Alameda Countywide
Clean Water Program

Contra Costa
Clean Water Program

Fairfield-Suisun
Urban Runoff
Management Program

Marin County
Stormwater Pollution
Prevention Program

San Mateo Countywide
Stormwater Pollution
Prevention Program

Santa Clara Valley
Urban Runoff Pollution
Prevention Program

Vallejo
Sanitation and Flood
Control District

B A S M A A

February 28, 2008

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

Subject: Comments on Pump Station Diversion Provisions in Tentative Order for the Municipal Regional Stormwater NPDES Permit

Dear Mr. Wolfe:

The purpose of this correspondence is to submit the Bay Area Stormwater Management Agencies Association's ("BASMAA's") written comments on the Pump Station/Sanitary Sewer Diversion Provisions of the Municipal Regional Stormwater Permit ("MRP") – Tentative Order.[1] Our understanding is the Bay Area Clean Water Agencies ("BACWA") will submit a similar letter regarding these provisions that jointly affect the member agencies of both organizations. We also expect BACWA is in substantial agreement with the content and recommended approach to potential stormwater pump station/sanitary sewer diversions contained in this letter. We request these written comments be made part of the administrative record in the Water Board proceedings for the MRP.[2]

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[1] BASMAA is a consortium of the following eight San Francisco Bay Area municipal stormwater programs:

- Alameda Countywide Clean Water Program.
- Contra Costa Clean Water Program.
- Fairfield-Suisun Urban Runoff Management Program.
- Marin County Stormwater Pollution Prevention Program.
- San Mateo Countywide Stormwater Pollution Prevention Program.
- Santa Clara Valley Urban Runoff Pollution Prevention Program.
- Sonoma County Water Agency.
- Vallejo Sanitation and Flood Control District.

In addition to the members listed above, other agencies, such as the California Department of Transportation (Caltrans) and the City and County of San Francisco (combined sewer system), participate in some BASMAA activities. Together, these agencies represent more than 90 agencies, including 79 cities and 6 counties, and the bulk of the watershed immediately surrounding San Francisco Bay.

[2] In addition to these comments concerning Provisions of the MRP relating to pump station/sanitary sewer diversion requirements in the MRP, BASMAA is submitting additional comments on other aspects of the Tentative Order under separate cover. It also incorporates by reference comments submitted separately by or on behalf of the Bay Area countywide Stormwater Programs, their various co-permittees, and their legal counsel.

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Consistent with TMDL implementation plans adopted by the Water Board, BASMAA generally supports enhanced stormwater pollution prevention measures for priority pollutants found to be impairing local waterways (e.g., mercury, PCBs).

However, as is true with a number of other MRP requirements on which we have expressed concern, it is essential the new initiatives proposed in the Tentative Order with respect to pump station/sanitary sewer diversions be:

- focused on identified receiving water quality problems, and
- practical, understandable, within the control and jurisdiction of the municipal stormwater agencies, and allow for needed flexibility to cost-effectively solve water quality problems.

What the Draft Permit Proposes in terms of Pump Station/Sanitary Sewer Diversions: The Tentative Order requires the diversion of stormwater pump station dry weather and first 'flush flows'[3] to the sanitary sewer without first reviewing the results of prior studies or awaiting the results of an ongoing pilot test evaluating feasibility.

Our Concern: We find the proposed implementation portions of the Tentative Order's requirements concerning pump stations to be premature; unnecessarily prescriptive; and inflexible requiring actions outside the control and jurisdiction of municipal stormwater agencies. More specific aspects of these concerns are as follows:[4]

Implementation of Pilot Studies Before Feasibility Assessment. Currently, the MRP appropriately conditions the effectiveness of some sub-provisions containing requirements related to pump stations on the results of a feasibility study required under another sub-provision. However, in other Provisions raising pump station/sanitary sewer diversion requirements, this very logical pre-condition is seemingly ignored. Specifically, under the current drafting of Provisions C.11.f. (Mercury Controls-Diversion of Dry Weather and First Flush Flows to Publicly Owned Treatment Works (POTWs) and C.12.f. (PCB Controls-Diversion of Dry Weather and First Flush Flows to POTWs), the permit appears to require diversions to sanitary sewers be implemented in five pilot projects irrespective of the results of required feasibility studies that demonstrate that such diversions are feasible.

