CONTRA COSTA
CLEAN WATER
PROGRAM

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July 10, 2015

Bruce H. Wolfe, Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
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Via email to: mrp.reissuance@waterboards.ca.gov

Subject: **Contra Costa Clean Water Program's Opposition to and Comments on the Tentative Order for the Municipal Regional Stormwater NPDES Permit (Order R2-2015-XXXX, NPDES Permit No. CAS612008)**

The Contra Costa Clean Water Program (hereafter CCCWP) appreciates the opportunity to submit these comments on behalf of the twenty-one public agencies comprising CCCWP, which consists of the nineteen incorporated cities and towns, unincorporated Contra Costa County, and the Contra Costa County Flood Control and Water Conservation District. The CCCWP has grave concerns about the Tentative Order for Reissuance of the Municipal Regional Permit (MRP 2.0) and is opposed to its adoption in its current form.

CCCWP along with other Permittees have met with your staff over the past two years to work through various issues. Through these meetings we were able to present extensive input and feedback to your staff. While we found these meetings to be productive in working through many issues and generating new ideas to build upon lessons learned and knowledge gained during MRP 1.0, we were disappointed that too few of the many ideas put forward with sound rationale for the changes we've advocated for, were not incorporated into the draft Tentative Order. These ideas would have helped reduce the administrative burdens on Permittees and prioritize and focus our limited resources on those actions that will maximize improvements to water quality. We urge you to seriously reconsider incorporating the Permittees ideas about reducing cost burdens into the revised MRP 2.0.

Our comments are structured to provide general high level comments within this letter and specific detailed comments in **Attachment 1**. Additional attachments provide supporting details to the comments in Attachment 1. In addition we have provided and reference herein a separate submittal of a red-line of editorial comments directly to your staff to assist them in completing a final edit and polish of the Tentative Order. This letter also incorporates by reference the Bay Area Stormwater Management Agencies Association's (BASMAA) comment letter submitted and dated July 10, 2015.

CCCWP General Comments

1. **Funding Limitations and the Need to Offset the Cost of Major New and Expanded Mandates**

CCCWP is committed to the vision of the MRP 2.0 regarding Green Infrastructure and POC control programs. It is important to recognize that these new and expanded initiatives will take significantly more resources. Permittees do not currently have these resources and developing new funding sources and mechanisms is extremely challenging. CCCWP experienced this first hand in 2012 when it sought to obtain voter approval for a stormwater fee. This fee initiative, a six year planning effort, cost the program over $1.5 million. The property-related fee was rejected by the voters in the county, with a 60% "No" vote. Fee initiative campaigns are expensive and take resources away from other stormwater program efforts. This is not a gamble worth trying again until changes are made at the legislative level to recognize stormwater management as a utility, like sewer, water and refuse services. CCCWP invites the Regional Water Board to be a partner to help change the state constitution and law that would allow stormwater to be treated the same water and wastewater utilities.

In the absence of dedicated funding for the stormwater program, stormwater programs have relied upon grants from state and federal agencies. More than $10 million in grant funding was secured for regional stormwater quality projects to support MRP 1.0 requirements. CCCWP appreciates the Regional Water Board's support in securing these past grants and welcomes the continued collaboration to secure grants for on-going and MRP 2.0 initiatives. In particular, support and advocacy for green infrastructure projects – specifically to include these costs into transportation project funding – will be critical to getting the state and regional transportation agencies to include these features as allowable cost and budget items.

Without new funding sources or maintaining a cost neutral program, Permittees will be asked to draw compliance resources from general funds or other program funds. For instance, green infrastructure planning and implementation costs are likely to come from local agency transportation budgets. Projects will cost more and as a result fewer projects will be built and maintenance will be deferred longer. This is an unintended consequence that the Permittees want to avoid.

The Regional Water Board must acknowledge its role in this effort to adequately fund stormwater compliance programs and work collaboratively with Permittees to secure dedicated funding via changes in legislation and opportunistic grants. The Regional Water Board must also acknowledge the inherent uncertainty in these efforts, and the fact that four previous attempts to amend the constitution to allow for stormwater to be funded the same way water and wastewater utilities are funded have failed.

Throughout the MRP 2.0 development process, Regional Water Board staff and management have requested that Permittees identify lower value or "less beneficial tasks" that take time and resources without returning a benefit to water quality. CCCWP provided this information in

its Report of Waste Discharge submitted in June 2014. We were disappointed that our recommendations for reductions were not included in MRP 2.0. POC and trash control programs and Green Infrastructure planning will take significantly more resources and cannot happen unless offset by reductions in lower value efforts.

2. Need for a Clear Path to Compliance for Green Infrastructure and PCBs and Hg TMDLs

Provision C.12 requires the Permittees to demonstrate a total cumulative MRP area-wide PCBs load reduction of 3 kg/yr. over the permit term. Provision C.12 does not provide Permittees with a clear and feasible pathway to attaining compliance with this load reduction performance standard. From a municipal government perspective, new financial and staffing commitments must be based on agreed upon goals and objectives, and have well-defined metrics for measuring progress. The load reduction performance criteria should not be the point of compliance, and Regional Water Board staff should work with Permittee representatives to revise the Tentative Order so that it provides a clear and feasible pathway for Permittees to attain compliance. Most factors that are key to meeting the load reduction performance criteria are uncertain and many are not within Permittee control (e.g., extent of source properties that will be found, building demolition rates, and redevelopment rates), making achievement of compliance uncertain. In order for Provision C.12 to provide Permittees with a clear and feasible pathway to attaining compliance, the load reduction performance criteria needs be informed by and consistent with the final and agreed upon interim accounting method. Compliance should be based upon implementing PCBs and Hg control programs designed to achieve the load reduction performance criteria.

Furthermore, PCBs load reduction performance metrics need to be described in MRP 2.0 in the form of action levels. Regional Water Board staff has acknowledged that load reduction performance metrics are not effluent limits, so this understanding should be explicit in MRP 2.0. Describing the performance metrics as action levels coupled with a clear control program, and accounting method, will compel Permittee action, provide accountability to the Regional Water Board, and alleviate the Permittees concerns regarding the potential third party lawsuits for not meeting the numbers when good faith actions and solid efforts by Permittees consistent with MRP 2.0 requirements does not result in achievement of the load reduction performance criteria.

CCCWP requests MRP 2.0 base compliance on implementation of PCBs and Hg control programs designed to achieve the load reduction performance criteria using an *a-priori* agreed upon interim accounting method and to restate the load reduction performance criteria as action levels. Compliance assessments would be based upon the Permittees good-faith demonstration of actions and effort consistent with these control programs. This approach is warranted based on the significant level of uncertainty, recognized by your staff and the Permittees, in the available data, models and assumptions in the accounting methods. CCCWP recommends the inclusion of a statement in MRP 2.0 that acknowledges this, such as "If the PCBs load reduction performance criteria are not achieved, then Permittees shall demonstrate reasonable and demonstrable progress toward achieving the criteria though the implementation of the control programs."

Section C.3.j needs to be made more consistent with the technical assumptions presented in Provisions C.11 and C.12 and in the corresponding portions of the Fact Sheet. In particular, the load reductions to be achieved through implementation of "green infrastructure," presented in Provisions C.11 and C.12, include public retrofits and private redevelopment; however, in Provision C.3.j, "green infrastructure" refers to public retrofits only.

3. Permit Timelines – First twelve months after the effective date

Various Permit provisions include compliance timelines; however, these timelines for individual provisions have not been coordinated across the Permit as a whole. Requiring aggressive implementation of multiple programs within the same timeframe—many of these Provisions have submittal dates within the first year of the Permit term—creates an untenable situation for the CCCWP and our Permittees. For example, Provisions C.11 and C.12.a.iii (1) require a list of watersheds (or portions therein) where mercury and PCBs control measures are currently being implemented and those in which control measures will be implemented by February 1, 2016, just two months after the permit effective date. Additionally, provision C12.a.ii (4) requires the reporting of "Permittee-specific load fractions" for PCBs reductions by April 2016. More time is needed for CCCWP to work with BASMAA to collaborate and coordinate consistent means and methods for complying with these mandates.

The draft Order contains a plethora of requirements for implementation and/or reporting in the first twelve months after the MRP effective date (see **Attachment 2**). Implementation of these requirements may not be feasible in this timeframe, given the degree of planning and coordination for each requirement and limited Permittee resources. CCCWP asks that the Regional Water Board extend identified deadlines twelve months to allow for outreach, budgeting, and regional collaboration and coordination.

Additionally, the proposed permit effective date of December 1, 2015, falls in the middle of Fiscal Year (FY) 2015/16. Budgets for FY 2015/16 were adopted in the spring of 2015. Planning and budgeting for required compliance mandates in MRP 2.0 must be addressed in FY 2016/17 budgets, which are adopted in the spring of 2016.

CCCWP requests that the Regional Water Board review the deliverables required within the first twelve months of the permit effective date and make appropriate reductions or elimination of lower value tasks, streamline and/or combine required reports, and provide more time for planning and implementation of new tasks that will need to be included in future budgets and that will require countywide and/or regional collaboration and coordination.

4. Trash Load Reduction

Trash was a major focus of MRP 1.0, and continues to be at the forefront of CCCWP's stormwater control efforts. Permittees spent enormous amounts of time and resources to meet the 40% reduction by July 1, 2014. Trash reductions have now become increasingly more challenging with higher percentage reduction goals. Furthermore, the trash reduction approach and accounting methodology for measuring trash reductions changed significantly during MRP

1.0, requiring a major redirection of Permittee efforts resulting in lost time and opportunities. Because of this, the proposed deadline of 70% reduction by July 1, 2017, must be extended to provide sufficient time for Permittees to ramp-up their new and refined trash load reduction programs. Meeting the higher percentage reduction goals will result in significant increases in capital, operating and maintenance costs for which some municipalities have not yet identified funding. During MRP 1.0, Permittees received $5 million dollars in grant funding for the purchase of full trash capture devices. These funds played a significant role in Permittees efforts to meet the 40% trash load reduction goal. Permittees need until the end of the MRP 2.0 term to secure additional funding to achieve 70% reduction. CCCWP asks that the Regional Water Board delay identified deadlines to allow for regional collaboration and additional time for the coordination, funding and outreach which is necessary in order to effectively reduce trash in MS4s. The timelines CCCWP is requesting are consistent with the Trash Amendments[1].

Compounding the challenge to meet the higher trash load reductions are: 1) changes to the formula that reduced the credit allowed for the beneficial efforts of source control and creek and shoreline clean-ups; and, 2) the addition of resource intensive tasks of annual mapping of trash control devices and storm drainage systems on private lands, including, in some cases, residential parcels. Permittees do not have the capacity or resources to perform these tasks, which provide no water quality benefit, while increasing efforts to meet the higher trash load reductions.

At the July 8 Regional Board hearing, a Water Board member suggested as a means to fund trash reduction efforts, that cities impose regulatory fees on litter-prone items. The use of regulatory fees by local government to address litter issues had been successful in the past. In 2006, the City of Oakland had passed a litter fee (regulatory fee) on fast-food restaurants, gas stations, and convenience stores to help pay for costs associated with litter and trash clean-ups. However, Proposition 26, approved by California voters in 2010, has likely effectively eliminated the ability to use a regulatory fee for stormwater management costs, without a balloted two/thirds majority approval. These establishment of regulatory fees as a means to fund trash load reduction programs is viewed with extreme legal risk and imminent legal challenge.

[1] Amendments to the Statewide Water Quality Control Plans for the Ocean Waters of California to Control Trash and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California

Should you have any questions or would like to meet to discuss these general or specific comments, please contact me at (925) 313-2392 or Tom.Dalziel@pw.cccounty.us.

I appreciate your consideration of CCCWP's comments.

Sincerely,

Thomas Dalziel
Program Manager
Contra Costa Clean Water Program

CC:
Tom Mumley, SFBRWQCB Assistant Executive Officer
Keith Lichten, SFBRWQCB, Chief, Watershed Management Division
Geoff Brosseau, BASMAA, Executive Director
Jolan Longway, CCCWP, Management Committee Chair

Enclosures:
Attachment 1. Detailed comments on Order No. R2-2015-XXXX
Attachment 2. Some of the compliance deadlines in the first twelve months after the MRP 2.0 effective date

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ATTACHMENT 1

Contra Costa Clean Water Program

Detailed Comments

Attachment 1

This attachment provides CCCWP's detailed comments, listed in order of permit provision. Each comment identifies CCCWP's concern, and the proposed solution.

Multiple Provisions

Comment 1. The draft Order contains many requirements for implementation and/or reporting within the first 12 months after the proposed permit effective date of December 1, 2015. It must be understood and acknowledged in MRP 2.0 that December 1, 2015 falls in the middle of Fiscal Year 2015/16. Municipal budgets, which were adopted in spring 2015, are already established. The financial resources needed to implement many of the new requirements will not be available. All effective dates for new provisions with substantial financial and staffing resources must be delayed to provide time to be included in FY 2016/17 budgets, which will be adopted in spring 2016, and to provide the time necessary for countywide and/or regional planning and coordination for each requirement.

*Action desired: Delay identified deadlines **at least** one year from the July 1, 2016 deadline to allow for budgeting in spring 2016, and additional time necessary for countywide and/or regional collaboration and coordination.*

Comment 2. The use of the term "certify" for various provisions throughout the draft MRP 2.0, particularly for various provisions requiring annual reporting, is redundant (e.g., C.3.h.v.(4), C.6.e.iii.(1), C.10.f.iii) . The entire Annual Report must be certified, and requiring certification of each specific provisions within the permit will create additional unnecessary work and confusion.

Action desired: Find and delete these unnecessary and redundant requirements to "certify" compliance with specific provisions. Provision C.17.c already adequately addresses this issue (i.e., "The Permittees shall certify in each Annual Report that they are in compliance with all requirements of the Order.").

C.2.f Corporation Yards

Comment 1. Municipalities are implementing their Corporation Yard Stormwater Pollution Prevention Plans (SWPPPs), which include routine inspections. Requiring pre-rainy season inspections and inspection data collection, and reporting are unnecessary and should be eliminated. This is a "less beneficial" task without a substantial water quality benefit.

Action desired: Eliminate the corporation yard inspection reporting requirements.

"ii. Implementation Level

(2) Routinely inspect corporation yards, according to the Corporation Yard SWPPP, to ensure that non-stormwater discharges are not entering the storm drain system and pollutant discharges are prevented to the maximum extent practicable. ~~At a minimum, each corporation yard shall be fully inspected each year between September 1 and September 30.~~ Active non-stormwater discharges shall cease immediately. Corrective actions shall be implemented before the next rain event, but no longer than ~~10~~30 business days after the potential and/or actual discharges are discovered. Corrective actions can be temporary and more time can be allowed for permanent corrective actions. If more than ~~10~~30 business days are required for compliance, a rationale shall be recorded.

iii. Reporting. The Permittees shall list activities conducted in the corporation yard ~~that have~~and BMPs in the site specific SWPPP~~, date of inspections, the results of inspections, and any follow-up actions,~~ including the date of any necessary corrective actions ~~were~~ implemented, in their Annual Report."

C.3 New Development and Redevelopment

Comment 1. At an October 2, 2014 MRP 2.0 Steering Committee meeting with high-level municipal officials, Regional Water Board staff encouraged Permittees to share draft Permit language, then under development by the BASMAA Development Committee, to streamline and improve implementation of Provision C.3. CCCWP sent this language to Regional Water Board staff on October 8, 2014. No response was received. In CCCWP's view, the subsequent Tentative Order misses opportunities to significantly improve the breadth, consistency, and technical quality of C.3 implementation regionally, while substantially reducing the effort required for its implementation. The October 8, 2014 email and the draft Permit language included with that email are attached to this letter and incorporated into these comments **(Attachment 1-A)**.

C.3.b.i Regulated Projects

Comment 1. This provision requires Permittees to require LID treatment on development projects with tentative maps or development agreements approved prior to February 2005 (the C.3 start date under Contra Costa's pre-MRP Permit). However, Permittees' imposition of additional requirements on entitled development projects would potentially conflict with state law and with existing development agreements.

Action desired: Allow municipalities flexibility to require applicants for these development approvals to implement stormwater treatment requirements only to the extent not in conflict with state law and existing development agreements.

C.3.b.ii.(4) Roads Projects

Comment 1. This Provision retains the applicability of Provision C.3 to certain road improvement projects, even though Provision C.3.j sets forth a comprehensive long-term approach to achieving the retrofit of streets and drainage systems with Green Infrastructure.

Action desired: Delete this requirement.

C.3.b.ii.(1)(c) 50% Rule

Comment 1. This Provision requires projects where 50% or more of existing impervious area is redeveloped to provide treatment for the entire area. The requirement pre-dates the LID requirements. With new design requirements promoting the use of LID facilities distributed throughout a development site, rather than building one large detention basin to serve the entire site, this requirement can require applicants to retrofit areas, including plazas and buildings with underground drainage pipes, that are otherwise left untouched by additional development on the same site. Regional Water Board staff has stated the purpose of this rule is to promote retrofit of existing development, an objective which is now addressed by the new Provision C.3.j.

Action desired: Delete this requirement.

