



CONTRA COSTA
CLEAN WATER
PROGRAM

FISCAL YEAR 2021/22

ANNUAL REPORT

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List of Acronyms and Abbreviations

<u>Acronym</u>	<u>Term</u>
ACCWP	Alameda Countywide Clean Water Program
AGOL	ArcGIS Online
BAMSC	Bay Area Municipal Stormwater Collaborative
BASMAA	Bay Area Stormwater Management Agencies Association
BMPs	Best Management Practices
Caltrans	California Department of Transportation
CASQA	California Stormwater Quality Association
CCC	Contra Costa County
CCCWP	Contra Costa Clean Water Program
CCCFCWCD	Contra Costa County Flood Control and Water Conservation District
CCEAC	Contra Costa Engineering Advisory Committee
CCWF	Contra Costa Watershed Forum
CCWSWRP	Contra Costa Watersheds Stormwater Resource Plan
CGP	Construction General Permit
ConFire	Contra Costa Fire Protection District
COVID-19	Coronavirus Disease 2019
CTR	Click-through Rate
CVRWQCB	Central Valley Regional Water Quality Control Board
DWQ	Department of Water Quality
EBME	East Bay Municipal Engineers
E _P	Erosion Potential
FY	Fiscal Year
GBP	Green Business Program
GI	Green Infrastructure
GIS	Geographic Information System
GSI	Green Stormwater Infrastructure
HHW	Household Hazardous Waste
HM	Hydromodification Management
HMP	Hydrograph Modification Management Plan
IDDE	Illicit Discharge Detection and Elimination
IMP	Integrated Management Practices
IPM	Integrated Pest Management

<u>Acronym</u>	<u>Term</u>
JPA	Joint Powers Authority
LID	Low Impact Development
MOC	Municipal Operations Committee
MRP	Municipal Regional Permit
MS4	Municipal Separate Storm Sewer System
MTC	Metropolitan Transportation Commission
NPDES	National Pollutant Discharge Elimination System
OPP	Oil Payment Program
OVTA	On-land Visual Trash Assessment
OWOW	Our Water Our World
PAPA	Pesticide Applicators Professional Association
PCBs	Polychlorinated Biphenyls
PCOs	Pest Control Operators
PIP	Public Information and Participation
PMU	Priority Margin Units
POC	Pollutants of Concern
POTW	Publicly Owned Treatment Works
PSA	Public Service Announcement
RAA	Reasonable Assurance Analysis
RMP	Regional Monitoring Program
SFBRWQCB	San Francisco Bay Regional Water Quality Control Board
SUA	Stormwater Utility Assessment
SWRP	Stormwater Resource Plan
TMDL	Total Maximum Daily Loads
UCMR	Urban Creeks Monitoring Report
USEPA	United States Environmental Protection Agency
WQ	Water Quality
WLA	Waste Load Allocation
WMAs	Watershed Management Areas

SECTION 1 – INTRODUCTION

Introduction

The Contra Costa Clean Water Program (CCCWP) comprises Contra Costa County (CCC), its 19 incorporated cities/towns¹, and the Contra Costa County Flood Control & Water Conservation District (District). These 21 public agencies are collectively referred to as “Contra Costa Permittees”. The Contra Costa Permittees submit their CCCWP Fiscal Year (FY) 2021/22 Annual Report to the San Francisco Bay and Central Valley Regional Water Quality Control Board (SFBRWQCB) and (CVRWQCB) as required by the Municipal National Pollutant Discharge Elimination System (NPDES) Permit (see “Municipal Stormwater Permit” discussed further on Page 1-2). The Annual Report documents permit compliance activities conducted during the previous fiscal year (July 1, 2021, to June 30, 2022), and consists of the following:

- ❖ **Individual Municipal Annual Reports:** Contra Costa Permittees’ individual Municipal Annual Reports document compliance activities conducted by each individual Permittee within their jurisdiction (submitted separately by each Contra Costa Permittee).
- ❖ **CCCWP FY 2021/22 Annual Report:** This report documents permit compliance activities conducted collectively as a group by all 21 Contra Costa Permittees.
- ❖ **BAMSC Regional/CASQA Statewide Supplemental Reports:** These reports document compliance activities conducted regionally (Bay Area-wide) in coordination with the Bay Area Municipal Stormwater Collaborative (BAMSC)² and statewide in coordination with the California Stormwater Quality Association

¹ Cities of Antioch, Brentwood, Clayton, Concord, El Cerrito, Hercules, Lafayette, Martinez, Oakley, Orinda, Pinole, Pittsburg, Pleasant Hill, Richmond, San Pablo, San Ramon, and Walnut Creek, and Towns of Danville and Moraga.

² In April 2021 the Bay Area Stormwater Municipal Agencies Association (BASMAA) dissolved. The coordination efforts of BASMAA have been replaced by Bay Area Municipal Stormwater Collaborative (BAMSC), which is a less formal organization without cost sharing abilities. Reports and committees created by BASMAA and retained under BAMSC will be referred to as BAMSC reports beginning with this FY 2021-2022 Annual Report. BAMSC will continue to serve as a consortium of municipal stormwater programs, representing over 90 agencies, including 79 cities and 6 counties, focused on regional challenges and opportunities to improving the quality of stormwater that flows to our local creeks, San Francisco Bay and delta, and the ocean.

(CASQA)³. In FY 2021-22, the following regional/statewide supplemental reports are to be included as submissions to the SFBRWQCB and CVRWQCB:

1. *BAMSC Annual Reporting for FY 2021-2022, Regional Supplement for New Development and Redevelopment;*
2. *CASQA Annual Reporting for FY 2021-2022, Our Water Our World Annual Summary Report; and,*
3. *CASQA, Pesticides Subcommittee Annual Report and Effectiveness Assessment 2021-2022.*

In July 2021, the Program and its participating Contra Costa Permittees were notified of changes to the Annual Reporting submittal process. Beginning FY 2020-2021 reporting year and for all subsequent years, Annual Reports are submitted via the SMARTS electronic submittal system. Given these changes, the Program is no longer able to submit the Annual Report on behalf of the Contra Costa Permittees. Instead, Contra Costa Permittees will submit the three elements of the Annual Report directly through their individual SMARTs accounts.

Municipal Stormwater Permit

The SFBRWQCB reissued its *Municipal Regional Stormwater NPDES Permit* to 76 Phase I⁴ municipalities within the San Francisco Bay Region on November 19, 2015 (NPDES Permit No. CAS612008, Order No. R2-2015-0049) and this reissued permit, which took effect on January 1, 2016, is hereinafter referred to as “MRP 2.0.” The previous permit (NPDES Permit No. CAS612008, Order No. R2-2009-0075), which was superseded by MRP 2.0 on January 1, 2016, is hereinafter referred to as “MRP 1.0”. MRP 2.0 is in effect for five years ending on December 31, 2020. On December 20, 2020, MRP 2.0 was administratively extended by the SFBRWQCB until the new permit goes into effect.

³ Formed in 1989, the California Stormwater Quality Task Force was a quasi-governmental organization, which advised the State Water Resources Control Board on matters related to developing stormwater regulations - more specifically, it was intended to help California comply with the municipal and industrial NPDES stormwater mandates of the federal Clean Water Act. The Task Force officially became the California Stormwater Quality Association (CASQA) in September 2002, when its formal 501 (c)(3) non-profit organization status was approved.

⁴ Phase I regulations were promulgated in 1990 and require medium and large cities or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their stormwater discharges.

Throughout FY 2021-2022, the SFBRWQCB developed the new permit, referred to as “MRP 3.0”. On May 22, 2022 the permit was adopted with the effective date of July 1, 2022. The first annual report to be submitted under MRP 3.0 will be following FY 2022-2023.

MRP 2.0 was amended on February 13, 2019, to add the cities of Antioch, Brentwood, and Oakley, and the eastern portions of unincorporated Contra Costa County and the Contra Costa County Flood Control & Water Conservation District (the East County Permittees), which are located within the jurisdiction of the Central Valley Regional Water Quality Control Board (CVRWQCB, Region 5) and were previously covered under a separate Joint Municipal NPDES Permit titled “East Contra Costa County Municipal NPDES Permit”.

MRP 2.0 Permittees include all Phase I Municipal Stormwater Programs⁵ in the San Francisco Bay Region, and the aforementioned East County Permittees. Each Permittee is individually responsible for complying with the permit mandates; however, MRP 2.0 allows and encourages Permittees to collaborate in the design, development, and/or implementation of certain mandates collectively (countywide, region-wide, and/or statewide). Activities conducted collectively are referred to as “group activities” and are documented in this Volume I report and in the regional and statewide supplemental reports noted on Page 1-2.

Unless specified otherwise, hereinafter all group activities reported below will reference activities conducted by all Contra Costa Permittees in accordance with MRP 2.0. A copy of the amended MRP 2.0 can be downloaded from a link found on the CCCWP website at: <https://www.cccleanwater.org/about/permits>.

⁵ Phase I Municipal Stormwater Programs include: 17 public agencies comprising the Alameda Countywide Clean Water Program (ACCWP); 21 public agencies comprising the CCCWP; 15 public agencies comprising the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP); 22 public agencies comprising the San Mateo Countywide Water Pollution Prevention Program; the cities of Fairfield and Suisun City comprising the Fairfield-Suisun Urban Runoff Management Program; and, the City of Vallejo and the Vallejo Sanitation and Flood Control District.

CCCWP Overview

Program Agreement

The Contra Costa Permittees operate under a “Program Agreement”, which was first entered into in 1991 and was last updated in 2010. The roles and responsibilities of CCCWP staff and the 21 Contra Costa Permittees are outlined within the Program Agreement (2010-2025).

Program Staffing

Staff to the CCCWP is provided by CCC. The CCCWP is staffed by five full-time staff positions and one 20-hour clerical position. For most of the year the two Watershed Management Planning Specialist (WMPS) positions were staffed by consultants, and in June 2022 the CCCWP was able to permanently fill one of the WMPS positions. The Program Manager has been on extended leave since August 2019. In FY 2021/22, all CCCWP resources and activities were managed by the Senior Watershed Management Planning Specialist as the Acting Program Manager. Additional technical and temporary staff support was provided, as needed, by consultants/contractors. See Attachment 1.1 for a listing of staff positions and the time certain positions were vacant, and consultants/contractors retained in FY 2021/22.

Organizational Structure

The Management Committee, which consists of one designated representative from each of the 21 Contra Costa Permittees, is the decision-making body of the CCCWP and provides direction to CCCWP staff and subcommittees. The Management Committee meets monthly and directs and monitors the implementation of all group activities. Six subcommittees and ad-hoc subcommittees: Administrative, Development, Monitoring, Municipal Operations, Public Information and Participation (PIP), and Select Committees review, research, and make recommendations to the Management Committee. CCCWP staff and designated municipal representatives participate on similar BAMSC subcommittees, which are focused on the implementation of tasks and projects conducted regionally. Attachment 1.2 outlines the CCCWP’s organizational structure.

Attachment 1.3 shows Contra Costa Permittees' participation and attendance on the CCCWP's Management Committee and its subcommittees. In accordance with the Program Agreement, designated Permittee representatives are required to attend at least 80% of the CCCWP's regularly scheduled meetings.

Funding Stormwater Compliance Programs

Most Contra Costa Permittees' stormwater activities are funded by a stormwater utility assessment (SUA). The assessments were authorized in 1993 and range from \$25 to \$45 a year for a single-family home, depending on the municipality. Assessments for properties are based on estimates of stormwater runoff based on impervious area. The cities of Richmond and Brentwood do not have a SUA. In those two municipalities, stormwater pollution prevention activities are funded by other revenues, including the general fund. In addition, most Contra Costa Permittees that have the assessment for stormwater pollution prevention supplement those revenues from other sources.

Revenues from the SUAs are collected by the CCC Tax Collector with the property tax bill. The District is responsible for the administration and disbursement of the assessment revenues, which in FY 2021/22 totaled approximately \$15,870,118. The assessment is restricted revenue that may only be used for NPDES program activities including construction of pollution control improvements and drainage system maintenance. Approximately 20% of these revenues are used to fund permit compliance activities that Contra Costa Permittees choose to conduct collectively (i.e., Group Activities). The remaining 80% of the revenue is "returned-to-source" (i.e., returned to the local jurisdiction from which it originated). The return-to-source revenue pays for permit compliance activities conducted at the municipal level. Each Permittee's cost share of Group Activities is apportioned by population. CCCWP staff, consultants, and contractors assisted Contra Costa Permittees in compliance with MRP 2.0 by providing technical support and guidance, staff training, and implementation of a variety of activities, including public education and outreach and water-quality monitoring. These activities are more effectively and cost-efficiently implemented as Group Activities. The CCCWP's FY 2021/22 budget was \$4,220,421 and is available on the CCCWP's website at: <https://www.cccleanwater.org/about/budget>.

Within this budget, the CCCWP paid dues on behalf of the Contra Costa Permittees to: the San Francisco Bay Regional Monitoring Program (RMP), the Bay Friendly Landscape Coalition, the Green Business Program (GBP), and CASQA. These groups provide water quality monitoring and research activities that are mandated under the NPDES permits, and/or provide representation, guidance and/or staff training at the regional or state levels.

Contra Costa Permittees' authority to raise taxes or assessment fees to pay for governmental activities has been sharply constrained by voter initiatives such as Proposition 13⁶ and Proposition 218⁷. Contra Costa Permittees' SUA rates have a maximum limit, which was established in 1993. All Contra Costa Permittees reached their maximum rate by FY 2009/10, when the SFBRWQCB adopted MRP 1.0. Since then, Contra Costa Permittees have been supplementing their SUA revenues with funding from other sources, including the general fund, to finance the ever-increasing stormwater compliance mandates.

Funding the unfunded federal and state mandated stormwater permit compliance programs continues to be the Contra Costa Permittees' most significant challenge. In the absence of new revenues for stormwater pollution prevention, Contra Costa Permittees have repeatedly advocated for the need to prioritize actions that have proven most beneficial to water quality and have asked that less beneficial permit requirements be eliminated or reduced. However, Contra Costa Permittees ultimately have no authority

⁶ Proposition 13 - In 1978 California voters passed Proposition 13, reducing property tax rates by about 57%. The basis for property tax calculation was rolled back to the 1976 assessed value. Reassessment of property value was allowed only upon change in property ownership and the assessment was limited to 1% of the sales price. Revenue for stormwater management agencies, such as a Flood Control Zone, was reduced significantly and the tax rate was locked in at the 1976 adopted rate. As time went on, stormwater management agencies could not raise revenue to keep up with needed construction, major maintenance, or replacement of failed drainage facilities.

⁷ Proposition 218 - After Proposition 13 was passed, many stormwater management agencies turned to assessments and other measures to help fund services. In 1996, California voters passed Proposition 218, expanding the protection against property tax increases established by Proposition 13. Voter approval was now required for all new or increased assessments, charges or fees proposed by a stormwater management agency. Assessment proponents also had to demonstrate the specific benefit to properties before initiating or increasing the assessment. Fees and charges established or increased by agencies providing water or sewer services were expressly exempted from obtaining voter approval.

over permit conditions and cannot guarantee that permit conditions are reasonable or implementable, or that prescribed actions are effective or worthwhile. Contra Costa Permittees continue to explore ways to improve cost recovery and to assign costs for controlling certain pollutant sources that originate on private property. Contra Costa Permittees also continue to seek community partners for trash cleanup and other watershed stewardship activities and aim to align available stormwater grant funding with transportation funding and grant programs for integrated transportation and drainage infrastructure improvements.

Highlights of Group Program Activities for FY 2021/22

Public Information and Participation

Given the continued challenges brought by COVID-19, the CCCWP has continued to develop and improve its ability to conduct outreach, disseminate public information, and engage with the public through virtual or online means of connection. CCCWP continued to make improvements to the CCCWP website, maintain access to Program documents and participation through Groupsite for Contra Costa Permittee access, and has facilitated the exchange of information internally to Permittees and externally to the public. Webinars and virtual meetings continue to allow greater participation in CCCWP activities, as well as provide long-term platforms for engagement for and by the public.

In FY 21/22, CCCWP conducted an evaluation of brochures and pamphlets distributed to businesses and public entities within the County and are continuing to work to provide information that is accessible to citizens of the County.

In addition, the CCCWP has continued to collaborate the Illegal Dumping Think Tank, a multi-agency effort throughout Contra Costa County, to reduce illegal dumping. Together they created an outreach video which highlighted the severity of litter and dumping issues and proper disposal options. The video aired on Contra Costa County television and various social media platforms.

As a result, the CCCWP has finalized revisions to the 1-800-No-Dumping phone tree to make it easier to report to the right jurisdiction, and collaborated on meetings and outreach materials.

Water Quality Monitoring: Report Completion

In FY 2021/22, the CCCWP continued to make progress on the reporting and implementation of Provision C.8 Water Quality Monitoring. The *Urban Creeks Monitoring Report, Water Year 2021* (2021 UCMR) was submitted to the SFBRWQCB and CVRWQCB on March 31, 2022. This report is available at <https://www.cccleanwater.org/monitoring/monitoringreports>.