Implementation of New Studies and Pilot Tests Before Completion of Existing Pilot Test and Evaluation of It and Other Existing Information. The Tentative Order also requires the initiation of new studies and additional pilot tests with respect to pump station/sanitary sewer diversions without first considering information from past and existing pump station diversion studies and tests or providing for an assessment of how the results of these studies and tests could inform smarter, more cost effective approaches to the data gathering required

[3] Note: The existence of first flush should not be assumed in all cases. A first flush may not be observed because a storm event is too small to generate runoff, the characteristics of the drainage area creates a lag time preventing runoff from reaching the storm drain, the pollutants may not be very mobile, or the pollutant sources are effectively continuous.

[4] Concerns about these potential permit requirements being beyond the legal jurisdiction of BASMAA members' stormwater agencies is being addressed at more length in a separate comment submission by Gary Grimm, counsel to the Alameda Countywide Clean Water Program and are incorporated by reference.

and issues intended to be addressed by the permit's pump station/sanitary sewer diversion-related requirements.

For example, EBMUD is currently in the process of conducting a $200,000+ interim environmental enhancement project to divert up to 75 gpm of dry weather urban runoff plus a limited volume of first flush wet weather flow from the Ettie Street Pump Station through an existing sanitary sewer to the EBMUD MWWTP. The project includes a monitoring component to characterize pollutant concentrations for use in evaluating the potential benefits of a larger scale project.

Likewise, since one of the approaches evaluated in it was the "Feasibility of using excess treatment capacity to reduce urban runoff mercury loads at strategic locations," the September 11, 2003 Clean Estuary Partnership (CEP) study "*Mercury Management by Bay Area Wastewater Treatment Plants (CEP Project 4.5)*" may also prove an instructive resource. In fact, this CEP study illustrates the importance of considering the implications of prior work on the feasibility of diversions. It estimated that a single full-scale Ettie Street Pump Station diversion project would have capital costs of $13 M and annual O&M costs of $1.0 M. Based on the assumptions of that study, a full scale project could potentially reduce mercury loading to the Bay by only 0.04 to 0.1 kg per year and PCB loads by only 0.1 to 0.3 kg per year. The study also noted a significant volume of stormwater (2,200 million gallons) would need to be diverted to the EBMUD wastewater treatment plant to achieve these reductions.

Recommended Alternative Approach for MRP Pump Station/Sanitary Sewer Diversion-Related Requirements: It is BASMAA's recommendation the proposed series of diversion requirements proposed in the MRP, included in provisions C.8.e.iii.(3) (Dry Weather Discharges & First Flush Investigations), C.11.f, C.12.d (Conduct Pilot Projects to Evaluate and Enhance Municipal Sediment Removal and Management Practices), and C.12.f, be replaced with a single more integrated and effective requirement for the permittees to work with BACWA and the sanitary sewer agencies to assess existing information where diversions have previously been assessed and the forthcoming results of the Ettie Street pilot project and develop a work plan, in accordance with a time schedule, to better characterize the possible stormwater pollutant related problems with stormwater pump station discharges that identifies a range of possible and recommended solutions depending on the types of problems that are identified.[5] We are available to work with Water Board staff to develop specific permit language for the MRP that would specify parameters for this more collaborative and cost effective effort to ensure it is implemented.

Conclusion: In summary, BASMAA requests the opportunity to learn from the ongoing Ettie Street pilot project and work with BACWA, sanitary sewer agencies, you and your staff to develop a more informed, pragmatic, flexible, and technically sound approach to defining criteria

[5] Indeed, we previously made a similar suggestion. We submitted a letter dated June 9, 2005 (copy attached) on this same subject titled "*Investigation and Development of Regional Policy / Guidance on Diversions of Wet Weather Urban Runoff to the Sanitary Sewer.*" That letter similarly supported moving forward collaboratively with Water Board staff and BACWA to investigate the key concepts and considerations needed to assess the benefits and costs of wet weather diversions.

develop a more informed, pragmatic, flexible, and technically sound approach to defining criteria for selection and implementation of potential future pump station/sanitary sewer diversion projects based on anticipated water quality benefits. Collectively we will:

1) develop (Bay Area wide) an inventory of municipally owned stormwater pump stations;
2) characterize operations;
3) collect general water quality data sufficient to characterize potential water quality issues; and,
4) identify criteria to evaluate potential solutions to develop recommended guidance to prioritize and implement appropriate solutions.