C.3.e.ii. Special Projects

Comment 1. In at least one specific, documented case in Contra Costa County, a developer deleted a planned and negotiated pedestrian plaza from a development project in a downtown, pedestrian-oriented shopping area so that the development would achieve the gross density required for C.3 "Special Projects" status.

Action desired: To avoid this disincentive for including pedestrian amenities, allow public plazas to be omitted from calculation of project gross density. Include previously recommended changes for footnote 6, as shown below.

"[6]**Floor Area Ratio** – The Ratio of the total floor area on all floors of all buildings at a project site (except structures or floors dedicated to parking) to the total project site area (excluding any area dedicated to public plazas)."

C.3.e.v.(1) Special Projects Reporting

Comment 1. This provision requires permittees to track Special Projects that have been identified (i.e., an application for development approval has been submitted) but for which no development approval has been given. The purpose of this requirement in MRP 1.0 was to provide Regional Water Board staff with an early opportunity to evaluate the effects of the Special Projects provision. BASMAA has submitted information covering two years of development throughout the region and showing that the number of Special Projects, and the amount of impervious area attributable to Special Projects, is very small when compared to the total amount of development subject to Provision C.3.

Action desired: Delete this requirement.

C.3.e.v.(2) Special Projects Reporting

Comment 1. This provision requires Permittees to conduct and document an analysis of the feasibility of LID treatment for Special Projects. The purpose of this requirement in MRP 1.0 was to provide Regional Water Board staff with an early opportunity to evaluate the effects of the Special Projects provision. BASMAA has submitted information covering two years of development throughout the region and showing that the number of Special Projects, and the amount of impervious area attributable to Special Projects, is very small when compared to the total amount of development subject to Provision C.3. Further, the proportion of LID treatment implemented is high, even where non-LID treatment could be used.

Action desired: Delete this requirement.

C.3.g.iv HM Standard—Methodology for Direct Simulation of Erosion Potential

Comment 1. This provision allows the Permittees to propose an additional method, using direct simulation of erosion potential, by which to meet the hydromodification management (HM) Standard. There is an inconsistency between the Fact Sheet and Tentative Order. The Fact Sheet indicates the Executive Officer can approve the additional method, and the Order specifies the method be submitted to the Board for review and shall not be effective until adopted by the Board as a permit amendment. This is the only Provision in the Tentative Order that contemplates an amendment during the permit term. As the methodology would only change the means and methods for meeting the HM Standard previously adopted by the Board,

and would not constitute any material change to the HM Standard, a permit amendment is not needed.

Action desired: Make the language in the Tentative Order consistent with that in the Fact Sheet, as shown:

> **"C.g.iv HM Standard – Methodology for Direct Simulation of Erosion Potential -** The Permittees may, collectively, propose an additional method, using direct simulation of erosion potential, by which to meet the HM Standard in Provision C.3.g.ii. Such a method shall be submitted to the Board for review and shall not be effective until ~~adopted by the Board as a Permit amendment~~ approved by the Executive Officer."

C.3.g.vi. Implementation Level and C.g.vii Reporting

Comment 1. Provision C.3.g.vi states that "For Contra Costa Permittees, Projects receiving final planning entitlements on or before one year after the Permit effective date may be allowed to use the Contra Costa design standards from the Previous Permit." Provision C.3.g.vii. states that Contra Costa Permittees shall, with the first Annual Report following the Permit's effective date, submit a technical report consisting of an HM Management Plan describing how Contra Costa will implement the Permit's HM requirements (e.g., how it will update or modify its practices to meet Permit requirements.)"

Under MRP 1.0, Contra Costa Permittees require applicable development projects to incorporate LID facilities (Integrated Management Practices, or IMPs) that provide both treatment and HM. This is different from other counties, where flow-duration-control detention basins are used, sometimes in series with LID facilities, to achieve HM requirements.

Under MRP 1.0, to show that their individual development project meets the HM standard, Contra Costa applicants may choose to apply a continuous simulation runoff model, with 30 or more years of hourly rainfall data, or they may use standard designs for IMPs with sizing factors. The sizing factors are derived from CCCWP's continuous simulation runoff model, and account for differing soil types and rainfall patterns at development sites. Most applicants—particularly those for smaller developments—use the sizing factors.

Regional Water Board staff commissioned an independent analysis of CCCWP's continuous simulation runoff model, including a review of default values for key model parameters and a comparison to the basin-oriented Bay Area Hydrology Model (BAHM) approach used in other MRP counties. That study found that the CCCWP continuous simulation runoff model produced sizing factors were overly conservative, and stated that the results of the analysis "suggest that Contra Costa would do well to calibrate their [model] to local conditions."[2]

MRP 1.0 required CCCWP to conduct a Model Calibration and Validation Project to monitor the performance of IMPs built using the current (2009) standard designs and sizing factors. This study was completed during 2011-2013 at a cost of over $300,000, and a final report was submitted with CCCWP's Annual Report in September 2013.

[2] Memorandum from Jonathan Butcher, Tetra Tech, Inc., to Janet O'Hara, "Comparison of BAHM and Contra Costa Approaches for Hydromodification Management Plan Requirements," December 7, 2007 (incorporated by reference into these comments).

The final report concludes: "This project demonstrated that the IMPs and sizing factors approved by the Regional Water Board in 2006—and updated in subsequent editions of the *Guidebook*—are adequate to meet current regulatory requirements."

CCCWP has not received any comments from Regional Water Board staff on the September 2013 report.

As the designs and sizing factors meet the current standard, and the Tentative Order proposes that the same standard be continued in the coming Permit term, there is no need for an extension of time to use current design standards. Nor is there any need for an additional technical report. Rather, CCCWP should be allowed to continue to use the current sizing factors while collaborating with Permittees in other counties in a regional effort to update the methodology used to size HM facilities (direct simulation of erosion potential, as provided in proposed Provision C.3.g.iv.).

Action desired: Delete the Contra Costa-specific language from C.3.g.vi and C.3.g.vii.

C.3.h Operations and Maintenance of Stormwater Treatment Systems

Comment 1. This Provision, continued from MRP 1.0, requires that, at a minimum, the Operations and Maintenance (O&M) Inspection Plan must specify the following for each fiscal year: Inspection by the Permittee of at least 20% of the total number (at the end of the preceding fiscal year) of Regulated Projects, offsite projects, or Regional Projects, in addition to the requirement that all Regulated Projects be inspected at least once every five years. Permittees should have the flexibility to perform more or less each year, depending on what they determine is appropriate, so long as all Regulated, offsite and Regional Projects are inspected by year five.

Action desired: Require that all Regulated, Offsite and Regional Projects are inspected by end of permit term, with no annual milestones.

Comment 2. The reporting requirements of Provisions C.3.b and C.3.h. are poorly coordinated with each other and with the typical municipal development review process. During MRP 1.0 term, this lack of coordination resulted in apparent anomalies in Permittee reporting, leading to Regional Water Board staff inquiries and, on the Permittee side, time lost responding to those inquiries. The need to update C.3 reporting requirements was identified during MRP 2.0 negotiations, but was not followed through in time for issuance of the Tentative Order.

Action desired: Include authorization for the Permittees to collectively propose an updated reporting system, such as entry of project data to a publicly accessible relational database, and to implement the updated reporting system following Executive Officer approval.

C.3.j Green Infrastructure Planning and Implementation

Comment 1. This provision continues to be the most challenging and most uncertain portion of C.3 in terms of determining what will constitute compliance. The language needs to be made more consistent with the expectations in Provisions C.11 and C.12. Discussions with Regional Water Board staff on C.11 and C.12 have suggested that load reductions can be accomplished by public retrofits and private development and redevelopment, whereas C.3.j only refers to public retrofits.

Action desired: Make it explicit in C.3.j (as well as in C.11 and C.12) that private development and redevelopment as well as public projects will count toward meeting POC load reductions. Efforts during MRP 2.0 term should focus on planning and opportunistic implementation where feasible.

C.3.j.i (1) Green Infrastructure Program Plan Development

Comment 1. The green infrastructure (GI) framework has to be developed and approved by local governing bodies within one year (by 12/1/16) and then reported in the 2017 Annual Report (9/15/17). This is a very short timeframe given the effort required to coordinate and educate upper level staff and elected officials, prepare the framework, conduct resource planning, and accommodate lead times for bringing the framework to governing bodies.

Action desired: Extend the timeframe for approval to the reporting date (9/15/17), which would provide an additional 9 months.

> **"Green Infrastructure Program Plan Development**
>
> Each Permittee shall:
>
> Prepare a framework (i.e., a plan containing specific tasks and timeframes) for development of its Green Infrastructure Plan and have the framework approved by the Permittee's governing body, mayor, city manager, or county manager ~~within 12 months of the Permit effective date~~by the second Annual Report following permit adoption."

Comment 2. Item (1) (a) requires prioritization and mapping of potential and planned projects. This will be a major, resource-intensive effort, which may not be completed within two years. Additional flexibility in approaches to mapping and prioritization is needed. In addition, the time intervals for planning should be made consistent with the time intervals for load reductions in C.11 and C.12 (i.e., 2020 and 2030).

Action desired: The mechanisms used to develop the GI Plan and priorities should include other less complex tools in addition to GreenPlan-IT. Change the time intervals to 2020, 2025, and 2030.

> "1. A mechanism ~~(e.g., SFEI's GreenPlanIT tool)~~ to prioritize and map areas for potential projects and planned projects, on a drainage-area-specific basis, for implementation over the following time schedules:
>
> a. 2020~~Within 2 years of the Permit effective date~~;
>
> b. 2025~~Within 7 years of the Permit effective date (5-year horizon)~~; and
>
> c. 2030~~Within 12 years of the Permit effective date (10-year horizon)~~.
>
> The mechanism shall include criteria for prioritization (e.g., specific logistical constraints, water quality drivers (e.g., TMDLs), opportunities to treat runoff from private parcels in retrofitted street right-of-way, etc.) and outputs (e.g., maps, project lists, etc.) that can be incorporated into Permittees' long-term planning and capital improvement processes."

Comment 3. Item (1) (c) requires the timeframes for establishing "targets" for amount of impervious surface retrofitted, which do not line up at all with the C.11 and C.12 load reduction timeframes. It is unclear how these targets are to be established by each Permittee.

Action desired: Allow the development of "projections" instead of "targets", and allow Permittees to include projected private development as well as public projects. Allow the

projections to be developed for the years 2020, 2030, 2040, and 2065, consistent with C.11 and C.12.

"(c) ~~Targets~~Projections for the amount of impervious surface within the Permittees' jurisdiction to be retrofitted over the following time schedules:

d. 2020~~Within 2 years of the Permit effective date~~;

e. 2030~~Within 7 years of the Permit effective date (5-year horizon)~~;

f. 2040~~Within 12 years of the Permit effective date (10-year horizon)~~; and

g. 2065.~~Within 27 years of the Permit effective date (25-year horizon); and~~

~~h. Within 52 years of the Permit effective date (50-year horizon).~~"

C.3.j.ii Early Implementation of Green Infrastructure Projects (No Missed Opportunities)

Comment 1. It is unclear how compliance with this provision will be determined. CCCWP recommends that the review process be better defined and objective, in order to avoid disagreements with Regional Water Board staff as to what are "missed opportunities".

Action desired: Add the following language, which would allow for consistent review of CIP projects for GI opportunities, based on specified criteria.

"(3) Permittees shall review and analyze appropriate projects within the Permittee's capital improvement program, and for each project, assess the opportunities and associated costs of incorporating LID into the project. The analysis shall consider factors such as grading and drainage, pollutant loading associated with adjacent land uses, uses of available space with the project area, condition of existing infrastructure, opportunities to achieve multiple benefits such as providing aesthetic and recreational resources, and potential availability of incremental funding to support LID elements along with other relevant factors... Permittees will collectively evaluate and develop guidance on the criteria for determining practicability of incorporating green infrastructure measures into planned projects."

C.4.c, C.5.b, C.6.b Reporting

Comment 1. These provisions indicate that "corrective actions shall be implemented before the next rain event, but no longer than 10 business days after the potential and/or actual non-stormwater discharges are discovered." Requiring a 10 day response for potential discharges results in all observed problems being handled as high priority, which will increase the inspection costs and reduce the total number of sites that can be inspected in a year. Furthermore, requiring that every observed problem requires follow-up within 10 business days creates a disincentive for inspectors to proactively identify and communicate potential problems to site operators because it will require the inspector to complete the prescriptive follow-up and documentation requirements. Not every observed "potential" non-stormwater discharge should nor needs to be deemed a priority. Verbal warnings and warning notices can be effective and efficient Tier 1 enforcement response tools for inspectors to identify and address observed problems without triggering the more time intensive follow-up, documentation, and reporting requirements. . Permittee inspectors and contractors need to be able to use their expertise and best professional judgement to determine how best to allocate their time to provide the maximum number of inspections with the maximum benefit for water quality. Existing guidance allows Permittees up to 30 days to ensure that corrective actions were implemented for potential discharges.

Action desired: Allow the current 30 days for corrective actions to be implemented for potential discharges. Example provided below.

"C.4.c.ii (3) Timely Correction of Potential and Actual Non-stormwater Discharges – A description of the Permittee's procedures for assigning due dates for corrective actions. Permittees shall require timely correction of all potential and actual non-stormwater discharges. Permittees shall require active non-stormwater dischargers to cease immediately. Corrective actions shall be implemented before the next rain event, but no longer than ~~10 business~~ 30 days after the potential ~~and/or actual~~ non-stormwater discharges are discovered. Corrective actions can be temporary and more time can be allowed for permanent corrective actions. If more ~~than 10 business day are~~ time is required for compliance, a rationale shall be recorded in the electronic database or equivalent tabular system."

C.4.d Reporting

Comment 1. The reporting requirements for C.4.d represent a "less beneficial" task that lacks substantial water quality benefit for the Permittees. Due to the excessive nature of the reporting requirements, Permittees will need to spend considerable resources on reporting, which would be better spent on other higher value tasks.

Action desired: Reduce the excessive data collection and reporting requirements. Examples of excessive data collection and reporting requirements include:

- *the number of inspections;*
- *the number of each enforcement action;*
- *the number of enforcement actions resolved in 10 working days, or otherwise deemed resolved in a longer but still timely manner*
- *facilities that are required to have coverage under the General Industrial Permit but have not filed; and,*
- *the dates of trainings, training topics covered, and percentage of inspectors attending training.*

C.5.e Control of Mobile Sources

Comment 1. Provision C.5.e requires that Permittees provide a summary of specific outreach events and education conducted for each type of mobile business operating within a Permittee's jurisdiction, provide a list of mobile businesses operating within a Permittee's jurisdiction, and develop a separate ERP to address mobile businesses. The language for this section remains very vague, especially as it relates to mobile businesses. It is unclear how Permittees can identify all mobile businesses operating within their jurisdiction, as these businesses operate in several municipalities. Not all municipalities require business licenses, and even when required, some mobile businesses may not obtain licenses for all of the municipalities they operate in. Furthermore, the development of any type of inventory by a Permittee would not include those businesses located in neighboring counties outside of the MRP jurisdictions. The current ERP is adequate to address mobile businesses and does not require revision. Also, there is not enough time to address all the 2016 Annual Report requirements (i.e., minimum BMPs for each business type, enforcement strategy, list and summary of specific outreach events and education conducted to different business types, number of business in jurisdiction, number of inspections conducted at business or job site) which should be coordinated regionally.

Action desired:

- *Clarify the language regarding the identification of mobile businesses operating in a Permittee's jurisdiction. Clarify that these businesses are being addressed through the inspection program as issues are identified. Require Permittees to address mobile businesses through business inspections.*
- *Remove requirement to develop a separate ERP.*
- *Extend the 2016 Annual Report requirements to 2018 Annual Report to provided sufficient time for MRP Permittee collaboration, development and implementation of a regional program.*

C.6.e.iii Construction Site Control – Reporting

Comment 1. Reporting on the "Number of Violations" is inconsistent with Provision C.6.b.ii (3), which requires timely correction for all potential and actual discharges.

Action desired: Revise the reporting requirements to be internally consistent. This would allow the annual reporting process more efficient and effective.

C.6.e.iii (2)(g) Number of actual discharges ~~violations~~ fully corrected prior to the next rain event, but no longer than 10 business days after the actual discharges ~~violations~~ are discovered or otherwise considered corrected in a timely, though longer period; and

C.7 Public Information and Outreach

Comment 1. Many of the permit requirements throughout Section C.7 are duplicated in multiple subsections, as well as throughout the entirety of the Permit.

Action desired: Consolidate public information and outreach requirements throughout the permit into this section and cross-reference it from other sections.

C.7.a Storm Drain Inlet Marking

Comment 1. This provision requires that Permittees mark and maintain municipally-maintained storm drain inlets with an appropriate stormwater pollution prevention message, such as "No Dumping, Drains to Bay", or equivalent. However, this action has been located in the wrong place, and should be moved to Provision C.2 for maintenance of the markers, and C.3 for installation of the markers on development projects.

Action desired: Remove the provision for storm drain inlet marking from Provision C.7., and move to its proper location in Provision C.2 and C.3.

