crew, Piedmont High School Key Club, Student Conservation Association, and UC Berkeley. Partnerships with other local community groups include Bicycle Trails Council of the East Bay, Diablo Firesafe Council, Dimond Business and Professional Association, Dimond Improvement Association, Friends of Joaquin Miller Park, Friends of Montclair Railroad Trail, Friends of Wood Park, Glenview Neighborhood Association, Jingletown Arts & Business Community, Keep Oakland Beautiful, Montclair Village Association, Nomadic Press, Oakland Wildland Stewards, Oakmore Homes Association, Piedmont Pines Neighborhood Association, and Shepherd Canyon Homeowners Association. As part of the Walkable Watershed planning process we established many new relationships this past year, including with Brothers on the Rise, Cohen Bray House, Fruitvale Many Hands, Peralta Hacienda Historical Park, Unity Council, and Walk Oakland Bike Oakland. We also began partnering with Youth Employment Partnership to lead special field programs for Team Oakland students in summer 2016.

CITIZEN INVOLVEMENT EVENTS

FOSC community volunteer events are held year-round at restoration sites throughout the watershed. Some of the workdays are led by FOSC staff, while others are led by neighborhood volunteers. Volunteer-led worksites receive support from FOSC staff in multiple ways: assistance with workday outreach and volunteer recruitment; tools; consultation on site restoration plans; and contribution of native plants grown at our native plant nursery. In addition to an executive director and restoration and nursery manager, FOSC hired an education specialist to lead our summer education programs, a summer intern, and an intern to assist during the school year. We also received 300 hours of assistance from a water resources intern from CSU-East Bay sponsored by USDA Careers Internship Program for April 2016-April 2017.

- Three (3) workdays at Barry Place

- Eleven (11) workdays at Beaconsfield Canyon plus many hours of invasive plant removal by dedicated park stewards
- One (1) monitoring day at the Big Trees Trail pallid manzanita colony
- Twenty-five (25) public workdays and three (3) private corporate workdays at Bridgeview Trailhead
- One (1) workday at Castle Canyon
- Five (5) public workdays and four (4) student workdays at Chabot Space and Science Center pallid manzanita colony
- One (1) workday at the Cohen Bray historic house
- Six (6) public workdays and one (1) private workday in Dimond Park and Dimond Canyon Park plus many hours of invasive plant removal by dedicated park stewards
- Four (4) public workdays in the Dimond Park Native Plant Demonstration Garden
- Eleven (11) public and two (2) private student trail maintenance workdays in Dimond Canyon Park
- One (1) private corporate workday at Fern Ravine
- Two (2) workdays at Fruitvale Bridge Park
- Two (2) workdays led by Jingletown Arts & Business Community
- Twenty-eight (28) public workdays and one (1) private workday at the FOOSC Native Plant Nursery
- Two (2) public workdays at the Police Activities League (PAL) camp in Joaquin Miller Park, one (1) private workday at Lookout Point in Joaquin Miller Park, plus many hours of invasive plant removal by dedicated park stewards in Joaquin Miller Park
- Sixteen (16) workdays at Marj Saunders Park
- Twelve (12) workdays at Montclair Railroad Trail led by Friends of Montclair Railroad Trail
- One (1) workday at Shepherd Canyon Park
- Twelve (12) workdays at William D. Wood Park
- Thirteen (13) propagule collection hikes
- Four (4) creek cleanups in Sausal Creek working upstream from the El Centro Trailhead
- One (1) family aquatic insect exploration field trip and four (4) field trips on benthic macroinvertebrates for college classes (College of Alameda and Merritt College)
- Four (4) bird monitoring events
- Twelve (12) water quality monitoring days
- Three (3) Eagle Scout projects completed yielding three plant benches, two bulb benches, and two planter beds at the FOOSC nursery

- **Board of Directors:** Our annual board and staff retreat in February 2016 was planned and conducted by our liaison with the National Park Service RTCA Program. Linda Stonier helped our board and staff to understand the strategic framework FOSC already has in place, to update our mission and vision statement, and to identify goals for FOSC's work in the Fruitvale neighborhood, which provided input and direction on the Walkable Watershed planning effort. Our 14-member board of directors and executive director met every other month. Board of directors meetings are open to the public, and the agenda and staff report are posted on the FOSC listserv.

SCHOOL-AGE CHILDREN OUTREACH

Our activities with school-age children include leading environmental education field trips for school classes and restoration workdays for student community service groups. Youth activities include a discussion of the Sausal Creek Watershed, stormwater pollution prevention, stream restoration strategies, and native and nonnative plant identification. The programs also include a hands-on restoration component such as removal of invasive, nonnative plants; vegetation monitoring; planting of native plants; or propagating plants in our native plant nursery. We also developed new curriculum on native pollinators at our pollinator garden, and aquatic insect observation and water quality testing along the creek. Many students also enjoyed naturalist-led hikes through the woods and along the creek, and silent reflection activities. FOSC staff led 36 field trips this past school year, and FOSC volunteers led an additional 14 field trips. In addition to these field trips, student service organizations volunteered for weekend workdays year-round.

During summer of 2015, we partnered again with Oakland Parks and Recreation to work with their Touch the Earth and Shake, Rattle & Roll day camp programs in the Joaquin Miller Park redwood area. Fifteen groups of campers learned about the Sausal Creek Watershed, stormwater pollution prevention, "Leave No Trace" ethics, native plants, insects and other wildlife, and California Native Americans and their practices. These groups also went on naturalist-led hikes through the redwoods and participated in restoration activities including removal of invasive, nonnative plants and propagation of native plants in our nursery. This partnership is continuing during the summer of 2016.

Seven students participated in our 2015 summer high school intern program. The 10-day program included a variety of habitat restoration projects throughout the watershed, special projects at our native plant nursery, educational and leadership activities, and explorative hikes.

FUNDING

Additional funding in 2015-16 came from the Alameda County Fish and Game Commission, Alameda Countywide Clean Water Program Community Stewardship Grant Program, Bill Graham Supporting Foundation of the Jewish Community Federation and Endowment Fund, California Department of Water Resources Urban Streams Restoration Program (Proposition 84 grant), City of Oakland (for plants for the Sausal Creek Restoration Project in Dimond Park), The Clorox Company Foundation, East Bay Community Foundation (prizes from East Bay Gives), East Bay Municipal Utility District, Hillside Gardeners of Montclair, JiJi Foundation, National Environmental Education Foundation, National Oceanic & Atmospheric Administration Ocean Guardian School Program (procured by Joaquin Miller Elementary), organization donations,

business contributions and employee matches, and individual contributions. In addition, we received the in-kind services described above from the National Park Service RTCA Program and Skeo Solutions to support our Walkable Watershed planning effort. FOOSC continues to work to identify other potential funding sources for our programs.

SUMMARY

Volunteer visits: 3,846

Volunteer service hours: 10,307

Students participating in field trips or summer service learning projects: 977

Plants planted by FOOSC: 2,485

Plants grown by FOOSC planted at the Sausal Creek Restoration Project in Dimond Park: 2,708

Plants donated for school and city projects: 199



Board of Directors

Michael Gregory, President
Dave Owen, Vice President
Jan Woycheshin, Secretary
Melanie Courchaine, Treasurer
Claudia Taurean, Membership Coordinator
Maureen Forney, Member at Large

C/O RHSD
835 East 14th Street
San Leandro, CA 94577

Annual Report Summary
7-1-2015 – 6-30-2016

Public Outreach Events

Environmental Forum – Annually, representatives from local organizations are invited to present information to community members and attendees regarding issues that impact the environment. The topic this year was, “Rethinking your Lawn the Bay Friendly Way” in response to the drought. The event was located at San Leandro Library from 10:30 - 2:30 on November 7, 2015.

