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December 17, 2012

Ms. Jeanine Townsend  
Clerk to the Board  
State Water Resources Control Board  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814



Subject: Comment Letter-Revised Draft Phase II Small MS4 General Permit

Members of the State Water Resources Control Board:

The California State University (CSU) appreciates the opportunity to provide comments relating to the Revised Draft Phase II Small MS4 General Permit ("Revised Draft Permit") dated November 16, 2012. Comments from CSU from the previous draft ("Draft Permit") were provided to the State Water Resources Control Board in a letter on July 19, 2012. As the steward of 23 university campuses, the CSU supports efforts to improve water quality and seeks to provide feedback on the Revised Draft Permit to assist in furthering a successful Phase II Small MS4 General Permit process.

### Major Items of Concern

#### Revised Draft Permit--General Comment 1--Revised Draft Permit (Section F4, Page 100)

The CSU supports environmental management of its resources through sustainability initiatives and responsible stewardship, including the goal of the State Water Resources Control Board to address adverse impacts upon water quality. However, the Revised Draft Permit program will result in extensive administrative requirements which will necessitate higher costs than necessary to accomplish the objectives of the Permit. It is estimated that the costs for CSU to implement the program will be significant, ranging from \$9 million to \$17 million annually and greatly affect the CSU's limited budgetary resources. This estimate covers CSU staff and consultant costs to manage the program (documentation, testing, reporting) but does not include the hard cost of construction for storm water retention ponds and monitoring stations. In the July 19, 2012 letter, CSU recommended that the Draft Permit add a provision that would

CSU Campuses  
Bakersfield  
Channel Islands  
Chico  
Dominguez Hills  
East Bay

Fresno  
Fullerton  
Humboldt  
Long Beach  
Los Angeles  
Maritime Academy

Monterey Bay  
Northridge  
Pomona  
Sacramento  
San Bernardino  
San Diego

San Francisco  
San José  
San Luis Obispo  
San Marcos  
Sonoma  
Stanislaus

enable public higher educational institutions to alternatively comply with the Permit program through the development of a campus storm water management plan which would identify administrative and implementation actions, as well as a schedule, necessary to meet water quality performance standards rather than through the prescriptive approach in the Draft Permit. The State Water Resources Control Board staff, in its response to this comment, conveyed that provision F.4 of the Revised Permit allows for the utilization of existing documents and program elements to satisfy permit requirements. However, F.4 of the Revised Draft Permit does not clearly provide for the development of a campus storm water management plan as an equivalent cost effective method to comply with the Permit.

**Recommendation:** Amend F4 of the Revised Draft Permit to provide an option for public higher educational institutions to comply with the Permit program through the development of a campus storm water management plan which would identify administrative and implementation actions, as well as a schedule, necessary to meet water quality performance standards (which would be established by the State Water Resources Control Board).

Revised Draft Permit—General Comment 4 and Comments 38/40 (Section F5g2a-d, Pages 126-131)

The Revised Draft Permit requires the treatment of runoff as measured by volume at the 85<sup>th</sup> percentile of a 24-hour storm runoff event (or the 80<sup>th</sup> percentile of annual runoff) or as measured by flow rate at 0.2 inches per hour (or two times the 85<sup>th</sup> percentile hourly rainfall intensity). In geographic areas with low average annual rainfall and/or large variations in intensities of storms, this will result in the capture of all runoff in almost every storm season. In the case of Southern California, the area may have individual storms with low intensities but high annual total rainfall in certain years. To address the treatment of runoff as required by the numeric sizing criteria in the Revised Draft Permit, a significant increase in land area will be necessary.

The property within CSU campuses is generally constrained and constructing retention basins or other similar structural best management practices (BMPs), would create a burden upon funding and land resources necessary for the support of the academic mission of universities. In addition, many campuses have soil conditions, topographic characteristics and infrastructure that do not lend to economical implementation of BMPs. These conditions include low rates of percolation, existing underground utilities (e.g., tunnels and direct burial), high groundwater tables, and sensitive biotic communities. The State Water Resources Control Board staff, in its response to this comment, did not concur with revising the criteria since it was developed with input from stakeholders. Nevertheless, issues associated with the proposed numeric sizing criteria remain and thus this key element of the Revised Draft Permit should be addressed.