C.7.b Advertising Campaigns

Comment 1. The language for this provision specifies that Permittees shall continue to participate in or contribute to advertising campaigns, with the goal of significantly increasing overall awareness of stormwater runoff pollution prevention messages and behavior changes in target audiences. However, the word "advertising" is antiquated, and should be modernized with the term "outreach," as the word "outreach" is a much broader term that includes social media and in-person events, in addition to traditional advertising media, such as radio, TV, and billboards.

Action desired: Change the word "Advertising" to "Outreach" throughout the provision, as the term "advertising" is more commonly associated with traditional media and is not inclusive of all the outlets Stormwater Programs employ to reach audiences.

Comment 2. Additionally, CCCWP requests that language referring to two campaigns and specific messaging be deleted. CCCWP would like the option to focus on one campaign if it is determined to be beneficial. For instance, a single campaign could allow for development of a sustained, long-term outreach effort analogous to "Spare the Air", "Keep Tahoe Blue", and "Only You Can Prevent Forest Fires". The proposed draft MRP 2.0 requires our limited public outreach resources be spread too thin, and precludes a countywide and/or regional 'branding' effort that might result in greater public recognition and long-term value in increasing awareness of water quality issues and solutions.

Action desired: Eliminate reference to two campaigns and a specific message.

C.8.d.ii Temperature

Comment 1. The temperature triggers defined in provision C.8.d.ii (4) attempt to create a "one-size-fits-all" temperature across all existing watersheds. This is problematic, as this type of temperature trigger does not acknowledge any other existing watershed specific temperature thresholds developed through other regulatory processes (e.g., agreements with National Marine Fisheries Service (NMFS)).

Action desired: Include language to the provision which states that the Permit's temperature triggers are held in deference to existing watershed specific temperature thresholds developed through other regulatory processes (e.g. agreements with NMFS).

> "Follow-up – The Permittees shall consider conducting a SSID project when results at one sampling station exceed the applicable temperature trigger(s) or demonstrate a spike in temperature with no obvious natural explanation. The temperature trigger is defined as when two or more weekly average temperatures exceed the Maximum Weekly Average Temperature of 17.0°C for a Steelhead stream, or when 20% of the results at one sampling station exceed the instantaneous maximum of 24°C. Where existing watershed-specific temperature thresholds were developed through other regulatory processes (e.g. agreements with NMFS), these thresholds prevail. Permittees shall calculate the weekly average temperature by breaking the measurements into non-overlapping, 7-day periods."

C.8.d.v Toxicity and Pollutants in Sediment

Comment 1. The contaminants listed in Table 8.2 of this provision include parameters that are costly to analyze the Permittee and have low water quality benefits. Examples of this type of high cost / low benefit parameters include PCBs, mercury, and organochlorine pesticides.

Action desired: Remove the high cost, low benefit analytes (PCBs, mercury, and organochlorine pesticides) from Table 8.2.

Table 8.2 Sediment Toxicity & Pollutants Analytical Procedures

Test Species or Pollutant	Units	Laboratory Method
Hyalella azteca and Chironomus dilutus survival	Pass/Fail using TST, % Effect	EPA-600/R-99-064
~~PCBs~~		
~~Total Mercury~~		
Pyrethroids: bifenthrin, cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin		EPA 3540C followed by EPA 8270D by NCI-GCMS
Carbaryl		
Fipronil		
~~Organochlorine pesticides: Chlordane, Dieldrin, Sum DDD, Sum DDE, Sum DDT, Endrin, Heptachlor epoxide, Lindane~~		
(gamma-BHC)		
Total PAHs		
Arsenic, Cadmium, Chromium, Copper, Lead, Nickel, Zinc		
Total organic carbon		
Grain size		

Comment 2. Provision C.8.d.v (4)(c) requires additional follow-up SSID projects for pollutants without Water Quality Objectives when the analytical results exceed Probable Effects Concentrations or Threshold Effects Concentrations (TECs).

Action desired: *Remove triggering by TECs.*

"For pollutants without WQOs, results exceed Probable Effects Concentrations. ~~or Threshold Effects Concentrations from MacDonald 2000.15~~"

C.8.e.ii.(1) Stressor/Source Identification (SSID) Projects

Comment 1. This provision requires Permittees who conduct SSIDs through a regional collaborative to conduct a "minimum of one for toxicity" out of eight possible new SSID projects during the permit term. However, this provision fails to account for the possibility that there may not be any toxicity threshold exceedances. The list of threshold exceedances provided in Provision C.8.e.i may or may not include any toxicity exceedances, and the current provision C.8.e.ii.(1) needs to account for that possibility.

Action desired: *Include qualifying language to the provision which accounts for the possibility of no qualifying toxicity exceedances.*

(1) Permittees who conduct SSID projects through a regional collaborative shall collectively initiate a minimum of eight new SSID projects (minimum of one for toxicity, provided that at least one qualifying toxicity threshold exceedance appears on the list required by Provision C.8.d.i) during the Permit term.

C.8.e.ii.(2) Stressor/Source Identification (SSID) Projects

Comment 1. This provision requires specific Permittees who conduct SSIDs to conduct a "minimum of one for toxicity" new SSID projects during the permit term. However, this provision fails to account for the possibility that there may not be any toxicity threshold exceedances. The list of threshold exceedances provided in Provision C.8.e.i may or may not include any toxicity exceedances, and the current provision C.8.e.ii (1) needs to account for that possibility.

Action desired: Include qualifying language to the provision which accounts for the possibility of no qualifying toxicity exceedances for the countywide programs.

"(2) If conducted through a stormwater countywide program, the Santa Clara and Alameda Permittees each shall be required to initiate no more than five (minimum of one for toxicity, provided that at least one qualifying toxicity threshold exceedance appears for the subject county on the list required by Provision C.8.d.i) SSID projects; the Contra Costa and San Mateo Permittees each shall be required to initiate no more than three SSID (one for toxicity, provided that at least one qualifying toxicity threshold exceedance appears for the subject county on the list required by Provision C.8.d.i) projects; and the Fairfield-Suisun and Vallejo Permittees each shall be required to initiate no more than one SSID project(s) during the Permit term."

C.8.e.iii.(1). Stressor/Source Identification (SSID) Projects

Comment 1. This provision requires SSID projects to be initiated by the third year of the permit term, resulting in the selection of an SSID project based on only 1-2 years of data generated under the new permit. Project selection necessarily requires more substantive data generation than only during the first year of the permit term. Thus, the requirement for this provision should be extended to begin initiation of SSID projects by the fourth year of the permit term, to allow for consideration and incorporation of 3 years of data generated by the MRP.

Action desired: Change requirement to generate SSID projects in the third year to instead begin in the fourth year.

(1) Step 1: The Permittees shall develop a work plan for each SSID project and submit the work plans with the Urban Creeks Monitoring Report (UCMR) such that a minimum of half the required number of SSID projects are started (at a minimum, have a workplan) by the ~~third~~ fourth year of the permit term.

C.8.e.iii.(1).f Stressor/Source Identification (SSID) Projects

Comment 1. The requirements of this provision require the Permittees to conduct a TIE in the event that a monitoring sample exhibits toxicity with no identifiable chemical pollutant. However, this provision is overly restrictive and inflexible. By forcing the Permittee to immediately conduct a TIE, this provision does not allow for the Permittee to explore alternative methods of reducing toxicity prior to conducting a TIE, and overly constrains the study design.

Action desired: Allow greater flexibility for Permittees conducting SSIDs by restoring the option granted in the MRP 1.0 which allows Permittees to conduct a TRE first. See additional language below.

"Conduct a site specific study (or non-site specific if the problem is wide-spread) in a stepwise process to identify and isolate the cause(s) of the trigger stressor/source. This study should follow guidance for Toxicity Reduction Evaluations (TRE) or Toxicity Identification Evaluations (TIE). A TRE, as adapted for urban stormwater data, allows Permittees to use other sources of information (such as industrial facility stormwater monitoring reports) in attempting to determine the trigger cause, potentially eliminating the need for a TIE.

For toxicity studies where there is no chemical pollutant associated with the creek status monitoring sample exhibiting toxicity, a Toxicity Identification Evaluation (TIE)[18] should be conducted. Where chemical data indicate a pollutant, such as fipronil or a pyrethroid, is present at adverse effects levels in the sample location, it is not necessary to conduct a TIE, and the SSID project would be considered complete."

C.8.e.iii.(2) Stressor/Source Identification (SSID) Projects

Comment 1. The requirements of this provision are presented without clarity, and the specific intent and meaning of the requirement to complete half of the SSID projects by the end of the permit term is vague. This provision should make clear that Provision C.8.e.iii.(2) refers to the completion of Step 1, the SSID investigation, and does not include the follow-up steps (Step 3(a) per Provision C.8.iii.(3)(a)).

Action desired: Improve the language and clarity of the provision by making the changes below.

(2) Step 2: The Permittees shall conduct SSID investigations according to the schedule in each SSID project work plan and shall report on the status of SSID investigations annually in the UCMR. SSID projects are intended to be oriented toward taking action(s) to alleviate stressors and reduce sources of pollutants; thus the Permittees shall attempt to complete ~~all steps~~ Step 1 for half their required SSID projects, at a minimum, during the permit term. Local stormwater Permittees shall be advised of the SSID project and consulted regarding possible local sources and potential management actions during the work plan phase and periodically throughout the SSID project.

C.8.e.iii.(3).b. Stressor/Source Identification (SSID) Projects

Comment 1. This provision requires that a Permittee seek the approval of an Executive Officer in order to complete a stressor ID project where the Permittee has determined that the MS4 is not the source. This provision is unnecessary and creates unnecessary steps.

Action desired: Remove the requirement for Executive Officer approval.

(b) If a Permittee(s) determines that discharges from its (their) stormwater collection system(s) are not contributing to an exceedance of a water quality standard, the Permittee(s) may end the SSID project. ~~The Executive Officer must concur in writing before an SSID project is determined to be completed.~~

C.8.e.iv Stressor/Source Identification Projects, Reporting

Comment 1. The requirements of this provision are not specific enough. The provision needs to clarify and make a distinction that the annual SSID reports required by this section are status reports on efforts to date.

Action desired: Introduce clarifying language which specifies SSID annual status reports.

Reporting: The Permittees shall submit an SSID status report in each UCMR which summarizes the actions taken in C.8.e.i-iii above. The SSID status report shall include a running summary of all SSID projects (C.8.e.ii), including start date, brief problem definition, and schedule for each project. As projects progress, the SSID status report shall describe findings and monitoring results and outline steps for the

upcoming year for each ongoing project. The Permittees shall submit the SSID status report with each UCMR.

C.8.f Pollutants of Concern (POC) Monitoring

Comment 1. The number of samples required in Table 8.4 for Contra Costa and Santa Mateo Counties should be consistent with the tiered sample number requirements in the Creek Status Monitoring (C.8.d).

Action desired: Reduce the minimum number of samples for Contra Costa and Santa Mateo Counties, consistent with C.8.d.

Table 8.4 POC Monitoring Parameters, Effort and Type

Pollutant of Concern	**Total Samples[a] Collected /Analyzed (yearly minimum) for each Countywide Program: Alameda & Santa Clara / Contra Costa, ~~Santa Clara, and~~ & San Mateo**	**Minimum Number of Samples for each Monitoring Type[b]**
Polychlorinated Biphenyls (PCBs)	80 (8)	8 samples minimum for monitoring types 1-5
Total Mercury	80 (8)	8 samples minimum for monitoring types 1-5
Copper	20 / 10 (2)	4 samples minimum for monitoring types 4-5
Pesticides: Pyrethroids (water and sediment): bifenthrin, cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin Imidacloprid Indoxacarb Fipronil Carbaryl (in sediments)	20 / 10 (2) for each	4 samples minimum for monitoring types 4-5
Toxicity: Water Column (during storms) Sediment (wet season, not necessarily during storms)	10 / 5 (1) for each	~~20~~ 10 samples for monitoring type 4
Emerging Contaminants[c]: Must include but not limited to: Perfluorooctane Sulfonates (PFOS, in sediment) Perfluoroalkyl sulfonates (PFAS, in sediment) Alternative flame retardants	See footnote c	See footnote c
Ancillary Parameters[d]: Total organic carbon Suspended sediments (SSC) Hardness	as necessary to address management questions for other POCs – see footnote d	
Nutrients: Ammonium, Nitrate, Nitrite, Total Kjeldahl Nitrogen, Orthophosphate,	20 / 10 (2) for each nutrient species	20 samples for monitoring type 4 for each nutrient

Total Phosphorus (all nutrients collected together for each sample)		species.

Comment 2. An error in Table 8.4 states that the minimum yearly sample should be 20 for toxicity. This minimum number should be reduced to 10 samples in order to coincide with the total number of samples required.

Action desired: Reduce the minimum number of samples from 20 to 10.

Table 8.4 POC Monitoring Parameters, Effort and Type

Pollutant of Concern	Total Samples Collected / Analyzed (yearly minimum) for each Countywide Program: Alameda, Contra Costa, Santa Clara, and San Mateo.	Minimum Number of Samples for each Monitoring Type
Toxicity: Water Column (during storms) Sediment (wet season not necessarily during storms)	10 (1) for each	~~20~~ 10 samples for monitoring type 4

Comment 3. An error in Table 8.5 POC Analytes and Analytical Methods identifies Method 1668 for PCBs. This method is not appropriate for use with the sediment fraction for analysis. Table 8.5 should include greater flexibility in methods that are approved for sample media to allow Permittees to select appropriate and cost effective methods.

Action desired: Remove PCBs Method 1668 from the table OR add alternative methods to the table to increase flexibility.

C.8.g.iii.(2) Urban Creek Monitoring Report

Comment 1. The requirements of this provision are not specific enough. The provision needs to clarify that the annual SSID report required by this section is a status report.

Action desired: Introduce clarifying language which specifies that SSID annual reports are status reports on work completed to date.

"(2) A SSID status report pursuant to Provision C.8.e.iv."

C.8.g.iv Pollutants of Concern Monitoring Reports

Comment 1. This provision requires the POC Monitoring report to be due annually on October 15, only fifteen days after the end of the preceding Water Year, and one month after the Annual Report is due. This deadline is overly restrictive, as it reduces the potential for sampling during the last three months of the Water Year (July-September) and adds unnecessary, incongruent reporting as it is also asked for annually in the UCMR (C.8.g.iii.) on March 15 with other monitoring data. Streamlining report and data submittal requirements is a cost and staff resources savings for the Permittees.

Action desired: Consolidate the timelines of all monitoring report's electronic data reporting. Remove the duplicative POC reporting and allow this monitoring to be reported with the UCMR.

"iv. Pollutants of Concern Monitoring Reports – ~~By October 15 of each year of the permit (~~Beginning in 2016~~)~~, the Permittees shall submit a report describing the allocation of sampling effort for POC monitoring for the forthcoming year and what was accomplished for POC monitoring during the preceding ~~w~~Water ~~y~~Year. The report ~~may~~shall be integrated into the UCMR (C.8.g.iii). The report shall include (for preceding year and projected for forthcoming year): monitoring locations, number and types of samples collected, purpose of sampling (management question addressed), and analytes measured. ~~Any data not reportable to CEDEN should also be included in this report."~~

C.9.c Implementation of IPM

Comment 1. This provision inappropriately requires the Permittees to observe the application of pesticides by the contractor in order to verify that the contractor is implementing the Permittee's IPM contract specifications or its IPM policies, program, or ordinance; and adhering to the associated standard operating procedures. This requirement assumes that observing pesticide application is somehow indicative of compliance with IPM practices and/or SOPs, which it is not. Furthermore, some Permittees that oversee contracts for IPM services are not qualified to judge whether contractors are applying pesticides properly, and pesticide applications are only a small part IPM contract specifications The most important criteria for the Permittees to do in regard to requiring Contractors to implement IPM are:

a. Have a contract that clearly specifies the requirements related to IPM
b. Be familiar with the contract and its requirements
c. Monitor the work of the contractor through frequent communication. The contractor should report verbally or otherwise with the Permittee on this pest management activities and the rationale behind those practices.

Action desired: Remove requirement to observe pesticide applications. Require instead that Permittees monitor their pest services contract. This monitoring would include reviewing pesticide usage, locations of any applications, and tracking IPM practices.

