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Executive Director

June 9, 2011

Bruce Wolf, Executive Director California Regional Water Quality Control Board San Francisco Bay Region 1515 Clay Street, Suite 1400 Oakland, CA 94612

VIA E-Mail: Dale Bowyer <u>dbowyer@waterboards.ca.gov</u>

RE: Comment Feasibility/Infeasibility Criteria Report Municipal Regional Permit Provision C.3.c.i.(2)(b)(iv) and C.3.c.iii.(1)

Dear Mr. Wolf;

This comment letter is in regards to the Bay Area Stormwater Management Agencies Association (BASMAA) Feasibility/Infeasibility Criteria Report submitted to the RWQCB on April 29, 2011. We appreciate the opportunity to comment on this regional effort to achieve the collective goals of encouraging infill projects while developing effective strategies to address water quality concerns. Low Impact Development (LID) measures pose particular challenges for Bay Area site development where land is not available for passive water infiltration, soil types and site conditions may impede water infiltration, and the technical feasibility of rainwater harvesting does not meet reliable supply and demand parameters. We support allowing engineered and maintained biotreatment systems for new and redevelopment projects when it is infeasible to implement harvesting, infiltration, and/or evapotranspiration measures.

As an affected industry we commend BASMAA and your staff for working to define feasibility criteria and procedures that will encourage infill development where institutional barriers and site-specific constraints may limit the application of the LID treatment measures allowed by the Municipal Regional Permit (MRP). The inclusion of Hydrologic Soils Group Classification (HSG) Maps that identify the soil type and infiltration rate and the Saturated Hydraulic Conductivity (Ksat) Maps to define retention storage volume and underlying soil filtration rates are both key to standardizing the feasibility process and complying with MRP requirements for new and redevelopment projects. It is critical for project applicants to have a process for assessing site feasibility to treat stormwater runoff in local guidance documents.

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Tel (408) 961-8133 cgiles@biabayarea.org http://www.biabayarea.org While progress has been made in stormwater technologies, reasonably sized infiltration measures and devices cannot achieve the capture objective for all locations within the MRP area. As the BASMAA Report identifies, the majority of the urbanized Bay is underlain by soils with percolation rates of less than 0.1 inches per hour. Approximately 88 percent of all soils classified within the MRP boundary were assigned soil infiltration rates of C – low infiltration (33 percent and 754 square miles) or D – very low infiltration (55 percent and 1284 square miles). On sites with a C or D soil classification, reasonably sized infiltration devices cannot achieve the infiltration objectives of the MRP and groundwater recharge efforts throughout the MRP area keep groundwater elevations consistently high, creating additional problems with infiltration feasibility. As outlined in the report rainwater

harvesting is another measure not readily feasible in the Bay Area. While evaporative cooling for industrial processes might provide a feasible opportunity for harvesting and re-use, it is not feasible for residential projects. Our rainfall occurs over five months of the year when irrigation is not required, and design efficiencies in toilet and urinal flushing will not provide the demand required to use collected runoff. The volume of storage required to capture the site runoff and hold it until it can be used is just not practical or cost effective.

Designed facilities, using current criteria, can meet the biotreatment requirements in the MRP and in addition achieve significant stormwater infiltration and evapotranspiration. Over the past nine years, Bay Area Permittees have adapted, implemented, and continuously improved bioretention criteria to optimize infiltration performance. The environmental benefits of compact, infill, and redevelopment projects should be encouraged by allowing greater flexibility in the treatment of stormwater runoff. For Bay Area projects none of the prescribed LID options; infiltration, evapotranspiration, or harvest and reuse, can be counted on to be feasible for every proposed project. It is a problem compounded by; non-infiltrative soils, the close proximity to adjacent structures, groundwater levels, limited space, supply and demand of harvested water, geotechnical hazards, and pollutants in soil or groundwater.

The BIA supports the criteria and procedures recommended in the BASMAA Feasibility/Infeasibility Criteria Report and ask that they be formally incorporated into the Municipal Regional Permit and local guidance documents for project compliance with Provision C.3 requirements. Homebuilders and their design professionals need the opportunity to apply feasibility and infeasibility criteria to their projects in a cost effective manner as part of their stormwater quality control submittals.

Thank you for your time and consideration, the BIA looks forward to participating in this process.

Best regards,

**Crisand Giles** 

**Executive Director, Governmental Affairs** 

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**BIA Bay Area**