Implemented Control Measures to Achieve Mercury and PCB Load Reductions

MRP 2.0 Provisions C.11.a.iii.(2) and C.12.a.iii.(2) require reporting a list of the Watershed Management Areas (WMAs) where mercury and PCBs control measures are currently being implemented and those in which new control measures will be or have the potential to be implemented during the term of this permit, along with the specific control measures and an implementation schedule. Although many of the control measures may be selected primarily for the purpose of achieving PCBs load reductions during this permit term, substantial mercury load reductions may result as a tangential benefit and will be accounted for in tracking mercury load reductions. A *Mercury and PCBs Watershed/Management Areas, Control Measures, and Load Reduction – Update 2022* report (WMA report) was prepared by the CCCWP to fulfill the requirement of MRP Provision C.11.a.iii.(3) and C.12.a.iii.(3) for updating the list of control measures reported annually as necessary to account for new control measures. This WMA report is provided as Attachment 11.1.

Previous studies indicate that old industrial areas are the most likely land use type to contain high PCBs concentrations. CCCWP is continuing the source property identification process until all Old Industrial areas are screened and characterized for the likelihood of pollutant load removal and potential referral to the SFBRWQCB for further action. CCCWP has compiled the past decade of source property investigation data to develop a Conceptual Work Plan for Completing PCB Source Area Investigations. In FY

2021/22, CCCWP continued to use its GIS platform for data management and analysis determining actual and potential load reductions, and as a tracking and reporting tool for Provisions C.11 and C.12 implementation work. The CCCWP continues to evaluate and update the GIS platform to increase its utility and respond to the needs of Permittees.

Continued to Develop a Regional Alternative Compliance Program

The Cities of San Pablo, Walnut Creek, and Richmond, and Contra Costa County have partnered for a USEPA San Francisco Bay Water Quality Improvement Fund grant to develop and pilot a Regional Alternative Compliance System in Contra Costa County (the “Contra Costa County System”). The objective of the Contra Costa County System is to more efficiently and cost-effectively meet Municipal Regional Permit (MRP) and total maximum daily load (TMDL) water quality goals, while also providing a net environmental benefit. The development of the Contra Costa County System aims to create deliverables that can be implemented in other counties and agencies subject to similar water quality compliance requirements.

The Contra Costa Permittee leads have continued working with a Consultant Team to develop project deliverables. During FY 2021/22, work completed on the project included a revised draft System Summary Report, a legal review of the draft system, and presentations to multiple committees and participating agencies. More details on the work completed can be found in Section 3 – Provision C.3.

A Summary of Other Group Program Activities for FY 2021/22

In addition to the activities and programs highlighted above, Contra Costa Permittees collectively conducted a broad range of other activities and programs designed to reduce or eliminate the discharge of stormwater pollutants (i.e., anything other than stormwater) into and from municipal storm drain systems. This Volume I report documents the other activities conducted or coordinated collectively as follows:

Table 1-1: Group Program Activities

<u>MRP 2.0 Provisions</u>	<u>Section</u>
<p>C.2 Municipal Operations – Controls to reduce non-stormwater discharges and polluted stormwater to storm drains and watercourses during operation, inspection, and routine repair and maintenance activities of municipal facilities and infrastructure.</p>	2
<p>C.3 New Development and Redevelopment – Source controls, site design, and stormwater treatment measures in new development and redevelopment projects to address both soluble and insoluble stormwater runoff pollutant discharges, and controls to prevent increases in runoff flows from new development and redevelopment projects.</p>	3
<p>C.4 Industrial and Commercial Site Controls – Inspections and enforcement of stormwater pollution prevention measures at businesses to prevent pollutant exposure and discharges into and from municipal storm drain systems.</p>	4
<p>C.5 Illicit Discharge Detection and Elimination (IDDE) – Surveillance, spill and complaint investigations, control of mobile sources, and enforcement and case follow-up.</p>	5
<p>C.6 Construction Site Controls – Inspections and enforcement of construction site stormwater pollution prevention to reduce and eliminate pollutant discharges into and from municipal storm drain systems.</p>	6
<p>C.7 Public Information and Outreach – Information and outreach to increase knowledge and encourage behavior changes of target audiences regarding the impacts of stormwater pollution on receiving water and of pollution prevention solutions to mitigate the problems, respectively.</p>	7
<p>C.8. Water Quality Monitoring – Water quality monitoring activities including: 1) San Francisco Estuary receiving water monitoring; 2) creek status monitoring; 3) stressor source identification investigation; 4) Pollutants of Concern (POC) monitoring; 5) pesticides and toxicity monitoring; and 6) reports submitted annually on March 31.</p>	8

MRP 2.0 Provisions	Section
C.9 Pesticide Toxicity Control – Actions to prevent impairment of urban streams by pesticide-related toxicity including implementation of Integrated Pest Management (IPM); outreach and training to municipal employees, pest control operators (PCOs), and residents; and, outreach to consumers on less-toxic methods of pest prevention and control.	9
C.10 Trash Load Reduction – Implementation of control measures and other actions to reduce trash loads discharged into municipal storm drainage systems and receiving water bodies.	10
C.11 Mercury Controls – Implementation of control measures to reduce total mercury and methylmercury loads in accordance with load reduction allocations established for urban runoff in the San Francisco Bay Mercury and the Sacramento San Joaquin Delta Methylmercury TMDLs.	11
C.12 Polychlorinated Biphenyls Controls – Implementation of control measures to reduce PCBs loads in accordance with load reduction allocations established for urban runoff in the San Francisco Bay PCBs TMDL.	12
C.13 Copper Controls – Implementation of source control Best Management Practices (BMPs) ⁸ to reduce and eliminate discharges containing copper into and from municipal storm drainage systems.	13
C.15 Exempted and Conditionally Exempted Discharges – Implementation of control measures to eliminate any adverse impacts to receiving waters from exempted unpolluted non-stormwater discharges, such as flows from natural springs; and, conditionally exempted non-stormwater discharges that are potential sources of pollutants, such as swimming pools and spas and irrigation water.	14
C.16.5 Provisions Applicable to East County Permittees – This Provision was added to the MRP in January 2019 to include the Cities of	15

⁸ A BMP is defined as any program, technology, process, siting criteria, operating method, measure, or device which controls, prevents, removes, or reduces pollution.

MRP 2.0 Provisions	Section
<p>Brentwood, Antioch and Oakley, and portions of Unincorporated County and the Flood Control District located in Water Quality Control Board Region 5 (East County Permittees), as dischargers named in the San Francisco Bay MRP. The provisions align the activities of East County Permittees with Permittees located in Region 2 and describe actions by East County Permittees necessary to implement TMDLs applicable in Region 5.</p>	

COVID-19 Impacts

This annual report provides the Regional Water Board with an update on the specifics of the requirements and provisions of the San Francisco Bay Region Municipal Regional Stormwater NPDES Permit (MRP), Order R2-2015-0049, that were impacted by Contra Costa County Health Orders for COVID-19. An overview of the impacts experienced by the Contra Costa Permittees is discussed in this section. In addition, the response efforts relating to MRP provisions were conducted by Permittees differently, in accordance with their jurisdiction’s relevant circumstances, and Permittee-specific considerations have been included in their individual reports.

It has been and still is deemed essential that the health and safety of all Contra Costa Permittee staff and contractors be protected to the maximum extent reasonably possible. All activities performed must be in accordance with State and local orders and guidelines. As the COVID-19 pandemic has evolved and operations have returned to a near normal status, there continue to be some remaining impacts on Contra Costa Permittee abilities to comply with some permit requirements.

- **Operational Delay.** Many Permittees were required to work remotely or in a hybrid-mode at the beginning of FY 2021/2022. While most in-office work has resumed, illness from periods of Covid outbreaks resulted in a large number of employees taking time off to recover, causing some operational delays.

- **Staff Reassignments.** Permittees have a role in emergency response efforts, and the pandemic posed a societal emergency requiring many Permittees to open their emergency operations centers. This resulted in reassignment of staff resources to meet the staffing needs of their emergency operations. Although this was a rather short-term effort for most Permittees, except perhaps for the County, it continued to disrupt operations especially in the beginning of FY 2021/2022.
- **Budget Reductions.** A primary source of general-purpose revenue for most Permittees is from sales tax. At the onset of the pandemic only essential business operations were open, reducing local sales tax revenue dramatically. Subsequent relaxation of certain restrictions has allowed most businesses to open at full capacity. This has increased some sales tax but the overall loss of revenue continued to result in budget reductions in Permittee stormwater divisions and in departments and divisions that support stormwater operations.

Despite these impediments, Contra Costa Permittee staff and their contractors and consultants continue to make all reasonable efforts to perform required permit activities while at the same time taking the necessary precautions to minimize exposure to themselves and the general public.

SECTION 2 – PROVISION C.2 MUNICIPAL OPERATIONS

Introduction

CCCWP staff, consultants and municipal staff participate on the Municipal Operations Committee (MOC), which assists in the review and preparation of guidance and training for municipal staff with respect to Provisions C.2 (Municipal Operations), C.4 (Industrial Commercial Site Controls), C.5 (Illicit Discharge Detection and Elimination), C.9 (Pesticide Toxicity Control), C.10 (Trash Load Reduction), C.13 (Copper Controls), and C.15 (Exempted and Conditionally Exempted Discharges) of the MRP. CCCWP staff also participate in the BAMSC MOC, which coordinates related regional activities. This section of the Annual Report will focus on municipal operation activities (Provision C.2). Reporting related to Provisions C.4, C.5, C.9, C.10, C.13, and C.15, are covered in Sections 4, 5, 9, 10, 13 and 14, respectively, in this Volume I Report.

In FY 2021/22, Joseph Camaddo (City of Pittsburg) and Michelle Giolli (Contra Costa Flood Control District) served as Chair and Vice Chair, respectively, of the CCCWP MOC. The regular MOC typically meets the third Tuesday of each month. In FY 2021/22, the regular MOC met in all months except December 2021 and March 2022.

Amanda Booth (City of San Pablo), Beth Baldwin (Unincorporated Contra Costa County), and Elizabeth Yin (CCCWP augmented staff) represented the CCCWP at the BAMSC MRP 3.0 C.10 Trash Subcommittee. Work undertaken by this committee is discussed in Section C.10.

A listing of Contra Costa municipal representatives on the CCCWP MOC is included in Attachment 1.4. Summary minutes of these meetings are available in the FY 2021/22 Management Committee agenda packets provided on the CCCWP website at <http://www.cccleanwater.org/meetings/>.

FY 2021/22 Accomplishments

The monthly MOC meetings provide an opportunity to further train and educate Contra Costa Permittees on subjects that are relevant to municipal operations and permit

compliance. The meetings also serve as a forum to discuss municipal operations such as pest management, trash controls, or illicit discharge response. There are also opportunities to hear from guest speakers, share audit findings of stormwater programs relative to municipal operations, or identify the need for new or updated public outreach material based on findings from stormwater inspections. Below are some of the highlights from MOC activities for FY 2021/22.

Presentations by Guest Speakers

As part of an ongoing effort to build relationships with agencies whose work may potentially intertwine with MOC's activities, guest speakers are invited to give presentations on their respective programs to this committee or to Management Committee when applicable. In FY 2021/22, presentations were given by the following persons:

- Presentation on CALTRANS Partnership opportunities by Anand Maganti (CALTRANS).
- Presentation on AGOL Trash Reporting Tool by Joe Camaddo (City of Pittsburg).
- Presentation on AGOL Planned Updates by Lisa Welsh (CCCWP augmented staff).
- Presentation on Private Land Drainage Area inspections by Michelle Giolli and Beth Baldwin (Contra Costa County).
- Presentation on MRP 3.0 Trash Requirements by Elizabeth Yin (CCCWP augmented staff).
- Beth Slate presented on Contra Costa County Department of Agriculture activities.

Additionally, specialized workshops provided training for CCCWP staff, including:

- Stormwater Inspector Training Workshop (C.4, see description below) – June 22, 2022

Finally, announcements were regularly sent out to the MOC to notify Contra Costa Permittees of upcoming region-wide workshops and activities of interest to Permittees.

FY 2022/23 Planned Activities

In FY 2022/23, the CCCWP MOC will continue to review and provide assistance to municipal maintenance and operations staff, where necessary, to ensure consistent and effective BMPs are implemented during the operation, inspection, and routine repair and maintenance activities of municipal facilities and infrastructure. This includes, but is not limited to: graffiti removal, implementation of Corporation Yard Stormwater Pollution Prevention Plans, municipal stormwater pump station inspection, operation, maintenance, and monitoring, implementation of appropriate BMPs during road, parking lot and bridge repair and maintenance work; and, complying with the reporting requirements in Provision C.2 and other relevant provisions to municipal operations.

In particular, the MOC will review MRP 3.0 for those provisions under the purview of the municipal operations and will recommend improvements on reporting and implementation of those permit elements.

SECTION 3 – PROVISION C.3 NEW DEVELOPMENT AND REDEVELOPMENT

Executive Summary of FY 2021/22 C.3 Activities

Throughout FY 2021/22, CCCWP staff and consultants, and the staff of Contra Costa Permittees, were engaged in the negotiation of Provision C.3 requirements in MRP 3.0, which was adopted in May 2022. CCCWP staff and consultants identified urgent tasks for Permittee compliance and began assisting Permittees to implement those tasks. CCCWP's Development Committee, with the assistance of CCCWP staff and consultants, drafted and reviewed updates to the *Stormwater C.3 Guidebook*, including MRP 3.0 changes and a new chapter to support the identification and preliminary design of Green Infrastructure projects. The Development Committee planned completion of the *Guidebook* 8th Edition for fall 2022. CCCWP organized and presented a Low Impact Development (LID) online seminar attended by about 145 land development and professional staff.

FY 2021/22 Objectives

The Development Committee's FY 2021/22 work was guided by the following objectives:

- Facilitate Permittee compliance with MRP Provision C.3.
- Facilitate planning, design, construction, and maintenance of permanent controls on new developments in Contra Costa Permittees' jurisdictions.
- Facilitate Contra Costa Permittees' planning, design, construction, and maintenance of Green Infrastructure facilities in Permittees' jurisdictions.
- Organize and implement all required C.3 group activities and submittals.
- Negotiate permit requirements and interpretations that protect water quality and are implementable and cost-effective.
- Continuously improve Program outreach, guidance, and training on C.3 requirements.
- Continue CCCWP's regional and statewide role as an exemplar and leader in implementation of new development controls.

FY 2021/22 Accomplishments – Overview

During FY 2021/22 the Development Committee was chaired by Joe Camaddo (City of Pittsburgh). John Steere (Contra Cost County) served as vice-chair. Staff from Antioch, Brentwood, Clayton, Concord, Contra Costa County, Danville, Hercules, Lafayette, Moraga, Oakley, Pittsburg, Pleasant Hill, San Ramon, and Walnut Creek were voting members of the Committee. The Development Committee met monthly throughout the fiscal year, except for November. The November and December meetings were combined to accommodate end-of-the-year holidays.

In addition to supporting implementation of Permit requirements, CCCWP staff and consultants—and Permittee staff—participated in the Bay Area Municipal Stormwater Collaborative (BAMSC, formerly BASMAA) MRP 3.0 C.3/Green Infrastructure (GI) Work Group. The Work Group also met throughout the fiscal year. CCCWP 2021/22 contributions to this Work Group—which built on contributions made throughout the previous fiscal year—included the following:

- CCCWP’s consultant developed a table comparing Provision C.3.b.ii requirements (thresholds for Regulated Projects) in MRP 3.0 vs. MRP 2.0.
- CCCWP’s consultant collaborated with countywide stormwater program staff and permittees regionally to review and prepare comments for the MRP 3.0 TO and Revised TO.

CCCWP staff and consultants, and Contra Costa Permittee staff, also attended meetings of BAMSC’s New Development Subcommittee (formerly BASMAA’s Development Committee). Contra Costa’s contributions to this subcommittee included the following:

- CCCWP presented at the subcommittee May 3, 2022, meeting on the changes impacting implementation of C.3.b.ii requirements (such a thresholds for regulated projects) in the MRP 3.0 Revised TO as compared to MRP 2.0.

- Contra Costa County staff are developing a plant guide for bioretention facilities where irrigation is not feasible (for space/ plumbing concerns). When complete, the guide will be shared with CCCWP Permittees and BAMSC members.

FY 2021/22 Accomplishments – Regulated Projects (Provisions C.3.a. – C.3.i.)

C.3.g - Hydromodification Management (HM)

Background and Previous Years' Activities

A 2003 permit amendment required CCCWP to prepare a Hydrograph Modification Management Plan (HMP). Similar requirements were added to the Santa Clara permit in 2001. Contra Costa's HMP was developed in 2003-2005 and emphasizes the use of LID to mitigate changes in runoff caused by land development. The SFBRWQCB approved the HMP in mid-2006. The HMP included requirements for monitoring of some bioretention facilities and for calibration and verification of the model used to calculate the bioretention sizing factors. The 3rd Edition of the *Stormwater C.3 Guidebook* (October 2006) incorporated HM requirements, including the sizing factors, into criteria for LID design on projects subject to the HM requirements.