C.10.a.i.a Schedule

Comment 1. Trash reductions become increasingly more challenging with higher percentage reduction goals. Furthermore, the trash reduction approach and accounting methodology for measuring trash reductions has changed significantly during MRP 1.0 requiring a major redirection of Permittee efforts resulting in lost time and opportunities. Six months after the submittal of the Municipal Short Term Trash Load Reduction Plans and BASMAA's Trash Load Reduction Tracking Methodology on February 1, 2012, Regional Water Board staff rejected Permittees plans and BASMAA's tracking methodology. On August 15, 2012, in a meeting between BASMAA representatives and Regional Water Board Executive Officer, a tentative agreement was reached to work together on a revised methodology. For the remainder of FY 2012/13, Regional Water Board staff and Permittee representatives worked collaboratively on a major new shift in direction for trash load reduction on how trash reduction should be accounted for, and how to proceed toward the objective of "no visual impact". This significant redirection of approach and effort resulted in lost time and opportunities. In FY 2013-2014, Permittees continued to build upon the newly agreed framework in development and implementation of their Long-Term Trash Load Reduction Plans and in demonstrating the 40%

reduction in trash loads by July 1, 2014 as required by the MRP. This framework is still evolving, and Permittees continue to explore and build on their knowledge of the effectiveness of control measures, the frequency these measures should be implemented, and how best to demonstrate or assess progress in meeting trash load reduction requirements. These efforts take time and significant resources. The proposed 70% reduction by July 1, 2017 must be extended to provide sufficient time for Permittees to ramp-up their new and refined trash load reduction programs. Meeting the higher percentage reduction goals will result in significant increases in capital as well as operating and maintenance costs for which municipalities have not yet identified funding. It should be noted that during MRP 1.0, Permittees received $5 million dollars in grant funding for the purchase of full trash capture devices. These grant funds played a significant role in helping Permittees efforts to meet the 40% trash load reduction goal. The proposed extensions are consistent with the State's Trash Amendments.

Action desired: Extend 70% load reduction time schedule to the end of the permit term.

i. **Schedule -** Permittees shall reduce trash discharges from 2009 levels, described below, to receiving waters in accordance with the following schedule:

a. 70 percent by November 30, 2020~~by July 1, 2017~~; and

b. 100 percent or no adverse impact to receiving waters from trash by July 1, 2025~~2022~~.

C.10.a.ii.a Trash Generation Area Management

Comment 1. This provision includes a sentence stating that full trash capture devices only allow trash to be discharged during a large storm event. This language is problematic as a "large storm event" has not been defined.

Action desired: Revise language as below:

"Actions equivalent to full trash capture means actions that send no more trash down the storm drain system than a full trash capture device would allow~~, which is essentially no trash discharge except in very large storm flows~~."

C.10.a.ii.b Trash Generation Area Management

Comment 1. This provision includes requirements to ensure that private lands plumbed directly to the MS4 are equipped with full trash capture devices or managed to a low trash generation rate, and requires mapping of those lands greater than 5,000 square feet by 2018. However, municipalities do not have an accurate inventory of storm drains on private lands nor do they know how these drains are connected to their MS4. It would also be a huge undertaking to identify storm drains on these lands, determine their point of connection to the MS4, and map their drainage areas. Additionally, there is no distinction between residential and commercial/industrial properties though trash on these lands is being addressed through C.4 and C.5 programs. Permittees do not have the capacity to perform the proposed requirement, but can and will address trash issues on these properties through the C.4 programs.

Action desired: Remove C.10.a.ii.b and instead integrate inspections and enforcement of high priority private drainage areas into C.4 programs.

~~"b. Permittees shall ensure that lands 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 are equipped with full~~

~~trash capture systems or are managed with trash discharge control actions equivalent to or better than full trash capture systems. The efficacy of the latter shall be assessed with visual assessments in accordance with C.10.b.ii. If there is a full trash capture device downstream of these lands, no other trash control is required. Permittees shall map all such lands greater than 5000 ft2 that are plumbed directly to their storm drain systems by 2018, including the trash control status of these areas. This information shall be retained by the Permittees for inspection upon request.~~"

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

Comment 1. This provision requires C.3 facility overflow structures be equipped with a screen. However, having a screen on C.3 facility overflow may result in increased flooding potential resulting in increased risk to property and public safety. Regional Water Board staff has not produced any data or information, which we have requested, that indicates C.3 facilities are not appropriately sized to treat the peak flow resulting from a one-year one hour storm (i.e., the required design treatment capacity for full trash capture device). A technical review of this matter was conducted by engineering staff within the City of Martinez. This review indicated the C.3 facility treats a greater volume of water than produced by the peak flow resulting from a one year-one hour storm.

Action desired: Revise text as noted below.

"A stormwater treatment facility implemented in accordance with Provision C.3 is also deemed a full capture systems if the system is maintained to prevent off site movement of accumulated trash and overflow from the system is ~~appropriately~~ screened, if needed, to meet the full trash capture screening specification for storm flows up to the full trash capture hydraulic specification (C.10.a.iii)."

C.10.b.1.a Maintenance

Comment 1. Maintenance of a full trash capture device should be based on device type, drainage area, and characteristics of the land it drains (amount of trash, amount of vegetation, etc.).

Action desired: Revise text to require that devices are inspected at a minimum of once a year. Frequency of inspection will be based on device type, drainage area, and characteristics of the land it drains.

"**a. Maintenance -** The maintenance of each full capture device shall be adequate to prevent plugging, flooding, or a full condition of the device's trash reservoir and bypassing of trash. Storm drain inlet type full trash capture devices shall be maintained a minimum of once per year. A Permittee-specific maintenance program shall be implemented and adapted to achieve/maintain full capture criteria.

~~(i) Storm drain inlet type full trash capture devices in Low or Moderate trash generation areas shall be maintained a minimum of once per year.~~

~~(ii) Storm drain inlet type full trash capture devices in High trash generation areas shall be maintained a minimum of twice per year.~~

~~*(iii)* Storm drain inlet type full trash capture devices in Very High trash generation areas will be maintained a minimum of 3 times per year.~~

~~*(iv)* All other full trash capture devices shall be maintained a minimum of one time per year.~~

~~If any such device is found plugged or full of trash during a maintenance event, the maintenance frequency shall be increased so that the device is neither plugged nor full of trash by the next maintenance event.~~"

C.10.b.i.c / C.10.f.iii. Certification

Comment 1. These provisions required certification that devices are being operated and maintained to meet full trash capture system requirements. (See related Comment #2 under "Multiple".) Numerous factors beyond the control of Permittees may result in a device being found plugged or clogged even though the device is being maintained on a frequency found to be appropriate. CCCWP requests the language be modified to require Permittees to annually report that they have an operation and maintenance program designed to meet the full trash capture system requirements, and are implementing that program.

> *Action desired: Require Permittees to report annually that an operation and maintenance program is in place, and it is designed to meet full trash system capture requirements.*

C.10.b.ii.v Visual Assessment of Outcomes of Other Trash Management Actions

Comment 1. Currently there is no means that will allow Permittees to take any percent reduction credit for significant efforts that have not conclusively demonstrated a trash generation rate change within a reporting period or the permit period. There should be an acknowledgement of the trial and error nature of implementing trash reduction control measures and the uncertainty in the degree of effectiveness they might achieve within a given timeframe. Permittees should be given greater flexibility and incentive for trying different control measures, at different frequencies, and in different locations. Without this flexibility, Permittees may be compelled to move directly to the installation of full trash capture devices everywhere simply to ensure they meet percent reduction requirements, which may not be the most cost effective method and long-term solution.

For example, source control strategies are very complex, expensive, time-consuming, and difficult to develop and implement, but may provide the most effective, long-term and sustainable solution to addressing a persistent and pervasive litter problem (e.g., single use plastic bags). The current permit language provides no incentive for source control approaches as the maximum achievable reduction credit is fixed at a maximum of 5%. This maximum is less than what was allowed in MRP 1.0 for single use plastic bag bans.

Another example includes the efforts to develop and implement grass-roots community-based approaches and/or partnerships with the local business community to address a trash problem also takes substantial effort and time to ramp-up. The results of these efforts are uncertain at the time of development and may not be known or achieved within a reporting period or several reporting periods; however, given sufficient time for their implementation they may be effective and additionally can have substantial ancillary benefits by increasing awareness of the trash problems within a community.

Another example scenario is a Permittee deciding to increase street sweeping from monthly to twice a month, which may require approval from upper management or elected officials, identification of new or additional funding, a contract amendment, and/or adjustments to other street sweeping routes and frequencies, etc. To plan, implement, and assess this effort could take a year or more, and the increased street sweeping may or may not result in the desired reduction in the trash generation rate even though the control measure has reduced measurable amounts trash. If the action is ultimately not achieving the needed result, then the

Permittee must decide what additional or different trash reduction strategies should be taken. This trial and error process takes time and the results are uncertain. CCCWP requests more flexibility and greater incentives for identifying the best and most cost effective combination of trash load reduction strategies within a reporting period and over the term of the permit.

Action desired: Include language in permit that provides development of a proposed interim or temporary credit for significant actions that may result or significantly contribute in time to a generation rate change.

> "C.10.b.ii.v. Permittees may put forth substantial effort to reduce trash loads in certain areas which may not be immediately apparent when performing the visual assessments. Permittees shall be allowed to put forth evidence of these efforts or programs, as well as supporting documentation on an allowable interim percent reduction credit for these actions, pending project completion and demonstration of achievement of the reduction in the trash load generation rate."

C.10.b.iv Source Control

Comment 1. The Long-Term Trash Load Reduction Plans developed under MRP 1.0 included source control as a means to meet percent reduction milestones. However, the percentages allowed in the draft MRP 2.0 (up to 5% for all source control actions) are not consistent with previously acceptable percentages for source control. One of the reasons cited for limiting the percent reduction is the suggested "double accounting" of these control measures. The argument has been put forth that reduction in trash loads from implementing product bans should be apparent in the results of visual assessments, and to provide an additional reduction credit for simply establishing a product banned constitutes a double credit. This is argument is flawed for a variety of reasons. First, the ranges assigned to high and very high trash generation rates are considerable. It is quite possible that the results of visual assessments would fail to detect the reduction to the extent of achieving an actual generation rate change. That is, a TMA with very high trash generation rate may continue to be very high even though it is now on the lower end of the range of that rate as a result of the product ban.

Furthermore, source control programs undoubtedly provide benefits beyond the boundaries of a trash management area and even a Permittee's jurisdiction, as these litter items are often obtained in one location and discarded in entirely different geographic location. Additionally, Regional Board staff's arguments also fail to recognize that not all trash is created equal. Certain litter items are more persistent and problematic than others, especially in a marine environment. Single use plastic bags and polystyrene food containers are a more significant threat to aquatic resources then say napkins and paper cups, which break-down and decompose more readily in the environment.

Without sufficient incentives for source control, there will be little incentive for Permittees to tackle other persistent and problematic litter-prone items such as cigarette butts, plastic bottles, metallic balloons, non-paper-based food wrappers, plastic cup lids and straws, etc....

Based on the previously acceptable percentages, CCCWP Permittees have committed resources to the development or advancement of source control programs as a means to meeting their trash load reduction milestones. Many communities implemented product bans to address particularly persistent and problematic sources of litter found in waterways. These efforts were not without significant risk from legal challenges and concerns from members of their

communities. To reduce a previously established trash load reduction credit for these significant efforts is bad public policy. Source control is perhaps the most cost effective and sustainable strategy for eliminating persistent and problematic sources of trash and other pollutants. Strong incentives for source control strategies and efforts should be incorporated into MRP 2.0.

Action desired: Edit section C.10.b.iv language increasing the maximum credit to 25%. Permittees will still be responsible for providing evidence to support the percentages claimed.

> **"C.10.b.iv Source Control** – Permittee jurisdiction-wide actions to reduce trash at the source, particularly persistent and problematic trash items, may be valued toward trash load reduction compliance by up to twenty-five percent load reduction total for all such actions. To claim a load percentage reduction value, Permittees must provide substantial evidence that these actions reduce trash by the claimed value. A Permittee may reference studies in other jurisdictions if it provides evidence that the implementation of source control in its jurisdiction is similarly implemented as the source control assessed in the reference studies."

C.10.b.v / C.10.f.vi Receiving Water Observations

Comment 1. As currently drafted, the receiving water observations for trash will not address the management questions being asked. Since there is no established protocol, there may not be consistency in how the observations are conducted across the region. The intent of receiving water monitoring downstream of areas converted to low generation remains unclear. The requirement that locations of sites have to be downstream of areas converted to low generation implies that compliance with MS4 reductions will be determined in the future via receiving water monitoring. It is not possible to definitely determine the source of all trash in receiving waters (upstream, windblown, direct dumping) and therefore these observations cannot and should not be linked to compliance with trash load reductions.

Action desired: Recommend having Permittees develop a monitoring protocol for receiving water observations within some specified time period of permit adoption. Suggest redrafting of text as follows:

> **"i. Receiving Water Observations -** Permittees shall conduct receiving water observations downstream from trash generation areas that have been converted from Very High, High, or Moderate to Low trash generation rates, or at other locations for which receiving water monitoring over time will produce useful trash management information.
>
> a. The observations shall be sufficient to evaluate the level of trash present in receiving waters over time, and to the extent possible determine whether there are ongoing sources outside of the Permittee's jurisdiction that are causing or contributing to adverse trash impacts in the receiving water(s).~~to determine whether a Permittee's trash control actions have effectively prevented trash from discharging into receiving waters, whether additional actions may be necessary associated with sources within a Permittee's jurisdiction, or whether there are ongoing sources outside of the Permittee's jurisdiction that are causing or contributing to adverse trash impacts in the receiving water(s).~~"

C.10.e.i Additional Creek and Shoreline Cleanup

Comment 1. For additional Creek and Shoreline Cleanups, the formula has a 10:1 offset, which means that most Permittees will not be able to claim even a 1% percent, or the maximum 5%, allowable reduction from these efforts, even though these activities remove significant

amounts of trash from local creeks. While we are glad to see that some percent reduction for these efforts is included, the formula for calculating the reduction should be revised to have 3:1 offset and the maximum allowable percent reduction should be increased. Additionally, this provision is limiting in that creek cleanups must be conducted twice a year to claim the minimal percent reduction. Some areas may not require that frequency of cleanups and some volunteer efforts are not necessarily twice a year at the same stretch of creek. If Permittees may not account for appropriate load reduction from these efforts, it is possible that much of the funding for these extremely effective cleanups will be reduced or eliminated. These events have significant public education, citizen involvement, and community awareness benefits. The removal of trash from creeks and shorelines improves water quality in the creeks, the San Francisco Bay and Delta, and the Pacific Ocean. With an increased maximum credit of 10% and a reduced 3:1 ratio, these important and beneficial efforts will certainly not be done at the expense of upland actions need to achieve the 70% reduction milestone; however, the proposed changes will provide a sufficient incentive for continued local efforts to remove trash that finds its way into our creeks and onto our shorelines. This is a win-win for water quality, the Regional Water Board, friends of creeks organizations, the environment and municipalities.

Action desired: Increase the maximum percent reduction credit to 10% or more for additional creek and shoreline cleanups, remove minimum cleanup frequency at a site, and reduce the 10:1 ratio to 3:1.

"A Permittee may claim a load reduction offset of one percent for each total of trash volume removed from additional cleanups that is ~~ten~~ three percent of the Permittee's 2009 trash load volume estimates, based on its trash generation maps and average categorical trash generation rates (see C.10.a.ii), in accordance with the following formula:

1~~0~~% Reduction Offset (Volume) = $(12\ A_{VH(2009)} + 4\ A_{H(2009)} + A_{M(2009)})\ OF$

where:

$A_{VH(2009)}$ = total amount of 2009 very high trash generation category jurisdictional area

$A_{H(2009)}$ = total amount of 2009 high trash generation category jurisdictional area

$A_{M(2009)}$ = total amount of 2009 moderate trash generation category jurisdictional area

12 = Very High to Moderate weighing ratio

4 = High to Moderate weighing ratio

OF = offset factor equal to (7.5 x 0.1), where 7.5 is the conversion from acres to gallons based on trash generation rates and 0.3~~1~~ is the ~~ten~~ three to one offset ratio."

C.10.e.ii Direct Trash Discharge Controls

Comment 1.The maximum of 10% offset for direct trash discharge controls in too small for such an important action. As the formula is written, even the trash challenged communities may find it difficult to claim meaningful reductions. In certain communities, a significant, pervasive and problematic source of trash observed in receiving waters may predominantly come from direct discharges (i.e., illegal dumping and homeless encampments) and these communities should be

allowed to focus their efforts to address those sources and receive full credit for these actions. On May 13, 2015, the Regional Water Board adopted a resolution stating in part:

NOW, THEREFORE BE IT RESOLVED THAT the Water Board:

1. *Encourages local agencies to undertake efforts to eliminate and prevent adverse water quality impacts from homeless encampments. These efforts should include clear and measurable goals for trash reduction.*

It isn't enough for Water Board members to "encourage" these programs and then approve a Permit that provides very little credit toward compliance.

Action desired: Omit the maximum percent reduction value for direct discharge control programs, and reduce the ratio in the percent reduction formula to 3:1.

> **"Direct Trash Discharge Controls –** A Permittee may offset an additional part of its provision C.10.a trash load percent reduction requirement by implementing a comprehensive plan approved by the Executive Officer for control of direct discharges of trash to receiving waters from non-storm drain system sources. ~~The maximum offset that may be claimed is ten percent using the C.10.e.i formula.~~"

C.10.f.i Reporting

Comment 1. This Provision requires mapping the areal extent of all control measures. However, it is very challenging to map areal extent of some control measures (e.g., trash receptacles, enhanced litter enforcement, enhanced storm drain inlet maintenance, activities to reduce trash from uncovered loads, anti-littering and illegal dumping enforcement, improved trash bins/container management, etc...). These maps would be extremely difficult to read as many trash reduction actions can be employed within a trash management area. This additional mapping effort is a "less beneficial task" and will not contribute in any meaningful way to assisting Permittees with meeting their trash load reduction goals, or to Water Board staff in evaluating compliance.

