CREST – Cleaner Rivers through Effective Stakeholder TMDLs
Conceptual Study Design – Water Body Survey

Background

The purpose of L. A. River Waterbody Survey is to conduct a reconnaissance level waterbody survey of waters in the L. A. River watershed (mainstem and tributaries) that are listed and proposed on the 2006 state-approved 303(d) list as impaired because of high bacteria concentrations to evaluate existing and potential recreational use activity. The findings from this survey will provide the basis for prioritizing the implementation of Best Management Practices (BMPs) to control bacteria sources and improve water quality in the watershed.

Los Angeles River Waterbody Survey

Stakeholder Interviews

A series of interviews will be held with no more than 20 watershed stakeholders to gather preliminary information on recreational use activity in 303(d) listed reaches throughout the watershed, guide development and implementation of the waterbody uses (including both use surveys and collection of channel attribute data); evaluate findings of the uses, and prioritize areas for reduction of bacteria loads. As needed, interviews will include site visits to facilitate information sharing. Subtasks include:

Prepare Interview Materials: Develop questionnaires and visual aids (e.g., watershed/waterbody maps) to guide interview process and facilitate information gathering.

Conduct Interviews: Meet with stakeholders to review questionnaire and gather waterbody data; conduct site visits as needed to facilitate interviews.

Compile and Verify Data: Compile information for input into; conduct no more than one follow-up interview person to the extent necessary to verify information.

Recreational Use Analysis

Conduct reconnaissance level survey of 303(d) listed reaches on the Los Angeles River to evaluate recreational use activity – both existing and potential. Existing use activity will be evaluated using approved survey methods. Potential use activity will be based on a channel attributes (e.g., channel structure, flow and type) and plans which can influence the likelihood of REC-1 activity occurring.

Establish Approved Methodology: Develop stakeholder approved methodology for evaluating existing and potential recreational use activity. In general, existing uses will be evaluated through the use of approved survey methods used elsewhere in the region (e.g., combination of surveys, questionnaires and photo documentation);

potential uses will be evaluated through the development of channel attribute data, and review of Los Angeles River Revitalization Plan, Integrated Regional Water Management Plan for the Upper Los Angeles River Watershed, and the Los Angeles County Los Angeles River Master Plan. Methodology for evaluation of both existing and potential uses will be reviewed with stakeholders prior to initiation.

Conduct Existing Use Evaluation: Using the methodology approved, implement the following tasks to evaluate existing recreational use activity:

Field Surveys: Gather field data at each of the sites over a range of locations and seasons.

Email Surveys: Gather data from various stakeholders through the use of an email-delivered questionnaire. Purpose of this effort is to gather anecdotal information regarding where people have been observed in the various waterbodies and potentially coming in to contact with the water.

Conduct Potential Use Evaluation: Using the methodology approved, implement the following tasks to evaluate potential recreational use activity:

Gather Available Waterbody Reach Data: Gather available data on channel attributes (e.g., bed and side-slope material, bottom width, side slope angle, channel height, longitudinal slope, presence/absence of fencing, access points, bridge crossings, and adjacent land use). Examples of data to be gathered include GIS base map layers and record drawings, e.g., as-built documents for waterbodies where channel modifications have been engineered. The budget assumes that as-built documents are available for much of the engineered channels.

Conduct Site Visits: Conduct field visits as needed to verify data gathered and fill data gaps, e.g., due to lack of GIS/record drawings that include required channel attribute data. It is anticipated that field verification will take place on the entire length of each assessed waterbody.

Analyze Plans: Analyze the Los Angeles River Revitalization Plan, Integrated Regional Water Management Plan for the Upper Los Angeles River Watershed, and the Los Angeles County Los Angeles River Master Plan for locations and priorities of projects planned along the River, including parks, habitat, and new development.

Develop Preliminary Reach Database and Maps: Data obtained in previous tasks will be used to develop tabular summaries of reach information and prepare reach maps that illustrate channel attribute data.

Data Verification: Preliminary reach maps will be reviewed with stakeholders to verify data correctly illustrated. As needed, follow-up field visits will be conducted to evaluate comments and correct reach data.

Develop Final Reach Maps: Final reach maps will be prepared. These maps will be used to support the development of the report.

Prepare Draft Waterbody Survey Report

Prepare draft report that includes (1) findings from existing use survey activities, (2) findings from the evaluation of potential recreational use activity based on the characterization of channel attributes (including reach maps) and locations of projects from analysis of plans; and (3) recommendations for prioritizing the implementation of controls to reduce bacteria loads based on where recreational use activity is existing or has the greatest potential to occur. The draft report will be submitted to project stakeholders for review and comment. Review of the draft report will be coordinated with stakeholders.

Prepare Final Waterbody Survey Report

Prepare final report based on comments received on the draft report prepared and reviewed.