

Working Group Title: Los Angeles River Water Quality Monitoring Mobile Working Group

The Los Angeles River is headed for an extraordinary revitalization/restoration effort (City of LA, 2007), but the form and direction of restoration is still under development. Underpinning revitalization/restoration of the river is the need to understand what the current water quality and ecological parameters are for the river and how these impact the recreational use of the Los Angeles River. Without accurate characterization of the existing instream conditions in priority revitalization/restoration reaches, the multi-billion dollar effort to revitalize the river will fail to produce any tangible ecosystem benefits.

In spite of the many proposed plans for river revitalization there has been limited discussion on conveying information about water quality to potential users of the Los Angeles River. Collection, standardization and dissemination of real-time and accurate water quality information from the Los Angeles River will be crucial to the proposed plans that incorporate public use of this unique and valuable resource. Currently there are a few groups that undertake water quality and ecological monitoring throughout the Los Angeles River (e.g. Heal the Bay, City of Los Angeles Sanitation), however these efforts are often independently funded and organized, and there are limited mechanisms for coordinated sharing and dissemination of water quality data. The proposed ASPIRE Mobile Working Group (MWG) will bring together the many entities that are actively involved in the collection of water quality and ecological data throughout the Los Angeles River basin with one overarching goal:

1. Provide an environment where parties that are actively involved in OR that are interested in the collection of water quality data can share, participate, inform, standardize, assess, communicate and utilize this data.

Our more specific sub-goals include:

- A. Develop protocols for best practices of water quality data collection from the Los Angeles River so that any member of the community can employ the protocol and understand and compare the data that is collected.
- B. Provide a data collection and dissemination portal for access of water quality data by all interested parties.
- C. Disseminate water quality data to the community of Los Angeles River users so they can make informed decisions on proper use of the river.

Current projects are run by different groups, with different / little / no standardization. Projects are starting to incorporate involvement from community members but little is done on large scale to provide this information to the community. The majority of active water quality monitoring is centered on measuring bacterial levels at a few locations in the urban portion of the river. Work by Heal the Bay has found harmful levels of bacteria throughout the river (Heal the Bay 2016). The collection of other important water quality parameters in the river are mostly absent. Aside from a recent study published on the summer temperature profiles throughout the LA River (Mongolo et al. 2016) there is little information that has been published or made available to the broader community of potential river users. The first goal of this project will be to bring together all groups that are currently measuring any aspect of water quality throughout the LA River (e.g.

bacteria, temperature, pollutants) under a single roof to discuss what information is being collected. The second goal will be to develop a platform for sharing information across all interested groups. Scientific expertise is needed to guide parameters on shared methodologies, attain sufficient neutrality, and to make data usable for a wide range of agencies and community entities alike. The final goal will be to develop a method for the dissemination of data to interested river users and the general public.

-Community:

The portion of the river that flows through the urban areas of Los Angeles include the cities of Canoga Park, Burbank, Glendale, Griffith/Elysian Park, Downtown Los Angeles, Vernon, Commerce, Maywood, Bell, Bell Gardens, South Gate, Lynwood, Compton, Paramount, Carson and Long Beach. Data from the 2010 census indicates over one million people live within the Los Angeles River corridor and an estimated 52% of this population are Latino (Alvarado et al. 2016; Garcia et al. 2016). Garcia et al. (2016) also reported that a significant proportion of corridor residents are low income. The potential community for recreational use of the Los Angeles River is large, diverse and potentially from low income groups. Providing this community with accurate and up to date information on water quality issues will be paramount to long-term utilization of the river.

The documented bacterial loads throughout the river suggest that there should be limited contact with river water, however many individuals continue to use the Los Angeles River for various recreational activities. These community members should be informed about potential hazards associated with water quality issues in the river. Our proposed program will bring together scientists actively working on Los Angeles River water quality issues with community members to find an optimal strategy for data dissemination and interpretation. Our hope is that this will lead to a more informed community that can be more active, even leaders, in current and future efforts to improve water quality in the Los Angeles River.