Designs for bioretention facilities were further developed and refined in 2006-2008. The *Guidebook* 4th Edition (2009) included variations on bioretention designed and incorporated sizing factors for all facilities based on limiting flow exiting via facility underdrains to two-tenths of 2-year event (0.2Q₂). MRP 1.0 (2009) imposed 0.1Q₂, but allowed Contra Costa to continue to use 0.2Q₂ for the permit term. MRP 1.0 also renewed the requirement for a model calibration and verification study.

The study proceeded in FY 2011/12 and FY 2012/13. Tony Dubin of Dubin Environmental Consulting conducted the model calibration and verification. CCC Flood Control District staff conducted the monitoring. A report was completed and submitted with the 2013 Annual Report. Monitoring data showed that exfiltration from the bioretention facilities was 0.24 inches per hour, an order of magnitude higher than the rate assumed in the original model. Largely because of this difference, using the calibrated model, sizing factors would not need to increase even if the 0.1Q₂ flow limit were to be met.

For MRP 2.0, CCCWP sought to also change criteria in Provision C.3.g. that favor the use of flow duration control basins rather than LID. This effort started with developing potential alternatives to the curve-matching criteria in Provision C.3.g.ii.(2). In early 2015, following discussions with SFBRWQCB staff, BASMAA retained Judd Goodman, then of Geosyntec Consultants, to develop a memorandum describing how the potential for downstream stream bed and bank erosion (erosion potential, or E_P) could be estimated directly, rather than relying on the matching of flow-duration curves. Mr. Goodman collaborated with Mr. Dubin. The modeling results from the 2013 CCCWP report were used as input for Goodman's calculations of E_P .

Additionally, in MRP 2.0, the Water Board required Contra Costa permittees to submit a technical report, due with the 2017 Annual Report, describing how CCCWP's criteria will be updated. The update was to be implemented by January 3, 2018. At a July 20, 2017, meeting, CCCWP consultants demonstrated how three "sensitive" parameters—lower threshold for sediment movement, facility exfiltration rate to native soils, and projected future increases in watershed imperviousness—interact to affect minimum sizing factors. It was shown how a selected value for sizing factor could be fully protective for a broad variety of reasonable combinations of the project's critical flow rate, facility exfiltration rate, and assumed future increase in watershed imperviousness. It was proposed to use this approach rather than using the "most conservative" values for all three sensitive parameters.

It was further proposed that this report would recommend an appropriate sizing factor for the "base case" of a bioretention facility in Hydrologic Soil Group "D" soils, which represents most future development in Contra Costa. Representative values for the three sensitive parameters that correspond to this selected sizing factor would then be used to generate the remaining sizing factors (for other facility types and other soil groups).

The Technical Report was submitted as required on September 30, 2017. CCCWP staff e-mailed SFBRWQCB staff on September 7, 2017, reviewing these proposed steps, stating that CCCWP anticipated being able to prepare updated sizing factors by January 3, 2018, if CCCWP received notice of the SFBRWQCB's acceptance of the technical

report by October 31, 2017 and also stating CCCWP's understanding that Contra Costa Permittees would not be penalized for continuing to use the current sizing factors until any issues are resolved. SFBRWQCB staff responded the following day that "this sounds acceptable," and CCCWP staff followed up with an e-mail on November 15, 2017 noting that comments had not been received, that Contra Costa Permittees would be guided to continue implementing HM criteria in the Stormwater C.3 Guidebook beyond that January 3, 2018 date, and suggesting a meeting once SFBRWQCB staff had reviewed and commented on the Technical Report.

CCCWP staff emailed SFBRWQCB staff on September 24, 2019, to request a response. Another email was sent on February 6, 2020. SFBRWQCB staff responded on March 1, 2020, and a meeting was held (via remote conferencing) on April 14, 2020. For this meeting, CCCWP compiled and summarized documentation of discussions held, and consensus reached, as the Technical Report was being prepared in 2016 and 2017. CCCWP also researched and provided language from other California Water Boards that supports the direct-simulation-of-erosion-potential approach used in the 2017 report. At the April 14, 2020, meeting, SFBRWQCB staff committed to providing written comments on the September 30, 2017, submittal.

CCCWP staff followed up the April 14, 2020, meeting with a May 5, 2020, email, requesting a timeline for the written comments.

On July 10, 2020, SFBRWQCB sent a communication, "Memo to CCCWP Regarding Their Hydromodification Technical Report and Hydromodification Applicability Map, Submitted September 29, 2017." CCCWP sent an initial response on July 13. Preparation of a response to all questions was delayed due to COVID response and due to resources diverted to ongoing permit negotiations. A response was sent on November 4, along with a request to meet to discuss questions SFBRWQCB staff had regarding CCCWP's approach.

CCCWP staff followed up December 8 to reiterate the request for a meeting to discuss the July 10 SFBRWQCB comments and the November 4 CCCWP response. SFBRWQCB staff responded the same day, saying they would follow up shortly.

SFBRWQCB sent a March 19, 2021, memo “intended to advance discussions...” After acknowledging the memo the same day, CCCWP worked to restart technical consultant services that had been inactive since the Technical Report submittal in 2017. On April 19, 2021, CCCWP staff wrote SFBRWQCB staff to propose meeting dates. A meeting with SFBRWQCB staff, CWP staff and consultant was held on May 13, 2021, including the technical consultants Tony Dubin and Judd Goodman, focused primarily on clarifying the SFBRWQCB’s July 10, 2020, comments and the November 4, 2020, CCCWP responses.

A follow-up meeting with SFBRWQCB staff, CCCWP staff and consultants was held on June 2, 2021, to identify ways to move forward with the reissuance of the MRP 3.0 Tentative Order now imminent. The outlines of permit language were discussed. CCCWP staff provided a working markup of Provision C.3.g., along with a summary and explanation, on June 9. The materials were reviewed in a meeting that day that included Zach Rokeach (SFBRWQCB staff) and Dan Cloak, Tony Dubin, and Judd Goodman (CCCWP consultants).

FY 2021/22 Accomplishments

The MRP 3.0 Tentative Order (TO) was released on September 10, 2021. TO Provision C.3.g.v.(2) directs Contra Costa Permittees to use the criteria in the current *Guidebook*, as it may be updated, until the SFBRWQCB Executive Officer approves an additional Technical Report, to be submitted with the 2023 Annual Report, and thereafter use methods and criteria in the Executive Officer’s approval or conditional approval of that report. The TO also asked that new sizing factors be calculated with a “base case” sizing factor of 6.5% rather than the 5% proposed in the 2017 Technical Report.

CCCWP staff and consultants reviewed the C.3.g language included in the TO and submitted comments in the CCCWP November 15, 2021, comment letter. SFBRWQCB staff considered the CCCWP comments, but did not significantly change the C.3.g language in subsequent versions of the permit. Subsequently, the CCCWP discussed and added an item to its FY 2022/23 budget for an ‘HM Options Report.’ The Report will evaluate CCCWP permittee options for compliance with MRP 3.0 C.3.g requirements.

FY 2022/23 Planned Activities

Complete the HM Options Report noted above and decide on a C.3.g compliance option for CCCWP permittees. Estimated costs and timeline for the options will vary and will be informed by the report.

HM Applicability Maps

Background and Previous Years' Activities

MRP 2.0 required Contra Costa Permittees to prepare HM applicability maps by September 2017. The maps are to show locations where projects may be exempted because they are in a catchment that drains to pipes or a hardened channel that extend continuously to the Bay, Delta, or a flow-controlled reservoir, or drain to channels that are tidally influenced, or are located in a catchment or subwatershed that is 70% or more impervious. CCCWP's Geographic Information System (GIS) Consultant, PSOMAS used a digital elevation model to delineate sub-basins (catchments). The sub-basins were overlaid on a national land cover dataset to determine sub-basins with imperviousness equal to or greater than 70%. Channel hardening was determined using ortho-imagery, and the initial determination was reviewed and corrected by Permittee staff. Sub-basins draining to hardened channels all the way to the Bay/Delta were manually coded as exempt. The maps were submitted, along with PSOMAS' Technical Report, on September 30, 2017, as required.

Because MRP 2.0 Provision C.3.g.vi. requires that the new HM Applicability Maps be "acceptable to the Executive Officer," and no response to the submittal was received, Contra Costa Permittees have been guided to implement existing policies (consistent with Attachment C in MRP 1.0) in the interim. The April 14, 2020, meeting with SFBRWQCB staff included discussion of the maps, and some of the comments in the July 10, 2020, memo from SFBRWQCB staff addressing the maps.

There was brief discussion of the 2017 draft HM Applicability Map—and of SFBRWQCB staff's July 10, 2020, comments on the Map—at the June 2, 2021, meeting regarding the 2017 Technical Report. CCCWP staff and consultants contacted Contra Costa County and Contra Costa County Flood Control and Water Conservation District staff to request

that they update their input into the draft maps in response to SFBRWQCB staff's comments.

FY 2021/22 Accomplishments and FY 2022/23 Planned Activities

In FY 2021/22 CCCWP staff and consultants intended to work with PSOMAS to revise the maps with input from Permittees, including Walnut Creek, Brentwood, Contra Costa County, and the Contra Costa County Flood Control and Water Conservation District. The project was postponed until FY 2022/23 to capture any potential new requirements from MRP 3.0.

CCCFCWCD Policy on C.3 Facilities and Flood Control

Background and Previous Years' Activities

Designs for proposed land developments within Contra Costa County must include facilities to safely collect and convey runoff from the development site. Depending on the site's characteristics and location, flood storage may be required to match peak runoff to pre-development conditions, and/or to limit effects on downstream facilities. The Contra Costa County Flood Control and Water Conservation District (CCCFCWCD) reviews proposed designs on behalf of municipal planning authorities.

An April 2019 CCCFCWCD memo concludes that C.3 facilities should not be relied on to mitigate peak flows. A February 2020 draft update to that memo suggested potential alterations to C.3 facilities that could allow them to be considered to have some mitigating effect.

Local stormwater coordinators are concerned that these design alterations, and proposals to combine flood control and stormwater treatment in a single facility, could result in facilities that have compromised performance, are difficult or impossible to maintain, and which lack the LID aesthetic qualities and ancillary benefits needed for long-term resiliency.

Design of flood control facilities and design of C.3/LID facilities use different hydrologic analysis methodologies and have different objectives for controlling flows.

During FY 2020/21, CCCWP's Development Committee formed a Work Group, comprising CCCFCWCD staff and representatives of Walnut Creek, Concord, Martinez, and other CCCWP permittees. The Work Group convened in October 2020 and held five additional 1-hour meetings during the following months.

This effort led to consensus that, if C.3/LID features and facilities are to be credited for peak-flow mitigation, it will be necessary to specify both the design criteria and the methods of hydrologic analysis applicants' engineers will be required to use.

The Work Group considered three possible outcomes:

1. No credit for C.3/LID features or facilities would be allowed when determining measures needed for peak-flow mitigation (this is similar to existing policy).
2. Adopt criteria and methods for explicit analysis of the peak-flow-mitigation benefit of C.3/LID measures.
3. Apply a conservative "rule of thumb"-based credit toward peak-flow mitigation benefit.

The Development Committee reviewed the Work Group's report and recommended that CCCWP further investigate ways to adopt criteria and methods for explicit analysis of peak-flow-mitigation benefits of C.3/LID. Pending consensus from municipalities that they would consider implementing criteria and methods developed by CCCWP for this purpose, the Development Committee recommended, and the Management Committee agreed, to budget, in FY 2021/22, for additional hydrologic analysis needed and to consider incorporating peak-flow analysis into the *Stormwater C.3 Guidebook* and the IMP Sizing Calculator.

FY 2022/23 Planned Activities

CCCWP staff and consultants plan to resume work on this project in FY 2022/23. The project's goal is to integrate flood control criteria into CCCWP's IMP Sizing Calculator. This task entails additional hydrologic analysis and related work updating the calculator

as well as developing criteria for integrated facilities to be incorporated into the next editions of the *Stormwater C.3 Guidebook*.

Other Program Activities Related to Changes in MRP 3.0 Regulated Projects Requirements: Regulated Projects (Parcel-Based)

Background and FY 2021/22 Activities

Throughout FY 2021/22, CCCWP staff and consultants, and the staff of Contra Costa Permittees, were engaged in the negotiation of Provision C.3 requirements in MRP 3.0, adopted May 2022. Among other tasks, CCCWP staff and consultants tracked changes to definitions and thresholds for “Regulated Projects,” which are those projects requiring stormwater LID treatment. The MRP 3.0 changes to Regulated Projects thresholds changes apply to projects approved beginning July 1, 2023.

In summary, for parcel-based (non-roadway) projects under MRP 3.0:

1. Construction of one detached single-family home that creates or replaces 10,000 SF or more of impervious surface is a Regulated Project.
2. All other projects, regardless of land use, which create or replace 5,000 SF or more of impervious surface are Regulated Projects.
3. It has been clarified that renovation of parking lots and other paved areas where the base course is affected must be counted toward the 5,000 SF Regulated Project threshold.

To address these changes, CCCWP consultants are updating the *Stormwater C.3 Guidebook*. CCCWP staff and consultants have been drafting several updates to the *Guidebook*, presenting them at the Development Committee meetings, and soliciting input from Permittees.

FY 2022/23 Planned Activities

As noted, several updates to the *Guidebook* are in progress and anticipated to complete in the early part of FY 2022/23. A revised 8th Edition is anticipated in Fall 2022. CCCWP will also produce a “C.3 Update,” a countywide outreach document that will include an

overview of MRP 3.0 changes for Regulated Projects. Permittees' staff will distribute this documentation to the land development community.

Other Program Activities Related to Changes in MRP 3.0 Regulated Projects Requirements: Road Construction and Maintenance Projects

Background and FY 2021/22 Accomplishments

As noted, CCCWP staff and consultants were engaged in the negotiation of Provision C.3 requirements in MRP 3.0, adopted May 2022. Among other tasks, CCCWP staff and consultants tracked changes to stormwater LID treatment for road construction and maintenance projects. In summary, new requirements for road construction and maintenance (applicable July 1, 2023) are:

- New roads and trails, or widening with additional travel lanes, which create 5,000 contiguous SF or more of impervious surface are now Regulated Projects.
- One contiguous acre or more of pavement maintenance that affects the base course, or extends the roadway, is now a Regulated Project.
- Utility trenching projects that extend over a contiguous acre or more are now Regulated Projects.

To address these changes, CCCWP consultants drafted updates to Chapter 1 of the *Stormwater C.3 Guidebook*.

FY 2022/23 Planned Activities

CCCWP will produce a memo for Permittees CIP planning and public works staff informing them of the changes to LID requirements for road construction and maintenance projects. Throughout the permit term, Permittees will need to review capital projects and road maintenance and determine if any might be Regulated Projects. CCCWP staff and consultants will be available to consult with Permittees throughout this process, as needed.

Other Updates to the Stormwater C.3 Guidebook

Background and Previous Years' Activities

CCCWP published the first edition of the *Stormwater C.3 Guidebook* in 2005. The current 7th Edition was published during 2016-2017. Ancillary documents, including example projects and updated templates, were posted to the CCCWP website in 2018.

FY 2021/22 Accomplishments

CCCWP staff and consultants have been drafting several updates to the *Guidebook*, presenting them at the Development Committee meetings, and soliciting input from Permittees. Remaining edits are related to implementation of new requirements in MRP 3.0, including CCCWP's to-be-determined strategy for compliance with HM requirements, expanded guidance on Green Infrastructure, updates to references, and improved document organization.

FY 2022/23 Planned Activities

CCCWP anticipates completing the *Stormwater C.3 Guidebook 8th Edition* in Winter 2022.

Outreach and Training

Background and Previous Years' Activities

Since 2004, CCCWP has sponsored a workshop on LID planning, design, and construction nearly every year. Workshops typically include an overview of C.3 requirements, implementation procedures, and design guidance in accordance with the *Stormwater C.3 Guidebook*. Participants include private-sector land development professionals and municipal staff.

Also, since 2004, CCCWP has maintained pages at www.cccleanwater.org with links to resources for implementing Provision C.3 requirements. These resources include the *Stormwater C.3 Guidebook*, CCCWP's Integrated Management Practices (IMP) Sizing Calculator, templates for Stormwater Control Plans, Stormwater Control Plan examples,

miscellaneous memoranda, submittals to the Water Boards, and slides and materials used in trainings.

FY 2021/22 Accomplishments

CCCWP sponsored a Provision C.3 Compliance Workshop, “Planning, Design, Construction, and Maintenance of Low Impact Development Features and Facilities,” held on May 24, 2022. This was initially scheduled as an in-person workshop to be held in Walnut Creek, but was switched to a webinar due to on-going public health concerns. There were 159 registrants and about 140-145 participated in the online seminar. Slightly more than half the attendees are engineers or engineering technicians working for consulting firms or land development companies that prepare LID designs for development. Somewhat less than half were engineers, planners, architects, and inspectors working for stormwater NPDES permittees. About 45% of participants had previously attended a CCCWP C.3 workshop.

Presentations included a review of the basics of Provision C.3 compliance and Low Impact Development design, an update on changes to Provision C.3 in MRP 3.0, and a brief training on Green Infrastructure project identification and preliminary design techniques. As with previous years’ workshops, the presentations were followed by a panel made up of experienced municipal stormwater staff: Mitra Abkenari (City of Concord), Phil Hoffmeister (City of Antioch), Frank Kennedy (Kennedy and Associates), and Ryan Cook (Walnut Creek). The panelists led an interactive discussion of five key topics in LID implementation.

