CONTRA COSTA
CLEAN WATER
PROGRAM

Donald P. Freitas
Program Manager

February 29, 2008

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

Re: Contra Costa Clean Water Program's Comments on the San Francisco Bay Regional Water Quality Control Board's December 14, 2007 Tentative Order for the Municipal Regional Permit

Dear Mr. Wolfe:

This comment letter is submitted on behalf of the 21 public agencies comprising the Contra Costa Clean Water Program (hereinafter referred to as the Program) to the San Francisco Bay Regional Water Quality Control Board's (Water Board) December 14, 2007 Tentative Order for the Municipal Regional Permit (MRP).

The Program has been a leader in implementing innovative Stormwater Pollution Prevention Program's since 1993. Many of these programs have been recognized regionally, statewide and nationally. Some of our significant accomplishments include:

- Partnering with Sanitation Districts to Provide Combined Pretreatment and Stormwater Quality Inspections of Businesses and Industry (1995)
- Leading the Development of the Bay Area Stormwater Management Agencies Association (BASMAA) "Start at the Source" Manuals (1997, 1999) Design Guidance Manual for Stormwater Quality Protection
- Pioneering the Use of Alternative Water Quality Monitoring and Watershed Assessment Methodologies Using Biological Indicators (1999)
- Development and Implementation of a Countywide Volunteer Monitoring Program (2000)
- Development and Publication of the Contra Costa Watershed Atlas (2003)

- Pioneering the Development and Implementation of Low Impact Development for Compliance with the Stormwater Treatment and Flow Control Requirements Both Treating Stormwater and Controlling Flow (2006)

In addition to these exemplar programs, Permittees throughout the San Francisco Bay Area have a distinguished track record for innovation, leadership and excellence. BASMAA's February 29, 2008 comment letter on the subject Municipal Regional Permit provides a list of the innovative projects and programs San Francisco Bay Area municipalities have been recognized for.

Program Support for Development of the Municipal Regional Permit

For the past three and half years, the Program has worked with BASMAA and the Water Board to develop a comprehensive, integrated and prioritized Municipal Regional Permit. This process was jointly initiated in FY 2004/2005. In June 2005, BASMAA members and San Francisco Bay Regional Water Quality Control Board (RWQCB) staff identified the following goals for development of the MRP:

- ❖ Consolidate the six (6) Phase I municipal stormwater permits into one consistent permit for 77 Permittees, including phasing of requirements where necessary;
- ❖ Incorporate detail currently in Stormwater Management Plans (SWMPs) into the MRP by being more specific in requirements including new performance standards tables establishing: (a) the required activities; (b) the level of implementation; and, (c) reporting and evaluating the effectiveness for each activity;
- ❖ Add new activities or enhance existing actions to address 303(d) listed pollutants and TMDL Waste Load Allocations;
- ❖ Add more specific and comprehensive stormwater monitoring;
- ❖ Evaluate new requirements in the context of implementation priorities, resource constraints and existing requirements; and,
- ❖ Relate actions to desired outcomes or effectiveness measurements, where possible.

To facilitate an inclusive and collaborative public participation process for development of the MRP, BASMAA and RWQCB staff established the following six (6) work groups:

1. Municipal Maintenance Operations
2. Industrial Inspection / Illicit Discharge Abatement / Construction / Conditionally Exempt Non-Stormwater Discharges
3. New Development & Redevelopment
4. Public Information / Participation
5. Monitoring
6. Pollutants of Concern and TMDLs

The work groups consisted of BASMAA representatives, RWQCB staff, and Non-Governmental Organizations (NGOs). From October 2005 to April 2006, these work groups were tasked with generating draft performance standards tables outlining:

- Best Management Practices: what activities must be done to achieve "Maximum Extent Practicable" (the standard of implementation called for in the Federal Clean Water Act for urban stormwater programs),
- Level of Implementation: how much must that activity be done to reach MEP, and
- Reporting: what should be the minimum amount of information that must be reported to show effective implementation of the BMPs?

In November 2005, Water Board staff changed the MRP development process and schedule without input from BASMAA. This change had a devastating impact on the effectiveness and efficiency of the Steering Committee, which was originally composed of four (4) members from Water Board management staff and four (4) members from BASMAA management. The Steering Committee members were originally tasked with the review and prioritization of activities identified by the Work Groups for inclusion in an Administrative Draft MRP to be prepared by Water Board staff. Following development of the Administrative Draft MRP, three public workshops were to have been held for all interested stakeholders. Instead of this process, Water Board staff decided to selectively invite NGOs to the Steering Committee meetings without any input from BASMAA. Predictably, little progress was made in the monthly Steering Committee meetings beginning in November 2005. Six months later, at the May 22, 2006 Steering Committee meeting, BASMAA representatives and environmental NGO representatives agreed that: 1) the MRP process was broken; 2) the Steering Committee was unproductive, and 3) Water Board staff should prepare a working draft MRP.

Frustrated with the lack of progress over the last several years, BASMAA representatives worked through the summer of 2006 to develop and submit on September 22, 2006, suggested Performance Standards and Provisions reflecting the maximum effort all 77 Bay Area municipalities could afford to do over the next five years to better manage stormwater and address the highest priority water quality issues. BASMAA's September 22, 2006 submittal is provided with BASMAA's February 29, 2008 comment letter on the subject MRP. To date, Water Board staff has not provided written responses to BASMAA's submittals, nor shown traceable responses to BASMAA's submittals in the subject Tentative Order.

Consistent with BASMAA's submittals and comments to the Water Board for development of the MRP over the past three and half years, the Program's comments in this letter continue to promote the importance of:

- Achieving significant and incremental water quality improvements
- Prioritizing requirements to be imposed on local governments
- Reducing the administrative burden of municipal stormwater permits in order to focus on actual water quality improvements, and
- Establishing a level playing field

Comment Letters Supported and Incorporated by Reference

The Program supports and includes by reference the following comment letters being submitted to the Water Board on the MRP:

- BASMAA's February 29, 2008 Comment Letter "Municipal Regional Stormater NPDES Permit – Tentative Order"
- BASMAA's February 28, 2008 Comment Letter "Comments on Pump Station Diversion Provisions in Tentative Order for the Municipal Regional Stormwater NPDES Permit"
- Morrison / Foerster LLP, on Behalf of the Santa Clara Valley Urban Runoff Pollution Prevention Program and its Permittees, February 28, 2008 "Legal Comment (No. 1) Concerning Unfunded Mandates Contained in Proposed Regional (Stormwater) Permit"
- Morrison / Foerster LLP, on Behalf of the Santa Clara Valley Urban Runoff Pollution Prevention Program and its Permittees, February 28, 2008 "Legal Comment (No. 2) Concerning Discharge Prohibition A.2 and Provision C.1 of Proposed Regional (Stormwater) Permit"
- Gary J. Grimm, February 29, 2008, "Tentative Order for the Municipal Regional Stormwater NPDES for Discharges From Municipal Phase I Permittees Legal Comments on the Tentative Order"

Program General Comments

The following general comments are in additional to the Program's "Specific Comments" (see attached), which provide further details and explanations for some of the general comments below:

1. Monitoring, Trash and Pollutants of Concern

The Program's general comments on the monitoring, special studies, and pilot projects proposed in provisions C.8 – C.14 focus on what can be done and what cannot be done by the Program through the draft MRP as currently framed by the Water Board. The list of what can be done, with clarifications and minor revisions as requested, is far longer than what cannot be done. With the revisions and clarifications proposed by the Program, substantial progress towards water quality improvement can be achieved, at the cost of significant demands on Permitees' resources. Included for review is a summary of the minimum and maximum costs for complying with the monitoring and special study provisions outlined in C.8 through C.14 of the MRP (see attachment). In the few instances where the Program has to establish boundaries of what cannot be done, it is because the benefit to water quality is unclear, and the authorities under the Clean Water Act have not been established.

The Program accepts that many of the status and trends monitoring requirements in provision C.8 (water quality monitoring) could be implemented, <u>if</u> the Water Board can be responsive to revisions and clarifications that are stated in our detailed comments.

The same applies to many parts of provision C.9, if the Water Board can be responsive to revisions and clarifications that are stated in our detailed comments.

Many elements of provisions C.11 – C.12 (mercury and PCB control measures) can be implemented though regional collaborations with other BASMAA members. The Program notes that substantial progress has already been made on many of the contaminated sediment investigation and abatement requirements. By developing and implementing regional guidance in collaboration with other BASMAA members, the Program can make substantial progress in identifying and abating mercury and PCB sources.

However, a firm boundary the Program must establish is the requirement to divert storm water into municipal treatment plants. Treatment plants cannot be compelled to accept storm water discharges. Plans to mix storm water with municipal effluent prior to treatment must be developed, screened for environmental impacts and unintended consequences, and approved by the affected publicly owned treatment works (POTWs). The most that the Program can commit to is a joint effort involving BASMAA and the Bay Area Clean Water Agencies (BACWA) to develop a feasibility study for diversion of dry weather discharges and first flush into municipal treatment plants.

Our general comment on provision C.10 is that it needs to be re-framed to make it feasible and effective. By fixing a percentage of the watershed that must be subjected to full capture and enhanced trash management, the permit does not allow the Program or Permittees flexibility to determine the best solution. As a result, there is unacceptable uncertainty in the predicted capital improvement costs that would result from this provision. Our estimates of the capital costs for implementing full trash capture range from $3 million to $160 million, depending on the approach (see attached). The details and assumption for preparation of these estimates were compared with other BASMAA members and reviewed with Water Board staff. To reduce the cost uncertainty associated with compliance, and allow local agencies to seek the most cost effective solutions, it makes the more sense to establish milestones for financing capital projects, and implementation of those finances, instead of fixing a percentage of the watershed that must be treated. The same logic applies to enhanced trash management measures. The goals must be stated as milestones towards achieving no trash impacts, without pre-judging which specific approaches work best for individual communities.

Some elements of Provision C.11, C.12, and C.13, and Provision C.14 in its entirety, are more appropriately implemented as Regional Monitoring Program special studies. As noted in our specific comments, these are instances where the MRP proposed broadly scoped studies that inappropriately transfer the duties of the Water Board to develop TMDLs onto local storm water agencies. Where our specific comments address these instances, a simple remedy would be to note that "this requirement can be fulfilled as a special study of the Regional Monitoring Program." The Water Board has considerable influence on RMP special study priorities, so the language associated with the requirement would be an efficient way to state regional monitoring priorities.

2. Business Inspection Programs

The proposed provisions in Provision C.4 "Industrial and Commercial Site Controls" are unnecessarily prescriptive and as written would require local governments to inspect every business with a roof and/or impervious surface, including facilities under the authority of State regulatory agencies. These provisions would also mandate business inspections of mobile field operations (e.g., carpet cleaners, food vendors, landscapers, etc...). Permittees must be provided the flexibility to implement prioritized inspection programs focused on businesses with a significant potential to pollute, particularly pollutants of concern. Furthermore, Permittees should not be required to inspection facilities, which are permitted and inspected by the State or Region Boards.

These provisions also mandate prescriptive and inflexible enforcement procedures, which are in conflict with state law. For example, Water Board staff is requiring a 3-year rolling window for progressive enforcement. State law only allows such action for a period of one-year.

3. New Development and Redevelopment Performance Standards

Despite the recent adoption of the Provision C.3 New Development and Redevelopment Performance Standards in Bay Area Phase I Stormwater Permits, Water Board staff is proposing to reverse the Water Board's previous decision to exclude road rehabilitation projects. This change will have a drastic impact on local governments' ability to fund deferred maintenance of its roads. Additionally, Water Board staff is proposing to reverse the Water Board's previous decision to exclude sidewalks, bicycle lanes, and trails from the C.3 rules. Water Board staff's proposal would unintentionally provide a disincentive for development of these important community amenities, which benefit the environment. They also are proposing to eliminate the alternative compliance option for all regulated projects without justification, and despite the fact that no municipalities have even exercised this option.

Water Board staff is also proposing that Stormwater Programs begin tracking installation of impervious surfaces exceeding 1,000 square feet in area. This is another example of a "paper program" that will provide no water quality benefit and will further exasperate limited municipal staff resources.

4. Street Sweeping Programs

Water Board staff's proposed street sweeping requirements are overly prescriptive and, as written, would require the sweeping of covered parking lots and **all** roads, including rural roads. Furthermore, the proposed requirements would require the purchase of specific street sweeping equipment regardless of its intended use. Most municipalities in Contra Costa County implement effective street sweeping programs exceeding the minimum requirements. Given minimum expectations and reporting requirements, Permittees must continue to be provided the flexibility to optimize their sweeping programs.

5. Conditionally Exempted Discharges

The proposed provisions in Section C.15.b. would require Permittees to ensure individual home owners collect water quality samples and monitoring discharges from foundation or footing drains. The provisions, as written, would also require Permittees to regulate and monitor planned and unplanned discharges from water supply districts and fire districts. These provisions are unacceptable. Permittees do not have the authority to regulate special districts. The Water Board does have the authority and the responsibility to regulate these discharges.