10:30-11:00 “Mini Environmental Expo – View and Chew” The public viewed exhibits from local environmental and community groups while enjoying complimentary coffee and refreshments. Exhibit groups included: Native Here, Bee Friendly San Leandro, Wilma Chan’s office, 350 Bay Area, Ever Green Nursery, EBMUD (Water Conservation team), and San Leandro High School Interact Club.

11:00-12:30 Guest Speakers: Richard Harris from EBMUD spoke about EBMUD lawn conversion rebates and incentive programs. Alia Rose Seidlitz spoke about garden designs including doing a site evaluation, hydrozoning and irrigation, and plant selection. Paul from Ever Green Nursery in San Leandro spoke about sourcing plants locally and native choices. Stephen Andrews from Bay Friendly Landscaping and Gardening Coalition spoke about downsizing lawns and what to replace them with. He then did an on-stage demonstration about how to choose materials, prep the site, irrigation retrofitting, tips and troubleshooting.

1:00-2:30 FSLC provided a free lunch to FSLC Board, guest speakers, dignitaries and the entire audience. Over 80 people from the community enjoyed this event.

Earth Day/Watershed Festival –

This annual event brings local residents to San Leandro Creek to learn more about the watershed and ecological issues. A variety of organizations host display tables for public education. Guest speakers and entertainment were also featured. On April 9, 2016, a **creek cleanup** began at 9:30 AM-12:00 PM. 32 participants volunteered.

Volunteers collected trash and recyclables for an art project and to be weighed.

Festival began at 12:30 PM-4:00 PM Booths included: Stepping Stones Growth Center (community center for adults with special needs), Merritt College, StopWaste, City of San Leandro; Rails to Trails; Oakland Zoo & Zoo Mobile, Mosquito Abatement, Davis Street, EBMUD, SLZHS “Earth Team”, Hayward Shoreline Interpretive Center; “Native Here”, Interact Club- Arroyo High School, Master Gardeners of Alameda County, Solar City, Life Chiropractic School, City of San Leandro Environmental Services Section.

Presenters: Dolores Morrison – Alameda County Master Gardeners -Drought Gardening Presentation; Stephen Andrews/City of San Leandro – Replace your lawn/ sheet mulching demonstration (with prior help from City of San Leandro Public Works. They had removed lawn and relandscaped area in park for event); Earth Capades - juggling, singing & Earth loving fun –environmental performer; Bancroft Middle School/SLHS Jazz band performance. Advertised in Eventful, Next Door San Leandro, San Leandro Chamber of Commerce, Castro Valley Forum, San Leandro Times, TriCity Voice, Gigantic Idea, FSLC Web Page & Face Book sites. Over 150 people attended festival. (See attachments with Advertising & garbage weight totals). School Community poetry and art contest approximately 50 students participated. 1st, 2nd & 3rd prize ribbons and prizes (Baskin Robbins gift certificates) were given for every grade level that participated (from K-8th grade). Friends of San Leandro Creek hosted with a booth, free food & drink and a raffle with prizes. Michael Gregory presented the raffle prizes. Our free healthy foods including veggie sticks with Ranch dip, air dried popcorn and a variety of fresh fruit. Total number of participants was around 200 people.

Friends of San Leandro Creek Members Meetings - Quarterly, the *Friends* invite guest speakers to talk about pertinent environmental issues for our members and the general public. We generally have about 20 members of the community join us. We serve complimentary coffee and snacks. This fiscal year we had three guest speakers. On October 10, 2015 Beckie Zisser from *Save The Bay* spoke. Beckie is the Climate Change Policy Campaign Manager at *Save The Bay* where she promotes wetlands restoration as a means of adapting to flooding and sea level rise. Beckie did a Power Point Presentation about current projects on SF Bay.

On February 2, 2016 Mitch Avalon, Consultant for the Contra Costa County Public Works Department discussed current projects and activities in Contra Costa County,

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including their plan to convert concrete channels to natural stream systems on Walnut Creek, “The Lower Walnut Creek Project” and the Contra Costa Watershed Forum. He discussed important activities occurring in the Bay Area, including planning for sea level rise, and integrated water management efforts. He wrapped up with a discussion about Proposition 1 grants and a statewide ballot measure that would provide funding for stormwater programs.

On May 24, 2016, film maker Stan Dodson shared movie, *Trial Head*. The 20-minute film features the City of Oakland’s largest wildland trail system that connects neighborhoods to redwood forests and more than five hundred miles of trails that span the entire East Bay. Trail users, historians, creek restoration experts, local merchants, and park volunteers are among those interviewed during a typical park day that begins predawn in Oakland’s Dimond District, and concludes at sunset from a Joaquin Miller Park ridge overlooking downtown Oakland and San Francisco Bay. Stan had a Q & A period after the movie.

Grants -In March 2016, FSLC applied to the Robert and Lois Braddock Charitable Foundation for a grant of \$5,000.00 for general use. This grant was received in June, 2106.

PCA – In the 2014-15 annual report we reported that the Cities of San Leandro and Oakland had both applied for San Leandro Creek to become a Priority Conservation Area. FSLC did not hear until after the Annual Report was completed. The PCA was granted. To review: In August of 2104, FSLC applied to make the lower reach of San Leandro Creek a Priority Conservation Area through ABAG (Association of Bay Area Governments) This designation is for areas critical to the functioning of wildlife and plant habitats, aquatic ecosystems and the region's water supply and quality, to make Urban Greening using existing and potential green spaces in cities that increase habitat connectivity, improve community health, capture carbon emissions, and address stormwater.

San Leandro Creek Alliance Group began meeting monthly in 2012. This group’s main focus is planning and building a Green Way from San Francisco Bay at Arrow Head Marsh in Oakland to Chabot Park in San Leandro. Among the members represented in the Alliance are: Susan Levenson (FSLC), Michael Gregory (President FSLC, former City of San Leandro Council Member), Hank Ackerman (Alameda County Flood Control Manager), Lee Huo (Bay Trial Planner, ABAG), David Ralston (Oakland City Planner), Joe Sullivan (Fisheries Program Manager, EBRPD), Robin Freeman (Professor of Environmental Sciences, Merritt College), Robert Raburn (Director District 4, BART), Sandra Threlfall (Director, Waterfront Action), Chris Zapata (City Manager, San Leandro), Dennis Waespi (Board EBRPD), Barry Bergman (Rails-To-Trails, Manager of Trail Development). This group is chaired by

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Douglas Siden (Director, Ward 4, EBRPD). FSLC and EBMUD (SL TAG) met during Alliance meetings to update and make decisions regarding our goal of receiving a more historical flow regime from the Lake Chabot Dam to the SL Creek below. EBMUD included with the Lake Chabot retrofit must include 1 year study plan to develop a “comprehensive fisheries plan, providing fish passage and/or habitat and flow enhancements” as per California Fisheries and Wildlife Division. The study has been extended to five years.