Upon exiting the Zoom webinar, participants were asked to answer four questions to provide feedback. 25 responses were received. The responses were entirely positive.

The workshop agenda and slides have been posted to the CCCWP website. The webinar was recorded, and a link to the recording is also on the CCCWP website for C.3 Workshops and Conferences:

<https://www.cccleanwater.org/development-infrastructure/development/c-3-workshops-conferences>.

FY 2022/23 Planned Activities

In FY 2022/23, the CCCWP plans to hold a similar half-day LID workshop (ideally in person) on C.3 topics relevant for municipal staff and land development professionals.

Development of Countywide GIS and Database Capabilities

Background and Previous Years' Activities

CCCWP has collaborated with the Alameda Countywide Clean Water Program (ACCWP) since FY 2015/16 to develop GIS capabilities (ArcGIS Online, or AGOL) for facilitating planning, tracking, and reporting of NPDES compliance activities, including activities to reduce discharges of trash and pollutants of concern. During FY 2016/17, CCCWP and ACCWP initiated efforts to incorporate into AGOL features that would allow integrated tracking and reporting of Regulated Projects in accordance with Provisions C.3.b. (Project approvals), and C.3.e. (Special Projects).

During that year and into FY 2017/18, a “C.3 module” was created within AGOL to facilitate tracking and reporting of Regulated Projects and Green Infrastructure street and drainage retrofit projects. The primary purpose of the module and the Contra Costa Permittees’ data entry into the module was to track and document load reductions achieved as a result of C.3 implementation. The Contra Costa Permittees continued to use their own, separate, tracking systems for C.3.b., and C.3.e., reporting requirements.

FY 2021/22 Accomplishments

In FY 2021/22 CCCWP staff, consultants, and permittees staff reconvened the ad-hoc Workgroup to address updates to the ArcGIS Online (AGOL) platform. Permittees currently rely on AGOL to track Hg/PCBs load reductions through GI projects and Source Property referrals to help demonstrate compliance with Provision C.3 and Provisions C.11/C.12. Permittees also use AGOL to track trash load reduction and demonstrate compliance with Provision C.10.

The system has been used for developing maps for the Stormwater Resources Control Plans, Hydromodification and Private Lands Drainage Area, all of which required

submittals in MRP 2.0. There are currently 5 ArcGIS Online applications that Permittees use in order to track and report on compliance with MRP 2.0.

The workgroup met regularly in January to June 2022 and several Development Committee members participated. The workgroup developed a survey to poll AGOL users on desired modifications based on current and future uses as related to new MRP 3.0 requirements. In a final report produced in June 2022, the workgroup summarized the survey findings and outlined the following recommendations:

1. Continue to maintain the AGOL workgroup to provide testing, input and direction on technical issues and provide recommendations.
2. Retain current consultant as the program staff liaison to lead the AGOL workgroup.
3. Prioritize and address the list of technical issues identified in the June 2022 report.
4. Conduct review of available alternatives GIS Systems and web applications in order to inform the development of RFPs for the eventual contract completion with PSOMAS, the current AGOL contractor.

FY 2022/23 Planned Activities

The AGOL Workgroup will continue monthly meetings through December 2022, assist in developing RFQ/RFP to solicit AGOL services, and continue to address technical issues and future needs.

Discussions of C.3 Implementation

Development Committee meeting agendas continued to feature, as a last item in each agenda, “open discussion” for the purpose of allowing Contra Costa Permittees to share questions and experiences regarding C.3 implementation, including implementation of Green Infrastructure Plans.

Design and Engineering Assistance to Municipal Staff and to Applicants for Development Project Approvals

Throughout the fiscal year, CCCWP made the services of the Program's staff and consultant, Dan Cloak, P.E., available to its member Permittees and to the community of land development professionals for consultation on C.3 compliance and LID design and construction. Typically, two to ten requests were fulfilled each month, and varied from e-mailed answers to questions, to review of drawings, to participation in local project review meetings.

FY 2021/22 Accomplishments – Green Infrastructure Planning and Outreach

C.3.j - Assistance to Permittees to Plan and Implement Green Infrastructure

Background and Previous Years' Activities

In 2013, CCCWP initiated discussions within BASMAA of Green Infrastructure as a unifying theme for the soon-to-be-reissued MRP 2.0. CCCWP staff and consultants participated in a BASMAA-sponsored Green Infrastructure Work Group that was launched in early 2014. During FY 2014/15, CCCWP staff and consultants helped draft a proposed green infrastructure provision. Following discussions within BASMAA and with Water Board staff, some elements of that draft were incorporated into MRP 2.0 Provision C.3.j.

During FY 2015/16, CCCWP focused on assisting Permittees to implement the early implementation “no missed opportunities” requirements of MRP C.3.j.ii. CCCWP initiated and drafted the BASMAA Development Committee's *Guidance for Identifying Green Infrastructure Potential in Municipal Capital Improvement Projects* and assisted Contra Costa Permittees to implement routine procedures to assess their capital projects.

Over the next three fiscal years (2016-2019) CCCWP staff and consultants, created resources for Contra Costa Permittees to use in preparing their Green Infrastructure Plans. These resources are available on the *Green Infrastructure Planning Resources* page on www.cccleanwater.org and include a template for creating local Green

Infrastructure Plans, example policies, links to planning and design manuals and engineering details, and presentation slides.

During FY 2018/19 CCCWP prepared, with local and State Water Resources Control Board funding, the Contra Costa Watersheds Storm Water Resources Plan (CCWSWRP), which included a database of potential public Green Infrastructure projects. CCCWP prepared, for the Permittees' use, projections and maps of anticipated redevelopment, by using the Metropolitan Transportation Commission's (MTC's) process for creating transportation demand projections using the UrbanSim model created at UC-Berkeley. These efforts were coordinated with development of the Reasonable Assurance Analysis (RAA), submitted with the FY 2020/21 Annual Report. Technical work products included a *PCBs Load Reduction Attainment Tool*, an optimized PCBs Load Reduction Attainment Scenario, and a *Green Infrastructure Cost Estimation Methodology*.

CCCWP staff and consultants' outreach on Green Infrastructure Planning included multiple presentations to Contra Costa County Planning Directors as well as Public Works Directors and municipal engineers through the City/County Engineering Advisory Committee.

FY 2021/22 Accomplishments

Throughout FY 2021/22, CCCWP staff and consultants, and the staff of Contra Costa Permittees, were engaged in the negotiation of Provision C.3 requirements, including GI retrofit requirements in Provision C.3.j. MRP 3.0 TO was released in September 2021 and it mandated that each municipality retrofit a specified acreage of public roadway during the MRP 3.0 permit term. The required acreage was calculated as 1 acre per 50,000 population served, with a maximum of 10 acres per jurisdiction.

In comments submitted on November 15, 2021, CCCWP permittees proposed that these numeric mandates be eliminated, and that the permit incorporate and support Permittees' Green Infrastructure Plans previously approved by the SFBRWQCB instead. SFBRWQCB staff considered these comments, but the MRP 3.0 adopted in May 2022 continued to include an acreage-based retrofit requirement, although the maximum requirement was scaled back from 10 acres to 5 acres per jurisdiction.

In addition to the MRP 3.0 review and negotiations as related to GI retrofit requirements, CCCWP's consultant assisted Permittees staff throughout the year with planning and design questions related to implementation of specific Green Infrastructure projects. Typical issues included ownership and maintenance responsibility for Green Infrastructure facilities that are constructed as part of street frontage improvements that may be required as a condition of land development approvals.

FY 2022/23 Planned Activities

In the upcoming fiscal year, the CCCWP staff and consultants will focus on assisting Permittees in understanding and meeting the new MRP 3.0 GI retrofit requirements. Permittees staff are concerned that the time needed to plan, design, fund, and build Green Infrastructure projects in roadways is typically more than the 5 years allowed by Provision C.3.j.ii.(2)(a). To this end, the Development Committee will plan to hold a forum on C.3.j retrofit requirements at the September 2022 Committee meeting to discuss Permittees' various options for fulfilling the MRP 3.0 retrofit assignments. CCCWP will develop guidance materials based on feedback from this forum.

Throughout the upcoming year, CCCWP staff and consultants will also continue to assist Permittees staff with planning and design questions related to implementation of specific Green Infrastructure projects.

C.3.e./C.3.j. – Regional Alternative Compliance Program

Background and Previous Years' Activities

CCCWP is participating in the Regional Compliance for a Sustainable Bay project, which is supported by an EPA San Francisco Bay Water Quality Improvement Fund grant to CCCWP member agencies San Pablo, Walnut Creek, and Richmond, in addition to Contra Costa County. The objective of the Project is to develop a Regional Alternative Compliance System (System) with the ability to efficiently and cost-effectively improve surface water quality, achieve multiple benefits, and reduce compliance pressures on jurisdictions and entities subject to stormwater quality requirements. It is intended that the System developed will help facilitate required green stormwater infrastructure/low impact development (GSI/LID) across the San Francisco Bay Area with the potential for

substantial cost savings, all while meeting Municipal Regional Stormwater Permit and Total Maximum Daily Load (TMDL) water quality goals. This Project will develop a System for Contra Costa County permittees, with the intent that the Project deliverables could be easily adapted for other programs and/or entities subject to the same water quality compliance requirements.

In May 2022, Amanda Booth of the City of San Pablo presented to the CCCWP Management Committee on the draft Summary Report for the Regional Alternative Compliance Program and provided a project status update. The presentation covered objectives, review of the system process, metrics, polluting loading, rainfall, process to collect initial capital payment and ongoing O&M payment. The project performed an extensive legal review of the draft system and all deliverables were reviewed by the project Steering Committee, consisting of members from the City of San Pablo, City of Walnut Creek, City of Richmond, and Contra Costa County. In addition to the progress described, the following meetings were held in FY 21-22 for the project:

- Three Steering Committee meetings.
- Two Technical Advisory Committee meetings, with participants including the Steering Committee members.
- One legal review meeting with many permittees legal representatives attending

FY 2022/23 Planned Activities

- *Final Summary Report*
- *CCCWP Final System Presentation*
- *Stakeholder Workshop #2*
- *Tracking tool development*

C.3.i - Green Infrastructure Design Guidance and Standard Specifications and Details

Background and Previous Years' Activities

Contra Costa municipalities' Green Infrastructure Plans include a commitment to participate in a multi-year countywide interagency process, convened by CCCWP, to

facilitate excellence and consistency in the design and construction of Green Infrastructure features and facilities. This process will augment the use of design resources such as the National Association of City Transportation Officials *Urban Street Stormwater Guide* and the San Mateo County *Sustainable Green Streets and Parking Lots Design Guidebook* as common primary resources for determining design elements to be included in streetscape improvements and Complete Streets projects, and the use of CCCWP's *Stormwater C.3 Guidebook* as the primary resource for design specifications and details for constructing Green Infrastructure features and facilities.

A survey of Contra Costa municipal public works directors and capital projects engineers indicated strong support for CCCWP's strategy of compiling design and engineering resources and making them readily available. In addition, respondents were unanimous in supporting countywide interagency collaboration to select and possibly refine details and specifications for use in Contra Costa.

CCCWP staff and consultants initiated the countywide interagency process with a presentation to the City/County Engineering Advisory Committee in January 2020. The next steps are to solicit the participation of City Engineers and capital improvement project managers and to hold a convening meeting.

FY 2021/22 Accomplishments

This project was delayed because of staff shortages and the on-going public health emergency.

FY 2022/23 Planned Activities

CCCWP plans to restart the project in FY 2022/23. Program consultants will draft design drawings, solicit Permittees staff input, and revise and finalize accordingly. The design guidelines will be posted on the CCCWP website and referenced in a future edition of the *C.3 Guidebook*, most likely the 9th Edition as the 8th Edition is anticipated before the design guidelines are finalized.

C.3.j.(4) - Green Infrastructure Outreach and Participation in Processes to Promote Green Infrastructure

Background and Previous Years' Activities

MRP Provision C.3.j.(4) requires Permittees to conduct public outreach, train appropriate staff, and educate appropriate Permittee elected officials. Provision C.3.j.iii. requires the Permittees to track processes and provide information to assist regional, state, and Federal agencies to plan, design, and fund incorporation of Green Infrastructure into local infrastructure projects.

At the countywide level, CCCWP's outreach in previous years (2016-2020) included presentations to the Contra Costa City/County Engineering Advisory Committee (CCEAC), the Contra Costa Planning Directors, the East Bay Municipal Engineers (EBME), and CASQA. CCCWP also provided resources, including templates for plans, documents, and presentations, to assist Contra Costa Permittees with their outreach to local elected officials and the public.

At the regional level, CCCWP supported and participated in regional discussions (2013-2015), which included representatives of the Contra Costa Transportation Authority and Water Board staff that informed the requirements of MRP Provision C.3.j. CCCWP staff and consultants, and staff from Contra Costa Permittees, also participated in BASMAA's grant-funded regional roundtable (2017); that process culminated in preparation of BASMAA's *Roadmap of Funding Solutions for Sustainable Streets* (2018). In February 2021 CCCWP created a 6-minute outreach video, "Rainfall Runoff and Green Infrastructure."

Summary of C.3 FY 2022/23 Planned Activities

- Complete HM Compliance Options Report and begin implementation of recommended option.
- Resolve any outstanding issues related to HM applicability and based on outcomes of interactions with Water Board staff, direct CCCWP's consultant Psomas to revise the draft maps. Publish the maps via website links.

- Develop a “C.3 Update” with an overview of MRP 3.0 changes for Regulated Projects thresholds for distribution to the land development community.
- Produce a memo for Permittees’ CIP planning and public works staff informing them of the changes to LID requirements for road construction and maintenance projects.
- Complete updates to the *Stormwater C.3 Guidebook* and publish the 8th Edition.
- Hold a half-day LID workshop for municipal staff and land development professionals.
- Continue the AGOL Workgroup and improve the AGOL platform for CCCWP Permittees.
- Discuss C.3 implementation examples, problems, and issues at Development Committee meetings. Provide consulting on request to assist local staff with review of proposed development projects.
- Develop countywide guidance, to facilitate consistent compliance with and reporting of new requirements to implement LID on road construction and maintenance projects that are regulated in MRP 3.0.
- Convene a GI Retrofit forum to facilitate Permittees’ planning process for compliance with numerical retrofit requirements in Provision C.3.j.
- Convene and facilitate a countywide interagency process to facilitate excellence and consistency in the design and construction of Green Infrastructure features and facilities.
- Continue to update pages on the CCCWP website with new Green Infrastructure resources and publications.
- Compile and distribute additional design resources for stormwater facilities, including an online library of photos and other materials related to C.3 implementation.
- Create additional development project LID implementation guidance for municipal project design review teams.
- Prepare guidance, consistent with regional reporting requirements, for Permittee preparation of the FY 2022/23 Annual Report.
- Prepare and review FY 2022/23 Annual Report of Program C.3 activities.

- Assist Contra Costa Permittees as needed with reporting C.3 implementation.

SECTION 4 – PROVISION C.4 INDUSTRIAL AND COMMERCIAL SITE CONTROLS

Introduction

During FY 2021/22, Contra Costa Permittees implemented their business inspection programs as follows:

- Antioch, Clayton, Concord, Danville, El Cerrito, Hercules, Lafayette, Martinez, Moraga, Orinda, Pittsburg, Pleasant Hill, San Pablo, San Ramon, and Walnut Creek contract for business inspection services with local sanitary district inspectors (or POTW inspectors). This institutional arrangement of using local POTW inspectors to conduct municipal stormwater inspections was initiated soon after the CCCWP was issued its first Joint Municipal NPDES Permit in 1993. This arrangement has been praised by SFBRWQCB staff for its effectiveness, and has served as a model for other municipalities throughout California. Business inspections conducted by POTW inspectors are referred to in this Annual Report collectively as the “Group Inspection Program”. The CCCWP provides administrative support to the Group Inspection Program. This includes management of the contracts, agreements, invoices and reporting; and, assistance in review and development of annual inspection lists, plans, and goals.
- Brentwood, Oakley, Pinole and CCC currently conduct their own business inspection programs.
- Richmond uses a combination approach for its business inspection program. Stormwater inspections are conducted by municipal staff as well as contracted POTWs inspectors.

FY 2021/22 Accomplishments

During FY 2021/22, CCCWP staff and the CCCWP’s MOC assisted Permittees with implementation of Provision C.4 by:

- Administering the CCCWP’s Group Inspection Program;
- Hosting an Industrial Commercial Stormwater Inspector Training Workshop;
- Supporting and participating in the Contra Costa Green Business Program; and

- Providing Outreach Resources to Businesses.