6. Documentation and Reporting

The tracking, documentation, and reporting requirements throughout the proposed MRP are individually innocuous, but cumulatively impossible. Water Board staff's attempt to "streamline" the reporting process with preparation of a 110-page reporting template is a disaster and will result in the allocation of even more municipal staff resources to preparation and submittal of voluminous Annual Reports that Water Board staff does not read.

7. Funding Stormwater Programs

All public policy is dictated by the amount of resources available to implement desired actions. No one is against "clean water". The conundrum is how to achieve clean water with constricted public funds. Municipalities are constantly asked to provide more and more services to its public with less and less financial resources. Institutional obstacles blunt the ability to raise taxes or increase funds even when a majority of its residents want and/or desire certain services to be provided.

Contra Costa Clean Water Program presently spends approximately $16 million to implement its current NPDES Permit. Since the initiation of Stormwater Utility Assessments in 1993, co-permittees now find themselves at their maximum assessment rates. The only way to increase these rates to generate additional funds to comply with the proposed MRP requirements is to ask voters to approve higher assessments by a nearly impossible 2/3 vote. Since this method is not likely, then one needs to ask what other revenue source is available. That would be a municipality's General Fund. The General Fund finances most municipal services. Public Safety takes the loin share of these funds. So the choice would be to choose funding police officers or funding the MRP. The realistic view is City/Town Councils would choose fighting crime versus the MRP.

The Contra Costa Clean Water Program would recommend a collaborative effort be immediately undertaken to determine how a dedicated source of revenue could be generated to implement all MRP provisions. Neglecting this approach would have the effect of immediately finding all Stormwater Programs in non-compliance. All existing funding is insufficient to implement the MRP provisions.

8. Public Review of the MRP

The December 14, 2007 Tentative Order for the Municipal Regional Permit is approximately 400 pages of extremely detailed and technical requirements. While the Program appreciates Water Board staff's efforts in developing a document of this magnitude, the Program and Permittees must be provided a reasonable period of time for its review. The Program does appreciate the Water Board's time extension for review of this document; however, even with the time extension, it has been a considerable and difficult process for the Program and its Permittees to review and evaluate the details of this proposed MRP. As highlighted in these general comments and reviewed in further detail in the specific comments, there are significant issues that need to be addressed. The Program would welcome the opportunity to review these issues and concerns and is ready to provide constructive input so that we may proceed with the business of reducing and eliminating stormwater pollutants from our waterways.

Should you have any questions or would like to meet to discuss these comments, please contact me at (925) 313-2373 dfreitas@pw.cccounty.us or Tom Dalziel of my staff at (925) 313-2392 tdalz@pw.cccounty.us.

Thank you.

Sincerely,

Donald P. Freitas
Program Manager
Contra Costa Clean Water Program

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Attachment

CONTRA COSTA CLEANWATER PROGRAM'S
SPECIFIC COMMENTS ON THE DECEMBER 14, 2007
TENTATIVE ORDER FOR THE MUNICIPAL REGIONAL PERMIT

C.2. Municipal Operations

1. Section C.2.a.i. and C.2.a.ii. – Combine and change these two provisions as follows:

"*Permittees shall sweep all curbed streets and non-covered public parking lots owned, operated or maintained by the permittees on at least a monthly average unless an alternative schedule is proposed and approved by the Regional Board.*"

An acceptable alternative to the minimum frequency proposed above would be the frequencies outlined in provision C.2.a.ii.(2) provided that Permittees would be allowed to determine high, medium and low priority areas, which may not always be consistent with specified traffic levels or land uses.

Rationale for change: Provision C.2.a.i would require municipalities to sweep all streets, roads, and public parking lots at a frequency commensurate with traffic levels and land uses. For example, the proposed rules would require that "high traffic zones" and "commercial and industrial districts" be designated as "high priority" and be swept on average of twice per month. Currently, municipalities are required to sweep all curbed streets on average of once per month. A review of municipal Annual Reports submitted to the Water Board will establish that most municipalities exceed the currently required minimum level of sweeping. The existing sweeping rules effectively establish a minimum level of sweeping while providing municipalities with the flexibility to prioritize areas and frequencies for sweeping to maximize pollutant removal. The proposed requirements are unnecessarily prescriptive and may result in increased sweeping in areas thought by Water Board staff to accumulate high levels of trash, but which in reality may not.

The proposed sweeping rules would require increased implementation of trash/litter controls where sweeping is not technically feasible. Because traditional street sweepers are designed to be operated on roads with curbs, most rural roads without curbs cannot be effectively swept and will be subject to the enhanced trash litter control requirements. Except in some rural areas known for illegal dumping, most rural roads and other non-curbed roads do not accumulate high levels of trash. (Note: The illegal dumping "hot spots" found in rural areas are addressed in municipalities' "Illicit Discharge Detection and Elimination" programs.) Requiring enhanced trash/litter controls where street sweeping is technically infeasible will result in an unnecessary expenditure of public funds with little water quality benefit. For example, unincorporated Contra Costa County, with many miles of rural roads, estimates a 250% increase in its annual sweeping budget to comply with the proposed new rules.

The proposed sweeping rules, as written, would also unnecessarily require sweeping of covered public parking lots, and could be interpreted to require sweeping of parking facilities used by the public but which are privately owned and maintained. Permittees do not have the authority to sweep privately owned parking facilities. The Program's proposed change above would clarify these two issues, and would also allow municipalities to effectively and efficiently prioritize their mandatory sweeping programs on all curbed streets and public parking facilities owned, operated and maintained by Permittees to maximize pollutant removal.

2. Section C.2.a.ii. (1) - Should provision C.2.a.ii.(1) be adopted without the Program's proposed changes above, replace "*by November 30, 2008*" to "*within 12 months of permit adoption*".

Rationale for change: Given all the priorities imposed on municipalities in the first year of implementing the proposed MRP, five (5) months would not be enough time for: (1) mapping and determining required frequencies for sweeping and other trash/litter controls on all roads, streets and public parking lots; (2) purchasing additional equipment, as may be necessary, to comply with the significantly expanded sweeping requirements; and, (3) amending and/or procuring municipal street sweeping contracts.

3. Section C.2.b.i - Eliminate the unnecessarily prescriptive and expensive requirement that 75 percent of replaced sweepers have the particulate removal performance of regenerative air sweepers or better.

Rationale for change: The cost for municipal street sweeping programs will considerably increase under the proposed and significantly expanded sweeping requirements outlined in provision C.2.a., and in provision C.10.b (i.e., "enhanced trash management control measures"). The increased cost includes the needed purchase of additional sweepers, the additional labor required to operate the new sweepers or additional hours on existing sweepers, and the increased maintenance costs for more frequent use of existing equipment and any new equipment.

While the sweeping required in provision C.2.b targets removal of fine particulates less than 150 microns, the increased sweeping required in provision C.10.b targets trash/litter that will not pass through a 5 mm mesh screen. There is a growing variety of sweeper equipment currently available. These new generation sweepers have specific designs and purposes with corresponding limitations and benefits (e.g., speed of operation, access and reach, material to be captured, etc...). This proposed provision unnecessarily prescribes a type of sweeper to be purchased without any knowledge of its intended use. Municipalities are more than capable of determining the most appropriate and effective equipment for the job. In fact, most municipalities already own and/or use regenerative air sweepers. This provision, as written, could result in a significant public investment in equipment that may be unwarranted and

ineffective, or could have the unintended consequence of delaying, for example, the purchase of a cost-effective sweeper capable of removing trash/litter from sidewalks, plazas, and other congested areas.

4. Sections C.2.b.ii & C.2.b.iii - Replace and combine these two provisions as follows:

1. In the first full reporting year after Permit adoption, identify high, medium and low priority areas and an implementation schedule with respect to each. Annually identify any changes to each.

2. Maintain records of types of sweepers used and proper operation for each.

3. Maintain records of swept curb miles and parking lots, volume or weight of materials removed, and verification of proper operation of equipment.

4. Maintain municipal staff training records.

5. Maintain a summary of seasonal leaf removal program efforts.

6. Maintain records concerning permittees public outreach efforts to improve sweeping efficiency.

7. Report information for items 3-6 (listed above) in summary form within Annual Report.

Rationale for change: The proposed language in provisions C.2.b.ii and C.2.b.iii is unnecessarily prescriptive, and will impose an unwarranted and costly additional administrative burden on municipal staff and its contractors. The Program's proposed language above provides accountability to the public and allows permittees to focus their efforts and limited resources on implementation of actions that will maximize water quality benefits.

5. Section C.2.c.ii.(2) – Add to the end of the last sentence "*and/or the California Stormwater Quality Association's California BMP Handbook for Municipal Activities.*"

Rationale for change: The California BMP Handbooks are a well recognized and readily available resource, and reflect the current state of water quality best management practices.

6. Section C.2.d.i - Replace "*which prohibit the discharge of wash water to storm drains. Permittees shall implement the BMPs included in....*" with "*consistent with*".

Rationale for change: This provision, as written, would prohibit all wash water from

mobile cleaning, pressure wash operations, and sidewalk and plaza cleaning from entering the stormwater system; however, BASMAA's Mobile Surface Cleaning Program allows wash water discharges to the storm drain in certain limited situations. For example, wash waters resulting from cleaning sidewalks and plazas (pedestrian only – no contact with vehicle areas) is allowed to storm drains if certain controls are used (e.g., discharge to nearby landscaping is not practical, dry clean-up first, water only is used, and a screen is placed at the inlet). Permittees, BASMAA and Water Board staff together developed the best management practices outlined in BASMAA Mobile Surface Cleaning Program. The proposed change above would clarify this inconsistency and provide formal recognition of this very successful collaborative effort.

7. Sections C.2.f.i. and C.2.f.ii – Combine these two provisions and replace with the following:

1. Annually inspect, before the wet season, all catch basins and storm drain inlets for trash and accumulated debris and clean as appropriate.

2. During inspections:

a. Look for evidence of illicit discharges. Report evidence of illicit discharges to appropriate municipal representative(s) for follow-up in accordance with the "Illicit Discharge Detection and Elimination" provisions in C.5.

b. Check for legibility of storm drain inlet markings and provide appropriate corrective action in accordance with provision C.7.a.

c. Check for inlets and catch basins with high accumulation of trash. Conduct increased inspection and maintenance of problem areas in accordance with provision C.10.b.i.(1).

Justification for change: Water Board staff's proposed language is unnecessarily prescriptive and as a result confusing and poorly integrated with the other proposed provisions in the MRP (e.g., C.5 and C.10). The proposed language above is much clearer and concise, meets the intent of Water Board staff's language, and better integrates various provisions within the MRP. Should this proposed language not be acceptable to Water Board staff, the Program requests a detail response as to why this language is not acceptable.

8. Section C.2.g.i – Change "*comply with water quality standards*" to "*the maximum extent practical in compliance with provisions in this order.*"

Rationale for change: This change reflects and is consistent with State Board Order WQ 1999-05, which ties compliance with discharge prohibitions to the implementation of control measures.

9. Section C.2.g.ii.(2) – Change "*but at least four times a year*" to "*once before the wet season and once during the wet season*".

Rational for change: Currently, permittees are required to inspect pump stations once a year. Inspecting pump stations four times a year would be in most situations excessive. It is in permittees' best interests to inspect and clean their pump stations, which may be known to accumulate excessive trash and/or debris more frequently in order to protect their pumps from over-heating, premature failure, and flooding. Increasing the minimum inspection frequency from once a year to four times a year is without justification and may result in an unnecessary expenditure of public funds and use of limited staff resources for no water quality benefit.

10. Section C.2.g.ii.(3) – Change to read:

"*(3) Inspect trash racks and oil absorbent booms at pump stations and remove debris in trash racks and replace oil absorbent booms, respectively, as needed.*"

Rationale for change: Public Works staff is currently required to proactively inspect, maintain and clean their storm drainage infrastructure, and would certainly be required to continue these efforts under the proposed Tentative Order. For example, proposed provisions C.2.a (street sweeping), C.2.f (catch basin and storm drain inlets), C.5.d. (collection system screening) all require proactive inspections, maintenance and cleaning of storm drainage infrastructure. Prescribing (i.e., requiring) the inspection of trash racks and oil absorbent booms at each pump station during or within 24 hours of each significant storm event is without justification and would place, in most situations, an unnecessary and unwarranted burden on limited municipal public works staff. During storm events, Public Works staff is mobilized and ready to react to a variety of common emergencies (e.g., localized flooding, fallen trees, debris flows, etc...). They are also proactively working to maintain conveyances systems during storms by raking grades to maintain flows, including trash racks. However, these efforts are, necessarily, focused on areas known to be problems, such as areas where there are lots of trees resulting in lots of leaf fall during storm events. The proposed language above is consistent with current practice. Municipalities simply do not have the staff to ensure inspection, maintenance and cleaning of each and every storm drain facility for each storm event, just as PG&E can't immediately inspect and repair all fallen power lines during a storm event.