Citizen Involvement Events

General Public Outreach and Membership Drives continue on an ongoing basis. All Friends activities are publicized by the City of San Leandro, both on-line and in print; as well as The San Leandro Times, Castro Valley Forum, San Jose Mercury News, Daily Review, Oakland Tribune, and San Leandro Chamber of Commerce website, and on FSLC’s web site (www.FSLC.org).

Presentations for Public –

As part of our public outreach we attend and give community events/presentations to gain exposure for FSLC and to further promote watershed education. These events include our Environmental Forum, The Watershed/Earth Day Festival, appearances for community groups, our newsletter The Splash, our website, and Creek Clean Ups & restorations. Details follow below.

On October 15, 2015, FSLC Met with homeless advocate groups in San Leandro. In attendance: Susan Levenson (FSLC), Mary Posey (St. Leander’s/St Vincent de Paul), Moira Fry (City of San Leandro Homeless Taskforce; April Showers), Dominic Li Mandri (San Leandro Improvement Association), Claudia Taurean (FSLC Board), Officers Neil Goodman, Brian Buss and Sergeant Teng (SLPD). Spoke of individual groups’ interest in homeless in San Leandro and what we envision to help homeless here in the future.

On October 17, 2015, FSLC teamed up with Wilma Chan’s Water Smart Workshop and our Environmental Forum. FSLC was a guest tabler and assisted at the Smart Water Event. Representative from Wilma Chan’s office was present and had donations later at our Environmental Forum. Approximately 50 people were present.

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On March 12, 2016, FSLC had an informational booth at the Davis St 2nd Annual Health Fair included: games, face painting, raffle prizes, resource booths, Medi-Ca Enrollment, Covered CA, enrollment free dental screening, free blood pressure check, clinic tour, free barbecue, and free fresh produce.

Bi-annual Newsletter - Featured in the publication, *The Splash* are updates on San Leandro Creek, upcoming events, informative articles on watershed related topics, and news of other activities and points of interest. Besides being electronically mailed to members, *The Splash* is also available in the San Leandro Library, community centers, and businesses in downtown San Leandro, in addition to being available for download from the FSLC website. See attached.

FSLC Website –The FSLC website is available to online viewers. It includes FSLC’s mission, news, announcements of events, pictures of events, and updates. Copies of our newsletter, [Splash](#) are on display for viewing.

Cary Dr. Property –After receiving the Cal Trans grant for the San Leandro Creek Master Plan (Green Way), work with SLUSD was temporarily put aside. Talk has resumed in hopes to find funding to build the educational center.

Creek Clean Up and Revegetation – Each year the public is invited to assist FSLC in removing litter from the creek, clearing non-native plant species and planting native riparian species to restore the creek to a more natural state. These activities are usually conducted at Root Park on San Leandro Creek. The number of participants at each event ranges from 5-50. Creek cleanups over this past year were held in August, October, February, April and June with the help of approximately 200 volunteers who donated about 600 hours of service. We have cleanups scheduled for August 27 and October 15, 2016.

School-Age Education Programs

Chabot Day Camp –FSLC continued a hands-on discovery of the San Leandro Creek for campers at the Chabot Day Camp, ages 5-14. Chabot Day Camp is a program the City of San Leandro has been offering to the community for over 35 years. Watershed Awareness Coordinator taught lessons on the San Leandro Creek at Chabot Park in San Leandro. This year nine lessons for two camp age groups; “Tiny

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Trees” – grades k-1; “Little Trees” – grades 2-4; These programs had a total of 229 campers. Each age group was given different age appropriate 30 minute lessons in groups of about 20- 50 children.

Field Trip/Schools Outreach Program – During the 2015/2016 school year, FSLC hosted 108 K-high school aged students from local schools. These free programs were held at Chabot Park in the San Leandro Creek watershed. One in-school presentation was given with a total of 21 students present.

This fiscal year, FSLC was also a part of a University level discussions/field trip. On March 20, FSLC took Martha Berthelsen’s Class from Merritt College in Oakland on a 2.5 hour field trip. The class was taken to the creek in two locations: Chabot Park and Root Park. The following topics were discussed in detail: What do the Friends of the San Leandro Creek group do? How did it start, how does it function, how does it maintain itself? Urban creek issues - visibility and accessibility, litter and homeless, and/or any other issues you frequently - or currently - deal with Creek trail/urban greenway Impact of Chabot Dam, water flows, and restoration for fish (and fish as the impetus for restoration). 13 students and 1 professor present.

This fiscal year, 142 school aged (K through college level) students received lessons through field trips, and 229 through Day Camp. The total students reached was 371.



CITY OF OAKLAND



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Environmental Services Division

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July 28, 2016

Clean Creeks Agreement Annual Program Summary – FY 2015/2016

Creek Cleanup Volunteerism and Outreach Program Area Updates

Program Area 1: Adopt a Creek (*Citizen Involvement Events*)

The Adopt a Creek Program has grown from 35 to 42 active sites. We have made special efforts to encourage adoption and cleanup of creek sites that are known “trash hotspots.”

We continue to distribute the Adopt a Creek orientation and resource packet to help new and existing groups build and manage stewardship activities at their sites. As many of our Adopt a Creek (AAC) groups are becoming more established, they are undertaking restoration projects at their adopted sites. In partnership with the City’s Watershed and Stormwater Management Program, we now provide technical assistance for several community-based creek restoration projects, including plant selection and site planning.

We also worked to create stronger partnerships between our Adopt a Creek groups and volunteer resources in the greater community. Through program promotion on several volunteer recruitment websites and established partnerships with community service organizations at local colleges and universities, we have seen more of our AAC groups tackling larger scale projects with this additional assistance. We have also started providing plant materials and continue to expand our tool lending service to our volunteers.

Program Area 2: Community Creek Efforts (*Citizen Involvement Events*)

Throughout the year, our program sponsored a range of creek cleanup and beautification events. There were 766 cleanup and restoration events in creeks and shorelines last year. There were an additional 7,687 volunteer cleanup events throughout the city – events that eliminate trash prior to its entry into the storm drains and creeks. Furthermore, there were an estimated 12,192 Adopt-a-Drain volunteer cleanup events throughout the city – these volunteers clear debris and trash from ten feet on either side of their adopted storm drain before rain events to prevent flooding and trash from getting into our creeks.

We continue to build our outreach strategy by incorporating additional forms of online communication to reach out to the community about watershed stewardship events. We now have an established presence on Facebook and regularly communicate with Oakland residents. Our relationships with numerous community organizations remain strong. We have attended numerous community events to distribute information about our volunteer program and other general watershed education outreach materials.

At this year’s EarthEXPO, an environmental fair in downtown Oakland on April 6, 2016 that attracted about 2,000 attendees, we highlighted stormwater protection, volunteer creek and shoreline cleanups, and sustainability at the Oakland Public Works booth. The overall theme of the event was environmental sustainability. Exhibitors presented various ways Oakland residents can be sustainable: alternative

transportation, solar energy, local food supply, promoting urban nature, volunteering, recycling, composting, buying recycled goods, Bay-friendly landscaping, and many more.