Action desired: Recommend continuing of mapping generation rates, management areas, and drainage of capture devices, but not the areal extent of all control measures.

C.10.f.ii Reporting

Comment 1. This Provision requires the Permittees to provide an updated trash generation map each reporting period. Considerable resources are required to generate, review, and revise maps. Having a map submitted each year does not provide that much more data than what is otherwise presented in the Annual Reports.

Action desired: Recommend tying map submittal to 70% reduction compliance date.

C.11 and C.12 General Comments

Comments are provided below on Provisions C.11 (Mercury Controls) and C.12 (PCBs Controls). Please note that Provisions C.11.a–d in the Tentative Order is "piggybacked" on C.12.a–d, so comments on Provisions C.12.a-d also generally apply to C.11.a-d.

It appears that the level of effort and resources required to implement Provisions C.11 and C.12 will be dramatically higher than implementing MRP 1.0 Provisions C.11 and C.12. Much of the cost of implementing MRP 1.0 Provisions C.11 and C.12 was offset by a grant from USEPA that

will end in 2016. The availability of grant or other funding for implementing MRP 2.0 Provisions C.11 and C.12 is uncertain.

With the delay in the release of the Draft Tentative Order from February to May 2015, many of the required submittal and/or completion deadlines have not been appropriately extended, and as currently written would be extremely difficult, if not infeasible, to meet. For example, see provisions: C.11.a.iii.(1) due February 2016; C.11.a.iii.(2) due with the June 2016 Annual Report; C.12.a.iii.(1) due February 1, 2016; C.12.a.iii.(2) due with the 2016 Annual Report; and, C.12.a.ii.(4) due April 2016.

Action desired: Extend the deadlines for these reports to the 2017 Annual Report and work with the Permittees to establish more realistic time frames for submittal of reports and/or completion of certain significant tasks, including the Green Infrastructure Framework in Provision C.3.j.i.(1).

C.12 Introduction

Comment 1. For better clarity, the introductory language should state the existing load (14.4 kg/yr.) and the wasteload allocation (1.6 kg/yr) in the PCBs TMDL that are applicable to the MRP Permittees, as opposed to the existing load and wasteload allocation that apply to all urban and non-urban stormwater discharges to the Bay (20 kg/yr and 2 kg/yr, respectively).

Action desired: Edit the introduction to Provision C.12 to identify the existing load and wasteload allocation that apply only to the MRP Permittees.

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

Comment 1. This permit provision requires the Permittees to demonstrate a total cumulative MRP area-wide PCBs load reduction of 3 kg/yr over the permit term. Provision C.12 does not provide Permittees with a clear and feasible pathway to attaining compliance with this load reduction performance standard. In order for Provision C.12 to provide Permittees with a clear and feasible pathway to attaining compliance, the load reduction performance criteria should be informed by and consistent with the final and agreed upon interim accounting method (see comments below on Provision C.12.b). Compliance should be based upon implementing PCBs control programs designed to achieve the load reduction performance criteria, as many factors that would be key to achieving the proposed load reduction performance criteria within this permit term are not controllable by the Permittees (such as the rate of building demolition or the amount of redevelopment that will occur within old industrial areas).

Furthermore, PCBs load reduction performance metrics should be in the form of action levels. Regional Water Board staff has acknowledged that load reduction performance metrics are not effluent limits. Further clarity is needed regarding their legal definition and implications with regard to enforcement and potential third party lawsuits. In addition, the permit should include contingency language that would allow for achieving compliance if a good-faith demonstration of solid efforts and actions by Permittees consistent with permit requirements does not result in achievement of the load reduction performance criteria.

Action desired:

- *Base compliance on implementation of control programs designed to achieve the load reduction performance criteria using the interim accounting method and restate the load reduction performance criteria in the form of Action Levels.*
- *Include contingency language in Provision C.12.a that allows compliance based on a good-faith demonstration of actions and effort consistent with these control programs, such as:*

  "If the PCBs load reduction performance criteria are not achieved, the Permittees shall demonstrate reasonable and demonstrable progress toward achieving the criteria."

C.12.a.ii Control Measures to Achieve PCBs Load Reductions

Comment 1. This provision requires Permittees to submit Permittee-specific PCBs load fractions by April 2016. This requirement would increase the number of stand-alone reports due within the first six months of permit adoption, creating significant burden on the Permittees.

Action desired: Include the submittal of PCBs load fractions with the FY 2016 Annual Report, providing an additional six months for the development of Permittee-specific PCBs load fractions.

C.12.a.ii (4) Implementation Level

Comment 1. The interim PCBs load reduction compliance performance criteria (i.e., 500 g/yr during the first two years of the permit) should be omitted. Although Permittees will continue existing efforts to develop and implement additional PCBs and mercury control programs, it will take time for new control programs to ramp up. Preliminary calculations of the benefit of reasonable control program scenarios over the first two years of the permit term reveals that meeting the year 1 and year 2 load reduction criteria are not feasible. Thus, the inclusion of these performance criteria in the permit will likely cause the Permittees to be out of compliance at the end of year 2.

Additionally, the PCBs load reduction performance criteria presented in Table 12.1 are somewhat unclear as presented. Presumably, the proposed area-wide load reduction performance criteria to be achieved by the end of the permit term is 3 kg/yr (as opposed to 10 kg/yr if one assumed that 0.5 kg/yr would be required in each of the first two years and 3 kg/yr would be required in each of the subsequent three years). Note that the Permit Fact Sheet states that the load reductions should be achieved "each year" (Fact Sheet, page A-98). This should be clarified by stating that 0.5 kg/yr is required at the end of year 2 (although preferably this interim performance criterion should be removed) and that 3 kg/yr be achieved by the end of year 5.

Action desired: Remove the PCBs load reduction performance criteria for the first two years of the permit term from this provision. For example, edit Provision C.12.a.ii.(4) as follows:

"For all Permittees combined, these county-specific average annual PCBs load reduction performance criteria shall total ~~0.5 kg/yr during each of the first two years of the permit and~~ 3.0 kg/yr ~~during each of~~ by the final ~~three~~ years of the permit. The ~~0.5 kg/yr reduction (and county-specific portions thereof) shall be assessed for compliance at the end of year 2 and shall be computed as the average of the year 1 and year~~

~~2 load reduction. Similarly, the~~ 3.0 kg/yr reduction (and county-specific portions thereof) shall be computed as the average of years 3-5 and shall be assessed for compliance at the end of year 4..."

C.12.a.iii (1) Reporting

Comment 1. This provision requires the Permittees to report a list of the watersheds (or portions therein) where PCBs control measures are currently being implemented and those in which control measures will be implemented (C.12.a.ii(1)) during the term of this permit as well as the monitoring data and other information used to select these watersheds by *February 1, 2016*. This submittal timeframe is arbitrary and unnecessarily short. It is unclear as to why this information is needed prior to the related information required in Provision C.12.a.iii.(2).

Action desired: Consolidate submittal of monitoring data with the monitoring reports submitted per Provision C.8.g.iv Pollutants of Concern Monitoring Reports.

C.12.a.iii (2)(b) Reporting

Comment 1. This provision requires the Permittees to report the identity and description of the contaminated sites referred to the Regional Water Board during the permit term in the 2016 Annual Report, although this is the first annual report of the permit term.

Action desired: Replace "during the permit term" with "during the previous year of the permit term" as this information will be updated each year per Provision C.12.a.iii.(3).

C.12.b Assess PCBs Load Reductions from Stormwater

Comment 1. Provision C.12.b requires Permittees to submit a load reduction assessment methodology by April 1, 2016 for Executive Officer approval. BASMAA and Regional Water Board staff recently worked together to develop an "interim accounting method" that was intended to provide a basis for stipulated load reduction benefits for implementation of the primary PCBs control programs during the MRP 2.0 permit term. CCCWP appreciates that Regional Water Board staff included in the Permit Fact Sheet much of the information developed for the interim accounting method. However, values for certain accounting parameters for managing PCBs-containing materials and wastes during building demolition activities were left out. The values for these, and all other accounting parameters, should be scrutinized now as part of the public permit review process, given the uncertainty of these values. This is especially important for one key parameter, the fraction of PCBs mass in a building that enters the MS4 during demolition in the absence of enhanced controls. In general, it is essential to articulate all aspects of the interim accounting method for managing PCBs-containing materials and wastes during building demolition activities in the permit because complying with the load reduction performance criteria in C.12.a would require the Permittees to rely heavily on this PCBs control program. In addition, many elevated source areas are outside of MRP MS4 jurisdiction (e.g., Caltrans, railroads, electrical utility properties and equipment, and ports). The interim accounting method should recognize that addressing these sites and sources will result in load reductions that should count towards meeting the load reduction performance criteria.

Action desired: Omit this provision. Finalize the interim accounting method and incorporated it into the Permit Fact Sheet. The final interim accounting method would then

be used for annual reporting of load reductions starting with the 2016 Annual Report, with potential refinements to the methodology being submitted starting in 2018. Include in the Permit Fact Sheet a discussion all of the parameters and assumptions underlying the interim accounting method and the associated uncertainties. The Permittees are committed to working with Regional Water Board staff to finalize the interim accounting method over the next few months.

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

Comment 1. Although the Permit Fact Sheet states that this permit does not require implementation of specific control measures for PCBs load reductions, this provision specifically requires the implementation of GI measures to achieve a 120 g/yr PCBs load reduction over the final three years of the permit and 3 kg/yr by the year 2040.

This provision should not include performance metrics for PCBs load reductions through implementation of Green Infrastructure (GI) over the MRP 2.0 permit term. PCBs load reductions will not be the driver for GI implementation during MRP 2.0. Regional Water Board staff has noted that based on extrapolation of MRP 1.0 data, the proposed metrics should be met via redevelopment in old industrial areas. Thus the proposed metrics would not influence GI implementation during MRP 2.0 and meeting them would instead be dependent upon an activity that is not under Permittee's control. While we expect to learn valuable lessons via opportunistic early implementation of GI retrofit projects through Provision C.3.j.ii., the pollutant load reductions associated with these retrofits implemented over MRP 2.0 is anticipated to be relatively small.

Action desired: This provision should be omitted.

C.12.f Manage PCBs-Containing Materials and Wastes During Building Demolition Activities

Comment 1. Provision C.12.f requires development of a program to manage PCBs in building materials and wastes during demolition. Given the large standing stock of PCBs known to be present in certain buildings in the Bay Area, there may potentially be significant benefits to implementing the proposed control program. However, data are sparse regarding the amount of PCBs-containing materials that are released to the ground during demolition and then mobilized into the MS4 by urban runoff, making it challenging to project with any certainty the actual benefit of the proposed control program. Cost-effectiveness relative to other PCBs controls is also highly uncertain at this time.

There remains a number of very challenging issues related to managing PCBs in building materials and wastes during demolition. For instance, this Provision fails to acknowledge that Permittees have no control over the timing of when properties redevelop. As was stated in the IMR Part B submitted in March 2014, BASMAA believes the various facets of the "big picture" need to be addressed together (e.g., human exposure at the site, water quality, and disposal) rather than trying to apply water quality BMPs outside of this context. The best approach would be to work with the State, USEPA, the building industry, and other stakeholders to develop a comprehensive statewide program analogous to current programs for asbestos and lead-based paint. The three year timeframe for developing such a statewide program and implementing its procedures at the Permittee level is likely unrealistic. Defining EPA's role in any such program is

particularly important. Implementing a program at the local level would likely be highly inefficient.

Action desired: Allow the Permittees to work with the State, USEPA, the building industry, and other stakeholders to develop a comprehensive statewide program analogous to current programs for asbestos and lead paint; remove the requirement to develop this program at the municipal level. Development of the statewide program to control PCBs during building demolitions, rather than applying controls to a specified number of buildings demolished, should represent compliance with this requirement.

C.12 Permit Fact Sheet

Comment 1. Given the uncertainty and variability in the inputs and outputs of the simple modeling used in the current TMDL framework, there is currently little certainty that feasible human interventions to reduce urban runoff PCBs inputs could accelerate the Bay's recovery with respect to PCBs. The TMDL needs to be updated to better reflect: 1) the questionable feasibility of meeting the urban runoff allocation; and, 2) the uncertainties in the allocation related to a number of factors (e.g., food web and pollutant fate modeling, fish consumption rate and target species, dose-response).

The Permit Fact Sheet should state that the Regional Monitoring Program (RMP) PCBs Synthesis Report established a foundation for a more realistic framework for conceptual and quantitative modeling of PCBs fate in the Bay that includes greater focus on the Bay margins. As such, the Permit Fact Sheet should state that the regulated community, Regional Water Board staff and the scientific community (e.g., RMP) should continue to work together to develop as soon as possible: 1) appropriate tools and monitoring strategies in support of this modeling approach to inform future planning of how and where to focus efforts to reduce PCBs loads in urban runoff; and, 2) a clear plan and timeframe for updating the Bay PCBs TMDL.

The Permit Fact Sheet states, on page A-94, that "based on information gained during pilot testing" that the specified load reduction performance criteria are achievable. In fact, the information gained through the Clean Watersheds for a Clean Bay pilot projects summarized in Part B of the Integrated Monitoring Report shows that the performance criteria included in C.12.a. is not likely to be achieved this permit term.

Action Desired: Revise Permit Fact Sheet to reflect the current state of scientific knowledge based on the RMP PCBs Synthesis Report and work to date on PCBs sources and control strategies. Revise the sentence on page A-94 above, or identify the uncertainties associated with achieving the performance criteria.

Comment 2. The Permit Fact Sheet includes an incomplete method to achieve stipulated reduction credits for each building demolished with PCBs controls, for each redeveloped site with new bioretention facilities, and for finding and abating concentrated sources of PCBs. Looking for hidden PCB sources is a good idea, but Permittees cannot guarantee that they will find them and be able to abate them.

Action Desired. Develop a program that will serve as a basis for the credits for the accounting for compliance. The program needs to include methods to systematically

identify and review potential sources, and to refer them to appropriate agencies for abatement.

Comment 3. The Permit Fact Sheet references many values from the Sources, Pathways, and Loadings Multi-Year Synthesis Report (McKee and Yee, 2015). As this is currently a draft report, the Permit Fact Sheet should be revised to reflect final edits to the report.

Action Desired: Revise the Permit Fact Sheet to reflect final edits to the report.

C.15 Exempted and Conditionally Exempted Discharges

Comment 1. The objective of this provision is to exempt unpolluted non-stormwater discharges from Discharge Prohibition A.1 and to conditionally exempt non-stormwater discharges that are potential sources of pollutants. However, fire department hydrant testing, and small new construction water line cleaning are not included as exempt uses. These minor potable water discharges are not conducted by potable water suppliers.

Action desired: Include fire department hydrant testing, and small new construction water line cleaning as conditionally exempted discharges, as long as BMPs are in place to reduce chlorine.

C.17 Annual Reports

Comment 1. Annual Reports under MRP 1.0 are due by September 15 of each year and report on the activities that occurred in the preceding fiscal year. This same reporting cycle is proposed for MRP 2.0. The Tentative Order anticipates an effective date for MRP 2.0 of December 1, 2015. Having a permit effective date in the middle of a permit year and fiscal year is challenging for several reasons. It is a challenge because municipal budgets are on a fiscal year cycle. When permits become effective in the middle of the budget cycle, Permittees' budgets are set for the remainder of the fiscal year. Municipalities are not able to adequately anticipate and budget for permit mandates that fall within the first year of the newly issued permit. For this reason, Permittees have been requesting for the past two years that the effective date of the reissued MRP coincide with the fiscal year. It is also a challenge because with the September 15, 2016 Annual Report, Permittees must report on the preceding fiscal year, which in this case covers two separate permits and sets of permit requirements – the last six months under MRP 1.0 and the first six months under MRP 2.0. This creates confusion and an unnecessary administrative burden on the 76 Permittees under the MRP and Regional Board staff because the Permittees must develop and submit a **one-time** annual report format for the approval of the Executive Officer by the required April 1 deadline. Water Board staff must review and approve that format in a timely manner so that Permittees can begin the 3-4 month process for development and submittal of their annual reports. For the last several years, the review and approval by Regional Board staff has extended into July, which squeezes the time BASMAA, the Stormwater Programs and Permittees have to prepare their many reports. A permit effective date that straddles two permit terms also presents logical challenges for conducting and reporting on our monitoring programs. Should the Water Board insist on a permit effective date that does not coincide with the fiscal year, as repeatedly requested by Permittees, Water Board staff must simplify and streamline the reporting during this overlap period.

Action Desired: Make the permit effective date July 1, 2016, or waive the requirement for the initial Annual Report under MRP 2.0. The September 2016 report should be the final report for MRP 1.0 and any special submittals due under MRP 2.0. The first Annual Report for MRP 2.0 due September 15, 2017 would cover an 18 month period for program elements.