The following is a detailed account of each activity listed above:

C.4.b,d - Administering the CCCWP's Group Inspection Program

CCCWP staff administers and manages the various inspection agreements for the Group Inspection Program involving the 16 Contra Costa Permittees and three local POTWs (Central Contra Costa Sanitary District, Delta Diablo, and West County Wastewater District). Administration of the Group Inspection Program includes: 1) coordinating the review of amendments and revisions to the inspection agreements, when necessary; 2) receipt and payment of POTW invoices on behalf of the 16 Contra Costa Permittees; 3) assistance to the Contra Costa Permittees and POTW staff in developing inspection goals, ensuring MRP compliance concerns are integrated into business inspections (e.g., identification and proper management of POC, such as PCBs); 4) training of inspectors to promote consistent inspection services countywide; and, 5) field support to inspectors and municipal staff when needed.

CCCWP staff meets with the participating Contra Costa Permittees and POTW staff annually to: assess the services provided; set inspection goals for the upcoming FY; distribute documentation needed for preparation of municipal annual reports; and, review any special issues or enforcement problems that have occurred.

C.4.e - Stormwater Inspector Training Workshop

The CCCWP hosted one Commercial/Industrial Stormwater Inspection Training Workshop in FY 2021/22. Due to the ongoing coronavirus pandemic, the workshop was held on June 22, 2022, via a Zoom webinar. The workshop had 25 attendees and topics consisted of:

- Stormwater Regulatory Overview of C.4/C.5 Under MRP 3.0;
- Investigating Cross Connections in Storm Water;
- Addressing Encampments of Unsheltered Homeless;
- Enforcement & Coordination with the County District Attorney;

Recordings of the presentation were made available to Permittees and their inspectors following the completion of the workshop.

Green Business Program (GBP)

The CCCWP is one of the largest contributing partners to the GBP and in FY 2020/21, provided \$6,000 to support the GBP to assist with carrying out its program mission. The GBP is designed to publicly recognize private businesses and public agencies that take extra steps, beyond baseline compliance with environmental regulations, to prevent pollution and save resources (e.g., conserve water and energy, reduce waste through reuse and recycling, prevent stormwater pollution through good housekeeping practices). This program encourages and helps business managers and inspectors strengthen and sustain the quality of the environment in the County through a collaborative partnership.

Since its inception in 1998, 642 businesses have been certified as Green Businesses in the County. There are currently 212 active Green Businesses. In 2021 the Contra Costa County Green Business Program (CCCGBP) initiated a tiered certification system, including the standard 'certified' tier and a streamlined entry-level 'efficiency' tier. In FY 2021/2022, 20 businesses were certified by CCCGBP (new 'certified': 2 business, new 'efficiency': 0 businesses, 'recertified': 18 businesses).

Municipal stormwater and POTW inspectors assist the GBP by encouraging business to become Green Business candidates. Each certified Green Business must complete a checklist section with pollution prevention and stormwater specific measures. CCCWP staff members serve on the GBP's "Partners Committee," and actively engage in development of the Green Business checklist (i.e., the stormwater pollution prevention section that each business needs to complete before becoming certified as a Green Business).

For FY 2022/23, the Green Business Program will be focusing primarily on the certification of 26 businesses or recertification of 39 businesses, or a combination (1 new business certification = 1.5 recertifications). To accomplish this, the Green Business Program has on staff 1 Hazardous Waste Reduction Manager and 1 Temporary Pollution

Prevention Specialist, with the support of our 24 Green Business Partner cities and agencies.

Providing Outreach and Resources to Businesses

With CCCWP MOC input and direction, CCCWP staff develops and/or updates a variety of business outreach materials, including BMPs brochures and posters, a website, and a telephone hotline. Stormwater inspectors promote these resources during their inspections. In FY 2021/22, CCCWP MOC and Outreach Committees began evaluating brochures for any necessary updates, including but not limited to: updated contact information, development of multiple languages, updates related to MRP 3.0, updates to BMP guidance. The CCCWP has developed recommended revisions and priorities for brochure updates and plans to publish revised brochures in FY 22/23.

Throughout FY 2021/22, CCCWP staff responded to businesses and residents requesting copies of such outreach materials. Business owners use the updated CCCWP website at <http://www.cccleanwater.org/business/> to find information on stormwater pollution prevention practices and how they can make their stormwater inspections as easy as possible. Businesses and residents also use the CCCWP's 1-800-No-Dumping hotline to report illegal dumping in their area to help their business communities prosper from a cleaner environment for their customers. A growing awareness of stormwater BMPs has stemmed from use of these resources and this awareness may help to eliminate non-stormwater discharges.

FY 2022/23 Planned Activities

For over 20 years, the CCCWP and local POTWs have consistently maintained a strong Group Inspection Program. Many of the MRP requirements were already part of Contra Costa Permittees' existing business inspection programs. To promote continuous improvement of the municipal inspection programs, the CCCWP MOC established as planned goals for FY 2022/23 the following activities:

- Work to perform inspections and follow-up inspections;
- Update any procedures or program policies in response to MRP 3.0;

- Conduct a training workshop for industrial and commercial stormwater inspectors;
- Provide training on POC source identification and management;
- Develop other outreach materials as needed; and,
- Continue to participate in, and support, the Green Business Partnership.

SECTION 5 – PROVISION C.5 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Introduction

The majority of MRP requirements related to Illicit Discharge Detection and Elimination (IDDE) are being addressed directly by Contra Costa Permittees. The CCCWP MOC oversees IDDE Group Activities.

FY 2021/22 Accomplishments

In FY 2016/17 CCCWP created a robust inventory, updated outreach material for mobile sources and businesses, and completed a mass mailing of the outreach material and an accompanying cover letter to the list of businesses. In FY 2018/19 Permittees reviewed and updated (as necessary) the minimum standards, BMPs, inspection and enforcement strategies, and outreach materials previously developed. The following IDDE Group Activities were initiated or ongoing during FY 2021/22:

- Managed the 1-800-No-Dumping Hotline and Hazmat Incident Reports;
- Joined and participated in the Illegal Dumping Think Tank, a multi-agency effort to combat illegal dumping throughout Contra Costa County;
- Continued with BAMSC and CCCWP activities related to mobile surface cleaners;
- Continued to respond to notifications of potential IDDE incidents and direct notifications to the respective municipality and provide guidance on response; and
- Continued to promote and offer stormwater pollution prevention car washing kits for charity car washing events.

Provided below is a brief summary of each activity listed above.

C.5.c - 1-800-No-Dumping Hotline and Hazmat Incident Reports

The CCCWP continues to operate the 1-800-No-Dumping Hotline. The Hotline is used by the public to report illegal dumping and to obtain stormwater information. All Hotline calls are referred to the appropriate municipality for follow-up and, if necessary, enforcement. Calls have been logged since FY 2004/05.

Although updates to the project were initiated in FY 20/21, the CCCWP completed a revision of the 1-800-No-Dumping hotline phone tree and scripts. As a result of the update, callers to the hotline are able to access information about illegal dumping in both English and Spanish languages, as well as learn more information about the CCCWP. In addition, the updates to the hotline phone tree and scripts allow callers to report illegal dumping incidents based on the type of material being dumped, as well as report in-progress dumping events to local dispatchers. In FY 2021/22, 432 calls were made to the 1-800-NO-Dumping hotline and the CCCWP received 103 Hotline calls directly. The difference in the number of calls that the CCCWP receives directly is due to the fact that members of the public are now able to contact local municipal dispatchers directly through the revised Hotline phone tree to notify them of dumped materials or illicit discharge. Additionally, RecycleMore (a Joint Powers Authority, or JPA, that serves West County jurisdictions) in partnership with Republic Services, started a free mattress recycling drop off program in February of 2019 that may be helping to alleviate some of the illegal dumping. The West County jurisdictions include El Cerrito, San Pablo, Richmond, Pinole, Hercules, and the unincorporated County (El Sobrante, North Richmond, etc.).

The most commonly dumped materials reported in these calls include garbage, furniture, mattresses and box springs, sofas and appliances. Other commonly reported dumped materials included car parts, grease/oil, tires, yard and landscaping waste, building/construction debris, tires, and household goods. Each Permittee uses the information from the Hotline to identify problem areas that need to be addressed.

The CCCWP also continues to collaborate with the CCC Hazardous Materials Programs Division (HazMat). HazMat's countywide 24-hour spill response is a vital component of Contra Costa Permittees' IDDE programs. Each month, the CCCWP disseminates the HazMat spill response reports (also known as "Incident Reports") to Contra Costa Permittees. These reports inform each Permittee of HazMat incident responses within their jurisdiction. Contra Costa Permittees use this information to track the type and locations of spills and dumping incidents, and to conduct appropriate follow-up. The Contra Costa Fire Protection District (ConFire) has also established a HazMat response team in Pittsburg (Station 87). The team responds to hazardous materials calls within

their jurisdiction or that is called into their dispatch center. ConFire HazMat coordinates with CCC HazMat both for response assistance and to report questionable activities at a business.

More information on each Permittee's IDDE program is provided in the individual Municipal Annual Reports.

CCCWP staff joined the Contra Costa County Illegal Dumping Think Tank in December 2020. Since then, staff have worked collaboratively on educational outreach ideas to educate and dissuade the public from illegally dumping in Contra Costa County. CCCWP staff also assisted in facilitating cities and towns throughout the County to share information and coordinate to reduce illegal dumping. The Taskforce includes the Contra Costa County Public Works, County Health, and County Conservation and Development Departments as well as the County Sheriff's and District Attorney's Office. See Section C.7.c for more information.

C.5.e - BAMSC and CCCWP Activities Related to Mobile Surface Cleaners

BAMSC's Mobile Surface Cleaner Program is a training and certification program for mobile surface cleaners. BAMSC continues to work on these efforts. For a list of activities and accomplishments and additional details, see BAMSC's website for their surface cleaning program⁹.

To augment BAMSC's efforts to address mobile businesses, the CCCWP continued with its own set of actions. When incidents are reported through HazMat, CCCWP reviews all notices for issues with mobile businesses. This information may then be disseminated to stormwater inspectors and municipal staff throughout the county. The tracking spreadsheet also serves to identify businesses that have received two or more citations and may warrant an escalation in enforcement action.

⁹ <https://basmaa.org/featured-programs-projects/surface-cleaning-program/>

Charity Car Wash Kits

In FY 2007/08, the CCCWP created and implemented a charity car wash pilot campaign to help charity car wash sponsors avoid illegal discharges of wash water to storm drains. The charity car washing campaign included the creation of a brochure and several car washing kits containing: one submersible pump; one 50 ft. electrical extension cord; one 3 ft. X 4 ft. rubber mat; one 50 ft. garden hose; one metal spray nozzle; three collapsible safety cones, and tape. The brochure instructs charity car wash organizers on how to conduct a car washing event without discharging wash water into the storm drain system. The brochure instructs organizations to 1) contact the CCCWP; 2) make sure that charity car washes are legal within their municipality; and 3) use the car washing kit in accordance with the instructions provided.

The charity car wash kits were not used in FY 2021/22. The drop in usage of the kit may be in response to previous drought conditions and may indicate that organizations have transitioned to other types of fundraising activities. The CCCWP will continue to promote and track the use of these charity car wash kits in FY 2022/23.

FY 2022/23 Planned Activities

A focus for CCCWP will be assisting Permittees in addressing any new and ongoing requirements identified in MRP 3.0 provisions. Other planned Program activities for FY 2022/23 include:

- Continuing to staff the 1-800-No-Dumping Hotline;
- Continue to participate in the Contra Costa County Illegal Dumping Taskforce
- Continuing to distribute CCC Hazmat Division's incident response reports to Contra Costa Permittees;
- Promoting the charity car wash kit;
- Revisiting the model IDDE response plan for further review and finalization;
- Assisting Permittee in their responses to illicit discharges and spills; and,
- Providing input and support for BAMSC'S expanded mobile surface cleaners program and associated work efforts.

SECTION 6 – PROVISION C.6 CONSTRUCTION SITE CONTROLS

Introduction

The CCCWP's Development Committee facilitates Contra Costa Permittees' implementation of MRP Provision C.6 requirements and provides direction to CCCWP staff and consultants. During FY 2021/22 the Development Committee was chaired by Joe Camaddo (City of Pittsburgh). John Steere (Contra Cost County) served as vice-chair. Staff from Antioch, Brentwood, Clayton, Concord, Contra Costa County, Danville, Hercules, Lafayette, Moraga, Oakley, Pittsburg, Pleasant Hill, San Ramon, and Walnut Creek were voting members of the Committee. The Committee met monthly throughout the fiscal year, except for November. The November and December meetings were combined to accommodate end-of-the-year holidays.

The Development Committee's FY 2021/22 goals were:

- Facilitate member agencies' compliance with MRP Provision C.6.
- Facilitate member agencies' efforts to reduce erosion and sedimentation, and discharge of pollutants, from construction sites.
- Continuously improve Program outreach and guidance on construction-phase controls.
- Facilitate member agencies' compliance with the Construction General Permit (for agency-sponsored projects)

FY 2021/22 Accomplishments

C.6.f - Construction Inspector Training

To assist Contra Costa Permittees to comply with MRP Provision C.6.f.ii., CCCWP sponsors training for permittee construction inspection staff biennially. The previous biennial training was in FY 2019/20. The FY 2021/22 training was held on March 30, 2022, jointly with the Alameda County Clean Water Program (ACCWP). The workshop was attended by 133 municipal agency staff and 11 consultants. The training was held virtually, on the *GoTo Training* platform; it was recorded and made available to ACCWP and CCCWP members.

The presentations provided foundational C.6 information, pending updates to the Construction General Permit (CGP) and the MRP, and inspection case studies. The inspection case studies drew from experiences three presenting stormwater construction inspectors and was followed up with an extended panel discussion with the participants.

Pre- and post-workshop surveys provided insights into the knowledge of the participants before and after the workshop. The pre-workshop survey had an average correct response rating of 70% that improved to 81% in the post-workshop survey.

Participants were also asked to provide feedback on the Workshop. Seventy-two percent of the attendees (104 out of 143) completed evaluations. Approximately 50% of the attendees stated a preference for future online trainings with the remaining 50% split between no preference and in-person trainings.

The survey also asked “What C.6 questions did you wish were covered, or were not covered enough in this workshop? These responses, which help to identify future training topics and needs, included: additional information on enforcement tools and options for non-responsive contractors; overview of inspection forms and other tools available for inspectors; Water Board contacts; clarification on CGP disturbance thresholds and comparison to MRP C.6 requirements; review of small project Erosion Control Plans.

FY 2022/23 Planned Activities

The following may be implemented during FY 2022/23 depending on Permittee requests and availability of resources:

- Assist Contra Costa Permittees to update enforcement response plans as needed. Review and update warning notice forms and guidance for use.
- Investigate the need to update construction inspection reporting forms and update as necessary. Continue providing support as needed for use of forms. Assist Contra Costa Permittees to respond to Water Board requests for submittal of inspection data.
- Assist Contra Costa Permittees with construction general permit (CGP) compliance and reporting requirements as needed. Discuss CGP compliance and

reporting requirements at Development Committee meetings and Provide updates on changes to the CGP.

SECTION 7 – PROVISION C.7 PUBLIC INFORMATION AND OUTREACH

Introduction

The CCCWP Public Information and Participation (PIP) Committee, with assistance from CCCWP staff and consultants, is responsible for overseeing the development of materials and products, information dissemination, marketing and public outreach related to stormwater pollution prevention. Starting in FY 2019/20 and continuing in FY 2021/22 the CCCWP Administrative Committee joined the PIP Committee as voting members in order for the PIP Committee to have sufficient voting members. Most of the public information and outreach requirements in the MRP are contained in Provision C.7; however, additional outreach activities are required or encouraged in other MRP provisions as well. The CCCWP PIP Committee works to identify and coordinate the public information and outreach mandates conducted as a group and/or regionally through BAMSC's PIP Committee. Attachments 1.2 and 1.3 provide a list of CCCWP representatives to BAMSC's PIP Committee, and participation and attendance at CCCWP PIP Committee meetings, respectively. In FY 2021/22, Melinda Harris (CCC Flood Control District) served as Chair and Kerry Parker (City of San Ramon) served as Vice-Chair, respectively, of the CCCWP joint PIP/Administrative Committee. The CCCWP's public information and outreach budget was supplemented by CalRecycle Oil Payment Program (OPP) Grant funds.

During the 2021/22 fiscal year the Contra Costa Clean Water Program executed a variety of projects to engage the community and youth in clean water efforts. These accomplishments include the creation of an educational video to be used in coordination with partner agencies, on social media, and featured on the CCCWP website¹⁰. During FY 2021/22, work began on a second educational video that will be available in FY 2022/23. Both videos incorporate animations and subject matter experts to illustrate the importance of community engagement and clean water. Additionally, CCCWP expanded its social media tactics by incorporating the use of a Snapchat filter to target the youth

¹⁰ <https://www.ccleanwater.org/>

demographic, captured 360 VR videos to be used on social media, and published paid social campaigns to amplify the program's call to action. Through the expansion of the program's efforts, CCCWP has seen growth in visitors to the CCCWP website, likes on the program's Facebook page, and overall engagement on Instagram. For further details of the CCCWP's social growth, see *C.7.c Stormwater Pollution Prevention Education*.

The remainder of this section documents public education and outreach activities conducted collectively in Contra Costa County.