Program Area 3: Citywide Creek Cleanup Events (*Public Outreach Events*)

The City hosts two citywide cleanup events per year, Creek to Bay Day and Earth Day. Creek to Bay Day brought together 1,401 volunteers to clean up 38 creek and shoreline locations throughout Oakland. Oakland volunteered a total of 4,801 hours picking up 15,500 pounds of trash from Oakland's creeks, Lake Merritt and the estuary and removing 46,514 pounds of green waste (mostly non-native) to allow native plants to flourish.

On Earth Day, over 2,334 volunteers participated in this citywide beautification effort, putting in a combined 7,855 volunteer hours at 90 volunteer sites throughout Oakland. Thirty nine of the volunteer sites were at creeks and shorelines. 1,241 volunteers assisted in cleanup and beautification activities at creek sites and Lake Merritt. Volunteers picked up 64,455 pounds of trash from Oakland's creeks, Lake Merritt, estuary and streets and removed 133,800 pounds of green waste (mostly non-native) to allow native plants to flourish.

Program Area 4: Creeks Website

Our creeks websites, www.oaklandcreektobay.org and www.oaklandcreeks.org continued to improve in Fiscal Year 2015-2016. We continue to maintain the websites to highlight our Adopt a Creek program as well as other ways people can get involved in community cleanup events. The websites provide interested individuals with information regarding the City's Creek to Bay protection efforts and general information as to the importance of watershed protection and the impacts of pollution on our waterways.

We also continue to maintain the Adopt a Drain website, www.adoptadrainoakland.com which facilitates storm drain maintenance adoption. This website has made it much easier to for Oakland residents to adopt a drain. There are now 756 Adopt a Drain adopters, which represents a 23% growth rate in FY 2015-2016. The [Adopt a Drain](#) program continues to receive interest from other municipalities looking to Oakland as a model. Staff has received calls from nearby cities like Berkeley, San Jose, [San Francisco](#), and [Riverside](#), which both launched a program in 2016 based on Oakland's, as well as [Burlington](#), [Vermont](#), St. Paul, Minnesota, and Shoreline, Washington. Oakland is collaborating with these cities to improve the Adopt a Drain website to optimize user experience and data management.

Program Area 5: Outreach Materials

To publicize both the Creek to Bay Day and Earth Day events, press releases are issued in an attempt to spread the word to the greater community about efforts being undertaken by our program as well as opportunities to get involved. We sent two press releases prior to each citywide event (two weeks prior and three days prior).

We also created posters and postcards to distribute to throughout Oakland and to nearby colleges and universities. For both Creek to Bay Day and Earth Day, we hired a contractor to distribute a portion of these posters and postcards. For Creek to Bay Day, 2,000 posters and 14,500 postcards were distributed throughout Oakland. Translated versions were distributed at appropriate locations. For Earth Day, 4,500 posters and 13,500 postcards (with EarthEXPO on one side) were distributed throughout Oakland and to nearby colleges/universities. An Additional 86,198 Waste Management bill inserts advertising Earth Day were sent to residential customers, on April 1, 2016.

To increase participation at our events, we also mailed 5,400 Creek to Bay postcards and 5,200 Earth Day postcards to our mailing list, which includes past volunteers and various City staff at libraries, recreation centers and senior centers, among others. Finally, we distributed approximately 500 Creek to Bay Day and Earth Day posters to site coordinators to increase participation at their particular sites.

To publicize our Adopt a Drain program, we created an outreach flyer in English, Spanish, Chinese, and Vietnamese describing the importance of maintaining storm drains and encouraging volunteers to sign up for Oakland Adopt a Drain. We also presented a poster about Adopt a Drain at State of the Estuary Conference in Oakland September 17 & 18, 2015, and at 250 Frank H. Ogawa Plaza for National Public Works Week May 16-

22, 2016. We also created a video with the City of Oakland KTOP videographers to publicize the Adopt a Drain program. This video played on the KTOP television station during the rainy season.

Enclosures:

1. List of adopted creek sites
2. Press releases
 - a. Creek to Bay Day
 - b. Earth Day
 - c. Adopt a Drain
3. Posters
 - a. Creek to Bay Day
 - b. Earth Day
 - c. Adopt a Drain poster
4. Postcards
 - a. Creek to Bay Day
 - b. Earth Day
5. Adopt a Drain
 - a. Outreach flyer
 - b. Poster
 - c. Video - [Click here to watch our Adopt a Drain video.](#)

For further information, please contact:

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2016 Final Report

A nine-year study of water use, green waste generation, maintenance hours, and maintenance labor costs between a traditional garden and a California native plant garden was conducted by the City of Santa Monica between 2004 and 2013.

The results of this study showed that the native garden used 83% less water; generated 56% less green waste, and required 68% less maintenance hours than the traditional garden.

from City of Santa Monica garden/garden

Why a Native Plant Garden Tour?

The spring, 2016, Bringing Back the Natives Garden Tour was held in order to showcase pesticide-free, water-conserving gardens that provide habitat for wildlife, reduce solid waste, and contain 60% or more native plants.

The tour enlists local residents to demonstrate by example that seasoned and novice gardeners can garden with good results without the use of synthetic chemicals, and with minimal supplemental water, while providing food, shelter, and nesting areas for wildlife. The gardens on this tour show that it is possible to implement sustainable garden practices and still have beautiful places for people to relax in and enjoy. The goals of the Bringing Back the Natives Garden Tour are to motivate attendees to eliminate pesticide use, reduce water use, generate less solid waste, and provide habitat for wildlife in their own gardens.

Why California natives? Once established in the garden setting, California native plants need little or no summer water, as they survive naturally with only fall-to-spring rainfall. In addition to being water-conserving, California natives are hardy, and they do not require the use of pesticides and fertilizers, as many non-natives do. Native plants need less pruning than many non-natives, such as lawn, ivy, or cotoneaster, thus generating less green waste. As this terrific article

demonstrates, native plants also provide the best habitat for birds, butterflies, beneficial insects, and other forms of wildlife.

A nine-year study of water use, green waste generation, maintenance hours, and maintenance labor costs between a traditional garden and a California native plant garden was conducted by the City of Santa Monica between 2004 and 2013. *The results of this study showed that the native garden uses 83% less water; generates 56% less green waste, and requires 68% less maintenance than the traditional garden.*

Bringing Back the Natives Garden Tour gardens contain minimal or no lawn. This is of particular value since the majority of the chemicals purchased by homeowners support lawn care, and the majority of water used in home gardens is applied to lawns. According to the U.S. Fish and Wildlife Service in their, "Homeowner's Guide to Protecting Frogs – Lawn and Garden Care," homeowners use up to ten times more chemical pesticides per acre on their lawns than farmers use on crops. In addition, half of the water used by the average household is applied to the landscape – with most of that water being applied to keep turf green.

2016 Bringing Back the Natives Garden Tour events: Tour; Native Plant Sale Extravaganzas; and Workshops

The Bringing Back the Natives Garden Tour has now expanded its offerings to include not only the spring Tour, but also three Native Plant sales (October, Valentines Day, and the week-end of the Tour), as well as a series of workshops that are offered in both the fall and spring. These are described below.

Garden Tour

The Twelfth Annual Bringing Back the Natives Garden Tour, which took place on Sunday, May 1, 2016, showcased thirty six gardens and nurseries located in eighteen cities and unincorporated areas in Alameda and Contra Costa counties (Alameda, Albany, Berkeley, Concord, Danville, El Cerrito, Lafayette, Livermore, Martinez, Moraga, Oakland, Piedmont, Pleasant Hill, Pleasanton, Richmond, San Leandro, San Lorenzo, and Walnut Creek).