11. Sections C.2.g.ii.(4) and C.2.g.iii.(2) – Move these two provisions into provision C.8.e.iii.

Rationale for change: Referencing and including the implementation and reporting requirements (i.e., C.2.g.ii(4) and C.2.g.iii(2), respectively) related to the "Dry Weather Discharges & First Flush Investigations" required in provision C.8.e.iii in the standard

provisions for operation and maintenance of municipal pump stations is unnecessarily duplicative and confusing.

12. Sections C.2.h.i. and C.2.h.ii – Combine and change these two provisions as follows:

"*Implement and require contractors to implement appropriate BMPs to the maximum extent practicable (MEP) during construction and post-construction of rural road construction and maintenance activities, particularly in or adjacent to stream channels or wetlands. Permittees shall always notify Water Board, the California Department of Fish and Game and the U.S. Army Corps of Engineers, where applicable, and obtain appropriate agency permits for rural public works activities before work in or near creeks and wetlands occurs.*"

Rationale for change: Requiring implementation of BMPs to the MEP when performing rural road construction and maintenance activities, AND requiring notification and proper permitting for all rural road and rural public works activities in or near creeks and wetlands provides a clear and concise mandate for which permittees are accountable.

The overly prescriptive language in provision C.2.h.i and C.2.h.ii requiring development and submittal of BMPs, training and technical assistance requirements, road maintenance priority criteria, etc... is unwarranted, in conflict with other agencies priorities and specifications, and will result in wasted effort and inefficient use of severely limited public funds for road maintenance with no additional water quality benefit. For example, the primary funding source for rural road maintenance activities is gas tax revenues, which are allocated to municipalities by the Metropolitan Transportation Commission (MTC). These allocations are awarded on the merits of the project in improving road safety. Requiring permittees to prioritize rural road construction and maintenance activities based on soil erosion potential, slope steepness, and stream habitat resources would drastically reduce available funding for much needed repairs and maintenance to rural roads.

Provision C.2.h.ii.(3)(a) would require re-grading existing rural roads to slope outward. Aside from the huge capital investment required to re-grade existing roads, this requirement is in conflict with American Association of State Highway and Transportation Officials (ASSHTO) and Caltrans standard practice of grading roads to slope inward for vehicle and driver safety on curves.

Provisions C.2.h.ii and C.2.h.iii require development and submittal of BMPs for construction and post construction on rural roads. The California Stormwater Quality Association's (CASQA's) BMP Handbooks (i.e., Construction Handbook and Municipal Handbook) already identify specify stormwater quality BMPs for road maintenance and construction activities.

Water Board staff's well intended yet overly prescriptive language in this provision will have the unintended consequence of further exacerbating deferred rural road maintenance needs, which is in excess of 10 million dollars countywide. The Program's proposed language will ensure that appropriate stormwater water quality protection measures are implemented when rural road and rural public works activities are conducted.

C.3. New Development and Redevelopment

Introduction

The proposed MRP would have the unintended consequence of severely limiting the Contra Costa Clean Water Program's pioneering Low Impact Development approach to controlling stormwater from new developments and redevelopments, which was adopted by the Water Board on July 12, 2006. Instead of Low Impact Development, proponents of development and redevelopment projects would use conventional designs and methods, which are more costly and less effective than LID in preventing stormwater pollution and managing hydrograph modification.

In recent discussions, Water Board staff assured us it was not their intent to prevent or inhibit continued use of Low Impact Development in Region 2. Accordingly, we have identified below the minimum modifications required to allow us to continue to effectively implement Low Impact Development on new developments and redevelopments in Contra Costa, and we request these changes be made to the proposed permit. We have identified some additional changes, which would allow us to focus and prioritize our efforts to implement our Low Impact Development approach.

Background

Low Impact Development (LID) is a stormwater management strategy that emphasizes conservation and use of existing natural site features integrated with distributed, small-scale stormwater controls to more closely mimic natural hydrologic patterns in residential, commercial, and industrial settings (Puget Sound Action Team, 2005).

In LID design, a development site is divided into small catchments. Runoff from each catchment is managed by dispersal and infiltration to landscaping, where possible. Where dispersal and infiltration is not possible, runoff is routed to small-scale engineered facilities such as bioretention areas, bioswales, planter boxes, or dry wells.

In February 2003, Regional Board Order R2-2003-0022 amended our NPDES permit to add the new Provision C.3 requirements for new developments and redevelopments. The Provision C.3 criteria for stormwater treatment are oriented toward conventional

(non-LID) design for treatment controls. In particular, the criteria assume a single treatment facility for an entire development. However, the Program developed LID guidance for site design and distributed treatment controls and demonstrated the LID guidance complies with Provision C.3. The LID guidance is presented in the Program's *Stormwater C.3 Guidebook*.

As required by Order R2-2003-0022, the Program submitted its Hydrograph Modification Management Plan (HMP) in May 2005. To achieve the standard in Order R2-2003-0022, the Program's HMP used an LID approach, including modified designs and sizing factors for bioretention facilities, planter boxes, and other facilities. Again, the Program created guidance so that developers could use LID to comply with Regional Board's permit requirements, even though those requirements are oriented toward a non-LID design approach.

Unlike the HMPs for other Bay Area counties, Contra Costa's HMP promoted a presumptive approach to HMP compliance. The Program's *Stormwater C.3 Guidebook* encourages LID implementation as the easiest and fastest route to project approval. Applicants have the option of submitting documentation, at their own risk and expense, to demonstrate HMP requirements should not apply. This contrasts with the HMPs from other counties, which include extensive maps and other provisions exempting projects within large geographic areas of their counties from even needing to consider HMP compliance.

Water Board Order R2-2006-0050 approved Contra Costa's HMP with minor modifications in July 2006. Contra Costa permittees began implementing the HMP in October 2006.

Contra Costa's LID approach to stormwater treatment and hydrograph modification management has garnered significant interest in other California regions. We continue to believe LID is the best way to achieve stormwater treatment and hydrograph modification management and are pleased to see peers throughout the state show interest in following our example.

Changes required to allow continued implementation of Contra Costa's LID approach

1. ***Section C.3.g.ii. HM Standard.*** Delete the following sentence: "Stormwater discharges from HM Projects shall not cause an increase in the erosion potential of the receiving stream over the pre-project (existing) condition."

   Rationale for deletion: This addition to the HM standard is unnecessary. The current standard already states that "increases in runoff flow and volume shall be managed so that post-project runoff shall not exceed estimated pre-project rates and durations, where such increased flow and/or volume is likely to cause

increased potential for erosion of creek beds and banks, silt pollutant generation, or other adverse impacts on beneficial uses due to increased erosive force." The additional language is problematic because there are various competing and superseding definitions of "erosion potential" currently circulating. For example, some definitions of "erosion potential" consider coarse sediment supply and others do not.

2. ***Section C.3.g.ii. (1). Ranges of Flows to Control:*** Omit Contra Costa from the list of permittees required to meet this flow range.

Rationale for deletion: This requirement abrogates the basis for the Water Board's approval of Contra Costa's LID approach in Order R2-2006-0050. That Order, which followed over a year of technical discussions with Water Board staff, reflected an understanding that (a) the assumptions used in establishing design criteria for Contra Costa's bioretention areas, planters, and other LID facilities are conservative; (b) the anticipated distribution and mix of types of LID facilities within sites and within watersheds makes stringent application of low-flow criteria to any one facility less important; (c) Contra Costa's presumptive approach means more facilities throughout its watersheds will implement hydrograph modification management controls; (d) unlike the other counties' HMPs, Contra Costa's HMP does not have maps showing exempt areas; (e) a distributed approach provides an additional buffer against impacts to streams; (f) assumptions used to calculate pre-project runoff and facility performance have not been verified by empirical evidence and Contra Costa's HMP includes provisions for monitoring to verify facility performance and for changes to facility designs if warranted. This proposed MRP provision would reverse the Board's 2006 decision and apply new criteria to the design of LID facilities. No technical rationale has been provided for this reversal, nor has any schedule been proposed for complying with the change. Note the requirement that duration control basins or other facilities designed for a specific site (Option #3) must meet a low-flow standard of 0.1Q2 is already in Order R2-2006-0050 and is included as in Attachment C to the proposed MRP, so this requirement need not be repeated in Section C.3.g.ii.(1).

3. ***Section C.3.g.ii. (3). Precipitation Data.*** Delete the following sentence: "For sizing a particular site's HM control, the nearest rainfall data shall be used."

Rationale for deletion: It is not possible to comply with this requirement using Contra Costa's LID design procedure. The requirement presumes continuous simulation of pre-project and post-project runoff for each site and the use of a single flow control facility for each site. However, to use Contra Costa's LID approach, applicants use LID facilities distributed throughout the site and adjust the sizing and underdrain flow rate of LID facilities based on differences in mean annual precipitation. Mean annual precipitation is determined by locating the site on an isohyetal diagram.

4. ***Section C.3.g.ii.(4). Calculating Post-Project Runoff.*** Delete the entire paragraph, which states: "Retention and detention units shall be considered impervious surfaces for the purposes of calculating post-project runoff. Pre- and post-project runoff shall be calculated and compared for the entire site, without separating or excluding areas that may be considered self-retaining."

   Rationale for deletion: The basis of LID is to disperse runoff to landscaped areas where possible and to use small-scale bioretention or other LID facilities distributed throughout the site. The clause eliminating credit for self-retaining areas would disallow the practice of directing downspouts to concave-graded landscaped areas as a means of control. The clause requiring comparison for the entire site would disallow use distributed LID facilities and would disallow Contra Costa's simplified approach with sizing factors.

5. ***Section C.3.g.ii.(5). Existing HM Control Requirements.*** Delete the following sentence: "Where existing requirements are less stringent than this Permit's Provision C.3.g., this Provision C.3.g. prevails."

   Rationale for deletion: "Less stringent" is subject to interpretation, and this sentence would create confusion. Contra Costa's HMP was carefully crafted and negotiated to balance a number of issues related to hydrograph modification management. In the name of consistency, this sentence undermines that balance and puts Contra Costa at a significant disadvantage in relation to other counties. For example, Contra Costa did not seek to exclude whole geographic areas where development would not be subject to HMP implementation, but rather sought broad applicability while developing a user-friendly, easy-to-implement approach that would encourage maximum implementation throughout the watersheds. This change undermines the advantages of Contra Costa's approach but does not provide the same exemptions the Regional Board provided to other counties.

6. ***Attachment C, Contra Costa Hydrograph Modification Management Requirements, Section 1b.*** Delete the newly added phrase "up to 10 acres."

   Rationale for deletion: This new restriction on the use of LID IMPs undermines Contra Costa's ability to implement its LID-based approach to hydrograph modification management. There is no technical basis for such a restriction. It is noted that no similar restriction has been proposed for other counties.

Additional comments and changes that would allow us to focus and prioritize our efforts to reduce stormwater pollutants from new and redevelopment:

7. ***Section C.3.a.i.(8).General Plans.*** Delete this paragraph.

Rationale for deletion: The requirement to "revise, as necessary, General Plans to integrate water quality and watershed protection with water supply, flood control, habitat protection, groundwater recharge, and other sustainable development principles and practices" is both too sweeping and too vague. The requirement to revise General Plans "to require implementation of the measures required by Provision C.3 for all Regulated Projects defined in Provision C.3.b." is redundant and unnecessary, as municipalities are already required to have ordinances which implement C.3.

8. ***Sections C.3.b.i.(1) and C.3.b.i.(3). Regulated Projects.*** Clarify the "50% rule" described in Sections C.3.b.i.(c), C.3.b.i.(d), C.3.b.(3)(a), and C.3.b.(3)(b) apply only to projects exceeding the thresholds in C.3.b.i.(1) and C.3.b.i(3).

9. ***Section C.3.b.i.(1). Special Land Use Categories. Effective Dates.*** Change this language to be consistent with the existing Water Board adopted "effective dates" language as follows:

   "*Beginning July 1, 2010, all references to 10,000 square feet in Provision C.3.b.i.(1) change to 5,000 square feet. This change would not apply to privately-sponsored development applications deemed complete by a Permittee by July 1, 2010, and public projects for which funding has been committed and for which construction is scheduled by July 1, 2010.*"

   Rationale for change: As written, this section would: 1) require some privately-sponsored development applicants to re-engineer and re-design existing projects at significant expense; and, 2) require substantial rebudgeting of municipalities' current capital improvement programs. The Program's proposed language above is consistent with the "start date" language included in all Bay Area Permittees current and recently adopted New Development and Redevelopment Performance Standards (i.e., Provision C.3 rules). Water Board staff's proposed changes to the "effective date" language is without justification and would require Permittees to change existing guidance materials and create unnecessary confusion within the development community.

10. ***Section C.3.b.i.(4). New Road Projects.*** Change "including" to "excluding" in the following sentence: "Any of the following that create 10,000 square feet of newly constructed contiguous impervious surface: streets, roads, or highways, contiguous paved surfaces installed as part of a street, road, or highway project (including contiguous sidewalks and bicycle lanes)..."