In the context of this collaborative effort BASMAA is suggesting, we are also willing during the term of the permit to initiate the identification of several additional pilot tests and work on developing a standard reporting format for O&M.

We appreciate your consideration of our comments, and would like to meet with you in the near future to further discuss these issues.

Sincerely,

Donald P. Freitas, Chair

cc: David R. Williams, BACWA Chair
BACWA Executive Board

Attachment: BASMAA June 9, 2005 letter to Bruce Wolfe, RWQCB

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Vallejo
Sanitation and Flood
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B A S M A A

June 9, 2005

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

Subject: Investigation and Development of Regional Policy / Guidance on Diversions of Wet Weather Urban Runoff to the Sanitary Sewer

Dear Bruce:

This letter is written in the spirit of moving forward, if appropriate, to investigate the feasibility (including water quality benefits) of diverting urban runoff to existing sanitary sewer systems and POTW facilities. While we embrace the philosophy within our existing Bay Area urban runoff programs that the best long-term solution is to control pollution at the source, there may be circumstances under which diverting urban runoff to sanitary sewers and ultimately to a POTW is appropriate.

As you are aware, a number of cities in Southern California have installed "dry weather diversion" structures to help minimize certain dry weather flows from reaching beaches and to lessen public health concerns associated with the presence of pathogenic organisms. It is our understanding that these structures are bypassed during wet weather and that some people believe that this practice may discourage source control efforts. We understand that both the USEPA and the State Water Board are currently investigating the results of those dry weather diversion projects. We look forward to seeing their results and where appropriate investigating the application of the results within the Bay Area.

We understand that your staff has been meeting with staff from a few selected POTWs and stormwater programs to discuss the possibility of diverting wet weather (e.g., first flush[1]) urban runoff flows to the sanitary sewer system. While we believe that this subject merits additional investigation, we believe that such an investigation needs to be done on a regional basis.

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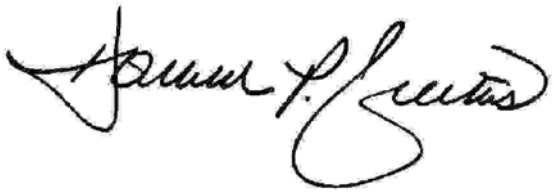
[1] As USEPA has stated, the existence of first flush should not be assumed in all cases, that the phenomenon has not been observed in some catchments that have undergone intensive monitoring, and that the existence of a first flush is critical to the design of stormwater pollution controls. Further, review of the literature indicates that there is no one consistent definition of the term. Published research conducted by the SCVURPPP is consistent with USEPA findings (Soller, J.; Stephenson, J.; Olivieri, K.; Downing, J.; and A. Olivieri. "Evaluation of seasonal scale first flush pollutant loading and implications for urban runoff management" Journal of Environmental Management, May 2005 (see journal website - in press).

We would like to discuss the possibility of working with you and your staff as well as members from BACWA to investigate the key concepts and considerations needed to assess the benefits and costs of wet weather diversions. We believe that a regional policy / guidance document could be a collaborative product from this endeavor and would significantly assist with the understanding and furthering of the potential concept. In addition, we believe that this type of joint investigation is consistent with the overall intent of the Regional Water Board's Mercury TMDL Basin Plan amendment.

We would like to discuss the feasibility of the above approach with you at your upcoming meeting with the BASMAA Executive Board.

If you have any questions please feel free to contact me at 925-313-2373 or Geoff Brosseau at 650-365-8620.

Sincerely,



Donald P. Freitas, Chair

cc: Michele Plá, BACWA
BASMAA Executive Board