Heal the Bay®

1444 9th Street
Santa Monica CA 90401
tel 310-451-1500
fax 310-496-1902
info@healthebay.org
www.healthebay.org

May 31, 2010

Angela R. George
Ballona/LA River Watershed Manager
Los Angeles County Department of Public Works
900 S. Fremont Ave.
Alhambra, CA 91803

Re: Study Work Plan For Engineered Earth-bottom Flood Control Channels Located Within the Los Angeles River Watershed

Dear Ms. George:

Heal the Bay has reviewed the Study Work Plan For Engineered Earth-bottom Flood Control Channels Located Within the Los Angeles River Watershed, and have a couple of comments we believe would strengthen the research. We appreciate the opportunity to provide the County these comments. They are:

- Section 4.1 (Workplans: Hydraulic Analysis): Throughout this section, the main focus of the HEC-RAS model appears to be place on a singular variable, namely the 'hydraulic roughness coefficient'. Yet, there are other variables within this model that appear to be downplayed or considered static/fixed, such as flow volume and or vegetation type and density. For example, within specific watersheds flow volume over time should be expected to change as new public policies for greater stormwater capture, reuse, and infiltration, like the 'green streets' initiatives, SUSMP, and low impact development are implemented watershed wide. While these policies certainly will not change stormwater runoff volumes within the year or two, the model should be able to forecast (predict) runoff volume reductions over time from these land-use changing policies.

- Section 4.1.4 (Workplans: Hydraulic Analysis Modeling): What is LACFCD rationale for only using a "one-dimensional steady flow hydraulic" model? While this model type is probably sufficient for a majority of the 26 earthen-bottom reaches within the Los Angeles River watershed, the model may be insufficient for other reaches. For example, Reach 7-Bull Creek, Reach 10-Project #469, Reach 15-Pacoima Wash, Reach 24-Compton Creek, Reach 25-Los Angeles River, and Reach 99 Kagel Canyon all have mile or greater long sections and or five-plus acreage (except Kagel Canyon) where 'one-dimensional steady flow hydraulic' model might not provide an accurate resolution. Has the LACFCD considered using other types of analysis, such as 'unsteady-flow'? If so, then why were these other analysis not utilized? There is no explanation in the workplan why all the reaches are treated the same,

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when clearly there is variation in size and length amongst the 26 reaches that would influence the model parameters.

- *Section I (page 6)*: As stated in the previous comment, predictive modeling needs to be a major component of this workplan. In response to Workplans: Hydraulic Analysis Modeling, section I (page 6), the model would be insufficient if there was no quantitative assessment and numeric inclusion of the policies outlined in this paragraph, or other government initiatives already being implemented, namely green streets and low-impact development.
- *Section J (page 7)*: When conducting the various hydraulic roughness coefficients, beyond flow volume changes, consider modifications to vegetation. For example, if a reach area is heavy populated with non-natives (e.g. arrundo), yet the reach still manages to have enough flood capacity (current condition), how would the reach—its flood capacity—change if a restoration occurred (future condition) assuming arrundo removal and a basic native plant palate.
- *Section K (page 7)*: Same issue as stated above.

- Section 4.2 (Workplans: Biological Technical Assessment): Noticeable absent from this workplan is any discussion on an ecological assessment. The workplan needs to specifically call out the methodology used for developing value ranks, such as California Rapid Assessment Method (CRAM) or Index of biological Integrity score to be used for each reach, or a percentage of the reaches. Certainly looking for those reaches with Threatened or Endangered Species is a good start; however, this should not be the only marker for determining the ecological health of these 26 reaches prior to grading or post-grading. This is a concern especially when discussing the development of value rankings for each of these reaches as detailed in 4.2.6, Workplans: Biological Technical Assessment: Biological Technical Assessment Report (pg. 10).

  As discussed in the 4.2.6, Workplans: Biological Technical Assessment: Biological Technical Assessment Report (pg. 10), simply collecting data through surveys on Threatened or Endangered Species or collecting fauna data post vegetation-clearing does not provide enough ecological resolution for any of the 26 reaches. If LACFCD is attempting to create a 'value rankings' system, then the surveys and rankings criteria should be scientifically defensible, and use already established methods.

- Section 4.2.2 (Workplans: Biological Technical Assessment: Field Surveys): Riparian Corridors provide important habitat and foraging along the Pacific Flyway (migration route). As such, only capturing those species present during summer conditions underestimates the number of birds that use the reach, even in disturbed conditions. For example, during the Spring and Fall migration patterns, when numerous bird species are in transit and seeking rest and food along the Los Angeles River watershed reaches included in this study, these sites will be either highly disturbed/denuded (Fall) or in recovery (Spring) with juvenile plants. In either case, value of these 26 habitats is severely underestimated, and the avian species that

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rely on these sites undercounted. As such, a single bird survey during the summer season is insufficient to determine impacts to all avian species.

Heal the Bay recommends conducting at least two surveys, with one of the surveys undertaken during migration time-periods at unimpacted reaches covered in this workplan. If this is not possible at any of the 26 reaches, then reference riparian locations should be considered to determine the bird species that would likely be present at the 26 reaches during respective time periods.

- Section 4.2.6 (Workplans: Biological Technical Assessment: Biological Technical Assessment Report): The County needs to include an additional section that identifies reaches where a reaches' biological function (scores/ranks) could be significantly improved if restoration efforts were implemented. In other words, one reach may have a high biological function rank but its scale (size/acreage) is minimal compared to another reach that might have a lower biological function rank but have a significant amount of habitat.

- Section 4.4 (Workplans: Stakeholder Solicitation): It is unclear who or what organizations received this solicitation for commenting on the LACFCD workplan; however, by the few calls I made to relevant stakeholders, a number of them did not get the email solicitation. In the interest of maintaining an open process, the LACFCD should make this document available for commenting to all interested stakeholders.

If you have any questions or need clarifications on any of the comments made in this letter, then please do not hesitate to contact me at (310) 451-1500 ext.115 or via email jalamillo@healthebay.org. Thank you for the opportunity to comment on this workplan.

Sincerely,

James Alamillo
Heal the Bay