CONTRA COSTA
CLEAN WATER
PROGRAM

ATTACHMENT 1-A

Contra Costa Clean Water Program

Provision C.3 Language Provided to Regional Water Board Staff By Email on October 8, 2014

Tom Dalziel

From: Tom Dalziel <tom.dalziel@pw.cccounty.us>
Sent: Wednesday, October 08, 2014 10:44 AM
To: Thomas Mumley
Cc: 'Dale Bowyer'; Louie, Selina@Waterboards; Sue Ma; Matt Fabry; Adam Olivieri; jims@acpwa.org; Lance Barnett; Kevin; Jill Bicknell; lynne_scarpa@ci.richmond.ca.us; John Steere; geoff@brosseau.us; Hoffmeister, Phil; jpacheco@ci.hercules.ca.us; 'Tim Tucker'; 'Keith Coggins'; Cece Sellgren; Mike Carlson; 'Steven Spedowfski'; Beth Baldwin; Lucile Paquette; dan@dancloak.com
Subject: Draft Provision C.3 for Discussion
Attachments: Table of Recommendations d3.docx; C3-MRP 2.0_d3.docx

Tom,

Attached are a draft C.3 provision and a tracking table. The Contra Costa Clean Water Program's Administrative Committee has directed me to send these to you.

These documents were originally drafted by Dan Cloak and were presented to the BASMAA Board in late September. A second draft incorporated comments by Jill Bicknell. This third draft also incorporates comments discussed at the BASMAA Development Committee's September 30 meeting.

I believe BASMAA Board members generally support the recommendations in the table and the language in the draft. However, we were unable to reach consensus on how and when to get them to you. Other Board members desired to wait until they could get additional review from their Permittee representatives.

Contra Costa Permittee representatives, mindful of time constraints, wished to get these documents to you and your staff right away. Accordingly, I am sending these to you "for discussion only" with the expectation that you and your staff may find them useful as you continue your work on the Administrative Draft of MRP 2.0. Contra Costa Permittees, and other Permittees, may weigh in with additional comments as we move forward.

The tracking table explains how the draft Provision C.3 differs from MRP 1.0. The Provision is reorganized and simplified, and many requirements are made clearer and less ambiguous. Reporting requirements are reduced. Concerns raised by Water Board staff, and many of the issues we have discussed over the past two years, are addressed.

To address the issue of stormwater retention vs. treatment, the draft Provision C.3 incorporates the language the State Board adopted in Provision E.12 of the Phase II municipal NPDES permit.

I look forward to the opportunity to review this with you. I suggest we meet as soon as possible to go over the draft provision and identify where the proposed approach and language are acceptable to you, where we have differences, and where we can work together to develop additional information to be included in the White Paper.

Thomas Dalziel

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C.3. Low Impact Development

Low Impact Development (LID) is a stormwater management strategy designed to improve water quality and stream integrity by promoting the reduction of impervious surfaces, mimicking natural drainage patterns, dispersing, infiltrating and treating runoff, and controlling runoff peaks and durations. Permittees shall require Low Impact Development (LID) features and facilities to be incorporated into development projects subject to their approval. Permittees shall also incorporate LID into their own capital improvement projects.

C.3.a. Program Implementation

i. **Task Description** –Each Permittee shall:

(1) Maintain legal authority to implement this provision;

(2) Maintain procedures and mechanisms to implement and enforce this provision. For projects discharging directly to CWA section 303(d)-listed waterbodies, conditions of approval must require that pollutants in post-development runoff not exceed pre-development levels for listed pollutants;

(3) In CEQA documents, evaluate potential water quality impacts and incorporate mitigation measures;

(4) Train staff;

(5) Conduct outreach to land development professionals;

(6) Provide guidance on LID to applicants;

(7) Integrate water quality and watershed protection goals, and the requirements of this provision, in General Plan updates and in other planning documents as appropriate.

C.3.b. Project Categories and Definitions

i. **Projects**—For the purposes of Provision C.3, a Project is a proposed development that is subject to the Permittee's planning approval and/or building permitting authority, or is constructed by the Permittee, and that creates and/or replaces impervious surface.

ii. **Regulated Projects**

(1) Projects that that create and/or replace 5,000 square feet or more of impervious surface for the following uses:

(a) Auto service facilities, described by the following Standard Industrial Classification (SIC) Codes: 5013, 5014, 5541, 7532-7534, and 7536-7539;

(b) Retail gasoline outlets;

(c) Restaurants (SIC Code 5812); or

(d) Uncovered parking lots (includes uncovered parking on rooftops)

(2) Other development projects that create and/or replace 10,000 square feet or more of impervious surface.

iii. **Hydromodification Management (HM) Projects**—Regulated Projects that create and/or replace an acre or more of impervious surface.

iv. **Exceptions and Exclusions**—When identifying areas that count toward the impervious surface thresholds in Provision C.3.b.ii.-iii., Permittees may exclude:

- Interior remodels
- Routine maintenance and repair such as roof or wall surface replacement (teardowns and structure replacements are not excluded)
- Pavement resurfacing within the existing footprint—only when existing grading and drainage is retained
- Pervious pavements constructed according to the design criteria referenced in Provision C.3.f.ii.*
- Swimming pools, fountains, and other water surfaces—only when made to overflow to the sanitary sewer
- Impervious surfaces that drain to a sanitary sewer
- Streets, roads, or trails within the public right of way [see Green Infrastructure Provision]
- Single-family homes that are not part of a larger plan of development.
- Playing fields with natural or artificial turf, when designed to retain runoff

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v. **Special Projects**—Regulated Projects that meet the criteria listed below are Special Projects eligible to use non-LID treatment as described in Provision C.3.e.iv.

(1) **Category A Special Project Criteria**—meet all of the following:*

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(a) Are built as part of a Permittee's stated objective to preserve or enhance a pedestrian-oriented type of urban design.

(b) Are located in a Permittee's designated central business district, downtown core area or downtown core zoning district, neighborhood business district or comparable pedestrian oriented commercial district, or historic preservation site and/or district.

(c) Create and/or replace one half acre or less of impervious surface area.

(d) Include no surface parking, except for incidental surface parking. Incidental surface parking is allowed only for emergency vehicle access, Americans with Disabilities Act (ADA) accessibility, and passenger and freight loading zones.

(e) Have at least 85% coverage for the entire project site by permanent structures. The remaining 15% portion of the site is to be used for safety access, parking structure entrances, trash and recycling service,

utility access, pedestrian connections, public uses, landscaping, and stormwater treatment. For the purpose of this requirement, Projects with ground-level public plazas or other public open space may omit that area from the entire project site area when calculating the percentage of the site covered by permanent structures. Runoff from the public plazas or other public open space must be directed to LID features or facilities.

(2) **Category B Special Project Criteria—meet all of the following:**

(a) Are built as part of a Permittee's stated objective to preserve or enhance a pedestrian-oriented type of urban design.

(b) Are located in a Permittee's designated central business district, downtown core area or downtown core zoning district, neighborhood business district or comparable pedestrian-oriented commercial district, or historic preservation site and/or district.

(c) Create and/or replace greater than one-half acre but no more than 2 acres of impervious surface area.

(d) Include no surface parking, except for incidental surface parking. Incidental surface parking is allowed only for emergency vehicle access, ADA accessibility, and passenger and freight loading zones.

(e) Have at least 85% coverage for the entire project site by permanent structures. The remaining 15% portion of the site is to be used for safety access, parking structure entrances, trash and recycling service, utility access, pedestrian connections, public uses, landscaping, and stormwater treatment. For the purpose of this requirement, Projects with ground-level public plazas or other public open space may omit that area from the entire project site area when calculating the percentage of the site covered by permanent structures. Runoff from the public plazas or other public open space must be directed to LID features or facilities.

(3) **Category C Special Project Criteria (Transit-Oriented Development)**

Transit-Oriented Development refers to the clustering of homes, jobs, shops and services in close proximity to rail stations, ferry terminals or bus stops offering access to frequent, high-quality transit services. This pattern typically involves compact development and a mixing of different land uses, along with amenities like pedestrian-friendly streets. To be considered a Category C Special Project, a Regulated Project must meet all of the following criteria:

(a) Be characterized as a non-auto-related land use project. That is, Category C specifically excludes any Regulated Project that is a stand-alone surface parking lot; car dealership; auto and truck rental facility with onsite surface storage; fast-food restaurant, bank or pharmacy with drive-through lanes; gas station, car wash, auto repair

and service facility; or other auto-related project unrelated to the concept of Transit-Oriented Development.

(b) Achieve at least an FAR of 2:1 for a commercial project or a density of 25 dwelling units per acre (DU/ac) for a residential project. A mixed use project must meet either an FAR of 2:1 or a density of 25 DU/ac.

(c) Have 50% or more of the project site located within ½ mile of an existing or planned transit hub or 100% of the site located within a Priority Development Area (PDA) per Provision C.3.e.vi.3(a).

vi. Start Date—Except as noted for specific subprovisions, upon Permit adoption Permittees shall apply all requirements of this Provision C.3 to all Projects for which an initial building or grading permit has not yet been issued, or (for their own Projects) for which construction has not yet begun.

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(1) **Exceptions**

(a) For Projects for which an application containing a complete stormwater control plan (showing Drainage Management Areas and facility footprints) has received final staff discretionary approval prior to December 1, 2011, Permittees may choose to require, as an alternative to the requirements of this Permit, facilities consistent with what is shown in the application.

(b) For projects for which a vested tentative map or development agreement was executed prior to December 1, 2009, Permittees may choose to require, as an alternative to the requirements of this Permit, the requirements in effect on the date of the vested tentative map or development agreement. In such case, a minimum of 60 days prior to issuing any additional permits or approvals for the Project, the Permittee shall inform the Water Board Executive Officer, by letter, of the particulars of prior Project approvals and of the proposed exceptions to the LID requirements of this Permit.

C.3.c. Source Control

i. Task Description: Each Permittee shall maintain standard requirements to reduce, to the maximum extent practicable, potential pollutant discharges to stormwater from specific sources that may be associated with Projects.

ii. Implementation: During their review of Projects, Permittees shall identify whether potential sources of pollutants will be created by the Project and shall require implementation of corresponding standard source control measures.

iii. Sources: At a minimum, each Permittee's standard requirements shall address the following potential sources:

- Interior floor drains
- Parking/storage areas and maintenance

- Indoor and structural pest control
- Landscape/outdoor pesticide use
- Pools, spas, ponds, decorative fountains, and other water features
- Restaurants, grocery stores, and other food service operations
- Refuse areas
- Industrial processes
- Outdoor storage of equipment or materials
- Vehicle and equipment cleaning
- Vehicle and equipment repair and maintenance
- Fuel dispensing areas
- Loading docks
- Fire sprinkler test water
- Drain or wash water from boiler drain lines, condensate drain lines, rooftop equipment, drainage sumps, and other sources

iv. **Exceptions:** Permittees may allow implementation of appropriate alternative source control measures, in place of a standard requirement for a structural source control measure, when none of the impervious surface created or replaced by the Project is built to accommodate the potential source.

v. **Schedule:**

(1) **Regulated Projects:** Upon Permit adoption.

(2) **All Projects:** Within one year of the Permit effective date.

C.3.d. LID Site Design

i. **Task Description.** Permittees shall adopt or reference a LID site assessment and site design methodology to be used by Project applicants. Permittees shall ensure Projects implement the following based on the objective of achieving, to the extent technically feasible, infiltration, evapotranspiration, and/or harvesting/use of the amount of runoff identified in Provision C.3.f.i.

(1) Define the development envelope and protected areas, identifying areas that are most suitable for development and areas to be left undisturbed.

(2) Concentrate development on portions of the site with less permeable soils and preserve areas that can promote infiltration.

(3) Limit overall impervious coverage of the site with paving and roofs.

(4) Set back development from creeks, wetlands, and riparian habitats.

(5) Preserve significant trees.

(6) Conform the site layout along natural landforms

(7) Avoid excessive grading and disturbance of vegetation and soils

(8) Replicate the site's natural drainage patterns.

(9) Detain and retain runoff throughout the site.

(10) Use pervious surfaces such as turf, gravel, or pervious pavement

(11) Use surfaces that detain and retain rainfall, such as green roofs,

(12) Disperse runoff from impervious surfaces on to adjacent pervious surfaces (for example, direct roof downspouts to vegetated areas)

(13) Use rain barrels and cisterns

ii. **Design Criteria for Site Design Measures.** Permittees shall adopt or reference design criteria for site design measures to be used by applicants for development approvals. The criteria shall be based on the objective of achieving infiltration, evapotranspiration, and/or harvesting/reuse of the amount of runoff identified in Provision C.3.f.i to the extent technically feasible and shall address the following measures, at a minimum:

- Pervious pavements
- Green roofs
- Dispersal of runoff from impervious surfaces on to adjacent pervious surfaces

Criteria for pervious pavements shall include requirements for signage identifying the pavement and warning against alteration.

C.3.e. Runoff Treatment and Hydromodification Management

i. **Task Description:** Permittees shall require Regulated Projects to implement LID standards to treat stormwater and control runoff flows.

ii. **Drainage Management Areas:** Permittees shall require, for each Regulated Project, a map or diagram dividing the project site into discrete Drainage Management Areas (DMAs) and drawings, text, and calculations showing how runoff from each DMA is managed using site design measures or LID facilities. One DMA may not drain to multiple LID facilities, but multiple DMAs may drain to one LID facility.

~~ii.~~(1) **Exception: Small areas for which it is infeasible to direct runoff to site design measures or LID facilities (for example, some driveway aprons) must be clearly delineated and accounted for as separate DMAs. Such areas must be minimized. Permittees shall require applicants to direct runoff from an equal or greater amount of existing (pre-project) impervious area, or from off-site impervious areas, to LID facilities where feasible.**

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iii. **LID Facilities:** Runoff not managed by LID Site Design shall be directed to facilities designed to infiltrate, evapotranspire and/or bioretain the amount of runoff specified in Section C.3.f.i. The facilities must be demonstrated to be at least as effective as a bioretention system with the following parameters:

(1) Maximum surface loading rate of 5 inches per hour.

(2) Minimum surface reservoir volume equal to surface area times a depth of 6 inches.

(3) Minimum planting medium depth of 18 inches. The planting medium must sustain a minimum infiltration rate of 5 inches per hour throughout the life of the project and must maximize runoff retention and pollutant removal and support healthy vegetation. The Permittees shall adopt or reference a regional standard for the planting medium and require the standard be implemented.

(4) Subsurface drainage/storage (gravel) layer with an area equal to the surface area and having a minimum depth of 12 inches.

(5) Underdrain with discharge elevation at the top of the gravel layer.

(6) No compaction of soils beneath the facility, or ripping/loosening of soils if compacted.

(7) No liners or other barriers interfering with infiltration.

(8) Appropriate plant palette for the specified soil mix and to conserve water.

(9) **Signage** that identifies the facility with the aim of preventing the use of pesticides or fertilizers or alteration of the planting medium ~~includes the following~~:

~~(a) Identification of the facility as a bioretention facility for stormwater treatment~~

~~(b) Identification of and contact information for the facility owner/operator~~

~~(c) Instructions warning against alteration of plants or soils or using pesticides or fertilizers~~

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iv. **Alternative Designs:** Facilities such as infiltration trenches or subsurface infiltration chambers or a combination of facilities of different design than in Section C.3.e.iii. may be used if all of the following measures of equivalent effectiveness are demonstrated:

(1) Equal or greater amount of runoff infiltrated or evapotranspired;

(2) Equal or lower pollutant concentrations in runoff that is discharged after biotreatment;

(3) Equal or greater protection against shock loadings and spills;

(4) Equal or greater accessibility and ease of inspection and maintenance.

v. **Variations for Special Site Conditions:** Bioretention facility design parameters may be adjusted for the following special site conditions:

(1) Facilities located within 10 feet of structures or other potential geotechnical hazards established by the geotechnical expert for the project

may incorporate an impervious cutoff wall between the bioretention facility and the structure or other geotechnical hazard.

(2) Facilities with documented high concentrations of pollutants in underlying soil or groundwater, facilities located where infiltration could contribute to a geotechnical hazard, and facilities located on or attached to elevated plazas or other structures may incorporate an impervious liner and may locate the underdrain discharge at the bottom of the subsurface drainage/storage layer (this configuration is commonly known as a "flow-through planter").

(3) Facilities located in areas of highly infiltrative soils or where connection of underdrain to a surface drain or to a subsurface storm drain are infeasible, may omit the underdrain.

(4) Facilities located in areas of high groundwater may omit the underdrain or incorporate an impervious liner based on the recommendations of the geotechnical and/or structural engineer or requirements of the local agency or water district.

(5) Facilities serving high-risk areas such as fueling stations, truck stops, auto repairs, and heavy industrial sites may be required to provide additional treatment to address pollutants of concern unless these high-risk areas are isolated from storm water runoff or bioretention areas with little chance of spill migration.

vi. **Non-LID Facilities on Special Projects.** Special Projects may be designed so that runoff from some impervious areas is directed to non-LID runoff treatment facilities, up to a maximum specified percentage of the total impervious area created or replaced by the Project. Allowable non-LID runoff treatment facilities are tree-box-type high flowrate biofilters or vault-based high flowrate media filters. Runoff from remaining impervious area shall be directed to LID facilities.

