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UCLA LA KRETZ CENTER FOR CALIFORNIA CONSERVATION SCIENCE
INSTITUTE OF THE ENVIRONMENT AND SUSTAINABILITY
LA KRETZ HALL, SUITE 300
619 CHARLES E. YOUNG DR. EAST
BOX 951496
LOS ANGELES, CA 90095-1496

PHONE: 310-825-5008
FAX: 310-825-9663
http://www.environment.ucla.edu/lakretz/

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LA Department of Public Works
WMD, 11th Floor
Attn: Marcela Benavides
P.O. Box 1460
Alhambra, CA 91802-1460

Submitted electronically to SedimentMgmtPlan@dpw.lacounty.gov

RE: **Comments on Los Angeles County Sediment Management Strategic Plan 2012-2032, Draft Dated April 23, 2012**

Dear Ms. Benavides:

This letter provides comments on the Draft LA County Sediment Management Strategic Plan dated April 23, 2012 (Draft Plan).

Developing a strategic approach to managing sediment throughout the County's extensive network of reservoirs and debris basins is a critical and complex endeavor. The Draft Plan provides many details related to transport and placement options that are important elements of such a long-term plan. However, it falls short of the level of vision and integration needed to provide a truly long-term solution.

The supply and transport of coarse sediments are fundamental geomorphic processes underlying both the physical integrity (channel stability, property and infrastructure protection) and biological integrity (e.g., habitat complexity, refugia, spawning substrates) of streams, as well as the health of beaches and nearshore habitats. Success of future stream restoration efforts planned within watersheds impacted by dams and debris basins will be dependent upon the ability to receive adequate supplies of sediment from upstream, in order to avoid excess erosion along naturalized reaches. A watershed-based assessment, considering current and future restoration efforts and coastal needs, should be undertaken in order to support the Draft Plan's stated objectives of increased environmental stewardship and using sediment as a resource. Furthermore, such an assessment should clearly link to and support the many other related initiatives taking place County-wide, to fully integrate regional water resources planning.

The Draft Plan dismisses the feasibility of using accumulated sediments at beaches, while continuing to leave open the potential for new sediment placement sites (section 6.5.5.2). A value of 20% is given as the amount of accumulated sediment that would be appropriate for beach placement (section 6.5.3), but no references or data are provided to support this number. The use of undisturbed habitat for sediment placement would be inconsistent with the Draft Plan's objective of increased environmental stewardship and contrary to the need for preserving regional open spaces. The Draft Plan does not

currently provide the level of detailed quantification of environmental impacts / tradeoffs of the various management options to support the use of new sediment placement sites.

Another critical aspect of strategic planning involves addressing potential climate change impacts. Modeling of future climate scenarios indicates a strong potential for increases in wildfire occurrence and burned area in coastal southern California[1]. Post-fire hydrologic consequences include increased erosion, overland flow, flooding and debris flow occurrence due to acute loss of vegetation and hydrophobic soil layer formation. Predicted climate change therefore has the potential to result in sediment accumulation quantities significantly greater than historic rates, creating further urgency for developing sustainable long-term management approaches.

I recommend the Draft Plan be revised as follows:

1. Identify areas of coordination / integration with the LA Regional Coastal Sediment Management Plan (RCSMP) planning effort currently underway in conjunction with the US Army Corps of Engineers, as well as other regional efforts such as the Los Angeles Basin Stormwater Conservation Study and the Greater Los Angeles County Integrated Regional Water Management Plan.

2. Develop a prioritized approach and timeline for conducting watershed-based evaluations of sediment management options, incorporating a full assessment of watershed and channel opportunities and constraints along the entire waterway, from the reservoir/debris basin downstream to the coast.

3. Identify approaches to evaluating flow-assisted sediment management (FAST) feasibility, possibly through a pilot study. Apply the most current hydrologic/ hydraulic and sediment transport modeling approaches to determine engineering feasibility, within the context of a watershed-based assessment.

4. Provide a more thoroughly documented discussion of opportunities and constraints for sediment use at beaches (in coordination with needs identified in the RCSMP) and provide a rigorous quantification of environmental impacts before making any recommendation for the use of undisturbed areas for sediment placement.

5. Reassess the 20-year planning quantity calculation assumption that "future sediment accumulation in the reservoirs and debris basins will be similar to the sediment deposition of the past" (Section 5.1). As discussed above, regional climate change scenarios and predicted effects on wildfire do not support this assumption.

Thank you for the opportunity to provide this input.
Sincerely,

Felicia Federico, D.Env.
Executive Director, UCLA La Kretz Center for California Conservation Science

[1]California Energy Commission. 2009. Climate Change, Growth, and California Wildfire - CEC-500-2009-046-D.