

CREST Update on the Los Angeles River Scientific Studies

Steering Committee Meeting

September 13, 2007

Overview

- **Schedule**
- **LA River Conditions**
- **Overview of the Studies**
- **Progress**

Schedule

CREST Los Angeles River Scientific Studies Schedule


		2007				2008					
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
BSI Study	Sampling	█									
	Data Analysis	█									
	Draft and Final Reports			█	█						
WBS Study	Survey		█	█	█						
	Data Analysis and Mapping			█	█						
	Draft and Final Reports			█	█						
BMP Analysis	Review BMPs			█	█						
	Prioritize areas					█	█	█			
	Identify Potential BMPs						█	█	█		
	Develop strategy for BMP implementation								█	█	

WBS Study Status

- Technical Working Group meetings held to discuss the conceptual plan for the study
- Based on feedback, prepared detailed Conceptual Plan and circulated
- Soliciting coordination from agency/organization staff that visit the river for various purposes (e.g., maintenance, inspections, monitoring) to assist the study
- Prepared a water body survey form

Study Objectives

To understand where recreational use activities in 303(d) listed LA River mainstem reaches and tributaries are occurring or have a high potential of occurring in the near future



Water Body Survey Form

Agency: _____ Survey-taker: _____
 Date: _____ Time : _____ AM PM
 Day of week: M T W Th F Sat Sun
 Waterbody/Channel/Station/Stormdrain#: _____
 Location/Street/Intersection: _____

Weather
 Air Temperature: _____°F or Cold Cool Warm Hot
 Sky Conditions: Sunny Cloudy/Overcast Drizzle Rain

Accessibility
Channel
 Gated/Fenced Limited Access
 Limited Access Easy Access
 Easy Access

Water Body Survey Form

Channel Bottom Material	Channel Bank Material	Channel Bank Slope	Area Beside Channel
<input type="checkbox"/> Concrete	<input type="checkbox"/> Concrete	<input type="checkbox"/> Vertical	<input type="checkbox"/> Natural
<input type="checkbox"/> Rip-rap	<input type="checkbox"/> Rip-rap	<input type="checkbox"/> Trapezoidal	<input type="checkbox"/> Natural/Grassy
<input type="checkbox"/> Natural	<input type="checkbox"/> Natural	<input type="checkbox"/> Natural	<input type="checkbox"/> Park

Recreational Activities (check all that apply)

REC-1 (Activities in river water)

Swimming # Adults _____ # Children _____ Duration _____

Fishing # Adults _____ # Children _____ Duration _____

Wading # Adults _____ # Children _____ Duration _____

None Observed

Total # of persons: # Adults _____ # Children _____ Duration _____

Other REC-1 Activities

Waterskiing Surfing Skin and scuba diving Boating activities

In Contact with Water:

Full body immersion Wading up to knees Contact between ankle and waist

Total # of persons: # Adults _____ # Children _____ Duration _____

REC-2 (Activities outside channel)

Picnicking Bicycling Sunbathing Hiking Camping

Sightseeing Hunting Walking pets Boating None observed

Total # of persons: # Adults _____ # Children _____ Duration _____

Water Body Survey Form

Channel/River Attributes:

Flow Depth:

Within Low flow channel

Outside the low flow channel - shallow (< - 6 in.)

Outside the low flow channel - deep (> - 6 in.)

Flow Velocity:

Still/stagnant

Slow

Fast

Odor:

None

Sewage

Rotten eggs

Chemical

Other: _____

Clarity:

Clear

Cloudy (sediment)

Murky (algae)

Algae:

Present

Not present

Color:

Colorless Bluish Greenish Brownish Reddish Olive greenish Yellowish

Trash Density

None (0)

Light (<5)

Moderate (6-10)

High (11-25)

Somewhat dense (26-50)

Dense (>50)

Trash Type

Organic (food)

Inorganic (plastics, bags, papers)

Large items (tires, shopping carts)

Cigarette butts

Dead animals

Pet droppings

Bird droppings

Evidence of trash dumping (Y or N): _____

Water Body Survey Form

Area Outside Channel Attributes:

Quality

Well kept grounds Bike paths

Other:

Temporary shelters Sleeping bags and personal items

Trash Density

None (0)

Light (<5)

Moderate (6-10)

High (11-25)

Somewhat dense (26-50)

Dense (>50)

Trash Type

Organic (food)

Inorganic (plastics, bags, papers)

Large items (tires, shopping carts)

Cigarette butts

Other

Dead animals

Pet droppings

Bird droppings

Evidence of trash dumping (Y or N): _____

Comments/Any other observations related to this survey: _____

Approach for the Study

- Initially characterize current waterbody use:
 - Conducting stakeholder interviews – 3 stakeholders
 - City and county staff will fill out the survey form for 2 months
 - Use the BSI study crew for assisting the survey
- Conduct potential use survey:
 - IRWMP
 - LA River revitalization
 - Agency work plans
 - Other planning activities
- Compile and document results, share results with WTG

Characterize Physical Attributes of Waterbodies

- Gather existing physical attribute data
 - Channel characteristics
 - Side slopes (trapezoidal, vertical, natural)
 - Channel material (bottom and side slopes)
 - Flow characteristics (general width/depth characterization)

High Flow Suspension Use Attainability Analysis (UAA)

In 2003, a categorical UAA was conducted by RWQCB of regional water bodies to meet USEPA requirements:

- Identified waterbodies to be covered by the high flow suspension
- Evaluated several possible triggers for the suspension
 - flow and velocity
 - depth
 - rainfall

Use Attainability Analysis (UAA), cont.

Rainfall was chosen as the most appropriate trigger:

- Rainfall used as trigger for locking access gates to County flood control channels and putting rescue personnel on alert
- Numerous sources of precipitation data throughout County
- Rainfall is an adequate proxy for high flows and high velocities that result in unsafe conditions
 - UAA compared 5 years of rainfall and corresponding flow, velocity, and depth data and rescue data

High Flow Suspension Adoption

- RWQCB proposed that the trigger for suspending the REC uses be rainfall $\geq \frac{1}{2}$ inch as measured at the closest rain gauge
- Based on the UAA, the RWQCB amended the Basin Plan to include a suspension of water contact recreation for REC-1 and REC-2

BMP Analysis Study

The purpose of this study is to determine the most appropriate BMPs and their placement in the LA River watershed in order to make wise cost-effective decisions to achieve compliance.



Approach for the Study

- Prioritization of BMP controls can rely on several factors
- Highest priority sites:
 - Locations where human bacteria sources are highest
 - Locations where people are most likely to recreate
- Coupled together – the highest priority sites will be where risk to human health is greatest
- Preliminary determination of appropriate BMPs

Questions/Comments?