Permittees shall conduct outreach to applicants for projects that qualify as Special Projects regarding the advantages of LID facilities and, notwithstanding the applicability of credits allowing the use of non-LID facilities, shall require the use of LID facilities wherever it is feasible to do so.

A Regulated Project that meets all the criteria for more than one category may apply the higher LID Treatment Reduction Credit of the categories; however, the LID Treatment Reduction Credits allowed under different categories may not be summed.

(1) Any Category A Special Project may direct runoff from up to 100% of the impervious area created or replaced to non-LID treatment facilities.

(2) For any Category B Special Project, the maximum LID Treatment Reduction Credit allowed is determined based on the density achieved by the Project in accordance with the criteria listed below. Density is

expressed in Floor Area Ratios (FARs) for commercial and in Dwelling Units per Acre (DU/Ac) for residential development projects. Mixed use projects may use either the FAR or DU/ac density criterion.

(a) **50% Maximum LID Treatment Reduction Credit.** For any commercial or mixed use Category B Special Project with a FAR of at least 2:1, and for any residential Category B Special Project with a density of at least 50 DU/acre, runoff from up to 50% of the Project impervious area created or replaced may be directed to non-LID treatment facilities.

(b) **75% Maximum LID Treatment Reduction Credit.** For any commercial or mixed use Category B Special Project with a FAR of at least 3:1, and for any residential Category B Special Project with a density of at least 75 DU/Ac, runoff from up to 75% of the Project impervious area created or replaced may be directed to non-LID treatment facilities.

(c) **100% Maximum LID Treatment Reduction Credit.** For any commercial or mixed use Category B Special Project with a FAR of at least 4:1, and for any residential Category B Special Project with a density of at least 100 DU/Ac, runoff from up to 100% of the Project impervious area created or replaced may be directed to non-LID treatment facilities.

(3) For any Category C Special Project, the total maximum LID Treatment Reduction Credit allowed is the sum of Location Credits, Density Credits, and Minimized Surface Parking Credits.

(a) **Location Credits.**

- 50% Location Credit: Located within a ¼ mile radius of an existing or planned transit hub.
- 25% Location Credit: Located within a ½ mile radius of an existing or planned transit hub.
- 25% Location Credit: Located within a planned Priority Development Area (PDA), which is an infill development area designated by the Association of Bay Area Government's / Metropolitan Transportation Commission's FOCUS regional planning program. FOCUS is a regional incentive-based development and conservation strategy for the San Francisco Bay Area.

Only one Location Credit may be used by an individual Category C Special Project, even if the project qualifies for multiple Location Credits. At least 50% or more of a Category C Special Project's site must be located within the ¼ or ½ mile radius of an existing or planned transit hub to qualify for the corresponding Location Credits listed above. One hundred percent of a Category C Special Project's site must be located within a PDA to qualify for the corresponding

Location Credit listed above. Transit hub is defined as a rail, light rail, or commuter rail station, ferry terminal, or bus transfer station served by three or more bus routes (i.e., a bus stop with no supporting services does not qualify). A planned transit hub is a station on the MTC's Regional Transit Expansion Program list, per MTC's Resolution 3434 (revised April 2006), which is a regional priority funding plan for future transit stations in the San Francisco Bay Area.

(b) **Density Credits:**

A Category C Special Project that is a commercial development may qualify for the following Density Credits:

- 10% Density Credit: Achieve an FAR of at least 2:1.
- 20% Density Credit: Achieve an FAR of at least 4:1.
- 30% Density Credit: Achieve an FAR of at least 6:1.

A Category C Special Project that is a residential development project may qualify for the following Density Credits:

- 10% Density Credit: Achieve a density of at least 30 DU/Ac.
- 20% Density Credit: Achieve a density of at least 60 DU/Ac.
- 30% Density Credit: Achieve a density of at least 100 DU/Ac.

Mixed-use Category C Projects may qualify for Density Credits based on DU/Ac or FAR. Only one Density Credit may be used by an individual Category C Special Project, even if the project qualifies for multiple Density Credits.

- **Minimized Surface Parking Credits**: 10% Minimized Surface Parking Credit: Have 10% or less of the total post-project impervious surface area dedicated to at-grade surface parking. Runoff from the at-grade surface parking must be treated with LID treatment measures.
- 20% Minimized Surface Parking Credit: Have no surface parking except for incidental surface parking. Incidental surface parking is allowed only for emergency vehicle access, ADA accessibility, and passenger and freight loading zones.

Only one Minimized Surface Parking Credit may be used by an individual Category C Special Project, even if the project qualifies for multiple Minimized Surface Parking Credit.

vii. Design Criteria for Non-LID Facilities. Allowable Non-LID Facilities are tree-box-type high-flowrate biofilters and vault-based high-flowrate media filters. The Permittees shall adopt or reference design criteria to be implemented for Non-LID Facilities. Non-LID facilities shall be designed to treat at least 80%

of total runoff over the life of the project, or a flow rate produced by rainfall intensity of 0.2 inches per hour.

viii. **Design Augmentation for Hydromodification Management (HM):** Facilities designed to meet the HM criteria in Section C.3.f. shall incorporate outflow-limiting devices and shall have additional infiltration area and runoff storage as required to meet the HM criteria.

C.3.f. Design Capacity and Performance of LID Facilities

i. **Point of Control:** Criteria for infiltration, evapotranspiration, harvest/use, and bioretention, and/or for flow-duration control, apply to the Project as a whole. Design flows from individual facilities within the same Project may be aggregated for the purpose of evaluating compliance.

ii. **Infiltration, Evapotranspiration, Harvest/Use, and Bioretention.** LID facilities on Regulated Projects shall be sized to infiltrate, evapotranspire, harvest/use, and/or bioretain at least 80% of the total runoff over the life of the project. For bioretention facilities, a sizing factor of 4% of tributary impervious area, or a flow rate produced by a rainfall intensity of 0.2 inches per hour, may be used.

iii. **Hydromodification Management (HM) Standards:** LID facilities on HM Projects shall be designed to at least the following minimum performance for flow-duration control.

(1) **No flow-duration control required**—HM Projects where one or more of the following apply:[1]

(a) Post-project impervious area is less than, or the same as, pre-project impervious area.

(b) The runoff path downstream to the Bay, Delta, or a flow-controlled reservoir consists solely of storm drains, hardened engineered channels, and channels that are tidally influenced or aggrading.

(c) Project is in a catchment or subcatchment that is 65% or more impervious.

(2) **Flow-duration control from 0.25Q2 to Q10**—Permittees may apply a flow-duration control standard of between one quarter of the two-year pre-project peak flow up to the ten-year pre-project peak flow to HM Projects that create or replace 20 acres or less impervious area and to which one or more of the following apply:

(a) On the runoff path downstream, at the location of first discharge to an unhardened stream, the increase in impervious area due to the HM Project represents 5% or less of the stream's watershed area.

(b) On the runoff path downstream, at the location of first discharge to an unhardened stream, the stream watershed is 25% or more impervious.

[1] Order R2-2009-0074 includes maps showing such locations in Santa Clara, Alameda, and San Mateo counties.

(c) Watershed locations where the local flood control agency has determined the potential for increased stream erosion due to future development is minimal.

(3) **Flow-duration control from 0.1Q2 to Q10** – For other HM Projects, Permittees shall apply a flow-duration control standard of between one-tenth of the two-year pre-project peak flow up to the ten-year pre-project peak flow.

iv. **Methods for applying flow-duration-control standards to HM Projects.** Permittees may allow applicants for development approvals to use either of the following methods to demonstrate that proposed LID site design measures and LID facilities achieve compliance with the applicable flow-duration control standard:

(1) **Project-specific continuous simulation modeling.** Applicants may use a model interface and parameters developed by the Permittees,[2] or Permittees may allow applicants to prepare their own model using industry-accepted methods and values for model parameters.[3] The most representative and longest available local rainfall data record shall be used.

(2) **Sizing factors derived from continuous simulation modeling.** Permittees may use a continuous simulation model to derive sizing factors for LID facilities to be used by applicants for development approvals. Local rainfall data records shall be used, and the results adjusted for geographic variations in rainfall patterns. Sizing factors may be organized by NRCS Hydrologic Soil Group.

v. **Goodness of Fit Criteria for HM Standards:** The net deviation above the post-project flow duration curve from the pre-project flow duration curve shall not be more than 10% over more than 10% of the length of the curve corresponding to the range of flows to control.

vi. **Limitations on Use of Infiltration Devices**

(1) An infiltration device is any structure designed to infiltrate stormwater into the subsurface and, as designed, bypass the natural groundwater protection afforded by surface soil. Infiltration devices include dry wells, injection wells, infiltration trenches, and french drains, but do not include bioretention.

(2) If a Permittee allows an applicant for approval of a development project to use an infiltration device to comply with this Provision, then the Permittee shall review the design and require any necessary measures to protect groundwater. These measures are included in guidance from local Water Districts and include:

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[2] For example, the Bay Area Hydrology Model (BAHM)

[3] For example, as described under Option 3 in the HMP Standard in the Contra Costa Clean Water Program's *Stormwater C.3 Guidebook*, 6th Edition.

- Prohibiting the use of infiltration devices to manage runoff from catchments where spills or dumping could generate high pollutant loads,
- Requiring a 10-foot vertical separation between the base of the device and seasonal high groundwater elevations,
- Requiring a 100-foot horizontal separation from known potable water supply wells, septic systems, and underground storage tanks with hazardous materials.

C.3.g. Alternative or In-Lieu Compliance with Provision C.3.e.

i. **Task Description:** The Permittees may allow an applicant for development project approval to provide alternative compliance with Provision C.3.e for some or all impervious area created or replaced by a Regulated Project. The Permittee must show a net environmental benefit for pollutant loading, as compared to requiring LID for all of the impervious area created or replaced by the Regulated Project. For HM projects, the Permittee must also show a net environmental benefit for reduced potential for stream erosion.

(1) **Option 1: Retrofit Off-Site Impervious Area with LID**
Retrofit with LID Facilities an equal or greater amount of existing impervious area at offsite location(s), or drain existing impervious areas on-site or off-site to on-site LID Facilities.

(2) **Option 2: Payment of In-Lieu Fees**
Pay a portion of the costs of off-site project(s).

C.3.h. Alternative Certification of Stormwater Treatment Systems

i. **Task Description** – In lieu of their own review, a Permittee may elect to have a third party review and certify a Regulated Project's adherence to Provision C.3.f. The third party reviewer must be a Civil Engineer, Licensed Architect or Landscape Architect registered in the State of California, or staff of another Permittee subject to the requirements of this Permit.

C.3.i. Operation and Maintenance of LID Facilities and Non-LID Facilities

i. **Task Description** – Each Permittee shall implement an Operation and Maintenance (O&M) Verification Program.

ii. **Implementation Level** – At a minimum, the O&M Verification Program shall include the following elements:

(1) Legally enforceable agreements or mechanisms for all Regulated Projects that, at a minimum, require at least one of the following from all project proponents and their successors in control of the Project or successors in fee title:

(a) The project proponent's signed statement accepting responsibility for the O&M of the LID Facilities or non-LID Facilities until such responsibility is legally transferred to another entity;

(b) Written conditions in the sales or lease agreements or deed for the project that requires the buyer or lessee to assume responsibility for the O&M of the LID Facilities or non-LID Facilities until such responsibility is legally transferred to another entity;

(c) Written text in project deeds, or conditions, covenants and restrictions (CCRs) for multi-unit residential projects that require the homeowners association or, if there is no association, each individual owner to assume responsibility for the O&M of the installed LID Facilities or non-LID Facilities until such responsibility is legally transferred to another entity; or

(d) Any other legally enforceable agreement or mechanism, such as recordation in the property deed, that assigns the O&M responsibility for the installed onsite, joint, and/or offsite LID Facilities or non-LID Facilities to the project owner(s) or the Permittee.

(2) Coordination with the appropriate mosquito and vector control agency with jurisdiction to establish a protocol for notification of LID Facilities and Non-LID Facilities.

(3) Legally enforceable agreements or mechanisms for all Regulated Projects that require the granting of site access to all representatives of the Permittee, local mosquito and vector control agency staff, and Water Board staff, for the sole purpose of performing O&M inspections of the installed LID Facilities and Non-LID Facilities.

(4) A written plan and implementation of the plan that describes O&M (including inspection) of all LID Facilities and Non-LID Facilities that are Permittee-owned and/or operated.

(5) A prioritized plan for inspecting all installed stormwater treatment systems and HM controls. At a minimum, this prioritized plan must specify the following for each fiscal year:

(a) Inspection by the Permittee of all newly installed LID Facilities and Non-LID Facilities during construction and at completion of construction.

~~(b) Inspection by the Permittee of at least 20 percent of the total number (at the end of the preceding fiscal year) of installed LID Facilities and Non-LID Facilities;~~

~~(c) Inspection by the Permittee of at least 20 percent of the total number (at the end of the preceding fiscal year) of installed non-LID Facilities; and~~

~~(d)~~(b) Inspection by the Permittee of all installed LID Facilities and Non-LID Facilities, at least once every five years.

(6) A database or equivalent method for tracking Regulated Projects, Facilities, and inspections.

iii. **Maintenance Approvals:** The Permittees shall ensure that LID Facilities and non-LID Facilities installed by Regulated Projects are properly operated and maintained for the life of the projects. In cases where the responsible party for a LID Facility or Non-LID Facility has worked diligently and in good faith with the appropriate State and federal agencies to obtain approvals necessary to complete maintenance activities for the LID Facility or Non-LID Facility, but these approvals are not granted, the Permittees shall be deemed to be in compliance with this Provision. Permittees shall ensure that constructed wetlands installed by Regulated Projects and used for urban runoff treatment shall abide by the Water Board's Resolution No. 94-102: Policy on the Use of Constructed Wetlands for Urban Runoff Pollution Control and the O&M requirements contained therein.

C.3.j. Reporting

i. Annual Reporting—Approvals of Regulated Projects

The Permittees' annual reporting format shall require, at a minimum, the following information for each Regulated Project approved during the reporting period:

- Project Name, Phase, Number, Location, and Street Address
- Project Owner
- Total new and replaced impervious area
- Project Type (Special Project Category and/or HM, as applicable)
- Impervious area draining to LID and to non-LID facilities
- Project status and date of last action
- Alternative compliance option, if any

ii. Annual Reporting—Facilities Beginning Operation

The Permittees' annual reporting format shall require, at a minimum, the following information for each LID Facility and Non-LID Facility beginning operation during the reporting period. :

- Project Name, Phase, Number, Location, and Street Address
- Facility Owner
- Tributary area
- Facility type
- Sizing criteria used (including HM criteria if applicable)
- Date operation started

This information shall be provided to the local mosquito and vector control district.

iii. Annual Reporting—Operation and Maintenance Verification

The Permittees' annual reporting format shall require, at a minimum, the following information for the reporting period:

- Total number of facilities in the Permittee's inspection database; number of bioretention, harvesting/use, green roofs, infiltration, tree-box-type

high-flowrate biofilters, vault-based high-flowrate media filters, and (for new development projects subject to the requirements of previous permits) extended detention basins, sand filters, continuous-deflection separators, other landscape-based facilities, and other mechanical facilities.

- Number of each type of facility inspected during the reporting period.
- Summary of inspection results, including the number of facilities found deficient in operation and remedial and enforcement actions taken.

iv. Records Retention

For each Regulated Project, Permittees shall retain, on an ongoing basis, reports, plans, portions of applications for development approvals, as-built drawings, and other information as necessary to document the design and construction of LID site design measures, Drainage Management Areas, LID facilities, and non-LID facilities in accordance with the requirements of this Provision. Permittees shall have the capability to readily provide this information to the Executive Officer on request, preferably in electronic form.

v. Regional Information Management

The Permittees are encouraged to collectively create and operate regional information facilities (for example, a relational database and GIS) to consistently and effectively manage records and information associated with implementation of this Provision. The Executive Officer may accept access to such facilities in lieu of any or all reporting requirements in Provision C.3.j.i.-iv.

Ref #	Issue Area	Recommendation	Draft Provision	White Paper Sections
1	Title	Retitle C.3 to be "Low Impact Development"	C.3	
2	Thresholds/Applicability	Retain current thresholds for private projects to be Regulated Projects	C.3.b.ii.	2.1-2.3
3	Thresholds/Applicability	Eliminate applicability of C.3 to Roads; defer to Green Infrastructure Provision	C.3.b.	2.4
4	Thresholds/Applicability	Clarify how square footage for special land uses is used to determine C.3 applicability	C.3.b.ii.(1)	2.5.1
5	Thresholds/Applicability	Clarify exclusions and how impervious areas count toward thresholds	C.3.b.iv.	2.5.2
6	Thresholds/Applicability	Omit the 50% rule	C.3.b.	2.5.3
7	Thresholds/Applicability	Set a "construction commenced by" date and end grandfathering after that date	C.3.b.vi.	2.5.4
8	Thresholds/Applicability	~~Omit the exclusion for single-family homes~~	C.3.b.	
9	Thresholds/Applicability	Omit the distinction of development vs. redevelopment	C.3.b.	
10	Thresholds/Applicability	Create a new category of "Projects" consisting of all projects that create and/or replace impervious surface and are subject to planning/building authority	C.3.b.i.	
11	Site Design Measures	Eliminate Provision C.3.i. Small Projects requirements	C.3.b.	2.6-2.7
12	Special Projects	Move Special Projects Categories definitions to C.3.b.—accompanies other applicability	C.3.b.v.	
13	Site Design Measures	Apply site design requirements "to the extent feasible" to all Projects (this replaces the "encourage" language of existing Provision C.3.a. as well as C.3.i.)	C.3.d.i.	
14	Site Design Measures	Update list of Site Design Measures and state that they are to be implemented based on the	C.3.d.i.	