A variety of gardens were featured on the tour. The gardens ranged from Al Kyte's forty year old wildlife habitat to a number of gardens that had been recently installed, and from large lots in the hills to small front gardens in the flats. Tour gardens contained everything from local native plants to the horticulturally available suite of natives from throughout California. Twelve of the gardens were designed and installed by owners, and the rest were designed

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and installed by professionals. Most the gardens were landscaped with between 80% and 100% native plants.

The tour received overwhelming interest from the public; 5,127 people pre-registered for the Tour. Same-day registration sites were set up at ten gardens, and accommodated 373 walk-in registrants, for a total of 5,500 registrants. The walk-in registration sites were set up in Berkeley, El Cerrito, Livermore, Martinez, Moraga, Oakland, Pleasant Hill, Pleasanton, Richmond, and San Lorenzo.

On the day of the tour 10,644 garden visits were made. See the end of this report for a list of the number of visitors counted at each garden.

More than 120 volunteers either worked at gardens for a half-day shift on the day of the tour, or helped with tour preparation and clean-up, contributing more than 400 hours of time to the tour. The 29 hosts put in countless hours preparing for the tour, and more than 200 hours on the day of the event.

Native Plant Sale Extravaganzas

More than \$12,000 worth of native plants were sold in the spring Native Plant Sale Extravaganza, which took place on April 30 and May 1, 2016. Nearly \$7,000 worth of natives were sold during the Spring 2016 Valentines Day sale.

Workshops

In the fall of 2015 and the spring of 2016 a series of workshops were coordinated. These included hands-on sheet-mulching workshops; how to install drip irrigation workshops; two workshops on how to design a native plant garden that will provide color and interest throughout the year; two workshops on how to replace a lawn with water-conserving alternatives; and four tours of a large organic garden that stores 10,000 gallons of rainwater on-site, has chickens, and contains extensive native and edible garden areas. This year all but two of the workshops filled, early.

Garden Talks

More than 50 garden talks and demonstrations on a plethora of topics were given throughout the week-end of the Tour. Talk topics included how to: retain storm water on-site; remove a lawn; design and install a drip irrigation system; select and care for native plants; design and install native plant garden; attract wildlife; choose appropriate natives; create a low-maintenance native plant garden; maintain a native plant garden; garden on hillsides; and how to receive rebates from water districts for removing lawns, among other topics.

The website

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The website contains numerous photographs of all of the gardens that have ever been on the tour (information on prior tours remains accessible on the website for future reference), extensive garden descriptions, plant lists for each garden, and some garden-specific bird, butterfly, mammal, reptile, and amphibian lists, as well as resource information on how to garden with California natives. The resource information includes contact information for landscaper designers with gardens on the tour, a list of Easy-to-Grow East Bay Natives, lists of nurseries that carry native plants, lists of reference books, “How I got started gardening with native plants” essays by a number of the host gardeners, and more.

In order to attract hosts and volunteers, and to thank them for their time, two Garden Soirees – free, private tours of native plant gardens – were held in 2016. Garden Soirees offer host gardeners and volunteers the opportunity to see tour gardens that they would otherwise miss. They also create a feeling of camaraderie between hosts and volunteers, and provide a venue for people who are both knowledgeable and passionate about gardening with natives to meet and exchange information.

Tour Partnerships

The Bringing Back the Natives Garden Tour created partnerships with a variety of organizations that share common values – that chemical-free and water conserving gardening preserves water quality and quantity, and creates wildlife habitat. The list of major sponsors and supporters of this year’s tour includes a flood control district, two county stormwater programs, three water districts, four cities, an unincorporated area, and a private foundation. The list of tour sponsors is provided below.

Sponsors of the 2016 tour

\$15,000

Alameda County Flood Control and Water Conservation District

\$10,000

Contra Costa Clean Water Program

\$7,500

Jiji Foundation

\$4,000

Contra Costa Water District

\$3,000

East Bay Municipal Utility District

\$1,500

California Native Plant Society (East Bay Chapter)
City of El Cerrito
City of Pittsburg

\$1,000

Bay Area Water Supply and Conservation Agency
City of Antioch
City of Walnut Creek
Zone 7 Water Agency

\$500

Netafim

Host Gardeners

The gardens selected to take part in the tour are chemical-free and water-conserving landscapes that provide habitat for wildlife. Hosts were chosen because of their willingness to be on site on the day of the tour to talk with visitors about their gardens, and their enthusiasm for, and commitment to, educating others about how to garden in environmentally sensitive ways.

Host gardener recruitment began in the spring of 2015 for the 2016 tour. Potential candidates completed an application, and applicants who met the criteria received a site visit. Host criteria were as follows:

- Gardener must reside in Alameda or Contra Costa County.
- Gardener must use organic and/or natural techniques for pest control rather than synthetic pesticides.
- Garden must demonstrate water conservation techniques. Examples include mulches, groundcover plants, drip or soaker hose irrigation, and the use of plants that do not require excessive watering during the dry part of the growing season.
- Gardener must be a good ambassador for chemical-free, water-conserving gardening: enjoy educating the public; and have the knowledge base to employ natural gardening techniques and share this information with the public.
- Garden must provide food, shelter and nesting areas for wildlife.
- Garden must contain 60% or more California native plants.
- No invasive plants are found in the garden.

Host's gardening experience ranged from native plant novices to professional landscape designers. All of the host gardeners were good ambassadors for natural gardening techniques.

Host Comments from the 2016 evaluations:

- Had many great conversations with those on the tour and it was so very heartening to talk with like minded people!
- I talked to many people who were concerned about water use. And many of them were interested in learning more.
- Lots of people asked me how I use so little water.
- Many people asked about how much water was used; our water bill [which was posted] was a great way to show the water use reduction.
- People are eager to learn how to work better with nature and to nurture wildlife. People want to conserve water, and garden without pesticides.
- Kathy K's organization and support was key to a well-run, pleasure-filled, non-stressful (even with 500 + visitors) experience. She is clear, thoughtful, well-organized, and articulates the goals of the tour in clear language. Kathy is reliable, and encouraging. Her love for this work, and sense of the value and purpose in it, are clear and inspiring. The tour guidebook is beautiful, well-organized, and informative..... very helpful. The ticket system is clear. Kathy's help with making plant labels was excellent – and people really want to know the plant names.
- Still a wonderful and important and ambitious idea and so wonderful to see people's eyes light up at the idea that natives are sooo beautiful.
- Thank you for putting together this tour; I am honored to be chosen as a garden host, and really loved the feedback we got from our guests.
- Thanks for the year-long effort it takes to organize the tour. It continues to be a valuable resource for the community!
- The book is a fantastic resource. There were lots of compliments on the book, as a great resource for throughout the year. The majority of the people who visited were people who WANT to convert their gardens as opposed to people who already have native gardens. They were very appreciative of any information they could get.
- The garden tour is a great event. Through it, thousands of people are influenced, and learnt to garden with nature's principles.
- You are a marvelous organizer. Our day was a great success. Over 400 people came through our garden. People loved the garden, and

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appreciated the natives, the wildflowers in bloom, the caterpillars and bees in evidence, the music, the talks, and the plant sale. The Tour has a widespread influence in making people aware of the beauty and value of native plants, and giving them the knowledge and resources to act on that awareness by incorporating native plants into their lives. Having our garden on the tour brings us great happiness, and a feeling of helping to make the world better. We would love to be on the tour next year.