    Rationale for change: Sidewalks and bicycle lanes are an essential part of municipalities' programs to reduce automobile use and create more dense, pedestrian-friendly urban environments. Application of the C.3 treatment requirements to these facilities increases their costs and will sometimes "tip the

balance" against their inclusion in projects. If this change is not made, there should be a reasonable schedule for implementation so this new requirement does not affect projects already in the pipeline.

11. ***Section C.3.b.i.(5)(a). Road Expansion or Rehabilitation Projects.*** Delete this provision.

    Rationale for deletion: Inclusion of road widening and rehabilitation projects reverses the previously adopted C.3 rules and would have the unintended consequence of 1) deferring critically needed repairs to existing arterial roadways, 2) drastically reduce the quantity of repairs currently planned with existing and future transportation funds, and 3) create a disincentive for providing much needed pedestrian sidewalks, bicycle lanes, and medians to existing arterial roads.

    Roadway widening or additional lanes are often required for safety, and funds are severely limited for these improvements. Application of stormwater treatment requirements to these projects would have a significant effect on municipalities' ability to execute these projects. It is typically not feasible to segregate drainage from new and old portions of the roadway, further complicating application of treatment controls to new portions. The Program is unaware of any changes that would justify inclusion of these road rehabilitation projects as "regulated projects".

12. ***Section C.3.b.i.(5)(a), Road Expansion or Rehabilitation Projects, Effective Date***, should this provision remain in the proposed MRP, change to be consistent with the comments under Section C.3.b.i.(1) above as follows:

    "*Effective Date – July 1, 2010. For Public Road projects in this category for which funding has been committed and construction is scheduled by July 1, 2010, the lower 5000 square feet of impervious surface threshold (for classification as a Regulated Project) shall not apply. For privately-sponsored road projects in this category that have been deemed complete by July 1, 2010, the 5000 square feet threshold shall not apply.*"

    Rationale for change: See comments under Section C.3.b.i.(1) above.

13. ***Section C.3.b.i.(5)(b). Road Expansion or Rehabilitation Projects.*** Delete the sentence "Widened with additional lanes, sidewalks, or medians."

    Rationale for deletion: Roadway widening or additional lanes are often required for safety, and funds are severely limited for these improvements. Application of stormwater treatment requirements to projects at or near the 5,000 or 10,000 square foot thresholds will have a significant effect on municipalities' ability to execute these projects. It is typically not feasible to segregate drainage from new and old portions of the roadway, further complicating application of treatment

controls to new portions.

14. ***Section C.3.b.i(5). Road Expansion or Rehabilitation Projects. Effective Date.*** Delete the words "*to begin*" from the following sentence: "*For public road projects for which funding has been committed and construction is scheduled to begin by July 1, 2010, the lower 5,000 square feet of impervious surface threshold (for classification as a Regulated Project) shall not apply.*"

    Rationale for deletion: See comments under Section C.3.b.i.(1) above.

15. ***Section C.3.c.i.(1)(a). Source Control Requirements.*** Add the phrase "and if discharge to onsite landscaping is not a feasible option" at the end of this sentence: "Minimization of stormwater pollutants of concern in urban runoff through measures that may include indoor mat/equipment/hood filter wash racks or covered outdoor wash racks plumbed to the sanitary sewer for restaurants; covered trash and food compactor enclosures with a sanitary sewer connection for dumpster drips; covered outdoor wash areas and sanitary sewer connection for vehicles, wash area equipment, and accessories; and sanitary sewer connections for swimming pools and fire sprinkler test water where allowed by the local sanitary sewer agency."

    Rationale for addition: Residents should have the option to use swimming pool discharge and fire sprinkler test water for irrigation where appropriate. It is also suggested the language in this section be consistent with Provision C.3.a., with the exception that such measures are encouraged, not required, for non-regulated projects.

16. ***Section C.3.c.(3). Stormwater Treatment Requirements.*** Substitute the following language to replace this section: "Require all Regulated Projects to select stormwater treatment systems in the following order of preference, based on feasibility for the particular location: (a) Low Impact Development stormwater treatment systems and features that retain and infiltrate runoff and/or provide filtration through biologically active soils, such as bioretention facilities, 'dry' swales, tree wells, planter boxes, and green roofs, and (b) Conventional treatment systems such as extended detention basins and sand filters and (c) Prefabricated and/or proprietary stormwater treatment systems."

    Rationale for substitution: The language proposed in the draft Tentative Order contains two widely overlapping categories: "Stormwater treatment systems that reduce runoff, store stormwater for beneficial reuse, and enhance infiltration to the extent that is practical and safe;" and "Multi-benefit natural feature stormwater systems, such as landscaped-based bioretention systems, vegetated swales, tree wells, planter boxes, and green roofs." These two categories should be combined into one category—bioretention, for example, meets the criteria in

both categories. Also, no current category describes conventional non-proprietary facilities, such as constructed wetlands, "dry" detention basins, and sand filters. The proposed substitution remedies these issues. Contra Costa's *Stormwater C.3 Guidebook* and our March 21, 2007 *Policy on the Selection of Stormwater Treatment Facilities* contain more detailed and stringent criteria for the selection of treatment controls based on ensuring maximum extent practicable treatment effectiveness. Contra Costa municipalities are interested in having other Bay Area municipalities raised closer to the standard applied in their own communities.

17. ***Section C.3.e.i. Alternative Compliance with Provisions C.3.b. and d.*** Delete the conditions (1) and (2) from this section, so that it reads: "i. Task Description — Each Permittee may allow Regulated Projects to provide alternative compliance with Provisions C.3.b.i.(1)-(3) and C.3.d., which require that stormwater runoff from a Regulated Project be treated on-site or at a regional stormwater treatment facility, with stormwater treatment system(s) hydraulically sized in accordance with Provision C.3.d...."

    Rationale for deletion: The Tentative Order's restriction of alternative compliance to only infill and redevelopment projects is unneeded to ensure on-site treatment is used in nearly all projects, and unnecessarily restricts the use of alternative compliance in rare instances where it is needed. Most projects will use on-site treatment because it is less expensive and the quickest route to development project approval. However, there may be some projects for which it is necessary or preferable to use alternative compliance, and not all of these projects are limited to infill projects smaller than an acre or redevelopment projects.

18. ***Section C.3.e.i.(4). Alternative Compliance with Provisions C.3.b. and d.*** Add the following to the last sentence in this section: "however, the timeline for a Regional Project may be extended with Regional Board approval if the project is consistent with a Discharger's adopted drainage master plan or similar plan."

    Rationale for addition: Three years may not be long enough to fund, permit, and build a regional project. The Permittees must have the option of supporting long-range planning and orderly development of public infrastructure, as reflected in their master plans.

19. ***Section C.3.h. Operation and Maintenance of Stormwater Treatment Systems.*** Add the following language from Provision C.3 in Order R2-2003-0022: "The Dischargers are expected to work diligently and in good faith with the appropriate state and federal agencies to obtain any approvals necessary to complete maintenance activities for stormwater treatment measures. If the Dischargers have done so, and maintenance approvals are not granted, where necessary, the Dischargers shall be deemed by the Regional Board to be in compliance with this Provision."

Rationale for addition: This language is necessary to protect the permittees from regulatory liability in the event state or Federal agencies effectively prohibit them from conducting maintenance on treatment facilities.

20. *Section C.3.j. Collection of Impervious Surface Data for Small Projects.* Delete this entire section.

Rationale for deletion: This data-collection exercise will divert needed resources from pollution prevention activities while having no discernible water-quality benefit. If this data collection is required, then the Water Board should delay implementation of the 5,000-square-foot threshold until the supporting impervious surface data are available and have been reviewed. However, if the Board decides to move ahead with the lower threshold as proposed in the Tentative Order, then it is unnecessary to collect the data.

C.4 Industrial and Commercial Site Controls

1. Section C.4.b.i – Replace the overly prescriptive and lengthy language in this section with the following:

"Each Permittee shall develop and submit a "Business Inspection Plan" with the first Annual Report prepared following adoption of this Municipal Regional Permit. The Business Inspection Plan shall contain the following information below:

(1) Total number and a list of industrial and commercial facilities that represent a significant potential to cause or contribute to pollution of stormwater pollution and that will require inspection.

(2) A listing of and inspection prioritization for all facilities to be inspected in accordance with C.4.b.ii below.

(3) A description of the types, contents, and frequency of inspection in accordance with C.4.b.ii below

(4) A description of the Permittees Enforcement Response Plan per C.4.c. below.

(5) A description of the Permittees Staff Training procedures as specified in C.4.d below.

Rationale for change: Provision C.4.b.i requires development and submittal of an "Inspection Plan" for conducting effective inspections of businesses. The proposed language is unnecessarily detailed and repeats in summary form requirements covered

in other provisions creating the potential for conflicts and confusion.

The language "*could reasonably be considered to cause or contribute to pollution of stormwater runoff*" is overly broad, and as written, would significantly increase municipal implementation costs with little or no water quality benefit. For example, this proposed language could be interpreted to include any businesses containing a roof and/or parking lot. Our current permit requires Permittees to identify and inspect "business types that have a greater potential to cause stormwater pollution". Other alternative language includes: "business types with the potential to contribute significant pollutant load to municipal stormwater" or "business types with high potential for stormwater pollution". Either of these is preferred and would provide Permittees with the needed flexibility to effectively focus its inspection programs and limited inspection staff resources on addressing key business types with the suspected or known potential to discharge priority pollutants of concern.

2. Section C.4.b.ii.(1): Insert "*may*" in "*Types of businesses to be inspected may include the following:*" and/or eliminate the following from list of "types of business" Permittees would be required to inspect:

1. C.4.b.ii(1)(a)(i): Industrial facilities covered under the State Board's General Industrial Stormwater NPDES Permit

2. C.4.b.ii.(1)(a)(ii): Operating and closed landfills

3. C.4.b.ii(1)(a)(iii): Facilities subject to SARA Title III

4. C.4.b.ii(1)(a)(iv): Hazardous-waste treatment, disposal, storage and recovery facilities

5. C.4.b.ii(1)(c)(i through xi): Mobile Sources

Rationale for deletions: Items 1-4 above goes beyond the intent and appropriate scope of a municipal-level business inspection program. Municipal inspection programs and staff are not equipped or trained to evaluate and regulate the operations of these types of industries. Other State agencies (i.e., State and Regional Water Boards, Air Quality Management Districts, Department of Toxic Substance Control, Integrated Waste Management Board, etc...) have regulatory authority, expertise, and resources required to properly inspect these types of facilities. It is not appropriate to delegate this State responsibility on local government without adequate funding and resources.

For item number 5 above, including the inspection of mobile operations listed under provision C.4.b.ii.(1)(c)(i through iv)) under the Permittees' "Business Inspection Program" makes no sense and would be impracticable to implement. As provided in the "task description" in provision C.4.b.i, Permittees' business inspection programs are to

address "facilities". A mobile carpet cleaner or food vendor, for example, does not constitute a "facility" for which an inspection can be reliably identified, planned and inspected. Identifying and controlling potential stormwater pollution from mobile, field-based businesses has proven to be extremely difficult, and more appropriately addressed in Permittees' illicit discharge detection and elimination Programs.

3. Section C.4.b.ii.(5): In provision C.4.b.ii.(5)(a) delete "*or included in Provision 4.b.ii(1)(a)*".

Rationale for deletion: As discussed in the comment above, it is inappropriate to require Permittees to prioritize these facilities, which are regulated under existing Federal and State environmental regulations.

4. Section C.4.c.ii.(1): Change "*3-year rolling window*" to "*1-year rolling window*".

Rational for change: Requiring a "3-year rolling window" for progressive enforcement would (1) be overly strict, (2) require amendments to municipal ordinances, and (3) be in direct conflict with the California Government Code Section 36900(b) and (c), which states that infractions and misdemeanor fines can only be progressive for a period of one year from the first violation.

5. Section C.4.c.iii.(4): Change to read:

"*(4) A list of facilities identified during Permittees' inspections that are suspected or known to require coverage under the State Board's General Industrial Stormwater Permit.*"

Rational for change: Permittees identify and will continue to identify and report to Regional Board staff a list of potential "non-filers" (i.e., industrial facilities that are known or suspected to require coverage under the State's General Industrial Permit" but have not filed a "Notice of Intent" with the State Water Resources Control Board.) Follow-up and enforcement of the State's General Industrial Permit is the responsibility of the State and Regional Water Boards.

C.5. Illicit Discharge Detection and Elimination

1. Section C.5.a.i.(3): Add "or Water Board" to the following:

"*(3)* ***Authority to Address Repeat Offenses*** *– Permittee shall be able to impose more substantial sanctions, including referral to a city or district attorney or Water Board, and maintain appropriate escalating response where repeat or escalating violations occur.*"

Rationale for addition: The State and Regional Board have significant enforcement capabilities under the State Water Code; certainly more than local governments. Water Board staff, in the past, has agreed to provide enforcement assistance when requested to deal with particularly difficult or egregious dischargers.