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Ref #	Issue Area	Recommendation	Draft Provision	White Paper Sections
		objective of achieving infiltration, evapotranspiration and/or harvesting/use of specified amount of runoff (this is consistent with Phase II permit)		
15	Site Design Measures	Add requirement that Permittees adopt or reference design criteria for site design measures, and specifically pervious pavements, green roofs, and runoff dispersal	C.3.d.ii.	
16	Source Control Measures	Include a list of sources for which standard source control measures must be adopted by the Permittee. Exclude applicability to Projects where the new or replaced impervious area is not directly related to the source.	C.3.c.	
17	Source Control Measures	Apply source control measures to all Projects.	C.3.c.	
18	Hydromodification Management	Redefine HM Projects to be those that create or replace an acre or more of impervious surface—see specific requirements	C.3.b.iii.	
19	Treatment and Hydromodification Management	Require delineation of Drainage Management Areas for Regulated Projects (consistent the Phase II Provision E.12)	C.3.e.ii.	
20	LID Facility Design	State that facilities must be "at least as effective as a bioretention system" with specified parameters (taken from Phase II permit Provision E.12—this addresses the feasibility/infeasibility of infiltration and harvesting/use issue). Includes provisions for Alternative Designs and Variations for Special Site Conditions (also from Phase II Permit Provision E.12).	C.3.e.iii.	
21	LID Facility Design	Includes requirement for identifying signage.	C.3.e.iii.(9)	
22	Non-LID Facilities for Special Projects	Requires use of LID facilities "where it is feasible to do so" notwithstanding non-LID credits (substitutes for any documentation of	C.3.e.vi.	

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Ref #	Issue Area	Recommendation	Draft Provision	White Paper Sections
		feasibility/infeasibility of bioretention).		
23	Special Projects	Allow public open space areas to be omitted when calculating lot coverage for purpose of determining the applicability of Category A and Category B Special Project provisions	C.3.b.v.(1)(e) and C.3.b.v.(2)(e)	
24	Non-LID Facilities for Special Projects	Require Permittees to adopt or reference design criteria for non-LID facilities (replaces current reporting requirement)	C.3.e.vii.	
25	Treatment Design Capacity and Performance	LID Facilities on Regulated Projects shall be sized to infiltrate, evapotranspire, and/or bioretain at least 80% of the total runoff over the life of the project (replaces current Provision C.3.d. hydraulic criteria). Allows bioretention to be designed to 4% and allows non-LID facilities to be designed to 0.2 in/hr. rainfall.	C.3.f.i.	
26	Hydromodification Management	Retains current exclusions from HM requirements that currently apply except in Contra Costa. Clarifies downstream hardening exclusion to consider flow-controlled reservoirs and specify that hardening applies to engineered channels (omits current references to riprap and sackcrete).	C.3.f.ii.(1)	
27	Hydromodification Management	Adds an intermediate flow duration control standard of 0.25Q2 to Q10 and states where it applies.	C.3.f.ii.(2)	
28	Hydromodification Management	Changes Goodness of Fit criteria to credit the area where the post-project curve is below the pre-project curve against the area where the post-project curve is above the pre-project curve.	C.3.f.iv.	
29	Limits on the Use of Infiltration Devices	Condenses current requirements and makes reference to local Water District standards rather than applying a permit-specific standard	C.3.f.vi.	
30	Alternative Compliance	Eliminate restrictions on Alternative Compliance	C.3.g.	3.2

Ref #	Issue Area	Recommendation	Draft Provision	White Paper Sections
		as to timing.		
31	Alternative or In-Lieu Requirements	Condenses and simplifies options, and combines alternative compliance for treatment and HM. States explicitly credit available for draining existing impervious areas on-site or off-site to on-site LID facilities.	C.3.g.	
32	Alternative Certification of Stormwater Treatment Systems	Condenses language.	C.3.h.	
33	Operation and Maintenance	Requires inspection of newly installed facilities	C.3.i.ii.(5)	
34	Reporting	Simplifies and condenses reporting of Regulated Projects approved during the fiscal year.	C.3.j.i.	
35	Reporting	Adds separate and explicit requirement to report facilities beginning operation	C.3.j.ii.	
36	Reporting	Requires only summary information for O&M Verification inspections	C.3.j.iii.	
37	Reporting	Specifies retention of documentation of design and construction of site design measures and facilities.	C.3.j.iv.	
38	Reporting	Allows option for regional information management for C.3 in lieu of any or all reporting requirements	C.3.j.v.	
39	Treatment and Hydromodification Management	Add a *de minimis* exception for small areas from which runoff can't be directed to LID facilities	C.3.e.ii.(1)	

CONTRA COSTA
CLEAN WATER
PROGRAM

ATTACHMENT 2

Contra Costa Clean Water Program

Some Of The Compliance Deadlines In The First Twelve Months After The MRP Effective Date

Some of the compliance deadlines in the first twelve months after the MRP 2.0 effective date

Permit Section	Implementation Task	Implementation Level/Reporting	Schedule
C.3 - New Development and Redevelopment			
C.3.a	New Development and Redevelopment Performance Standard Implementation	Provide a brief summary of the method(s) of implementation of Provisions C.3.a.i (1)–(8) in the 2016 Annual Report.	2016 AR
C.3.b	Regulated Projects	All elements of Provision C.3.b.i.-ii shall be fully implemented immediately, including a database or equivalent tabular format that contains all the information listed under Reporting (Provision C.3.b.iv.)	implement immediately
C.3.c	Low Impact Development (LID)	For specific tasks listed that are reported using the reporting tables required for Provision C.3.b.iv, a reference to those tables will suffice.	2016 AR
C.3.d	Numeric Sizing Criteria for Stormwater Treatment Systems	Permittees shall use the reporting tables required in Provision C.3.b.iv.	2016 AR
C.3.g	Hydromodification Management	All HM Projects shall meet the HM Standard in Provision C.3.g.ii immediately. For Contra Costa Permittees, Projects receiving final planning entitlements on or before one year after the Permit effective date may be allowed to use the Contra Costa design standards from the Previous Permit.	immediate compliance
		Contra Costa Permittees shall, with the first Annual Report following the Permit's effective date, submit a technical report consisting of an HM Management Plan describing how Contra Costa will implement the Permit's HM requirements (e.g., how it will update or modify its practices to meet Permit requirements).	2016 AR
C.3.h	Operation and Maintenance of Stormwater Treatment Systems	Immediate implementation except for Provision C.3.h.ii (7) which is due within 12 months of the Permit effective date.	immediate compliance
		Each Permittee shall certify in the 2017 Annual Report that an ERP has been completed by 12 months after the Permit effective date.	12/1/2016
C.3.j	i. Green Infrastructure Program Plan Development	Prepare a framework for development of Green Infrastructure Plan. Each Permittee shall submit documentation that its framework for development of its GI Plan was approved by its governing body, mayor, city manager, or county manager by 12 months after Permit effective date, with the 2017 Annual Report.	12/1/2016
C.5 - Illicit Discharge Detection and Elimination			
C.5.c	Spill and Dumping Complaint Response Program	The Permittee's website shall be updated with the central contact point to report spills and dumping by June 30, 2016.	6/30/16

Permit Section	Implementation Task	Implementation Level/Reporting	Schedule
C.5.e	Control of Mobile Sources	In the 2016 Annual Report, each Permittee shall provide the following: (a) minimum standards and BMPs for each of the various types of mobile businesses; (b) its enforcement strategy; (c) a list and summary of the specific outreach events and education conducted to the different types of mobile businesses operating within the Permittee's jurisdiction; (d) the number of inspections conducted at mobile cleaners' businesses and/or job sites in 2015-2016; (e) discuss enforcement actions taken against mobile businesses in 2015-2016; (f) a list of mobile cleaners operating within the Permittee's jurisdiction; and (g) a list and summary of the county-wide or regional activities conducted, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education.	2016 AR
C.5.f	Municipal Separate Storm Sewer System (MS4) Map	In the 2016 and 2019 Annual Reports, Permittees shall discuss how they make MS4 maps available to the public and how they publicize the availability of the MS4 maps.	2016 AR
C.6 - Construction Site Control			
C.6.e	Inspections	By September 1st of each year, each Permittee shall remind all site developers and/or owners disturbing one acre or more of soil to prepare for the upcoming wet season.	9/1/16
		In the 2016 Annual Report, each Permittee shall certify the criteria it uses to determine hillside developments. If the Permittee is using maps of hillside developments areas or other written criteria, include a copy in the Annual Report.	2016 AR
C.7 - Public Information and Outreach			
C.7.d	Stormwater Pollution Prevention Education	In the 2016 Annual Report, each Permittee shall list the point of contact, discuss how this point of contact and stormwater pollution website are publicized and maintained, and certify that it has a website dedicated to providing and maintaining information on stormwater issues, watershed characteristics, and stormwater pollution prevention alternatives.	2016 AR
C.8 - Water Quality Monitoring			
C.8.e	Stressor/Source Identification (SSID) Projects	The Permittees shall develop a work plan for each SSID project and submit the work plans with the Urban Creeks Monitoring Report (UCMR) such that a minimum of half the required number of SSID projects are started (at a minimum, have a workplan) by the third year of the permit term.	3/15/16
		When a Permittee(s) determines that discharges to its stormwater collection system(s) contribute to an exceedance of a water quality standard or an exceedance of a trigger threshold such that the water body's beneficial uses are not supported, the Permittee(s) shall submit a report in the UCMR that describes BMPs that are currently being implemented, and the current level of implementation, and additional BMPs that will be implemented, and/or an increased level of implementation, to prevent or reduce the discharge of pollutants that are causing or contributing to the exceedance of WQSs. The report shall include an implementation schedule.	3/15/16
		The Permittees shall submit an SSID report in each UCMR which summarizes the actions taken in C.8.e.i-iii above. The SSID report shall include a running summary of all SSID projects (C.8.e.ii), including start date, brief problem definition, and schedule for each project. As projects progress, the SSID report shall describe findings and monitoring results and outline steps for the upcoming year for each ongoing project. The Permittees shall submit the SSID report with each UCMR.	3/15/16

Permit Section	Implementation Task	Implementation Level/Reporting	Schedule
C.8.g	ii. Electronic Reporting	The Permittees shall submit to the California Environmental Data Exchange Network (CEDEN) all results from monitoring conducted pursuant to Provisions C.8.d. Creek Status, C.8.e. SSID Projects (as applicable), and C.8.f. Pollutants of Concern. Data that CEDEN cannot accept are exempt from this requirement. Data shall be submitted in SWAMP formats and with the quality controls required by CEDEN. Data collected during the previous October 1–September 30 period shall be submitted by March 15 of each year.	3/15/16
	iii. Urban Creeks Monitoring Report	The Permittees shall submit a comprehensive Creek Status Monitoring Report no later than March 15 of each year, reporting on all data collected during the foregoing October 1–September 30 period. (See C.8.g.iii for specifics)	3/15/16
	iv. Pollutants of Concern Monitoring Reports	By October 15 of each year of the permit (beginning in 2016), the Permittees shall submit a report describing the allocation of sampling effort for POC monitoring for the forthcoming year and what was accomplished for POC monitoring during the preceding Water Year. The report shall include (for preceding year and projected for forthcoming year): monitoring locations, number and types of samples collected, purpose of sampling (management question addressed), and analytes measured. Any data not reportable to CEDEN should also be included in this report.	10/15/16
C.10 - Trash Load Reduction			
C.10.a	i. Schedule	Permittees shall reduce trash discharges from 2009 levels, described below, to receiving waters in accordance with the following schedule:	
		60% by 7/1/16 (performance guideline)	7/1/16
	ii. Trash Generation Area Management	Permittees shall have an opportunity to correct and/or revise, based on improved information, the 2009 trash levels and trash generation areas in their February 2014 maps by submitting the correction and/or revision no later than the 2016 Annual Report deadline.	2016 AR
C.10.e	ii. Direct Trash Discharge Controls	A Permittee may offset an additional part of its provision C.10.a trash load percent reduction requirement by implementing a comprehensive plan approved by the Executive Officer for control of direct discharges of trash to receiving waters from non-storm drain system sources. The maximum offset that may be claimed is ten percent using the C.10.e.i formula. The plan shall be submitted with the 2016 Annual Report.	2016 AR
C.10.f	i. Summary and Areal Extent of Implementation	A summary of trash control actions within each trash management area, including the types of actions, levels of implementation, areal extent of implementation, and whether the actions are ongoing or new, including initiation date.	2016 AR
C.10.f	Ii Submittal of Updated Maps	An updated trash generation area map or maps and associated trash management areas including the locations and associated drainage areas of full trash capture systems and non-full trash capture system trash control actions, and the location of Trash Hot Spots, with highlight or other indication of any revisions or changes from the previous year map(s). These maps are separate and distinct from corrections and/or revisions of the 2009 trash levels in the February 2014 maps and shall illustrate progress toward achieving the trash reduction requirements in C.10.a.i.	2016 AR
C.11 - Mercury Control			
C.11.a	Implement Control Measures to Achieve Mercury Load	The Permittees shall report by February 1, 2016, a list of the watersheds (or portions therein) where mercury control measures are currently being implemented and those in which control measures will be implemented (C.11.a.ii(1)) during the term of this permit as well as the monitoring data and other information used to select these watersheds.	2/1/16

Permit Section	Implementation Task	Implementation Level/Reporting	Schedule
	Reductions.	The Permittees shall report in their 2016 Annual Report the specific control measures (C.11.a.ii(2)) that are currently being implemented and those that will be implemented in watersheds identified under C.11.a.iii(1) and an implementation schedule (C.11.a.ii(3)) for these control measures. (See C.11.a.iii (2) for report specifics).	2016 AR
C.11.b	Assess Mercury Load Reductions from Stormwater	The Permittees shall submit, for Executive Officer approval, by April 1, 2016, a full description of an adequate measurement and estimation methodology and rationale for the approaches used to assess mercury load reductions achieved through mercury source control, stormwater treatment, green infrastructure projects, and other stormwater management measures implemented during the term of this permit.	4/1/16
C.12 - Polychlorinated Biphenyls (PCBs) Controls			
C.12.a	Implement Control Measures to Achieve PCBs Load Reductions	Report list of the watersheds (or portions therein) where PCBs control measures are currently being implemented and those in which control measures will be implemented during the term of this permit as well as the monitoring data and other information used to select these watersheds.	2/1/16
		Report specific control measures that are currently being implemented and those that will be implemented in identified watersheds and an implementation schedule.	2016 AR
C.12.b	Assess PCBs Load Reductions from Stormwater	Submit, for Executive Officer approval, by, a full description of the measurement and estimation methodology and rationale for the approaches used to assess PCBs load reductions achieved through PCBs source control, stormwater treatment, green infrastructure projects, and other stormwater management measures implemented during the term of this permit.	4/1/16
C.12.g	Fate and Transport Study of PCBs: Urban Runoff Impact on San Francisco Bay Margins	Submit a workplan in 2016. Report on status of the studies in the 2017 Annual Report. Report in the 2019 IMR the findings and results of the studies completed, planned, or in progress as well as implications of studies on potential control measures to be investigated, piloted or implemented in future permit cycles.	2016 AR
C.13 - Copper Controls			
C.13.a	Manage Waste Generated from Cleaning and Treating of Copper Architectural Features...	In the 2016 Annual Report, the Permittees shall certify that legal authority currently exists to prohibit the discharge of wastewater to storm drains generated from the installation, cleaning, treating, and washing of copper architectural features, including copper roofs. In the 2016 Annual Report, the Permittees shall report how copper architectural features are addressed through the issuance of building permits.	2016 AR
C.13.b	Manage Discharges from Pools, Spas, and Fountains that Contain Copper-Based Chemicals.	In the 2016 Annual Report, the Permittees shall certify that legal authority currently exists to prohibit the discharges to storm drains of water containing copper-based chemicals from pools, spas, and fountains. In the 2016 Annual Report, the Permittees shall report how copper-containing discharges from pools, spas, and fountains are addressed to accomplish the prohibition of the discharge.	2016 AR
C.17 - Annual Reports			

Permit Section	Implementation Task	Implementation Level/Reporting	Schedule
C.17	Annual Reports	The Permittees shall submit Annual Reports electronically in all cases and in paper copy upon request by September 15 of each year. Each Annual Report shall report on the previous fiscal year beginning July 1 and ending June 30. The annual reporting requirements are set forth in Provisions C.1 – C.16.	9/15/16
		The Permittees shall collaboratively develop a common annual reporting format for acceptance by the Executive Officer by April 1, 2016.	4/1/16