**Recommendation:** To resolve the issues with the numeric sizing criteria, it is recommended that the Final Permit include an alternative to the numeric sizing criteria section that utilizes the

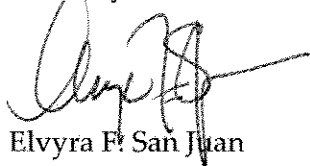
United States Green Building Council's (USGBC) LEED standards for storm water quality control for new construction (see attachment). Several advantages on using LEED standards are evident. First, LEED standards are nationally recognized and used across California. Second, the standards use a 2-year, 24-hour storm for minimum requirements as defined by local jurisdictions across the state and are adaptable to local hydrologic and ground conditions. In contrast, the numeric sizing criteria currently in the Revised Draft Permit does not recognize different climate and hydrologic conditions. Third, LEED standards most efficiently address the volume of water retention. Essentially, it is more effective for water quality control measures to target small, frequent storm events that over time cause more total runoff than larger infrequent storms. Thus, the use of LEED standards will provide storm water quality control that effectively addresses Revised Draft Permit goals.

### Summary

The CSU wishes to thank the State Water Quality Control Board for providing an opportunity for input to the Board on the Revised Phase II Small MS4 General Permit program. By incorporating the changes identified in this letter, we believe that the CSU and other higher educational institutions will be better able to address the goal of improving water quality.

If you have any questions, please contact Dr. Steven Lohr, Chief, Land Use Planning and Environmental Review, Chancellor's Office at (562) 951-4120 or at slohr@calstate.edu.

Sincerely,



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ESJ:SL

Enclosures

c: Dr. Benjamin F. Quillian, Executive Vice Chancellor and Chief Financial Officer,  
Chancellor's Office  
Zachery Gifford, Associate Director, Risk Management, Chancellor's Office  
Dr. Steven Lohr, Chief, Land Use Planning and Environmental Review, Chancellor's Office

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## SS Credit 6.1: Stormwater Design: Quantity Control

### 1 Point

#### Intent

Limit disruption of natural water hydrology by reducing impervious cover, increasing on-site infiltration, reducing or eliminating pollution from stormwater runoff, and eliminating contaminants.

#### Requirements

##### CASE 1 — EXISTING IMPERVIOUSNESS IS LESS THAN OR EQUAL TO 50%

Implement a stormwater management plan that prevents the post-development peak discharge rate and quantity from exceeding the pre-development peak discharge rate and quantity for the one- and two-year 24-hour design storms.

OR

Implement a stormwater management plan that protects receiving stream channels from excessive erosion by implementing a stream channel protection strategy and quantity control strategies.

OR

##### CASE 2 — EXISTING IMPERVIOUSNESS IS GREATER THAN 50%

Implement a stormwater management plan that results in a 25% decrease in the volume of stormwater runoff from the two-year 24-hour design storm.

#### Potential Technologies & Strategies

Design the project site to maintain natural stormwater flows by promoting infiltration. Specify vegetated roofs, pervious paving, and other measures to minimize impervious surfaces. Reuse stormwater volumes generated for non-potable uses such as landscape irrigation, toilet and urinal flushing and custodial uses.

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## SS Credit 6.2: Stormwater Design: Quality Control

### 1 Point

#### Intent

Limit disruption and pollution of natural water flows by managing stormwater runoff.

#### Requirements

Implement a stormwater management plan that reduces impervious cover, promotes infiltration, and captures and treats the stormwater runoff from 90% of the average annual rainfall<sup>1</sup> using acceptable best management practices (BMPs).

BMPs used to treat runoff must be capable of removing 80% of the average annual post development total suspended solids (TSS) load based on existing monitoring reports. BMPs are considered to meet these criteria if (1) they are designed in accordance with standards and specifications from a state or local program that has adopted these performance standards, or (2) there exists in-field performance monitoring data demonstrating compliance with the criteria. Data must conform to accepted protocol (e.g., Technology Acceptance Reciprocity Partnership [TARP], Washington State Department of Ecology) for BMP monitoring.

#### Potential Technologies & Strategies

Use alternative surfaces (e.g., vegetated roofs, pervious pavement or grid pavers) and nonstructural techniques (e.g., rain gardens, vegetated swales, disconnection of imperviousness, rainwater recycling) to reduce imperviousness and promote infiltration thereby reducing pollutant loadings.

Use sustainable design strategies (e.g., Low Impact Development, Environmentally Sensitive Design) to design integrated natural and mechanical treatment systems such as constructed wetlands, vegetated filters, and open channels to treat stormwater runoff.

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<sup>1</sup> In the United States, there are three distinct climates that influence the nature and amount of rainfall occurring on an annual basis. Humid watersheds are defined as those that receive at least 40 inches of rainfall each year, Semi-arid watersheds receive between 20 and 40 inches of rainfall per year, and Arid watersheds receive less than 20 inches of rainfall per year. For this credit, 90% of the average annual rainfall is equivalent to treating the runoff from:

- (a) Humid Watersheds – 1 inch of rainfall;
- (b) Semi-arid Watersheds – 0.75 inches of rainfall; and
- (c) Arid Watersheds – 0.5 inches of rainfall.