- It was a great surprise to have Kathy and Mike visit our garden at the end of a beautiful Tour day. Thank you, Kathy, for organizing this great garden show. Thanks to Kathy, we discovered beautiful native California drought tolerant plants and gardens years ago, before the official drought. Inspired, we made plans to change our own garden. Thanks to her, we figured out how and with whom to design and install our own back garden in 2012, and after that the front garden in 2014. Yes, a garden can look good without a lawn and, no, It does not take more time than mowing the lawn, but it still can look better. Today, with help from multiple volunteers, including lovely neighbors at our greeting table, it was great to share our garden. In all, we mostly enjoyed hearing that the 643 people that came through our garden had a great day; that made our day.

Volunteer Comments from the 2016 evaluations:

- As in previous years, the tour is extremely well organized and executed. Thank you, Kathy, for making this such a pleasurable experience.
- It's a fabulous day. Well-organized, instructive, and fun.
- Love, love, love this Tour! I look forward to it every year.

Pledges

This year, for the first time, during the registration process tour participants had the opportunity to pledge to undertake one or more environmental action. Research has shown that people who pledge to take an action are very likely to follow up and do it. The text on the website read:

Might you be willing to take a healthy lawn and garden pledge?

Garden chemicals can be harmful to humans, pets, wildlife, creeks, and the Bay. The good news is there are many surprisingly easy ways to care for your lawn and garden that avoid putting your family, pets, and neighbors at risk.

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All of the beautiful Bringing Back the Natives Garden Tour gardens are managed without the use of pesticides. If these hosts can garden without the use of pesticides, you can, too!

Are you ready to join Bringing Back the Natives Garden Tour hosts in pledging to restore the Earth one garden at a time? Your family, pets, neighbors, and the birds and bees will thank you.

If a pledge to eliminate pesticide use is too big a step to take right away, you can pledge to reduce your pesticide use instead.

* I pledge to reduce or eliminate pesticides like “weed and feed” on my lawn. *(Weed and feed products are persistent, bioaccumulative toxic substances linked to cancers and to reproductive, immunological, and neurological problems. Some of the herbicides in chemical weed and feeds – especially 2, 4-D – have been linked to increased rates of cancer in people and animals.)*

* I pledge to reduce or eliminate the use of rodenticides. *(Anticoagulant mouse and rat poison also kills dogs and cats, hawks and owls, and many other species of wildlife.)*

(I pledge not to use insecticides. *(A garden and lawn ecosystem in balance is home to birds, native plants, and insect life, which support each other and keep one another in check. Lawns and gardens free of synthetic chemicals provide much-needed habitat for wildlife, and they are much safer for you, your family, and your pets.)*

* I pledge to remove part or all of my lawn, eliminate pesticide and herbicide use, and create a wildlife habitat in part of my garden.

“I pledge to” results:

reduce or eliminate pesticide use	68%
reduce or eliminate the use of rodenticides	68%
not to use insecticides	64%
remove part or all of my lawn, eliminate pesticide and herbicide use, and	
create a wildlife habitat in part of my garden	60%

Tour Survey and Evaluation

C.7.6a – Native Garden Tour FY 15/16 Summary

Two surveys were offered to the tour’s pre-registered participants. The first was available as part of the registration process. Below are some statistics taken from this survey.

Responses by Tour year

What do you want to learn from the tour?	2012	2013	2014	2015	2016
How to select native plants	72%	83%	69%	71%	69%
How to reduce water use	51%	58%	57%	62%	49%
How to garden for wildlife	51%	56%	45%	46%	49%
How to reduce or eliminate pesticide use	30%	33%	25%	25%	24%
How to replace a lawn with a garden	30%	33%	30%	33%	26%
How to compost	19%	23%	18%	17%	16%

Evaluations

There was a return of 342 registrant evaluations, with 99% of those filling out the evaluations rated the tour “Excellent” or “Good.”

86% of those who completed the evaluations were interested in entering the drawing for the free front yard garden design. (The free front yard garden design was won by Mona Hansche, of Martinez.)

95% percent of the people who completed the evaluation said they felt the Tour did inspire them to garden without pesticides, and while using less water.

This year 60% of the registrants were repeat visitors, and 40% were attending the tour for the first time.

Motivation and Behavior Change

C.7.6a – Native Garden Tour FY 15/16 Summary

When asked if the Tour inspired people about how to garden without pesticides, while using less water, tour participants provided these comments:

Registrants commented:

- The Tour is THE BEST tool out there right now to inspire people to change their landscape.
- I'm totally inspired. I feel the native gardens are so much more attractive than lawns, as well as being water conserving and attracting birds, bees, and butterflies.
- There were very knowledgeable volunteers and home owners at every stop, and it is very inspiring to save water with natives!
- Yes! Simply by showcasing gardens where natives comprise a large percentage of the plants is inspiring and teaching how to use less or no pesticides and less water because natives require less of both.
- Can't think of a better way to get the message across than showcasing the beautiful gardens and hearing the heartfelt stories by the owners.
- The information provided and seeing real gardens that follow these principles was terrific.
- It is so helpful to see how beautiful and low maintenance native plant gardens are.
- My husband and I were very impressed with all of the "green" garden ideas. We have been trying to come up with ideas on our own to do more, and this really inspired us! We are transforming our backyard as we write this!
- For me, the biggest "aha" was how native plants expand the population of native bugs, which then feed native birds & other wildlife.
- Seeing is believing. When you see what people have done you can translate some of their ideas to your own garden.
- The sheer beauty of the gardens is inspirational, and the guides are knowledgeable and enthusiastic.
- The gardens spoke for themselves!

C.7.6a – Native Garden Tour FY 15/16 Summary

- The tour provides a variety of gardens for viewing that inspire and educate the public to join in the movement. I feel very inspired to begin the process!
- The tours provide lots of examples of plants and designs to fit different needs.
- There were homes of all types, all committed to principles of sustainability. I also very much like the tips in the book. There is good information in it!

The registrant evaluations were split up into two groups – those who had attended the tour before, and those who had not. The data for repeat registrants and first-time registrants was tabulated separately. Both of these categories are discussed below.

Repeat Registrants

85% of registrants who had attended a previous Bringing Back the Natives Garden Tour, and who filled out the evaluation form, said they had changed their gardening practices because of their participation in the Bringing Back the Natives Garden Tour.

The first column below shows the percentages of the repeat registrants who changed their gardening behaviors after attending the Bringing Back the Natives Garden Tour. The second column shows the percentage of repeat registrants who plan to change their gardening behaviors.

This table shows that repeat visitors were highly motivated to make changes in their gardens.

How do you manage your garden? (This information was taken from evaluations filled out by repeat registrants.)