FY 2021/22 Accomplishments

C.7.b - Outreach Campaigns

A paid likes social media campaign ran from December 2021 – April 2022 to expand the program's efforts and reach on Facebook. The content shared included imagery of Contra Costa County to encourage residents to engage with the ad. The paid likes campaign increased Facebook likes by 19% and boosted post engagement for the five-month period. Additionally, the ads published linked viewers to the program website which led to 35% of new visits via Facebook. The completion of the paid likes campaign resulted in a 59% increase in likes by women, with the majority falling in the 25-34 age demographic. Overall, the campaign reached 50,489 people in the local area.

Additional promoted posts were delivered throughout the fiscal year expanding the program's message and highlighting key pollutants of concern.

Content promoted on Facebook resulted in:

- Reach: 97,779
- Impressions: 226,990
- Likes: 1,797
- Engagement: 2,515
- Clicks: 598
- Video Views: 5,821

Website Analytics:

- Sessions: 18,428 (+33% from FY 2020/21)
- Users: 14,000 (+35% from FY 2020/21)
- Organic Sessions: 3,695

Instagram Analytics:

- Followers: 326 (+10.8% from FY 2020/21)
- Likes: 383

C.7.c - Stormwater Pollution Prevention Education

- Working with Sagent, CCCWP utilized links on paid and organic social media content to drive users to the website. Video content was also created and shared with partners, to drive traffic to the CCCWP website. These tactics directed 14,000 users to the website, 98% of which were new users.
- CCCWP staff worked with Sagent to implement improvements to the CCCWP website in order to make it more consumer-friendly and prioritize new content. Updates included revising the event calendar to be an organization-focused current events page and placing the Illegal Dumping video (created in FY 2021/22) on the website's front page. Additionally, Sagent submitted monthly newsletters to the website editor to be placed on the front page, ensuring residents can locate the document quickly.
- In addition, the CCCWP provides a 1-800-No-Dumping Hotline where people can call and report illegal dumping, as well as obtain stormwater information. Calls regarding illegal dumping are forwarded to the appropriate Permittee for follow-up as needed. Further details regarding these calls are provided in Section 5 of this Volume 1 report.
- CCCWP continued IPM engagement through Our Water Our World (OWOW) outreach in retail locations as well as online workshops for the public; continued outreach to school-age children with the OPP/Mr. Funnelhead programs; and utilized the watershed diorama at three community events and one staff training.

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

Contra Costa Permittees conducted several public outreach efforts and citizen involvement events as a group in order to reach a broad spectrum of the community with both general and specific stormwater runoff pollution prevention messages. Several efforts were conducted countywide, and are described below:

- **Social Media** – CCCWP expanded its use of social media to include Instagram and YouTube in FY 2019/20. In FY 2021/22, CCCWP continued to utilize Facebook, Instagram, and YouTube and expanded its use of social media to include Snapchat. Sagent continued to use an expanded social media approach to promote involvement at events. Utilizing Facebook and Instagram they shared Permittee and partner recommendations for public outreach and community involvement events. YouTube (https://www.youtube.com/channel/UC0x-EX-fgMRk9DXfGeE9Q_w/videos) now serves as the host library as the CCCWP video series content is developed.

Facebook¹¹ & Instagram¹² – CCCWP published content about integrated pest management, proper disposal of trash and pet waste, and safely consuming fish caught in local water bodies several times a week. The social media posts also highlighted community-based organizations' stormwater pollution prevention events. Content spotlighted organizations that focus on youth education, integrated pest management, and proper disposal.

Snapchat – CCCWP created a local Snapchat geo-filter for organizations to use during the 2021 California Coastal Clean-Up Day events in Contra Costa County.

YouTube¹³ – The updated Illegal Dumping video was published on January 10, 2022. Since it's posting, the video has received 5,821 views across YouTube, Instagram, and Facebook. The video can be viewed at https://youtu.be/7CaPFM_9CqQ.

- **Bringing Back the Natives Garden Tour** – This public outreach and citizen involvement event promotes the idea of water-saving, pesticide-reduced gardening through planting of native species. Contra Costa Permittees sponsored the 2022 18th Annual Bringing Back the Natives Garden Tour, which included both

¹¹ <https://www.facebook.com/cccleanwaterprogram/>

¹² <https://www.instagram.com/cccleanwater>

¹³ https://www.youtube.com/channel/UC0x-EX-fgMRk9DXfGeE9Q_w

virtual¹⁴ and in-person tours. The online tours took place on Saturday, April 16 and Sunday, April 17, 2022. 968 unique viewers watched the Saturday tour, and 577 unique viewers watched the Sunday tour. The in-person tour was a two-day event this year for the first time in the program's history. Bayside gardens (Pinole to Fremont) were open on Saturday, April 30, and Inland gardens (Martinez to Livermore, including Orinda and Moraga) were open on Sunday, May 1, 2022. There were 50 gardens open on the in-person tour across the two days and 10,816 garden visits were made. A total of 3,036 people registered for the events and 40% of registrants participated in both the online and in-person tours. There have been more than 100,000 views of the Tour's YouTube channel to date and the channel has nearly 2,000 subscribers. For a detailed summary about the Tour, see Attachment 7.1 of this Volume 1 report.

- **OWOW** – As in past years, Contra Costa Permittees partnered with the OWOW Program to help raise awareness of the connection between pesticide use and water quality, and to provide information to consumers (at the point of purchase) about IPM and less-toxic alternatives that reduce or eliminate impacts to water quality. Thirty-four stores participated in this public outreach program, with 92 store staff receiving formal training during 23 OWOW store trainings. Three in-person outreach/tabling events reached over 65 people, while eight webinars reached over 700 attendees. Additionally, webinars recorded during FY 2020/21 continued to be viewed online. For a detailed report on this year's efforts, see Section 9 and see Attachment 9.1 of this Volume 1 report.
- **CCCWP Current Events** – Due to reduced public events during the COVID-19 pandemic, the CCCWP event calendar shifted to a list of organizations that may host watershed-related community events, activities, and volunteer opportunities on the CCCWP Current Events webpage at <https://www.cccleanwater.org/community/get-involved/events>. A secondary goal in maintaining the Current Events page is to increase traffic to, and use of, the

¹⁴ <https://www.youtube.com/c/BringingBacktheNativesGardenTour>

CCCWP website and its information resources to increase awareness of stormwater quality and pollution prevention practices.

- **Volunteer Field Monitoring Equipment Maintenance Support** – CCCWP budgets for an annual contribution of \$1,000 to maintain field monitoring equipment used by creek groups and volunteer field monitors. This equipment is housed by the CCC Department of Conservation and Development.

C.7.e - Watershed Stewardship Collaborative Efforts

- **Contra Costa Watershed Forum (CCWF)** – CCCWP staff attends and participates in CCWF meetings, an open committee of some 50 organizations, including state and local agencies, local non-profit environmental and education organizations, community volunteer groups, and private citizens. The CCWF operates on the premise that actions in a watershed are inter-related, and that broad participation and cooperation is needed to effect change. Concerned with urban, suburban, and rural areas in the San Francisco Bay Delta area, the CCWF facilitates local agency and citizen collaboration, fosters innovative strategies for stewardship and protection of watershed resources, and encourages regional capacity building in Contra Costa and neighboring areas.
- **Green Business Program** – CCCWP continued to provide staff support and financial assistance to the GBP to help with its outreach activities to the business community, including the certification and recertification of Green Businesses. CCCWP continues to be a major contributor to the GBP. Strategic meetings are held quarterly. For more details on the GBP, see Section 4 of this Volume 1 report.

C.7.f - School Age Children

This provision requires Permittees to individually or collectively implement outreach activities designed to increase awareness of stormwater and/or watershed messages in school-age children. In FY 2021/22, the Contra Costa Permittees, individually and collectively, implemented several youth-oriented outreach programs, which are discussed below:

- **Social Marketing** – CCCWP’s monthly social media content shares helpful and easy tips that Contra Costa County youth can use at home and at school to engage in pollution prevention activities. Sagent utilizes user-friendly language and creative content that engages this demographic through CCCWP social media accounts.

Snapchat Filter – CCCWP connected with the youth of Contra Costa County through the development and use of a Snapchat geo-filter for local cleanup events during the 2021 California Coastal Clean-Up Day events. This filter focused on spreading awareness of the importance of properly disposing of litter to prevent it from reaching local waterways. To participate, Snapchat users logged into the app could take a photo of their coastal clean-up activities and then swipe through the available filter options to the CCCWP-provided filter. The filter was promoted with a paid ad on social media, targeting students to use the filter, and information about the filter was shared with all local event hosts.

- **OPP Grant & Mr. Funnelhead** – The OPP strives to reach across all age groups, but places particular emphasis on youth for two reasons: (1) teaching positive behaviors to young children early can result in the behavior being a part of their daily lives; and (2) children can influence behavior change in their parents and other adults. Several Contra Costa Permittees provided their allocation of OPP grant funds to the CCCWP for implementation of an ongoing, countywide comprehensive effort in FY 2021/22. There are several components of the OPP: 1) certifying and recertifying used-oil recycling centers throughout the County; 2) providing educational programs targeted to elementary schools throughout the County; 3) providing outreach at community events countywide; 4) providing programming to educate and entertain people about the importance of recycling used motor oil; and 5) providing outreach through a cable advertising component. A “Mr. Funnelhead” website exists as an additional outreach tool at www.funnelhead.com. A summary of OPP activities is reported below:

Used Oil Collection Center Certification - There are 67 certified oil collection sites in CCC, 12 of which were visited by CCCWP's OPP Grant consultant during FY 2021/22. At the 12 sites visited in FY 2021/22, there were 1,560 used filters and 4,860 gallons of oil recycled.

"The Filter Crush" - During FY 2021/22, the CCCWP's Used Oil Recycling Program continued to share Public Service Announcements (PSAs) entitled "The Filter Crush" with local channels in Contra Costa County. The PSAs are available in English and Spanish and were created in cooperation with the West Contra Costa Integrated Waste Management Authority (also known as RecycleMore). They focus on oil filter recycling and feature Ruby Lopez, a bilingual professional actress who has worked throughout the Bay Area. In the PSAs, Lopez plays an auto mechanic who shows how much oil can be left in an oil filter after draining, followed by a shot of an oil filter being crushed in a clear filter crusher to show the amount of residual oil. These PSAs can be seen at: <https://youtu.be/BulmUlfSvxQ> (English) and <https://youtu.be/6-L0QjJ4u9U> (Spanish).

Mr. Funnelhead - Matt Bolender, CCCWP's OPP Grant consultant, uses the Mr. Funnelhead character to provide educational outreach. Now in its 26th year, the Mr. Funnelhead School Education Program virtually visited 11 schools and educated 3,695 students via Zoom presentations about the importance of used oil and filter recycling. This year's show, "It Came from Boggy Lake," featured several actors portraying the characters Dastardly Dana, Slimer, and Mr. Funnelhead. Featuring professional actors, lighting, and sound, the show has been the most talked about and memorable part of the program each year. Conducting the program over Zoom had its constraints, but it allowed students from all over the County to be educated via this unique experience. Clips from this year's performances can be viewed at: <https://youtu.be/qMEOyh2JLqQ> and <https://youtu.be/drWnqggliVQ>.

Additional Outreach - Another highlight of the program was outreach to children and adults about the importance of recycling used motor oil and filters with the use of a diorama/biosphere. The diorama/biosphere captivates children and adults through its use of flowing water and figurines to provide a unique focus on recycling motor oil and filters. Over the past 11 years, OPP has created several stories using the diorama/biosphere that intrigue audiences between the ages of 4 and 80 and infuse them with information about the importance of recycling of used motor oil and filters. This year the program educated 3,125 children and adults at 12 events about this important subject.

Annual Art Contest - Mr. Funnelhead also holds an annual art contest where children incorporate Mr. Funnelhead into their own message about recycling used oil. Prizes are given to the top three artists. To see this year’s contest winners and their artwork, visit <http://www.funnelhead.com>.

- **CCCWP Watershed Diorama** - The CCCWP’s Watershed Diorama is provided to, and used by, Contra Costa Permittees and stakeholder organizations for youth-education programs and various public outreach events. The Watershed Diorama is a hands-on model which shows how rain becomes stormwater runoff carrying dirt, garbage, and other pollutants found in the urban environment into storm drains, which flow untreated to local creeks, the Delta, and the Bay. In FY 2021/22, the diorama was reserved for three public outreach events and one staff training, as follows:

Table 7-1: Watershed Diorama Use

<u>Use Date</u>	<u>Entity</u>	<u>Event</u>
8/5/2021	Contra Costa County	Maintenance Training
4/8/2022	City of Oakley	Science Week
4/22/2022	City of San Pablo	Outreach

5/5/2022	Contra Costa County	CC Block Party
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FY 2022/23 Planned Activities

- Increase awareness of and expand partnership with Friend of the Creek organizations and clean-up events with shared calendars, social media posts, e-mail blasts.
- Continue to expand social media channels and promote involvement at events.
- Increase awareness of the Bringing Back the Natives Garden Tour partnership including program ad and recognition.
- Continue to generate awareness and participate in the Mr. Funnelhead Program targeting Oil Recycling messaging.
- Expand partnerships and shared outreach opportunities with Kids for the Bay, East Bay Regional Park, Contra Costa County Public Works and the Contra County Resource Conservation District.
- Finalize and share the Fish Risk video on the CCCWP YouTube channel, website, and social media pages.
- Continue to provide outreach to school-age youth through targeted social media posts and consider new ways to reach this demographic.
- Review and update CCCWP stormwater pollution prevention brochures and create new brochures as needed.
- Launch a paid media campaign in partnership with Caltrans' "Let's Change This to That" campaign, which focuses on reducing the amount of litter that ends up in waterways. The paid media campaign will include digital, social, radio, and out-of-home ads.

SECTION 8 – PROVISION C.8 WATER QUALITY MONITORING

Introduction

Reporting on implementation of the Provision C.8 Water Quality Monitoring requirements is provided in the *Urban Creeks Monitoring Report, Water Year 2021* (2021 UCMR) submitted to the SFBRWQCB and CVRWQCB on March 31, 2022. This report is available at <https://www.cccleanwater.org/monitoring/monitoringreports>.

Pyrethroid pesticide and toxicity monitoring conducted since 2012 in compliance with Provision C.8.g fulfilled requirements of the Central Valley Water Board's TMDL for Pyrethroid Pesticides, applicable to East County Permittees (the Cities of Antioch, Brentwood, and Oakley, and portions of unincorporated County and the Flood Control District locates within Region 5) in WY 2021.

SECTION 9 – PROVISION C.9 PESTICIDES TOXICITY CONTROLS

Introduction

BAMSC and CCCWP staff, consultants and MOC members provided the following assistance to Contra Costa Permittees' efforts to reduce pesticide toxicity in local creeks during FY 2021/22:

- Tracking and participating in pesticide regulatory initiatives;
- Promoting opportunities for training events for municipal employees and contractors on IPM and similar programs;
- Providing outreach to residents and the general public on less-toxic pesticides and proper pesticide use and disposal; and
- Coordinating with, and reporting to, the CCC Agricultural Commissioner on improper pesticide use.

FY 2021/22 Accomplishments

CCCWP's MOC provides a forum for Contra Costa Permittees to share information on common issues and lessons learned related to reducing pesticide toxicity in the County's urban creeks. A summary review of activities conducted as a Group Activity is provided below.

C.9.b - Train Municipal Employees on IPM Practices

CCCWP did not sponsor workshops for municipal staff and their contracted employees during FY 2021/22. However, throughout the FY, CCCWP notified Permittees about IPM trainings being conducted in the Bay Area and recommended that if Contra Costa Permittees have municipal staff that apply or use pesticides and need training, to sign up for these workshops.

C.9.d - Interface with CCC Agricultural Commissioner

During FY 2021/22 at the June MOC meeting, Deputy Agriculture Commissioner Beth Slate from the Contra Costa County Department of Agriculture made a presentation to the Committee. Ms. Slate discussed headquarter inspections and annual audits of municipal facilities, as well as pesticide disposal practices including public interface and outreach.

CCCWP contacted Deputy Agriculture Commissioners Beth Slate and Erin Herbst to inquire as to whether there had been any reports of improper pesticide usage that occurred in FY 2021/22. It was reported that there had been no violations of pesticide use affecting stormwater.

C.9.e - Public Outreach

- Point of Purchase Outreach: The CCCWP funds and participates in the OWOW Program, which provides educational outreach directly to the consumer/user at the point of purchase (i.e., in the store). The OWOW Program is implemented both regionally and locally. Further details regarding regional implementation of the OWOW Program are provided in Attachment 9.1 *Contra Costa Clean Water Program, Our Water Our World Store Partnership Program Report, 2021-2022*.

Locally, the CCCWP distributes OWOW educational literature in stores for customers and classes/presentations for the public at community events. CCCWP staff promotes OWOW through its website and direct interactions with citizens, schools, and businesses. In addition, many Contra Costa Permittees provide educational flyers at their city or county offices (public counters). A total of 34 Contra Costa stores participated in the OWOW Program in FY 2021/22. All 34 stores were set up with literature racks, fact sheets, and shelf talkers, as well as QR code posters on display.