2. Section C.5.a.ii. – Change to:

"***Implementation Level*** *– Adequate legal authority shall be within one year from the date of adoption of this order."*

Rationale for change: The requirement for establishing necessary legal authorities to implement adopted Municipal NPDES Permits have been in place since the Program's first permit issued in 1993. These authorities must be reviewed with each new permit issued, and if necessary revised. For example, significant revisions were made to Permittees' stormwater discharge control ordinances following the amendments to the Contra Costa Countywide Permit in 2003 and 2004. Permittees will again need to review existing legal authorities following adoption of the proposed Municipal Regional Permit. Five (5) months is not enough time to review and, if necessary, adopt required authorities cited in this section and others (e.g., C.3.a.i.(1), C.4.a.i., C.6.a.), and could unfairly put Permittees in potential risk of non-compliance and liability. Given all the priorities imposed on municipalities in the first year of implementing the proposed MRP, five (5) months would not be enough time for: (1) reviewing and identifying needed changes to existing municipal codes; (2) researching available authorities and options to establish tiered enforcement, increased fines, mechanisms for abatement or corrective measures within prescriptive timeframes, etc...; and (3) the public review and adoption process for which Permittees have no control.

3. Section C.5.b.ii. – Change to:

"*Implementation Level – Develop and maintain an ERP within one year from the date of adoption of this order, and fully train staff on the ERP within 18 months from the date of adoption of this order."*

Rationale for change: Development of an ERP must necessarily be coordinated in parallel with review and adoption of needed legal authorities and enforcement capabilities cited in provision C.5.a.i. Again, given all the priorities imposed on municipalities in the first year of implementing the proposed MRP, Permittees would need a minimum of one year from the date of adoption of this order for development of the ERP in accordance with the goals and prescriptive requirements outlined in provision C.5.b., and would necessarily need a minimum of 18 months from the date of adoption of the order for developing and providing training to municipal staff on the newly developed ERP.

C.6 Construction Site Control

1. Section C.6.e.ii.(2) – Delete "prior to the onset of the wet season" from this sentence.

Rationale for deletion: We believe this provision is intended to require site inspections just after the beginning of the rainy season (i.e., between October 1st and October 15th each year) to ensure successful implementation of the minimum required management practices.

2. Section C.6.f.i (2)(b) – Add "initial" before "wet season" in this sentence.

Rationale for addition: Again, we believe the intent of this provision is to require an inspection just after the beginning of the wet-season (i.e., October 1st) to ensure successful implementation of the minimum management practices. See also the comment under C.6.e.ii (2) above.

3. Section C.6.iii – Attachment "L" suggests permittees must track and report the number of "Screening Level Inspections" conducted, even if no violation is noted. We don't believe this was intended nor is it appropriate, and therefore request reporting the number of screening level inspections be deleted from table C.6.e in Attachment "L".

Rationale for deletion: Tracking and reporting the number of "Screening Level Inspections", not resulting in a problem or violation, would provide little useful information and would create an additional and unwarranted administrative burden on limited inspection staff resources.

4. Section C.6.h - This entire section is duplicative of the reporting requirements outlined throughout provision C.6. For brevity and clarity, we suggest this section be eliminated.

C.7 Public Information and Outreach

1. Section C.7.a.i. – Delete the following:

"*For privately maintained streets that were not marked upon construction but discharge stormwater to the Permittee's MS4, inlet marking retrofit shall be required of the entity responsible for street maintenance by July 1, 2012.*"

Rationale for deletion: Existing legal authorities do not currently allow Permittees to require installation of markings on privately owned and maintain streets. "No Dumping"

markings on municipally-owned storm drains are required throughout our watersheds. Furthermore, upon construction of new, privately-maintained streets, Permittees have and would continue to require storm drains be marked. The fact that there are older, existing, privately-owned storm drains are not marked is of unknown consequence. The efforts required to establish the authority to mandate installation of markings on privately-owned and maintained streets is without justification and would represent a significant undertaking further burdening limited municipal staff and resources.

2. Section C.7.b. – See comment to provision C.7.l. below.

3. Section C.7.c.ii. – Add "municipal" as follows:

"***Implementation Level*** *– Conduct a minimum of six pitches (e.g., press releases, public service announcements, and/or other means) per year at the municipal, countywide, program, and/or regional level."*

Rationale for addition: Individual Permittees would very likely conduct one or more of these required "Media Relations" at the individual municipal-level.

4. Section C.7.e.iii. – Change as follows:

"*Reporting – Annual Reports shall state the number of events participated in and assess the effectiveness of efforts with appropriate measures (e.g., success at reaching a broad spectrum of the community, number of participates, post-event survey results, quantity ~~/volume materials cleaned up and comparisons to previous efforts~~ of materials distributed, etc...*"

Rationale for change: For the type of "Public Outreach Events" described in this provision (see C.7.e.i.), reporting on "volumes of materials cleaned up" is inappropriate and should be deleted so as to avoid confusion regarding the intent of this provision. This language is more appropriately contained in provision C.7.g. "Citizen Involvement Events", which include "creek/shore clean-ups".

5. Sections C.7.j.i and C.7.j.ii. – Change as follows:

'*(i) Task Description – Permittees shall conduct, or enhance existing, outreach to at least one of the following or similar categories ~~each year~~, based on the most prevalent type of activities and discharges within their jurisdiction.*"

"*(ii) Implementation Level – ~~Focus on one polluting illicit activity or targeted industrial/commercial activity per year for proactive outreach.~~ Select and conduct two activities during the permit term.*

Rationale for changes: Planning, designing, implementing, and funding effective and

quality outreach campaigns are a significant undertaking for which Regional Board staff may not fully appreciate. Most outreach projects of this type require a minimum of 18 months from initial project planning to post-outreach evaluations and assessment. These types of activities, if conducted effectively, can require a significant amount of staff time, which are already severely limited.

6. Section C.7.k.i – Add "*individually or collectively*" as follows:

"***Task Description*** *– Permittees shall individually or collectively conduct outreach to municipal officials."*

Rationale for addition: Permittees should be given the option to conduct this activity collectively.

7. Section C.7.l. – Delete this overly prescriptive provision, or at least move and combine with provision C.7.b.

Rationale for deletion/change: This provision is unnecessarily prescriptive and duplicative of the language outlined in C.7.b. Permittees have coordinated a number of very successful Regional and Countywide Advertising Campaigns over the last 15 years, and typically work with very capable public outreach consultants who help design and conduct these programs. The prescription of means and methods for conducting an advertising campaign is unwarranted and may unnecessarily increase the costs for such efforts with little benefit. For these reasons, provision C.7.l should be deleted.

C.8 Water Quality Monitoring

1. Section C.8.a.i. - CCCWP requests that the first paragraph regarding Regional Collaboration be placed at the beginning of every Provision (e.g. C.8, C.10, C.11 etc.) for which it is intended to apply.

Rationale for additions: As it is written in C.8, it states "*Permittees may comply with any requirement of* ***this Provision...*** *"* so it could be interpreted by some as applying only to those items contained in C.8, *even though* it goes on to say "including status and trends monitoring, long-term trends monitoring; monitoring projects; and pollutants of concern monitoring" because Pollutants of Concern are *also* addressed in other Provisions of the permit, i.e., C.9 through C.14. So the most conservative interpretation of the language as written would be that Regional Collaboration only applies to Pollutants of Concern in Section C.8, not Pollutants of Concern in other permit Provisions.

2. Section C.8.a.ii - Preliminary discussions and efforts at organizing a Regional Collaboration are already underway but some collaborative efforts will necessarily take

longer to plan and implement. The language of the MRP should be more specific about this, to help the Regional Board and the Public understand what has already been accomplished, what actions can be reasonably expected in a short time frame (in the first year), what actions can be reasonably expected in the first permit cycle, and what actions could not be completed within the permit cycle. As currently written, the Permit would require Permittees to commence monitoring the first year, unless it is a regionally coordinated action. This does not reflect a measured, prioritized approach to the continuous improvement process.

The Program requests that a significant discussion item in the March 11 workshop be the appropriate priorities and sequencing of actions. Our comments on specific provisions below state what we consider to be appropriate priorities and feasible time frames.
The Program requests that the language of C.8.a.ii be revised to state "Monitoring conducted through a regional monitoring collaborative shall commence data collection within 18 months of permit adoption. All other Permittee monitoring efforts shall commence data collection within 6 months of permit adoption."

3. Section C.8.a.iii. - Where permit obligations can be fulfilled by existing programs, such as the Regional Monitoring Program (RMP), Surface Water Ambient Monitoring Program (SWAMP), or grant-funded projects, it should be explicitly stated. This will reduce uncertainty in the cost estimates for compliance. We propose in our comments below ways that the provisions could be met with existing efforts, and request that the Regional Board reply to specific proposals with a clear statement that either confirms, qualifies, or rejects the proposal.

4. Section C.8.a.iv. - To promote use of volunteers, consideration needs to be given to the complexity of monitoring required, and with the recognition that use of volunteers to fulfill permit requirements represents a liability for Permittees.

The main benefit of using citizen volunteer monitoring groups is to involve members of the community in the process of watershed management. It would be a mistake to look on volunteer monitoring as a cost-saving mechanism. To the contrary, it takes time, energy, and funding to invest in the process of teaching people how to use monitoring tools to track progress in watershed management.

With that in mind, we suggest that the most appropriate roles for volunteer monitors are benthic macroinvertebrate indicies (BMI), rapid trash assessment (RTA), and stream surveys. Collection of samples for chemical and toxicological analysis in a compliance monitoring framework is more appropriate for trained professionals who can provide reasonable assurance that liability, accountability, and reliability standards will be met. The Program's cost estimates reflect this assumption. If the Regional Board wishes to see citizen volunteers involved in more complex sample collection tasks, safe harbor language would be necessary under those provisions, so that the learning curve of

training volunteers and any errors or omissions in data collection does not become a liability for compliance.

An example of safe harbor language to enable volunteer monitors is: "If volunteers participate in sample collection, compliance with this provision will be considered on development and execution of an approved sampling and analysis workplan."

5. Section C.8.b. - Wherever and whenever possible, the MRP should specify where required provisions could be met through participation in the RMP. This is common boilerplate language that appears in most NPDES municipal and industrial wastewater permits.

6. Section C.8.c.ii. – We request that the Regional Board remove unnecessary qualifiers to creek sampling locations. For example, under "Locations" the permit should simply indicate "Kirker Creek" instead of "Kirker Creek (at Pittsburg or below)". With this limitation, it is very likely that 15 sample sites could be rationally excessive in such a short stretch of Kirker creek (e.g., below Pittsburg City Limits and above the tidally influenced zone), since each site represents a reach of at least 300 linear feet of creek. This example shows the general point that the prescriptive directions in the permit don't enable the optimum sampling design. Moreover, the unnecessarily prescriptive requirements in the permit would mean that many of the Program's existing monitoring sites would need to be prematurely abandoned, resulting in wasted effort and use of volunteer resources, and eliminating future benefits from continued monitoring of those sites.

The requirement that samples be collected in reaches where the contributing catchment area is 60% or more urban or suburban may not be attainable in many cases in Contra Costa County.

Lastly, Lafayette Creek does not confluence with Walnut Creek. Lafayette confluences with Las Trampas Creek which in turn confluences with Walnut Creek. At a minimum, text needs to be revised to say "Walnut Creek (below confluence of Las Trampas Creek)".

The Program is requesting that the permit not prescribe and unnecessarily narrow or limit sampling locations within the listed watersheds. Rather, this provision should require Permittees to propose a schedule of rotating watersheds and locations in the first year after adoption of the permit, according to more general guidelines set forth by the permit.

7. Section Table 8.1 – The Program requests more information about which thresholds apply, and how requested monitoring data will be interpreted to determine whether or not a trigger for stressor identification has been exceeded. The most uncertain issues are:

A. **Nutrients (an emerging program in California):** How will numeric nutrient measurements, chlorophyll and periphyton measurements, dissolved oxygen (DO) concentrations, and BMI data be used to determine whether or not a stressor ID study is necessary?

B. **Temperature:** If this study is intended to be accomplished by simply deploying data logging temperature probes, and then retrieving them at the end of the dry season, without maintenance or inspection, then this requirement needs to specify that deployment of the probes is deemed compliance. Otherwise, the probes will need to be serviced regularly to assure that they have not been damaged or stolen, and are correctly logging valid data. That latter assumption dramatically increases labor costs to implement this monitoring requirement. Also, Table 8.1 requires the probes to be in place from April through November, far into the beginning of the rainy season. If probes are required to remain in place into the start of the rainy season, it's likely they will be lost in the first storm event of the season. And with weather forecasting being an imperfect science, it may not be reasonable to simply retrieve them in advance of the first predicted rainfall event. CCCWP requests that the duration of temperature sampling be reworded to read "15 minute intervals (unless equipment limited) from May through September".