ITEM	Began after participation in a previous BBTN Tour	Plan to do this
1. Incorporate native plants into our garden.	20%	25%
2. Group plants of similar water needs.	17%	36%
3. Encourage birds, butterflies, etc. with plant choices, food, shelter, and water.	15%	24%

C.7.6a – Native Garden Tour FY 15/16 Summary

4. Increase the density of plantings to out-compete weeds.	14%	47%
5. Incorporate drought-resistant plants into our garden.	13%	20%
6. Tolerate some insect damage to plants.	10%	13%
7. Mulch with leaves, grass, wood chips, etc.	10%	16%
8. Install efficient irrigation (such as drip, timers, soaker hoses).	9%	32%
9. Reduce/eliminate insecticide/herbicide use.	8%	6%
10. Reduce the size of our lawn.	6%	26%
11. Amend soil with compost.	6%	17%
12. Minimize hardscapes (patios, decks).	4%	12%
13. Compost yard waste and kitchen scraps at home.	4%	11%
14. Grasscycle (leave grass clippings on the lawn).	2%	8%

First-time registrants

The tour was highly motivating to the first time registrants who completed the evaluation.

The question was, “How do you manage your garden?” The following are the percent of people who responded that they planned to begin managing their garden in this way.

ITEM	Plan to
1. Incorporate native plants into our garden.	56%
2. Group plants of similar water needs.	54%
3. Increase the density of plantings to out-compete weeds.	52%

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4. Encourage birds, butterflies, etc. with plant choices, food, shelter, and water.	46%
5. Incorporate drought-resistant plants into our garden.	44%
6. Install efficient irrigation (such as drip, timers, soaker hoses).	36%
7. Amend soil with compost.	33%
8. Reduce the size of our lawn.	30%
9. Tolerate some insect damage to plants.	22%
10. Mulch with leaves, grass, wood chips, etc.	20%
11. Reduce/eliminate insecticide/herbicide use.	19%
12. Compost yard waste and kitchen scraps at home.	17%
13. Grasscycle (leave grass clippings on the lawn).	13%
14. Minimize hardscapes (patios, decks).	13%

Number of visits made to each garden

BAYSIDE CITIES

Alameda

Cyrus Musiker and Andi Duncan	176
Williams Family	203

Albany

Leslie Zander	341
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Berkeley

California Native Bee Garden	304
Mardi and Jeff Mertens	403
Glen Schneider	341

El Cerrito

Donna Bodine	290
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Oakland

Carol Baird and Alan Harper	345
Friends of Sausal Creek's Native Plant Demonstration Garden	309
Sue Duckles and Cherie Donahue	361

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Joan Lohman and Jenn Biehn	444
Lorraine Mann	512
Piedmont	
Jean Hansen	602
Nancy McKee-Jolda and Robert Jolda	545
Richmond	
Paul Carman and Anita Pereira	454
Dave Drummond	454
San Lorenzo	
San Lorenzo High School	190
INLAND CITIES	
Danville	
Maria Sargent	316
Lafayette	
Richard and Sandy Brehmer	545
Livermore	
Ed and Liz Folsom	247
Martinez	
Chris and Marianne Dundon	363
Jean Halford	523
Nancy Salsig	412
Moraga	
Al and Barbara Kyte	351
Pleasant Hill	
Gaston and Ariane Habets	643
Pleasanton	
Melinda and Steve Ballard	247
Ward and Pat Belding	223
Walnut Creek	
Erik and Shellie Jacobson	500

10,644

When planning for a year, plant corn. When planning for a decade, plant trees.

*When planning for life, train and educate people.
(Chinese proverb)*

Below are comments from garden tour attendees, either taken from registrant evaluation forms, or received via e-mail.

It's an inspiring tour! We loved it so much last year that we dug up our back yard and planted a mostly native garden. Now we are real plant geeks. Thanks so much for what you do. We hope to enter our garden for the tour next year.

This has been a spring highlight for many years. And, the result is my own new landscaping. The Tour offers great encouragement to see what can be done. Thanks!!!

It was really a wonderful way to get motivated to do more with natives, and the variety of garden examples was outstanding! Thanks to all of you for all of the planning and hard work that went into this very large scale event. We can hardly wait for next year!

It's fantastic. So well organized. The booklet and website are useful. The garden hosts are friendly. Really: I'm in awe. Thanks for all the countless hours of work that clearly went into this.

I love this tour! It is so well-organized and the gardens are superior to many I've seen on other tours. I always learn many things that I can put to use right away in my garden. We are so lucky to have this tour in the East Bay, right at our doorsteps, which showcases natives, a very important endeavor in this day and age of climate change and drought.

This was GREAT! I liked that I could buy seeds at Paul Carman's place. The enormous amount of work you all put into this event really shows; it is well-organized, the information went out with plenty of time to study the garden guide, and the gardens offered wildly different approaches. Thank you, thank you, thank you. Enjoy your rest now!

C.7.6a – Native Garden Tour FY 15/16 Summary

This tour has been wonderful in the level of awareness it has brought to the concept of gardening with natives.

Beautifully designed tour booklet. Thank you for educating the public via tours - most interesting and informative in presenting design & plant options.

This is a great tour! Thank you for all of the time and effort that goes into planning and implementing this event. It is a wonderful opportunity to be able to visit so many gardens and get ideas on how to create a native garden and wildlife habitat. Thankyou!!!

The tour book was impressive, with garden descriptions, directions, lectures, use of discounts, and the quality of the booklet itself.

Wonderful tour!! The organization is excellent and the enthusiasm of participants inspirational!

The tour is a great way to educate the Bay Area about the importance of native plants for wildlife preservation and drought tolerance.

This tour is well-run, well-organized, very educational, and fun. Really wonderful. Every one is so nice at the gardens. We enjoy it a lot.

I appreciate the garden owners for spending the whole day answering people's questions!

Excellent event. The gardens were great, and the improved labels were fabulous. I talked to friendly owners at many gardens and it makes a lot of difference. The volunteers were fabulous and knowledgeable also.

Always inspiring!

This is a wonderfully organized event; my hat goes off to you. Thanks to all the hosts who opened their gardens to the public. Great plant sale options this year, too!

Very well-organized. This was my first time and I was impressed!

Amazing tour and knowledgeable hosts/presenters

Beautiful gardens. I love those that are more than 90% native.

Congratulations on such a beautiful and informative, well-organized tour.

C.7.6a – Native Garden Tour FY 15/16 Summary

We learned a lot during the tour and really enjoyed it. We really appreciate that these homeowners were willing to open their gardens to us! Thank you so much for organizing this event.

Excellent catalogue. Obviously a great deal of love and hard work go into this tour. Keep it up. It is wonderful!

Great job on organizing the tour. The guide is amazing and gives all details needed to get to and enjoy the gardens. Thank you for all the hard work.

Great variety of gardens. Accurate descriptions with particulars noted so you could choose based on your interests. Thanks!

Hosts and volunteers were great. Really appreciated native plant sales at some of the gardens, too.

I appreciate all the work and planning that made this day a success. Thank you!!

I commend you for all the work you do in setting up this tour annually. You provide a great service to the community.

I know of no other event that is so well-organized, and so representative of the native plant movement. It allows people of all income and educational brackets to attend, which is very rare. I am very grateful for the opportunity to visit native gardens.

The volunteers were all so welcoming; it was a pleasure. This must take an incredible amount of effort and attention to detail, but comes off so smoothly!

Well-organized! Easy to find places, warm and friendly owners and volunteers. Wonderful day!