One of OWOW's primary outreach tools is to set up a table where they can promote eco-friendly products, answer customer questions and work with them in the aisle

on product choices. This is a chance to reach customers at point-of-purchase. They also set up tables at community events to introduce the OWOW program to a broader audience, promote eco-friendly methods and products, and explain how the fact sheets and shelf talkers can help in product selection. This year, OWOW was able to provide formal store trainings, tabling events, as well as led a series of online webinars in order to stay in touch with the public and the store customers. In addition, OWOW developed modern alternatives to the printed fact sheets by developing a poster with QR codes available for each fact sheet, which was placed in stores alongside each of the OWOW informational racks.

- Store Staff Training: Training on the OWOW Program was provided to staff at 23 key stores in FY 2021/22. There were 92 staff trained at formal training events. Trainings included information on:
 - An OWOW partnership program overview,
 - Pesticide pollution and impacts on water quality through storm drains and sewers; pesticides of particular concern; how and where to dispose of pesticide products no longer wanted.
 - Where to dispose of local household hazardous waste.
 - How to identify common beneficials and pests; planting to attract beneficials; new/invasive pests/diseases to watch for.
 - Benefits of organic fertilizers, compost and mulch; nutrient run-off; chemical salt buildup from fertilizers; the importance of building up the soil foodweb.
 - Techniques for managing specific pest problems and the eco-friendly products they carry for these pests; active ingredients and how eco-friendly products work, and information on invasive pests.
 - Tips for working with customers on how to choose and use products.
 - How to find and use on-line resources, including the OWOW 'Ask the Expert' feature and the UC IPM website.

Each training participant received a packet of information and resources, including:

- The Mac's Field Guide Good Garden Bugs of California
- Monthly Pest-at-a-glance Calendar

- How Less-Toxic Products Work
- Applying Beneficial Nematodes
- Lose Your Lawn the Bay-Friendly Way (sheet mulching instructions for lawn reduction projects)
- *10 Most Wanted Bugs in Your Garden* brochure
- OWOW pocket guides
- Sheet mulching instructions
- Additional pest management information sheets on: citrus leaf miner, codling moth, dormant spraying, whitefly, beneficial nematodes, and bed bugs
- OWOW Resources (websites, books, and the location of local Household Hazardous Waste Collection Sites.)

Trainees also receive pre- and post-training surveys to determine effectiveness of training on the connection of pesticides to water quality and proper disposal of pesticides.

- Webinars: Given the constraints of COVID-19, OWOW successfully implemented a 8 free webinars on a variety of topics, which were very successful and reached an audience of over 1200 participants. Topics included: fall planting tips and garden maintenance, organic rose care, eco-friendly pest management, and maintaining landscapes in a drought. In addition to the successful webinars provided over the course of FY 21/22, OWOW continued to receive views and engagement on previous webinars delivered in FY 20/21. Virtual education continues to provide reach and engagement with the public beyond individual in-person tabling events.
- OWOW as a training tool: In FY 21/22 Sloat Garden Centers began encouraging associates to watch additional OWOW educational webinars that are archived on the website and on the OWOW YouTube channel. Throughout FY 21/22, 45 associated continued their education and training by viewing recorded webinars.
- Tabling Events: Although the OWOW program continued to experience challenges associated with COVID19, the program was able to provide 3 in-person tabling events that reached and engaged with 81 people. Typical topics at the tabling

events included eco-friendly pest solutions, sheet mulching techniques, and integrated pest management.

- Social Media: In FY 21/22, OWOW assisted the CCCWP in posting nine (9) bilingual “OWOW IPM Tips” across CCCWP social media accounts.
- Outreach to PCOs: CCCWP performs outreach to PCOs by mailing PCOs a letter and flyer and encouraging them to attend the annual Pesticide Applicators Professional Association (PAPA) seminar held in Contra Costa County. The FY 2021/22 seminars were all held as webinar-based trainings.

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

In recent FYs, the CCCWP, along with other BAMSC members and stormwater programs statewide, invested considerable efforts in tracking and participating in the USEPA and Department of Pesticide Regulation actions related to urban uses of pesticides to reduce the amount of toxic pesticides impacting urban waterways. The most recent efforts in this area may be found in CASQA’s *Pesticides Subcommittee Annual Report and Effectiveness Assessment 2021-2022* submitted separately by CASQA on behalf of Contra Costa Permittees and included in the attached Regional/Statewide Supplemental Reports.

FY 2022/23 Planned Activities

Planned activities for FY 2022/23 may include:

- In conjunction with the MOC, determining if training of municipal employees and their contractors on landscape and/or structural IPM should be conducted by CCCWP or left to the individual Contra Costa Permittees;
- Continuing to support regional and CCCWP’s OWOW Programs; continuing to track and participate in relevant pesticide-related regulatory processes and initiatives through BAMSC and CASQA;
- Continuing to provide outreach to PCOs by promoting PAPA seminars held in CCC or identifying other meaningful ways to promote IPM to PCOs;
- Continuing to interface with County Agricultural Commissioners; and

SECTION 10 – PROVISION C.10 TRASH LOAD REDUCTION

Introduction

In FY 2021/22, CCCWP directed its efforts to address Provision C.10 requirements in three areas to assist Contra Costa Permittees in meeting their trash load reduction requirements. These efforts included participating in the regional and statewide efforts on trash-related issues affecting stormwater; continuing to coordinate efforts with Caltrans to identify mutually beneficial projects that reduce trash loads; and communications with Regional Water Board staff regarding MRP 3.0 trash provisions.

FY 2021/22 Accomplishments

Participating in the BAMSC Trash Subcommittees and Statewide Efforts

CCCWP staff participate in the BAMSC Trash Subcommittee and MRP 3.0 Workgroup. CCCWP staff is participating in the Ocean Protection Council's *Statewide Trash Monitoring Methods Project* being conducted in collaboration with the State Water Board, the San Francisco Estuary Institute, and the Southern California Coastal Water Research Project. CCCWP is a stakeholder in this endeavor and will be attending future stakeholder meetings as they occur.

Coordinating Trash Reduction Efforts with Caltrans

In FY 2021/22, CCCWP continued to serve as a liaison between Caltrans and Contra Costa Permittees. CCCWP provided information to Permittees on the criteria that Caltrans required for candidate projects to qualify for assistance and identified factors that would help a project's overall ranking and what minimum information they should include with their project submittal. In FY 2021/22 several Contra Costa Permittees submitted potential collaborative projects with Caltrans, and worked to move forward on agreements.

FY 2022/23 Planned Activities

CCCWP staff and consultants will continue to coordinate and support Contra Costa Permittees in refining and implementing their *Long-Term Trash Load Reduction Plans*.

Furthermore, CCCWP will work to support Contra Costa Permittees in meeting MRP 3.0 trash load reduction requirements. Support will include further refinement, development and training of the countywide GIS Platform and associated applications; continued involvement in regional Trash Committees and stakeholder meetings from the Ocean Protection Council; exploring project and funding opportunities with Caltrans; and developing regional reports in response to MRP 3.0 Trash Load Reduction requirements.

SECTION 11 – PROVISION C.11 MERCURY AND METHYLMERCURY CONTROL PROGRAM

Introduction and Overview of Countywide Implementation of Two TMDLs

Provision C.11 of the MRP Implements the TMDL for Mercury in San Francisco Bay, applicable to Permittees located within Region 2¹⁵. Provision C.16.5.h implements the TMDL for Mercury and Methylmercury in the Sacramento San Joaquin River Delta, applicable to East County Permittees located within Region 5. CCCWP coordinates mercury monitoring, reporting of control measures, and assessing effectiveness on a Countywide level to be responsive to both applicable TMDLs and associated permit provisions.

MRP Provision C.11 requires that the Permittees implement a mercury control program including source control, treatment control, and pollution prevention actions to make substantial progress toward achieving the urban runoff mercury load allocations established for the TMDL.

The TMDL implementation plan calls for attainment of the urban runoff load reduction goals by February 2028. Mercury TMDL compliance can be demonstrated through three different approaches¹⁶:

1. Show that mercury concentrations in suspended sediments discharged by urban stormwater are below 0.2 milligrams per kilogram (mg/kg) (i.e., monitoring-based compliance demonstration using grab and / or composite sampling to measure mercury and suspended sediment concentrations).

¹⁵ Permittees located in Region 2 (the San Francisco Bay Basin) include the Cities of Clayton, Pittsburg, Concord, Martinez, Pleasant Hill, Walnut Creek, San Ramon, Lafayette, Orinda, El Cerrito, Richmond, San Pablo, Pinole, Hercules, the Towns of Danville and Moraga, and portions of unincorporated Contra Costa County and the Flood Control District. The Cities of Brentwood, Antioch, or Oakley, and portions of unincorporated County and the Flood Control District (known as East County permittees) are located in Region 5, (the Central Valley Basin).

¹⁶ See Order No. R2-2015-0049 as amended, Attachment A (Fact Sheet) Page A-105 for definition of three pathways to comply with the San Francisco Bay Mercury TMDL

2. Show attainment of the WLA as a rolling 5-year average (i.e., through monitoring flows and event mean mercury concentrations, combined with numeric modeling applied to unmonitored storms).
3. Demonstrate the required load reductions can be achieved over time by a program of source control and treatment measures, with quantitative evidence of the load reduction benefits of control measures applied.

CCCWP Permittees in Region 2 are pursuing the third pathway for compliance with the San Francisco Bay Mercury TMDL. The Implementation Plan, Schedule, and Reasonable Assurance Analysis for Achieving PCBs and Mercury Total Maximum Daily Load (TMDL) Load Reduction Goals (TMDL Implementation Report) was provided with the Fiscal Year 2019/20 Annual Report. The waste load allocation (WLA) applicable to urban runoff discharges from CCCWP Permittees in Region 2 is 11 kg/yr. The TMDL Implementation Report parses the 11 kg/yr WLA into a load reduction goal that focuses on MRP areas where Permittees will implement mercury control measures.

East County Permittees completed and submitted a Methylmercury Control Study Report to the Central Valley Water Quality Control Board in FY 2018/19. That report established the requirements of MRP Provision C.16.5.h when Order No. R2-2019-0004 amended the MRP to include East County Permittees. Accomplishments under Provision C.16.5.h are described separately in Section C.16.5 below (Central Valley Provisions Applicable to East County Permittees).

CCCWP Permittees are implementing a coordinated Countywide approach to both the Region 2 Mercury TMDL and the Region 5 Methylmercury TMDL. Both TMDLs result in control measures focused on pollution prevention, source control, and long-term implementation of green stormwater infrastructure through development and redevelopment, with some incremental contribution from public green stormwater infrastructure projects as funding and planning constraints allow.

FY2021/22 Accomplishments

C.11.a - Implement Control Measures to Achieve Mercury Load Reductions

MRP 2.0 Provisions C.11.a.iii.(2) and C.12.a.iii.(2) require reporting a list of the Watershed Management Areas where mercury and PCBs control measures are currently being implemented and those in which new control measures will be or have the potential to be implemented during the term of this permit, along with the specific control measures and an implementation schedule. Although many of the control measures may be selected primarily for the purpose of achieving PCBs load reductions during this permit term, substantial mercury load reductions may result as a tangential benefit and will be accounted for in tracking mercury load reductions. A *Mercury and PCBs Watershed/Management Areas, Control Measures, and Load Reduction – Update 2022* report (WMA report) was prepared by the CCCWP to fulfill the requirement of MRP Provision C.11.a.iii.(3) and C.12.a.iii.(3) for updating the list of control measures reported annually as necessary to account for new control measures. This WMA report is provided as Attachment 11.1 and summarized in Section 12 below under provision C.12.a.

C.11.b - Assess Mercury Load Reductions from Stormwater

MRP Provision C.11.b and C.12.b require the Permittees to develop and implement an assessment methodology and data collection program to quantify mercury and PCBs loads reduced through implementation of pollution prevention, source control, and treatment control measures. These provisions also require the Permittees to submit, in 2018 and subsequent Annual Reports, refinements to the mercury and PCBs load reduction assessment methodology to assess load reductions in the next permit term. Those refinements are documented in the BASMAA Source Control Load Reduction Accounting for Reasonable Assurance Analysis Report, which was submitted with the Fiscal Year 2019/20 Annual Report. Comments were received from the Regional Water Board on the BASMAA Source Control Load Reduction Accounting for Reasonable Assurance Analysis report in April 2021. A revised report was approved by the Executive Officer approval in January 2022 and is provided as Attachment 11.2. The regional Interim Accounting Methodology for TMDL Loads Reduced report, approved by the Executive

Officer in May 2017, was used to report mercury load reductions in Attachment 11.1 (the WMA Report).

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

Provision C.11.c requires Contra Costa Permittees located in Region 2 to implement green stormwater infrastructure projects sufficient to collectively achieve a “mercury loads reduction performance criteria” of 9 g/yr by 2020. This was achieved and documented in the Fiscal Year 2019/20 Annual Report. Provision C.11.c further requires a demonstration of the amount of mercury that will be reduced by green stormwater infrastructure by the years 2030 and 2040. That requirement was fulfilled by the Clean Water Program Reasonable Assurance Analysis Report, which was submitted with the Fiscal Year 2019/20 Annual Report. Finally, Provision C.12.c requires a demonstration that all MRP Permittees collectively will attain 10 kg per year mercury load reductions via green stormwater infrastructure by the year 2040. The RAA Report documented the extent and cost of green stormwater infrastructure that would be required to achieve the proportion of that regional goal that would be applicable to Contra Costa Permittees located in Region 2.

C.11.d - Prepare Implementation Plan and Schedule to Achieve TMDL Allocations

MRP Provision C.11.d requires the Permittees to prepare a plan and schedule for mercury control measure implementation and an RAA demonstrating that sufficient control measures will be implemented to attain the mercury TMDL WLAs by 2028. The TMDL Implementation Report and RAA Report submitted with the Fiscal Year 2019/20 Annual Report fulfilled this requirement.

C.11.e - Implement a Risk Reduction Program

Refer to Section C.12.h for information on implementation actions related to this permit requirement.

SECTION 12 – PROVISION C.12 POLYCHLORINATED BIPHENYLS CONTROLS

Introduction

MRP Provision C.12 implements the urban runoff requirements of the San Francisco Bay PCBs TMDL. It requires the Permittees located in Region 2 to implement a control program for PCBs that includes source control, treatment control, and pollution prevention control measures where benefits are most likely to accrue (i.e., focused implementation). East County Permittees are exempt from Provision MRP C.12. The San Francisco Bay PCBs TMDL's urban runoff WLA for CCC is 0.3 kg/yr. The TMDL Implementation Report (submitted with the Fiscal Year 2019/20 Annual Report) parsed this WLA into a load reduction goal that focuses on MRP areas where Permittees will implement PCB control measures.

FY 2021/22 Accomplishments

C.12.a - Implement Control Measures to Achieve PCBs Load Reductions

MRP Provision C.12.a., similar to Provision C.11.a., requires the Permittees to report the Watershed Management Areas where PCBs control measures are currently being implemented and where new control measures will be implemented during the term of this permit, the specific control measures, and an implementation schedule. The Permittees are required to update the list of control measures annually as needed.

A Mercury and PCBs Watershed/Management Areas, Control Measures, and Load Reduction – Update 2022 report was prepared by the CCCWP to fulfill the requirement of MRP Provision C.11.a.iii.(3) and C.12.a.iii.(3) for updating the list of control measures reported annually as necessary to account for new control measures. This report is provided as Attachment 11.1.

Previous studies indicate that old industrial areas are the most likely land use type to contain high PCBs concentrations. CCCWP is continuing the source property identification process until all Old Industrial areas are screened and characterized for the likelihood of pollutant load removal and potential referral to the SFBRWQCB for further action. CCCWP compiled the past decade of source property investigation data to

develop a Conceptual Work Plan for Completing PCB Source Area Investigations. In FY 2020/21, CCCWP continued to use its GIS platform for data management and analysis determining actual and potential load reductions, and as a tracking and reporting tool for Provisions C.11 and C.12 implementation work.

MRP Provision C.12.a. also requires the Permittees to implement sufficient control measures to achieve the PCBs 0.56 kg/yr PCB load reductions by June 30, 2020. This represents the Contra Costa County's estimated share of the regional 3 kg/yr PCB load reduction performance standard. The regional performance standard of 3 kg/yr was achieved in Fiscal Year 2019/20.

C.12.b - Assess PCBs Load Reductions from Stormwater

MRP Provisions C.11.b and C.12.b. require the Permittees to develop and implement an assessment methodology and data collection program to quantify mercury and PCBs loads reduced through implementation of pollution prevention, source control, and treatment control measures. Those requirements were fulfilled by the regional Interim Accounting Methodology for TMDL Loads Reduced report, approved by the Executive Officer in May 2017. These provisions also require the Permittees to submit, in 2018 and subsequent Annual Reports, refinements to the mercury and PCBs load reduction assessment methodology to assess load reductions in the next permit term. Those refinements are documented in the BASMAA Source Control Load Reduction Accounting for Reasonable Assurance Analysis Report, which was submitted with the Fiscal Year 2019/20 Annual Report. Comments were received from the Regional Water Board on the BASMAA Source Control Load Reduction Accounting for Reasonable Assurance Analysis report in April 2021. A revised report was approved by the Executive Officer in January 2022 and is included as Attachment 11.2.