C. **Pollutants in fine grained sediments:** What method, specifically, should be used to determine grain size? The methods employed by the RMP for grain size analysis are most robust, but are not trivial or easily obtained through contractors. Does the provision require analysis of bulk concentration of pollutants, augmented with particle size distributions? Or does the provision require analysis of pollutant concentration in specific size fractions? What are the appropriate size fraction cutoffs? If defensible answers to those questions are not readily available, the best approach is to develop a regional work plan. It may not be possible to complete such a workplan in less than 18 months.

D. **Pollutants in fine grained sediments:** What method should be used to analyze polychlorinated biphenyls (PCBs) in sediments? EPA method 608, 8082 or 1668? If using one of the high resolution gas chromatography methods (8082 or 1668), which congeners should be reported? If defensible answers to those questions are not readily available, the best approach is to develop a regional work plan. It may not be possible to complete such a workplan in less than 18 months.

E. **Pyrethroids in fine grained sediments.** Which specific compounds should be determined, and by what methods? What are the expected detection limits? If defensible answers to those questions are not readily available, the best approach is to develop a regional work plan. It may not be possible to complete such a workplan in less than 18 months.

F. **Bioassessments** – According to the requirement in Footnote 18, biological assessments under the MRP would need to be conducted along with Periphyton, a completely new parameter. This greatly increases the level of effort needed for biological assessment and potentially makes it impossible to use volunteer monitors to conduct this work, as the CCCWP has done very successfully in the past. The same applies to the requirement to include pebble count, CPOM and discharge requirements in the Physical Habitat Assessment. All these additional requirements above and beyond the basic Physical habitat assessment and collection of benthic macroinvertebrates make it very difficult to leverage the efforts of volunteers to collect this data, as the CCCWP has done in the past and would very much like to continue in the future.

CCCWP requests that requirements to collect periphyton, pebble count, CPOM, and cobble embededness be removed from the Permit so as not to preclude the use of volunteers in the collection.

Attachment "A" to these comments provides additional requested corrections/changes to Table 8.1

8. Section C.8.d., Table 8.3 – This provision is duplicative of C.8.f.

Suspended solids concentrations (SSC) and Total Suspended Solids (TSS) are both called for in various sections of the monitoring provisions. They are not the same. If the SSC method is desired, the Regional Board needs to be aware that it is not a readily available method from all commercial labs. To ensure consistent methods and adequate laboratory capacity to implement those methods, the best approach is to develop a regional work plan. It may not be possible to complete such a workplan in less than 18 months.

Table 8.3 has some formatting problems that are confusing, e.g., one would not collect bedded sediments in a storm event.

Please clarify that the TIE triggers stated in this provision (or once the provision is combined with provision C.8.f) will satisfy the stressor ID monitoring projects called for in C.8.e.i below, and will therefore be subject to the same cap of three such projects for the permit cycle. This will help reduce cost estimating and compliance uncertainty.

9. Section C.8.e.ii - Please clarify that this is a stand alone requirement, not tied to triggers such as the Stressor ID projects.

10. Section C.8.e.iii.(1) - The 2009 date in the first sentence appears to be incorrect. If the permit becomes effective July 1, 2008, it will be extremely difficult to commence this sampling in early summer. Other dates called out in (2) and (3) are also confusing.

This section appears to be duplicative of requirements in C.11 and C.12. We request the following language be added:

"*The requirements of this provision can be met by implementing projects under C.11.e, C.11.f, C.12.e, and C.12.f.*"

11. Section C.8.e.v. – Submitting a report such as described in this provision within 6 months of completing data collection for monitoring projects is not feasible. Change to:

"Monitoring Project Reports – Permittees shall report on the status of their Monitoring Projects in each annual Urban Creeks Monitoring Report, ~~required per Provision C.8.h.ii within 6 months of completing data collection for a Monitoring Project, Permittees shall submit a report for that project that includes, at a minimum~~ which shall include at a minimum, the following: a description of the project...."

12. Section C.8.f. - General comment on this section: as noted above, this should be combined with provision C.8.d above into a single, cogent provision with a clearly stated goal and a linkage between the goal and the proposed monitoring. This provision, as written, will not demonstrate progress towards achieving Waste Load Allocations (WLAs) for Total Maximum Daily Loads (TMDLs). For the only category 1 pollutants that have TMDLs, mercury and PCBs, this is acknowledged in the footnotes. That is also likely the case for selenium, PBDEs, PAHs, chlordane, DDTs, dieldrin, nitrogen and phosphorous, none of which have specific WLAs at this time. The Program requests the Water Board answer the question: What is the water quality benefit of this provision?

Program requests that the Regional Board work with BASMAA members to develop a regional monitoring strategy for pollutants of concern that will produce meaningful results. Development, peer review, refinement, and finalization of a meaningful regional work plan cannot be done within a year. This provision, when hybridized with C.8.d, should set forth as a goal finalization of the work plan within two years of permit adoption, and implementation in the third year.

If work commences in the first and second year on other monitoring provisions, this would lead to a more appropriate prioritization and sequencing of actions. The Program welcomes the opportunity to discuss on March 11 appropriate priorities and sequencing of actions.

13. Section C.8.f.i. - Rheem Creek at Giant Road presents problems for sampling. The property is privately owned and, as such, permission to enter may not be granted. More importantly, there are safety issues, because the site is on the west wise of the railroad tracks which would be a potential hazard to sampling personnel. A better site might be Rheem Creek at Wanless Park or Wildcat Creek at 3rd Street.

14. Section C.8.f.ii. - How does measurement of methylmercury in a 24-hour flow weighted composite provide useful information? Methylation and demethylation can take place in the bottles over a 24 hour period; what would that tell you about the waterbody sampled?

What analytical method should be used for PCBs in water? Method 608 is the only method promulgated for compliance monitoring. It is well established that the more sensitive Methods, such as 1668A, can detect PCBs in ultrapure water blanks. Should method 1668A be specified, a method detection limit should be developed based on a series of measured procedural blanks, consistent with the trace metal methodologies of the RMP. Such a detection limit study is a considerable undertaking.

There are similar questions about desired methods for category 2 pollutants. For example, to ensure consistent selenium results, collision cell ICP-MS should be employed. Promulgated methods for organochlorine pesticides may not have detection limits low enough to provide useful results.

This provision has not been thought through enough, and should be eliminated. In its present form, it cannot be reasonably implemented in a way that provides information that is a benefit to water quality improvement.

15. Section C.8.g.ii. - As mentioned previously, the Program has forged a very successful collaborative with its Contra Costa Volunteer Monitoring Program over the last 3 years. The Program would very much like to continue to support the Volunteer Monitoring Program in the future by funding them to collect some of the data needed for the MRP, especially the biological assessments. However, some of the new monitoring parameters (i.e., periphyton, CPOM, pebble counts and cobble embededness) are far beyond the capabilities of volunteers to collect and will hinder our ability to leverage the efforts of volunteers to collect this data in the future. We request that these parameters be removed from the permit so that we can continue to have volunteers collect this data in the future.

16. Section C.8.h.ii. - It is unrealistic, if not impossible, to compile such a comprehensive report at the same time the raw data are provided in the Electronic Data Report. In some cases, it can take months for just the data analysis and reporting to occur (in the case of bioassessment data it is common for analysis of samples to take 4 months) and once reported, those data need further QA/QC. To then perform the extensive mapping, generation of tables and figures, calculation of metrics, and development of hypotheses to investigate pollutant sources, trends and BMP effectiveness (to name just a few of the types of information required in the report) will take at least 6 months after the Electronic Data Report.

C.9 Pesticides Toxicity Control

1. Section C.9.e. – Delete this provision.

Rationale for deletion: This provision requires Permittees to track and encourage water quality concerns in pesticide-related regulatory policies and regulations under review or in development by Federal and State regulatory agencies. While Permittees often do individually and collectively participate in Federal and State public processes, requiring such participation in this Municipal Regional Permit is not appropriate.

2. Section C.9.g. – This provision needs to be deleted or clarified.

Rational for deletion or clarification: This provision is extremely vague and appears to be requiring Permittees to study the effectiveness of pesticide source control actions outlined in provisions C.9 in attaining pesticide concentration and toxicity targets for water and sediment. Such an analysis would be scientifically difficult, or impossible, and certainly beyond the realm of a practical mandate. A more reliable evaluation for assessing the effectiveness of pesticide source control measures include: 1) compliance with activity-based permit requirements, 2) changes in knowledge and awareness, and 3) changes in behavior and implementation of BMPs.

3. Section C.9.h.i. – Change this provision so as to encourage, not require, point of purchase outreach efforts.

Rationale for change: This provision requires Permittees to conduct outreach to consumers at the point of purchase. This requires the cooperation and participation of retail outlets. While Permittees have successfully conducted point of purchase programs in the past, there is no guarantee these programs can be successfully implemented in the future. Water Board staff needs to consider and include additional partners in these types of outreach efforts. It is inappropriate to mandate point of purchase programs on Permittees.

4. Section C.9.h.iii. - This is not the most effective or efficient way to gather information, and may not gather reliable information. A more general and comprehensive survey approach may be more effective. The provision should be integrated with the Advertising Campaign mandated in C.7.b.

5. Section C.9.h.iv. – Delete the sentence: "*This documentation may include percentages of residents hiring certified IPM providers and the change in this percentage.*"

Rationale for deletion: It would be a very difficult for Permittees to ascertain the percentages of residents hiring IPM certified providers. Doing surveys of residents that

are robust enough to provide useful and valid results is more problematic than it may appear.

C.10. Trash Reduction

1. Section C.10.a.i. - This provision assumes every city has high trash areas totaling at least 10% of their urban and suburban land. This may not always be the case, particularly in smaller less urban Contra Costa municipalities, and may result in public monies being unnecessarily wasted with little water quality benefit. The Program proposes a more effective and measured approach as outlined in BASMAA's September 22, 2006 Performance Standard tables, as summarized below:

1. Identify and assess potential litter/trash high accumulation areas/watersheds.

2. Identify management actions (BMPs) to reduce trash levels in stormwater conveyances at such locations and identify current trash collection/control options for minimizing trash/litter inputs to storm drain inlets. Determine the implementation costs and effectiveness of devices/BMPs investigated.

3. Identify high priority storm drain inlets within key urban areas/watersheds that have had high accumulations of litter/trash to prioritize inlets for potential projects.

4. Select locations for pilot projects and implement demonstration studies to assess their effectiveness and associated costs.

2. Section C.10.a.ii. - Brown and Caldwell's preliminary capital cost estimate ranges from $3,000,000 to $160,000,000 for complying with the trash reduction provisions over the five year permit for Contra Costa alone. Operations and maintenance costs for full trash capture are estimated at $15,000,000 – $30,000,000 over the five year permit term. Implementation of the "Enhanced Trash Management Controls" would add to the capital and O&M costs.

The higher cost capital projects (installation of Gross Solids Removal Devices, or GSRDs), provide the greatest certainty of success, and lower Operations and Maintenance costs. The lower cost options, such as storm drain inserts, have higher O&M costs and less certainty of success.

The above proposed provisions assume all communities are impacted by trash - enough to warrant what is estimated to be extremely expensive retrofits and enhanced trash management measures.

It is likely that the cost/benefit and optimum approach would be very different among municipalities (e.g., Moraga vs. Concord).

To help permittees move forward, this provision needs to be re-written to allow for more flexibility. As worded, the fixed requirement to demonstrate the success of full trash capture on 5% would drive towards the higher capital cost projects to ensure compliance.

The Program can suggest a better approach that addresses both the Regional Board need for assurance of reasonable progress and the municipalities need for cost certainty in capital planning. Our proposed alternative is to make compliance with this provision contingent on attainment of two significant milestones:

a. Procurement of capital funds sufficient to undertake significant trash capture projects. Based on our estimates, this would be an amount on the order of $10,000,000; and

b. Initiation of projects to utilize those capital funds.

These two activities would occur in sequence, according to the strategy called for in C.10.c below. We are willing to discuss reasonable time frames for completion of these two milestones.

3. Section C.10.b.i.(1) – Implementing enhanced trash management controls on ten (10) percent of the Urban and Suburban Land Area would be unwarranted and result in wasted public monies. We request a more flexible mandate based on an assessment of need and/or impact.

Mandated "Enhanced trash management controls" includes a minimum of weekly street sweeping frequency which is twice as much as even the "high frequency" street sweeping areas in C.2.a. Is this intended? CCCWP requests that permit language be changed to require sweeping of enhanced trash management control areas at frequencies no greater than 2 times per month, to be consistent with requirements in C.2.a.ii. (Also, see comments under Provision C.2.b.i.)

4. Section C.10.b.(1) – Delete *"(with enforceable parking restrictions to clear vehicles from the curbs on sweeping days)"*.

Rationale for change: This provision would have the unintended consequence of requiring installation of "No Parking" signs legible from any parking position, and at a minimum of 300 feet apart, in all geographic areas required to implement "enhanced trash management control measures". This is unacceptable. Not only would this represent a huge capital expenditure for purchase and installation of signs, these signs are unacceptable in most communities for aesthetic reasons. Permittees must be allowed to use public education and/or other means to encourage residents to not park in areas scheduled for sweeping.