Wonderful event, will be telling neighbors.

I loved it.

Kathy, we want to commend you on a wonderful day. My husband and I enjoyed the Tour immensely. It was so amazingly well-organized. We thought the booklet was superb! We lost service on our iPhone at the beginning of the tour (don't ask...our phone was hacked...all ok now) so we found your great written "old fashioned" driving instructions invaluable! I know you work very hard on this event, so just know that it all paid off magnificently. Good luck for next year.

C.7.6a – Native Garden Tour FY 15/16 Summary

I so appreciate your working all year to make this a delightful, informative, and interesting day.

I think it is really a great thing that you have so many volunteers who are willing to participate and to display their gardens.

The garden guide was very informative. I liked knowing which gardens were professionally designed, and which were done by the owner.

I'm a new homeowner, just planning my first real garden, and your resources and the opportunity to visit these beautiful gardens have been very helpful. I really appreciate the incredible amount of work that must go into organizing such an extensive and well-planned day!

The tour is amazing, and the classes fabulous! Thank you for all of your hard work!

It's nice to have the friendly volunteers at the sites.

It's really nice to be able to self guide the tour. It's always an enjoyable day for me and I always learn new things and find things I want to go home and research. I really like to be able to purchase plants at the gardens, it just adds more fun to the tour. You do a great job with the tour and I appreciate being able to attend every year!

Just loved the gardens this year. Before and after photos were very helpful. Thought the owner's talk about affordability and how he did it and available rebates was fabulous.

Love the fact that the book is mailed well in advance so it gives time to figure out an itinerary. All the homeowners and volunteers are very gracious.

Love the tour! Look forward to it every year!

Loved the tour. Really great brochure. Very organized. Nice people. Educational and inspirational.

Lovely experience – enjoyed the variety of gardens available. Gives good ideas on how to improve one's garden.

So inspirational. I can really see and appreciate the beauty and need for going native and drought tolerant. Inspired by the great work people have put into their

C.7.6a – Native Garden Tour FY 15/16 Summary

properties. Thank you to all for putting this together for the enjoyment of many visitors. A fun day. Looking forward to next year already.

Special praise and thanks to all who participate in putting on this event. I look forward to it all year long, every time learning more about native gardening. I am now propagating some of my natives to expand my plantings and share with friends and neighbors.

Superb, professional booklet. Very well-organized, and the plant lists are very helpful. The plant labels at the gardens are extremely useful.

Thank you for your hard work putting this together.

Thank you to all the families who opened their private gardens.

**Bringing Back the Natives Garden Tour
Sunday May 1, 2016**

Summary

- 36 gardens and nurseries were showcased on the Tour
- 50 + talks and demonstrations were given
- 120 volunteers made the tour possible
- 5,500 registrants
- \$19,000 worth of natives sold through the spring Native Plant Sale Extravaganzas
- 10,644 garden visits were made

What do you want to learn from the tour?

How to select native plants	69%
How to reduce water use	49%
How to garden for wildlife	49%
How to reduce or eliminate pesticide use	24%
How to replace a lawn with a garden	26%
How to compost	16%

Information taken from evaluations

99% rated the tour “Excellent” or “Very Good.”

Behavior Change

86% of repeat registrants said they had changed their gardening practices because of their participation in the Bringing Back the Natives Garden Tour.

Motivation and Behavior Change

When asked if the Tour inspired people about how to garden without pesticides, while using less water registrants provided these comments:

- The Tour is THE BEST tool out there right now to inspire people to change their landscape.
- I’m totally inspired. I feel the native gardens are so much more attractive than lawns, as well as being water conserving and attracting birds, bees, and butterflies.

C.7.6.b – Native Garden Tour FY 15/16 Statistics Summary

- There were very knowledgeable volunteers and home owners at every stop, and it is very inspiring to save water with natives!
- Yes! Simply by showcasing gardens where natives comprise a large percentage of the plants is inspiring, and teaching how to use less or no pesticides and less water because natives require less of both.
- Can't think of a better way to get the message across than showcasing the beautiful gardens and hearing the heartfelt stories by the owners.
- The information provided and seeing real gardens that follow these principles was terrific.
- It is so helpful to see how beautiful and low maintenance native plant gardens are.
- My husband and I were very impressed with all of the "green" garden ideas. We have been trying to come up with ideas on our own to do more, and this really inspired us! We are transforming our backyard as we write this!
- For me, the biggest "aha" was how native plants expand the population of native bugs, which then feed native birds & other wildlife.
- Seeing is believing. When you see what people have done you can translate some of their ideas to your own garden.
- The sheer beauty of the gardens is inspirational, and the guides are knowledgeable and enthusiastic.
- The gardens spoke for themselves!
- The tour provides a variety of gardens for viewing that inspire and educate the public to join in the movement. I feel very inspired to begin the process!
- The tours provide lots of examples of plants and designs to fit different needs.
- There were homes of all types, all committed to principles of sustainability. I also very much like the tips in the book. There is good information in it!

C.7.6.b – Native Garden Tour FY 15/16 Statistics Summary

Evaluations of repeat registrants from the 2016 tour showed that after attending a prior Bringing Back the Natives Garden Tour:

20% of respondents had incorporated natives into their gardens (thereby reducing herbicide use and conserving water)
17% had grouped plants of similar water needs
15% were encouraging wildlife with plant choices
14% had increased the density of plantings to out-compete weeds
13% had incorporated drought-resistant plants into their gardens
10% were tolerating some insect damage
10% had begun mulching
9% had installed efficient irrigation
8% had reduced or eliminated pesticide use
6% had reduced the size of their lawn;

Repeat registrants:

Repeat visitors were motivated to make changes in their gardens. Repeat visitors report that they plan to:

47% increase the density of plants, thus helping to outcompete weeds and reduce water use
36% group plants of similar water needs
32% install efficient irrigation
26% reduce the size of their lawn
25% incorporate native plants into their gardens
24% encourage wildlife
20% incorporate drought-resistant plants into the garden
17% amend their soil with compost
16% mulch
13% to tolerate some insect damage to plants
11% compost
9% minimize hardscapes
8% to grasscycle
6% to reduce or eliminate pesticide use

First-time registrants:

The tour was highly motivating to first time registrants, who reported that they planned to:

56% incorporate native plants into their gardens
54% group plants by water needs

C.7.6.b - Native Garden Tour FY 15/16 Statistics Summary

52% increase the density of plants, thus helping to outcompete weeds and reduce water use

46% encourage wildlife

44% incorporate drought-resistant plants into their gardens

36% efficient irrigation

33% amend their soils

30% reduce the size of their lawns

22% tolerate some plant damage

20% mulch

19% reduce or eliminate pesticide use

17% compost

13% reduce the amount of hardscape in their gardens

13% grasscycle

Attachments

C.7.1 Alameda County Resource Conservation District
FY15/16 Final Report

C.7.2 Tule Ponds at Tyson Lagoon FY 15/16 Annual Activities
Report

C.7.3 Friends of Sausal Creek Annual Activities Report
FY15/16

C.7.4 Friends of San Leandro Annual Activities Report
FY15/16

C.7.5 Oakland Clean Creeks FY15/16 Summary

C.7.6.a Native Garden Tour FY15/16 Summary

C.7.6.b Native Garden Tour FY 15/16 Statistics Summary