In FY 2015/16, the CCCWP began development of a countywide GIS pilot project focused on maintaining, analyzing, interpreting, displaying, and reporting relevant municipal stormwater program data and information related to Provisions C.10 (i.e., trash load reduction activities) and C.11/C.12 (i.e., mercury and PCBs source property identification and abatement screening activities). In FY 2016/17, the CCCWP worked with the ACCWP

and its GIS consultant PSOMAS to expand the countywide GIS platform and create the GIS C.3 Project Tracking and Load Reduction Accounting Tool to support additional compliance activities related to: 1) C.3.b Regulated Projects reporting; 2) the C.3.j Green Stormwater Infrastructure Planning and Implementation provisions; and 3) the C.11 Mercury Controls and C.12 PCBs Controls provisions. In FY 2021/22 the CCCWP continued to use its GIS consultant PSOMAS to improve the countywide GIS platform for C.3, C.10, and C.11/C/12 reporting. The data in the countywide platform was used to estimate the loads reduced that are reported in Attachment 11.1 (the WMA Report).

This GIS tool helps Contra Costa Permittees identify WMAs where multiple-benefit control measure implementation opportunities have been identified and prioritized for implementation during this permit term and over the coming decades. Additionally, this GIS database is being used to track and map existing C.3 projects, allow ease of ongoing review of opportunities for incorporating green stormwater infrastructure into existing and planned Capital Improvement Projects, and to report mercury and PCBs loads reduced.

C.12.c - Plan and Implement GI to Reduce PCBs Loads

C.12.c requires MRP Permittees to plan and implement green stormwater infrastructure sufficient to meet a performance criterion of 120 g per year PCBs reduced by green stormwater infrastructure for all MRP Permittees collectively. Contra Costa Permittees are tracking private C.3 projects and implementing early action public green stormwater infrastructure projects to achieve the PCBs load reductions specified by performance criteria. The regional performance standard of 120 g/yr by GI was achieved collectively by all MRP Permittees in Fiscal Year 2019/20. The TMDL Implementation Report provided in the Fiscal Year 2019/20 Annual Report includes a RAA of Permittee Green Infrastructure Plans that relates acres treated by green stormwater infrastructure to loads reduced over time.

C.12.d - Prepare Implementation Plan and Schedule to Achieve TMDL Allocations

MRP Provisions C.11.d and C.12.d require the Permittees to prepare a plan and schedule for mercury and PCBs control measure implementation and RAA demonstrating that sufficient control measures will be implemented to attain the mercury TMDL WLAs by

2028 and the PCBs TMDL WLAs by 2030. This requirement was fulfilled by the TMDL Implementation Report submitted with the Fiscal Year 2019/20 Annual Report.

C.12.e - Evaluate PCBs Presence in Caulks/Sealants Used in Storm Drain or Roadway Infrastructure in Public Rights-of-Way

The CCCWP participated in a BASMAA Regional Project to evaluate PCBs presence in caulks/sealants used in storm drains and roadway infrastructure, and to quantify the potential PCB load reduction benefits that may result from public infrastructure improvements. The final project report was submitted with the CCCWP's 2017/18 Annual Report.

C.12.f - Manage PCB-Containing Material and Wastes During Building Demolition Activities so that PCBs do not Enter Municipal Storm Drains

MRP Provision C.12.f. requires that Permittees develop and implement or cause to be developed and implemented an effective protocol for managing materials with PCBs concentrations of 50 parts per million or greater in applicable structures¹⁷ at the time such structures undergo demolition, so that PCBs do not enter municipal storm drain systems. A Permittee is exempt from this requirement if it provided evidence acceptable to the Executive Officer in its FY 2016/17 Annual Report that the only buildings that existed pre-1980 within its jurisdiction were single-family residential and/or wood-frame buildings.¹⁸

Contra Costa Permittees located in Region 2 were required to develop a protocol by June 30, 2019 that includes each of the following components, at a minimum:

- The necessary authority to ensure that PCBs do not enter municipal storm drains from PCBs-containing materials in applicable structures at the time such structures undergo demolition
- A method for identifying applicable structures prior to their demolition

¹⁷ Applicable structures are buildings built or remodeled from January 1, 1950 through December 31, 1980, with the following exemptions: single-family residential buildings, wood-framed buildings, and partial building demolitions.

¹⁸ The City of Clayton provided acceptable evidence and is exempt from this provision.

- Method(s) for ensuring PCBs are not discharged to the municipal storm drain from demolition of applicable structures

By July 1, 2019 and thereafter, Permittees are required to:

- Implement or cause to be implemented the PCBs management protocol for ensuring PCBs are not discharged to municipal storm drains from demolition of applicable structures via vehicle track-out, airborne releases, soil erosion, or stormwater runoff; and,
- Develop an assessment methodology and data collection program to quantify in a technically sound manner PCBs loads reduced through implementation of the protocol for controlling PCBs during demolition of applicable structures.

BASMAA completed a regional project in March 2019 that assisted developing local programs to manage PCBs-containing materials during building demolition. The assistance included model ordinance language, guidance materials, tools and training materials and conducted outreach. Contra Costa Permittees began implementing the program on July 1, 2019. Building demolition data were gathered from Permittees with applicable structures and are included in the PCBs in Building Materials Management Program – Fiscal Year 2021/22 Data Summary (Attachment 12.1).

C.12.g - Fate and Transport Study of PCBs: Urban Runoff Impact on San Francisco Bay Margins

MRP Provision C.12.g requires Permittees to conduct or cause to be conducted studies concerning the fate, transport, and biological uptake of PCBs discharged from urban runoff to San Francisco Bay margin areas. Provision C.12.g is being addressed through a multi-year project by the San Francisco Bay RMP to develop a series of conceptual models of PCBs in Priority Margin Units (PMU). The project is:

- Identifying margin units that are high priority for management and monitoring.
- Developing conceptual models and mass budgets for margin units downstream of watersheds where management actions will occur; and,
- Conducting monitoring in these units as a performance measure.

Four urban embayments along the Bay shoreline with management actions planned or ongoing to address PCBs in the upstream watersheds were initially selected as PMU for conceptual modeling:

- Emeryville Crescent (Alameda County)
- San Leandro Bay (Alameda County)
- Steinberger Slough (San Mateo County)
- Richmond Harbor (Contra Costa County)

The conceptual models are intended to provide a foundation for future monitoring to track responses to load reductions and may eventually help guide planning of management actions. The Richmond Harbor in Contra Costa County has not to date had any resources allocated for conceptual model development.

BASMAA representatives to the RMP will participate in the RMP PCBs Workgroup to help provide ongoing oversight of PMU conceptual model development and the related RMP Special Studies. CCCWP will communicate with the RMP PCBs Workgroup to encourage development of a conceptual model for the Richmond Harbor PMU.

C.12.h - Implement a Risk Reduction Program

The Contra Costa Permittees implement risk reduction activities to increase awareness of the risks of mercury and PCBs contamination when consuming fish caught in the San Francisco Bay/Delta:

- Kiosks and Pier Postings – The CCCWP works with the East Bay Regional Parks District to post, inspect, and maintain fish consumption warning signs at fishing piers and harbor/marina kiosks around CCC. CCCWP funds the replacement of signs which is necessary when signs are vandalized or when fish consumption information is updated.
- Point-of-purchase outreach at fishing supply stores – In FY 2021/22, the CCCWP continued to work with marinas and local fishing supply stores throughout the county to make fish consumption warning information available to the public through displaying multi-lingual signage and brochures.
- A report on risk reduction activities is provided in Attachment 12.2.

SECTION 13 – PROVISION C.13 COPPER CONTROLS

Introduction

Under MRP 2.0, Contra Costa Permittees need to report on efforts to control copper discharges from architectural copper; from pools, spas, and fountains that contain copper-based compounds; and from industrial sources. A review of these efforts specific to the CCCWP is provided here. Copper control activities conducted at the local level are reported in the Individual Municipal Annual Reports.

Accomplishments

C.13.a - Architectural Copper

In FY 2015/16, CCCWP finalized and approved a public outreach flyer entitled *Requirements for Copper Roofs and Other Architectural Copper*. Contra Costa Permittees continue to make this flyer available to the public at permit counters. CCCWP also encourages Permittees to include the flyer with applicable building permits and to incorporate the BMPs as conditions of approval for any discretionary projects with architectural copper features.

C.13.b - Pools, Spas and Fountains

Since many of the larger community pools within CCC are included in the inventory of facilities that have the potential to have non-stormwater discharges, these facilities are inspected on a regular basis as required by Provision C.4. During the inspection process, stormwater inspectors convey the requirements for managing discharges from pools relative to stormwater and wastewater regulations. For this reason, CCCWP has not had to devote significant additional resources to address this potential source of copper.

On occasion, as part of the 1-800-No-Dumping Line or other complaint hotlines, municipal staff or their contracted stormwater inspectors have had to counsel residential owners of pools to instruct them on the proper procedure for discharging their pool water or cleaning of their filters. CCCWP has made available to municipal staff and their contracted

inspectors a *Draining Pools and Spas* brochure to provide guidance to homeowners on managing their pool discharges.

C.13.c - Industrial Sources

The CCCWP has provided training to stormwater inspectors on industrial sources of copper. This training has been included in past annual C.4 commercial and industrial stormwater inspection workshops. As inspectors have been well-trained in this area, CCCWP has not had to devote significant resources to address these particular sources.

FY 2022/23 Planned Activities

CCCWP will continue to assist Permittees with meeting Copper Control requirements, and evaluating appropriate requirements for MRP 3.0. CCCWP will be working with Permittees to ensure they have established a robust procedure within their municipalities' planning and building departments to adequately address new potential sources of copper from architectural features and management of pools, spas, and fountains.

CCCWP is considering providing outreach to homeowners who have personal pools. For this task, CCCWP would work with Permittees to inventory residential pools and once inventoried, send outreach material to the pools owners to ensure they understand maintenance, filter cleaning, and draining requirements relative to stormwater regulations.

CCCWP will continue to work with stormwater inspectors to address industrial sources of copper identified during inspections and ensure that proper BMPs are in place at such facilities to minimize discharge of copper to storm drains. It is anticipated that the FY 2022/23 stormwater inspector training required under Provision C.4 may include a refresher on how to identify POC including Copper and Mercury at industrial facilities and BMPs for controlling these pollutants and preventing their discharge to stormwater.

SECTION 14 – PROVISION C.15 EXEMPTED AND CONDITIONALLY EXEMPTED DISCHARGES

Introduction

As outlined in Section 2, the CCCWP's MOC is tasked with the review, development and coordination of any countywide and/or regional tasks conducted to assist Contra Costa Permittees with implementation of the mandates in Provision C.15. CCCWP resources on this provision continue to be minimal. One of the primary reasons for limited focus on this provision is that Contra Costa Permittees that are also water purveyors and used to report on their planned and unplanned drinking water discharges in their MRP Annual Reports are now reporting these discharges under their Statewide NPDES Permit for Drinking Water System Discharges (Order WQ 2014-0194-DWQ).

FY 2022/23 Planned Activities

In FY 2022/23, it is anticipated that Group Program activities related to Provision C.15 will continue to be minimal. CCCWP staff may work with Permittees to improve outreach to address potable water discharges to the MS4s arising from large-scale landscape irrigation projects. This outreach may include working more closely with Contra Costa Water District and East Bay Municipal Utility District. Other issues under this provision will be addressed as needed.

SECTION 15 – PROVISION C.16.5 PROVISIONS APPLICABLE TO EAST COUNTY PERMITTEES

Introduction

Provision C.16.5 was added to the MRP in January 2019 to include the Cities of Brentwood, Antioch and Oakley, and portions of Unincorporated County and the Flood Control District located in Water Quality Control Board Region 5 (East County Permittees), as dischargers named in the San Francisco Bay MRP. The provisions align the activities of East County Permittees with Permittees located in Region 2 and describes actions by East County Permittees necessary to implement TMDLs applicable in Region 5.

C.16.5.a - Green Infrastructure Planning and Implementation

This provision requires Development and Implementation of GI Plans. East County Permittees were required to have a GI framework approved by their governing bodies by December 31, 2019. Completed GI plans, including documentation of legal mechanisms for implementation, were due by December 31, 2020. East County Permittees self-certify these completion deadlines.

C.16.5.b - Inspections for Construction Site Control at Hillside Projects

This provision requires Inspections for construction site control on hillslope properties. East County Permittees were required to self-certify in their 2021 annual report the criteria used to determine hillslope development, including any maps or other written criteria.

C.16.5.c - Trash Load Reductions

This provision requires trash control plans. In FY 2020/21, East County Permittees were required to (i) map the location or otherwise record the location, and (ii) provide the trash control status of lands greater than 10,000 ft² that they do not own or operate, but that are plumbed directly to their storm drain systems in Very High, High, and Moderate trash generation areas. This information is retained by the East County Permittees for inspection upon request.

C.16.5.d - Mercury Controls

This provision exempts East County Permittees from Provision C.11 (Mercury controls to implement the San Francisco Bay Mercury TMDL).

C.16.5.e - Polychlorinated Biphenyls Controls

This provision exempts East County Permittees from Provision C.12 (PCB controls to implement the San Francisco Bay PCBs TMDL).

C.16.5.f - Diazinon and Chlorpyrifos Controls

This provision requires East County Permittees to maintain WLAs for diazinon and chlorpyrifos. Practically, this means demonstrating the diazinon and chlorpyrifos water quality standards are not exceeded. In 2018, CCCWP transmitted a letter to the CVRWQCB providing monitoring data that documented exceedances of numeric water quality objectives for diazinon and chlorpyrifos have generally ceased since 2009. CCCWP has ceased directly monitoring diazinon and chlorpyrifos because these products are no longer in general commercial use. CCCWP verifies that WLAs are maintained via toxicity screening using *Ceriodaphnia dubia*, a species of water flea known to be sensitive to diazinon and chlorpyrifos.

C.16.5.g - Methylmercury Monitoring

This provision requires methylmercury monitoring with a minimum frequency of eight samples per year. Results are reported in the annual Urban Creeks Monitoring Report.

C.16.5.h - Delta Mercury Control Program

This provision requires actions to implement a Delta Methylmercury Control Program. The Methylmercury Control Program implements WLAs for methylmercury assigned to subareas of the Delta that receive stormwater discharges from East County Permittees. The West Delta Sub Area (receiving waters of East and West Antioch Creeks) is in attainment of its WLA of 3.2 grams per year. The Marsh Creek subarea appears to exceed its WLA of 0.3 grams per year. The CCCWP's Methylmercury Control Study Report

provided evidence that attainment of the WLA for the Marsh Creek sub-area is technologically infeasible. In WY 2019/20, CCCWP responded to CVRWQCB questions about the Methylmercury Control Study and revised the final study report in response to clarifications requested by the CVRWQCB. In June 2020, CCCWP submitted a Report of Waste Discharge that recommended specific permit language to implement the methylmercury TMDL. CCCWP conducted reasonable potential analyses and submitted preliminary results to the CVRWQCB in March 2022. CCCWP anticipates working with the CVRWQCB staff to review the Delta Methylmercury TMDL and revise the WLAs and attainment schedule to reflect the results of the CCCWP Methylmercury Control Study and RAA results.

Provision C.16.5.h includes specific control measures required by East County Permittees to implement the Delta Methylmercury Control Plan:

- 1) **Mercury collection and recycling.** Mercury Collection and Recycling. During FY 2021/22, the CCCWP continued to coordinate with Contra Costa Permittees and local household hazardous waste (HHW) collection facilities to implement mercury collection and recycling in accordance with MRP 2.0 Provision C.16.5.h.(1). These efforts are only required to be reported for the East County Permittees. Delta Diablo serves East County Permittees. Contra Costa Permittees collect HHW at three regional facilities in the County:
 - Central Contra Costa Sanitary District
 - Delta Diablo
 - West County Wastewater District

In addition to the above mercury collection activities, many municipally owned and maintained non-decorative streetlights in CCC have been and continue to be converted from mercury and/or high-pressure sodium vapor streetlights to Light Emitting Diode streetlights. Contra Costa County's Landscaping and Lighting District has coordinated with PG&E to replace mercury-containing light fixtures with LED fixtures. As a result, Contra Costa County has converted all of its mercury and/or high-pressure sodium vapor street lights to Light Emitting Diode (LED) street lights. In addition, the County Public Works Department had also converted

all fluorescent bulbs in the main office building to LED. The old fixtures included the high-pressure sodium vapor lamps (bulbs) at various wattage sizes. Each streetlamp is reported to have from 1 to 22 mg of mercury, with an average of 16 mg/bulb for a 100-Watt bulb. This streetlight replacement removing substantial amounts of mercury from the environment.

- 2) **Enhanced Municipal Management Practices to Reduce Sediment Discharges.** East County Permittees are required to list in their annual reports the municipal maintenance activities used to minimize sediment discharged from urban stormwater.
- 3) **Public education and risk reduction.** East County Permittees are required to conduct ongoing public education about mercury pollution prevention and health guidance for reducing mercury risk from fish consumption. East County Permittees provide pollution prevention outreach through implementation of Provision C.7. Please see Section 12 describing the Fish Risk Reduction Program for Mercury and PCBs: 2022 Status Report that fulfills this requirement for East County Permittees.