5. Section C.10.b.(2) – The City of Walnut Creek has developed some preliminary estimates for different approaches, comparing costs for inlet approach versus a larger catchment approach. Preliminary information suggests catchment approach may be more efficient or cost effective. Regional Board staff has pointed out examples from the City of Los Angeles and from the Lake Merritt project. BASMAA has developed some preliminary estimates for different approaches, which have been compared with costs generated by the Program. All available information is too preliminary to decide on the best approach, or be able to predict implementation costs. This is why this entire provision needs more flexibility.

6. Section C.10.b.ii. - As written, the permit requires trash assessments to be performed twice a year downstream of all enhanced trash management control catchments (in addition to the trash assessments required in Table 8.1). There is concern as to how many assessment sites would be necessary to comply. It is very difficult to estimate the level of effort and money required to fulfill this permit requirement since the number of enhanced trash management control catchments will not be known until some time after the permit goes into effect.

The Program requests that the Regional Board cap the number of catchments that would require trash assessments to be performed. The current monitoring cost estimate assumes a cap of 40 such sites within Contra Costa County, assessed twice a year.

The trash monitoring requirement should be called for in C.10.b.ii only, not repeated in C.8.b. under Table 1.

7. Section C.10.d. (October, 2010 Annual Report) – This section states "*Report steps toward establishing pilot full trash capture device installations.*" Mandating full-capture trash control installations in at least 5% of all Bay Area Urban and Suburban Land Area is neither a pilot project nor approach. The Program agrees with the concept of a pilot-project, and would like to discuss with Regional Board how this might be best achieved.

8. Section C.10.d. (October, 2011 Annual Report) - This date is inconsistent with C.10.c above, which indicates October 2012. CCCWP believes the correct date is October 2012. Please clarify.

C.11. Mercury Controls

1. Section C.11.b.i. - As noted above, provision C.8.f, as written, won't yield any useful information about factors leading to methylmercury production and bioaccumulation. Is the management endpoint the Bay or the creeks? If the Bay, then the RMP mercury strategy should be the appropriate mechanism for investigating this.

This provision is duplicative of the methylmercury fate and transport requirement of provision C.11.h.

2. Section C.11.c.i. – The Program requests that all provisions relating to both Hg and PCBs be combined to improve the clarity of what's being required as well as to remove inconsistencies between the two.

Existing work, such as the data collected under the "Joint Stormwater Agency Projects to Study Urban Sources of Mercury and PCBs" performed by KLI in 2001 and 2002, PCBs investigations case studies, and the Prop 13/Urban Stormwater BMP Project currently being carried out by SFEI constitute reasonable progress on this provision. The Program suggests that as a next step, BASMAA members would work together to develop regional guidance to provide a consistent, peer-reviewed approach to conducting source investigations and pilot removal and abatement projects.

3. Section C.11.d.i - Contra Costa County has applied for funds to develop plans and designs to abate the Mount Diablo Mercury mine. That mine discharges into Marsh Creek, upstream of a planned wetland restoration project. Successful remediation of a mercury mine upstream of a planned wetland would seem to be an excellent candidate for a meaningful pilot project, especially given that wetlands are known to be high risk areas for mercury methylation. The Program requests that the completion of the design phase of this project be considered satisfactory for meeting the requirement of this provision.

To ultimately succeed, this project will need coordinated support from the SFRWQCB, the CVRWQCB, the State Board, and USEPA. When state agencies can provide such coordinated support, meaningful projects with substantial benefits result, as was observed at the Gambonini mercury mine in Marin County.

4. Section C.11.e.i. - Please confirm that the siting of retrofit projects should generally be based on targeting PCB sources, with assessment of the ancillary benefit to mercury load reductions. Remediation of the Mt. Diablo Mercury Mine would be one exception to this general approach, where mercury would be the driver for remediation instead of PCBs.

The capital costs for stormwater retrofits are on the order of millions of dollars; this will need to be carefully planned as a regionally coordinated effort to ensure consistency and measurable benefits. The time frame to implement this is unreasonable. Performing the engineering analysis, following CEQA, and obtaining the necessary permits takes time. CCCWP requests that the goal of the provision be set to have plans and designs in place by the end of the permit cycle (2013).

5. Section C.11.f.i - This provision assumes the characterization ongoing in C.8.e.iii

will warrant diversions; that outcome has yet to be determined.

Stormwater programs cannot require POTWs to accept discharges. Has the Regional Board thought through the substantive or perceived degradation of biosolids quality that would result from deliberate introduction of stormwater from highly contaminated areas? That is but one of the many policy and technological barriers to implementing this provision.

6. Section C.11.g.ii - The Mercury TMDL contains "or" for each. Program requests that each of the options #1-4 under C.11.g.ii be separated by the word "or" so it's clear we're not being asked to do all of those requirements.

CCCWP believes that the best way to achieve meaningful load reductions from stormwater, after abating mercury mines that discharge into wetlands, would be implementation of C.3 facilities. Attenuating direct connections between hardscape and state waters is a potentially significant benefit to ameliorating mercury loads from atmospheric deposition. A primary focus of implementing this provision should be to model or assess the mercury load reduction benefits of C.3 implementation.

7. Section C.11.g. - This belongs under the RMP, as a special study. This provision inappropriately delegates the Regional Board's duties to develop TMDL information. BASMAA's comments, by reference, expand on this and are incorporated by reference herein. For the purpose of this comment letter on behalf of the CCCWP, we request that you simply state that this requirement may be fulfilled by an RMP special study, and commit to supporting the special studies at the RMP technical committee and steering committee.

C.12. PCB Controls

1. Section C.12.b.i - Would our participation in the SFEI/Prop 50 grant funded study of PCBs in Building Materials satisfy this provision?

2. Section C.12.b.iii – The Program requests clarification of whether the Regional Board intends this to be carried out at 10 sites within each county or 10 sites distributed over the entire region?

3. Section C.12.c. - Same comments as for C.11.c above.

4. Section C.12.c.vi. - Change "*2012*" to "*2013*" at the end of the last sentence.

5. Section C.12.d.ii - What is the purpose of evaluating the cost-effectiveness of high-efficiency sweepers when the permit already requires permittees to replace 75% of their existing sweepers with high-efficiency models regardless of the outcome of that

cost-effectiveness evaluation? It makes their cost efficiency a moot point and a waste of time to evaluate unless the results of that evaluation will play into the decision of how many should be replaced and the type of sweeper to be used.

C.12.c is written to be carried out concurrently with C.12.d and C.12.e and C.12.f but really C.12.d, C.12.e and C.12.f are a menu of items that respond to what happens in C.12.c. They shouldn't happen until after C.12.c is completed because we need the results of C.12.c to guide the actions of the others.

6. Section C.12.d.iv. - Add "*at applicable areas*" to this sentence so that it reads "*Beginning July 1, 2011, Permittees shall implement the most potentially effective measure(s) based on the evaluation of Provision C.12.d.i and ii at applicable areas throughout the region.*" This is because PCBs aren't evenly distributed throughout the region.

7. Section C.12.e. - Same comments as for C.11.e above.

8. Section C.12.f.i. - Same comments as for C.11.f above.

9. Section C.12.g. – This belongs under the RMP, as a special study. This provision inappropriately delegates the Regional Board's duties to develop TMDL information. BASMAA's comments, by reference, expand on this and are incorporated by reference herein. For the purpose of this comment letter on behalf of the CCCWP, we request that you simply state that this requirement may be fulfilled by an RMP special study, and commit to supporting the special studies at the RMP technical committee and steering committee.

C.13. Copper Controls

1. Section C.13.e.i – This is yet another highly technical and complex study for which Permittees are being required to undertake. This belongs under the RMP, as a special study. This provision inappropriately delegates the Regional Board's duties to develop TMDL information. BASMAA's comments, by reference, expand on this and are incorporated by reference herein. For the purpose of this comment letter on behalf of the CCCWP, we request that you simply state that this requirement may be fulfilled by an RMP special study, and commit to supporting the special studies at the RMP technical committee and steering committee.

C.14. Polybrominated Diphenyl Ethers (PBDE), Legacy Pesticides and Selenium

1. Section C.14.a. - This belongs under the RMP, as a special study. This provision inappropriately delegates the Regional Board's duties to develop TMDL information.

BASMAA's comments, by reference, expand on this and are incorporated by reference herein. For the purpose of this comment letter on behalf of the CCCWP, we request that you simply state that this requirement may be fulfilled by an RMP special study, and commit to supporting the special studies at the RMP technical committee and steering committee.

Furthermore, the time frames are unreasonable, particularly when combined with all the other requirements. This is a vaguely worded, "everything else" provision thrown in at the end. Does the conceptual model for selenium suggest that urban stormwater is a likely source? That does not appear to be the case in Contra Costa County.

As with the pollutants of concern monitoring in C.8.f, the goal of this provision for the first MRP permit cycle should be development of a carefully thought out, peer reviewed regional work plan that frames questions and proposes meaningful approaches to answer them.

C.15. Exempted and Conditionally Exempted Discharges

1. Section C.15.b.i.(1) – Change this provision to read:

"*(a) These discharge types shall, if necessary, be properly managed ~~treated~~ before discharge to remove pollutants, including, but not limited to, total suspended solids (TSS) or silt to allowable discharge levels. Appropriate BMPs to render pumped groundwater free of pollutant and therefore exempted from prohibition may include the following: filtration, settling,, coagulant application with no residual coagulatent discharge, minor odor or color removal with activated carbon, small scale peroxide addition or other minor treatment. In the case of single family homes, discharges to landscaping from foundation drains, crawl space pumps and footing drains are exempt from Prohibition A.*"

Rationale for change: Residential (i.e., single family homes) foundation drains, crawl space pumps, and footing drains are quite common in the Bay Area due to our topography and predominance of clay soils. It is impractical to require an individual homeowner to comply with the monitoring requirements outlined in this provision. There needs to be an easy and convenient compliance option. The Program proposes the following three options: 1) discharge to landscaping, 2) discharge to sanitary sewer, and 3) direct discharge to the storm drain provided the homeowner complies with the provisions C.15.b.i.(1)(a), C.1.5.b.i.(1)(c), C.1.5.b.i.(1)(f), and C.1.5.b.i.(1)(g).

2. Section C.15.b.i(1)(b) – Change to read:

"*(b) Permittees shall notify the Water Board of new discharges of pumped uncontaminated groundwater at flows 10,000 gallons/day or verify the discharge is*

covered under the San Francisco Bay Regional Water Quality Control Boards General Permit (Order No. R2-2007-0033).

Rationale for provision removal: Discharges of pump groundwater at flows of 10,000 gallons/day are regulated by Water Board Order R2-2007-0033, "Discharge or Reuse of Extracted Brackish Groundwater and Reverse Osmosis Concentrate Resulting from Treatment of Groundwater by Reverse Osmosis and Discharge or Reuse of Extracted and Treated Groundwater Resulting from Structural Dewatering". Enforcement, administration and oversight of these discharges are the responsibility of the Regional Board. However, Permittees can and will continue to be partners with Regional Board staff in working to identify and abate pollutant discharges. The Program's proposed change ensures this partnership continues while relieving Permittees from strict reporting and enforcement responsibilities.

3. Sections C.15.b.iii.(1), C.15.b.iii(2) and C.15.b.iii(2) – <u>These provisions are unacceptable.</u> Permittees request a special meeting with Water Board staff and other stakeholders (e.g., Water Supply Districts, Fire Districts, and others) to identify an appropriate regulatory framework for addressing these discharges.

4. Section C.15.b.v(1)(c) – Change to read:

"*(c) Permittees shall require that new ~~or remodeled~~ swimming pools, hot tubs, spas and fountains requiring permits have access to a sanitary sewer cleanout, if feasible.*

Rationale: The expense and reasons for requiring a "connection" to sanitary sewer for a new or remodeled pool, hot tub, spa, or fountain is without justification and is unnecessary. First, connection or access to sanitary sewer cleanout may not be possible (i.e., some areas of Contra Costa County are not served by sanitary sewer). Second, remodeling work is typically superficial (e.g., replastering, light replacement, or new equipment filtering equipment) and would not justify the significant expense of plumbing a "connection" to the sanitary sewer. Third, a connection to sanitary sewer precludes use of this valuable water for irrigation or other non-potable water purposes.

Table 8.1 Status Monitoring Elements

Status Monitoring Parameter	**Method**[14]	**Minimum Sampling Frequency**[15]	**Duration of Sampling**	**Minimum # Sample Sites to Monitor/Yr**[16] Santa Clara & Alameda Permittees/ Contra Costa & San Mateo Permittees/Fairfield-Suisun & Vallejo Permittees	**Result(s) that Trigger a Stressor Identification Monitoring Project in Provision C.8.e.i.**
Biological Assessment (Includes Physical Habitat Assessment and General Water Quality Parameters[17])	SWAMP procedure[18]	1/yr (Spring Sampling)	Grab sample	Spring 25 / 15 / 5	Metrics that indicate ~~substantially degraded~~ community as per Attachment G, Table G-1
Chlorine (Free and Total)	USEPA Std. Method 4500 Cl F[19]	2/yr (Spring and Dry) in conjunction with Bioassessments where possible	~~Grab sample~~	Spring 25 / 15 / 5 Dry 3 / 2 / 1	After immediate ~~resampling, concentrations remain > 0.08 mg/L~~

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[14] Refers to field protocol, instrumentation and/or laboratory protocol.
[15] Refers to the number of sampling events at a specific site in a given year.
[16] The number of sampling sites shown is based on the relative population in each Regional Stormwater Countywide Program and is listed in this order: Santa Clara & Alameda Countywide/Contra Costa & San Mateo Countywide/Vallejo & Fairfield-Suisun Programs.
[17] Includes dissolved oxygen, temperature, conductivity, pH and stream depth.
[18] Ode, P.R. 2007. Standard Operating Procedures for Collecting Macroinvertebrate Samples and Associated Physical and Chemical Data for Ambient Bioassessments in California, California State Water Resources Control Board Surface Water Ambient Monitoring Program (SWAMP), as subsequently revised. Biological assessments shall include benthic macroinvertebrates and periphyton. For periphyton, include mass (ash-free dry weight) and chlorophyll *a*, or SWAMP comparable method. Physical Habitat (PHab) Assessment shall include the SWAMP basic method plus 1) depth and pebble count + CPOM, 2) cobble embeddedness, and 3) discharge measurements. PHab Assessment form is at http://www.waterboards.ca.gov/swamp/docs/reports/fieldforms_fullversion071007.pdf. Macroinvertebrates shall be identified according to the Standard Taxonomic Effort Level I of the Southwestern Association of Freshwater Invertebrate Taxonomists.
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[19] The method of analysis shall achieve a method detection limit at least as low as that achieved by the Amperometric Titration Method (4500-Cl from *Standard Methods for Examination of Water and Wastewater*, Edition 20).

Status Monitoring Parameter	**Method**[14]	**Minimum Sampling Frequency**[15]	**Duration of Sampling**	**Minimum # Sample Sites to Monitor/Yr**[16] Santa Clara & Alameda Permittees/ Contra Costa & San Mateo Permittees/Fairfield-Suisun & Vallejo Permittees	**Result(s) that Trigger a Stressor Identification Monitoring Project in Provision C.8.e.i.**
Nutrients (total phosphorus, orthophosphate, total nitrogen, nitrate, ammonia, calculate ammonium)	Applicable SWAMP comparable method	3/yr in conjunction with biological assessments & water column toxicity	Grab sample	Storm event 3 / 2 / 1 Spring 25 / 15 / 5 Dry 3 / 2 / 1	Water repeatedly exceeds one or more water quality standard or established threshold
General Water Quality[20]	Multi-Parameter Probe	1/yr (During June-Sept.)	15-minute intervals for 1-2 weeks	3 / 2 / 1	Water repeatedly[21] exceeds one or more water quality standard or established threshold
Temperature	Digital Temperature Logger	15-minute intervals (one-hour intervals allowed if equipment limits greater frequency)	15-minute intervals (unless equipment-limited) May through Sep.	9 / 6 / 3	Water consistently or repeatedly exceeds applicable temperature threshold[22]
Toxicity & Diazinon and Chlorpyrifos–Water Column[23]	Applicable SWAMP Comparable Method	2/yr (1/Dry Season & 1 Storm Event)	Grab or composite sample	Dry: 3 / 2 / 1 Storm: 3 / 2 / 1	If toxicity test results < 50% of control results, repeat sample. If 2nd sample also <50% of control, do TIE[24]

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Comment [A77]: Khalil, please advise. Should we request another attachment listing all the referenced thresholds?
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[20] Includes dissolved oxygen, temperature, conductivity, pH and stream depth.

[21] For example, if dissolved oxygen repeatedly falls below threshold or declines with no obvious natural explanation.

[22] If temperatures exceed applicable threshold (e.g., Maximum Weekly Average Temperature, Sullivan K., Martin, D.J., Cardwell, R.D., Toll, J.E. ,Duke, S. 2000. *An Analysis of the Effects of Temperature on Salmonids of the Pacific Northwest with Implications for Selecting Temperature Criteria, Sustainable Ecosystem Institute*) or spike with no obvious natural explanation observed.

[23] *Three species toxicity tests: Selenastrum* growth and *Ceriodaphnia* and *Pimephales* with acute endpoint only.

[24] Select TIE methods from the following references after conferring with SWAMP personnel: For sediment: (1) Ho KT, Burgess R., Mount D, Norberg-King T, Hockett, RS. 2007. Sediment toxicity identification evaluation: interstitial and whole methods for freshwater and marine sediments. USEPA, Atlantic

Status Monitoring Parameter	**Method**[14]	**Minimum Sampling Frequency**[15]	**Duration of Sampling**	**Minimum # Sample Sites to Monitor/Yr**[16] Santa Clara & Alameda Permittees/ Contra Costa & San Mateo Permittees/Fairfield-Suisun & Vallejo Permittees	**Result(s) that Trigger a Stressor Identification Monitoring Project in Provision C.8.e.i.**
Toxicity– Bedded Sediment, Fine-grained	Applicable SWAMP Comparable Method	1/yr (Spring or Fall Sampling, coordinate with SWAMP)	Grab sample	6 / 4 / 1 At Biological Assessment sampling locations	See Attachment G, Table G-1
Pollutants – Bedded Sediment,[25] fine-grained	Applicable SWAMP Comparable Method Inc. grain size and TOC	1/yr (Spring or Fall Sampling, coordinate with SWAMP)	Grab sample	6 / 4 / 1 At Biological Assessment sampling locations	See Attachment G, Table G-1
Pathogen Indicators[26]	Applicable SWAMP Comparable Method	1/yr (During Summer)	Follow USEPA protocol	5 / 5 / * *Fairfield & Vallejo Permittees: 5 sites twice in permit period	Exceedance of USEPA or Basin Plan criteria

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Comment [A78]: Khalil & Jamison, is SWAMP working on any sites in Co.Co., and how might this impact our cost estimates?

Comment [A79]:

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Ecology Division/Mid-Continental Ecology Division, Office of Research and Development, Narragansett, RI, or (2) Anderson, BS, Hunt, JW, Phillips, BM, Tjeerdema, RS. 2007. *Navigating the TMDL Process: Sediment Toxicity*. Final Report- 02-WSM-2. Water Environment Research Federation. 181 pp. For water column: (1) USEPA. 1991. *Methods for aquatic toxicity identification evaluations. Phase I Toxicity Characterization Procedures*. EPA 600/6-91/003. Office of Research and Development, Washington, DC., (2) USEPA. 1993. *Methods for aquatic toxicity identification evaluations. Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity*. EPA 600/R-92/080. Office of Research and Development, Washington, DC., or (3) USEPA. 1996. *Marine Toxicity Identification Evaluation (TIE), Phase I Guidance Document*. EPA/600/R-95/054. Office of Research and Development, Washington, DC.

[25] Bedded sediments should be fine-grain from depositional areas. Grain size and TOC must be reported. Analytes shall include all of those reported in MacDonald (including copper, nickel, mercury, PCBs, DDT, chlordane, dieldrin) as well as other contaminants of interest, including pyrethroids. Coordinate with TMDL Provision requirements as applicable.

[26] Includes fecal coliform and *E. Coli.*

Status Monitoring Parameter	**Method**[14]	**Minimum Sampling Frequency**[15]	**Duration of Sampling**	**Minimum # Sample Sites to Monitor/Yr**[16] Santa Clara & Alameda Permittees/ Contra Costa & San Mateo Permittees/Fairfield-Suisun & Vallejo Permittees	**Result(s) that Trigger a Stressor Identification Monitoring Project in Provision C.8.e.i.**
Trash Assessment – Baseline & Trends as specified in Provision C.10.	SCURTA[27] or SWAMP RTA Version 8	2/yr (Spring and Fall)	As stated in method used (See C.10.b.)	Immediately downstream of Enhanced Trash Management Control Catchments as specified in Provision C.10.b. and additionally at the Toxicity and Pollutants in Bedded Sediment 6/4/1 sites.	See Provision C.10. for triggered actions
Stream Survey (stream walk & mapping)	USA[28] or equivalent	1 waterbody/yr	N/A	9 / 6 / 3 stream miles/year	N/A

Comment [A80]: Need to clarify that the start date for trash assessments is per Provision C.10 (i.e., July 2010).

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Comment [A81]: We do 3-4 miles per year now with volunteers. 6 miles is a significant increase. Conflicts arise with access and private property.

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[27] Santa Clara Urban Rapid Trash Assessment

[28] Center for Watershed Protection, Manual 10: *Unified Stream Assessment: A User's Manual,* February 2005.

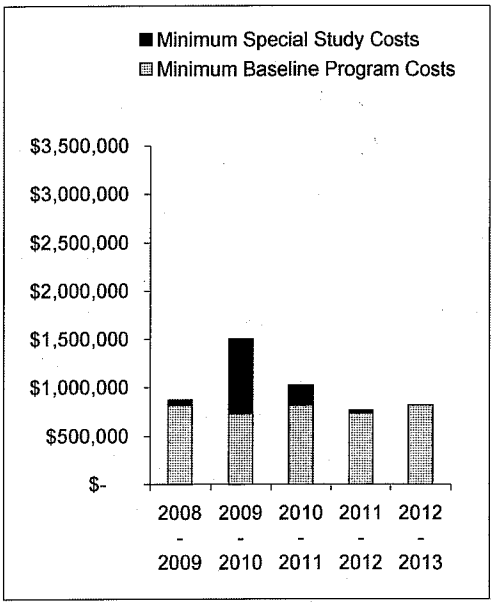
Summary of CCCWP ONLY Cost Estimates for Provisions C.8 - C.14 of MRP, Compared to Existing CCCWP Monitoring Costs
February 24, 2008

BROWN AND CALDWELL

Minimum Cost Estimate for Provisions C.8 - C.14

Year	Minimum Baseline Program Costs	Minimum Special Study Costs
2008 - 2009	$ 821,000	$ 54,167
2009 - 2010	$ 736,000	$ 766,833
2010 - 2011	$ 821,000	$ 201,069
2011 - 2012	$ 736,000	$ 33,333
2012 - 2013	$ 821,000	
Total 2008 - 2013 Monitoring costs (c.8 - c.14)	**$ 3,935,000**	**$ 1,055,403**

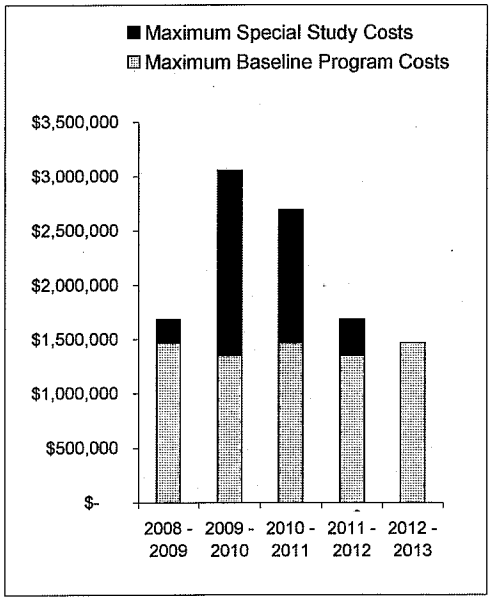
Minimum Capital Costs (Retro fits, trash capture). Does not include diversions to sanitary, O&M on trash capture, or enhanced trash management costs	**$ 4,227,400**
5-year O&M associated with minimum capital for trash capture	**$ 28,750,000**



Maximum Cost Estimate for Provisions C.8 - C.14

Year	Maximum Baseline Program Costs	Maximum Special Study Costs
2008 - 2009	$ 1,471,000	$ 216,667
2009 - 2010	$ 1,355,000	$ 1,703,333
2010 - 2011	$ 1,471,000	$ 1,219,887
2011 - 2012	$ 1,355,000	$ 333,333
2012 - 2013	$ 1,471,000	
Total 2008 - 2013 Monitoring costs (c.8 - c.14)	**$ 7,123,000**	**$ 3,473,221**

Maximum Capital Costs (Retro fits, trash capture). Does not include diversions to sanitary, O&M on trash capture, or enhanced trash management costs	**$ 162,907,340**
5-year O&M associated with maximum capital for trash capture	**$ 15,400,000**



Current Program Annual Monitoring Costs for Comparison:

General Technical Support	$ 50,000
RMP/SFEI contribution	$ 132,000
BASMAA Regional Monitoring Strategy (BRMS)	$ 125,000
Watershed Management	$ 25,000
Watershed Management Technical Support	$ 5,000
Volunteer Monitoring	$ 74,750
Total Current Monitoring per year	**$ 411,750**
Max Future Monitoring per year	**$ 2,119,244**
Min Future Monitoring per year	**$ 998,081**

These two bottom line summaries reflect the max and min baseline plus special studies, divided by 5 years