

**SANTA MONICA MOUNTAINS CONSERVANCY
GRANT APPLICATION**

Project Name: Upper LA River Integrated Design and Technical Analysis		Amount of Request: \$1,000,000.00	
Applicant Name: Los Angeles River Revitalization Corporation		Total Project Cost: \$3,100,000.00	
		Matching Funds: \$2,100,000.00 (\$1,070,000.00 committed; \$1,030,000.00 to be determined)	
Applicant Address: 570 W. Avenue 26, Ste. 475 Los Angeles, CA 90065		Project Address: Multiple	
		County	Senate District
		Los Angeles	
Phone: 323-221-7800 Email: obrownson@larivercorp.com		Tax ID: 27-2245545	
Grantee's Authorized Representative: Omar Brownson, Executive Director 323-221-7800 <i>Name and Title</i> <i>Phone</i>			
Overhead Allocation Notice: <input checked="" type="checkbox"/> Any overhead costs will be identified as a separate line item in the budget and invoices. <input checked="" type="checkbox"/> The Conservancy encourages grantees to reduce overhead costs including vehicle and phone expenses. <input checked="" type="checkbox"/> The overhead allocation policy has been submitted prior to or with the grant application. <i>All check boxes must be checked</i>			
Project Description:			

LA River Revitalization Corporation (LARRC) has assembled a core technical team with Gehry Partners, OLIN Landscape, and Geosyntec with additional consultants to develop an integrated design and technical analysis of Upper LA River reaches for the purposes of creating a range of river interventions and multi-benefit projects.

The goal for this Scope of Work (SOW) is to develop an integrated design and technical analysis of Upper LA River reaches to yield recommendations for a range of river interventions/capital improvements based on design storm impacts and design process methodology that ultimately creates a unique identity and multi-use benefits for the 51-mile length of the LA River while maintaining flood control capacity. Preliminarily investigating Upper LA River general sites and conditions, including data gathering and developing a framework for obtaining more difficult data sets, will be the preparation for a more detailed analysis of intervention/capital improvement areas and water resource development within the Upper river. This SOW covers Upper LA River reach deliverables to be completed in a 12-week timeline to commence November 3, 2015. Work performed in this phase will become the foundation for future project phases and related Scopes. The support provided through the Santa Monica Mountains Conservancy grant helps the LA River Corporation get started on a 51-mile river analysis and integrated design study. The activities and deliverables related to the Upper LA River, taking shape through this Grant, represents one-third of the larger project budget. A similar approach to activities and deliverables will occur in the Lower LA River as funding is provided for such work.

Note: Upper LA River reaches include the following: Confluence from Canoga Park to Sepulveda Basin Reach, Sepulveda Basin Reach, Sepulveda Basin to Barham Blvd Reach, Tujunga Wash Reach, Glendale Narrows Reach (Arbor Reach), Downtown LA Reach (to City of Vernon)


ATTACHED IS DETAILED PROJECT DESCRIPTION/SCOPE OF WORK

*attach additional pages as necessary

Tasks / Milestones:	Budget:	Completion Date
1. Basis of Design Testing	\$166,855.66	Week 4
2. Data Acquisition	\$166,855.66	Week 8
3. Water Resources Research and Benefits Estimation	\$166,855.66	Week 8
4. Initial Beta Tests and Econometrics	\$211,433.02	Week 12
5. Public Engagement	\$188,000.00	Week 12
6. Project Management and Administration	\$100,000.00	Week 12
Total:	\$1,000,000.00	12 Weeks
See Global Budget Attachment		

For Acquisition Projects: APN(s): N/A
Acreage: N/A

I certify that the information contained in this Grant Application form, including required attachments, is accurate.



Signature of Authorized Representative

October 29, 2015

Date

STATE OF CALIFORNIA ♦ THE NATURAL RESOURCES AGENCY

		Sources and Uses for 51-mile Integrated Design Vision*				
		<i>Committed</i>		<i>Anticipated</i>		
		Philanthropic Gifts	Santa Monica Mountains Conservancy	Rivers and Mountains Conservancy	Sources To Be Determined	
	<i>SOURCES</i>	<i>SUM</i>				
	Pledged/In Hand/Anticipated	\$ 3,100,000	570,000	1,000,000	500,000	1,030,000
100%	<i>USES</i>	<i>SUM</i>				
48%	Design & Engineering	\$ 1,501,700	-	667,422	333,711	500,567
11%	Public Engagement	\$ 354,289	75,000	188,000	91,289	
11%	Public Affairs	\$ 352,000	125,000		25,000	202,000
1%	Econometrics	\$ 44,578	-	44,578		
8%	Data Compilation	\$ 250,000	95,000			155,000
12%	Project Management	\$ 382,433	275,000			107,433
7%	Administration	\$ 215,000	-	100,000	50,000	65,000
* This is an anticipated budget, subject to change.						



Board of Directors

Upper LA River Integrated Design and Technical Analysis Scope of Work

SMMC
Attachment
11-2-2015
Agenda Item 13

Brian Moore

Chair

Date: October 29, 2015

To: Santa Monica Mountains Conservancy

Harry B. Chandler

Vice Chair

From: LA River Revitalization Corporation

Subject: Proposition 84 Grant for Integrated Design & Technical Analysis

Christopher C. Rising

Treasurer

Background and Motivation

Stephen R. English

Secretary

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Allan Abshez

Member

Goal

Monica Dodi

Member

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Cynthia Hirschhorn

Member

Krisztina Holly

Member

Howard Katz

Member

Jordan Kerner

Member

Dee Dee Myers

Member

David O'Connor

Member

Gary Ross

Member

Bruce Saito

Member

Michael Strautmanis

Member

Daniel Tellalian

Member

Richard Weintraub

Member

Daphne Zuniga

Member

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Note: Upper LA River reaches include the following:

- Confluence from Canoga Park to Sepulveda Basin Reach
- Sepulveda Basin Reach
- Sepulveda Basin to Barham Blvd Reach
- Tujunga Wash Reach
- Glendale Narrows Reach (Arbor Reach)
- Downtown LA Reach (to City of Vernon)

Task One – Basis of Design Testing

Objective

The primary objective of this task is to provide information on flow rate and stage within Upper LA River reaches to enable the design team to develop initial concepts, select an initial “functional flow rate” for each Upper LA River “Reach”, and select sites for more detailed evaluations across transparent criteria (or “Evaluation Criteria” such as flood control, water quality, water reclamation, recreation, public health, transportation, etc.). In addition, an understanding of capacity for Upper LA River reaches can assist in understanding which reach locations have sufficient capacity to convey the design flow and which reaches do not.

Activities

- Obtain historical flow rate and stage data of the Upper LA River from the USACE, LACFCD, the USGS, the City of LA, and other regional entities as available (through actual data collected or extracted from valid models).
- Evaluate Upper LA River reaches using flow and stage data and the USACE’s 1-D HEC-RAS model and/or 2-D HEC-RAS model (if obtained from the USACE) to identify an appropriate functional design flow rate and percent of time (e.g., 99%) that flow rate is less than the functional flow rate.
- Research design flow rates for Upper LA River reaches, FEMA flood maps, freeboard requirements, amongst other related research.
- Obtain as-built drawings for Upper LA River reaches.
- Compile the above information into an analysis to be performed in coordination with the USACE’s HEC-RAS model.
- Start attempts to test 1-D or 2-D HEC-RAS, if obtained, for intervention/capital improvement design flow rates and USACE design discharge.

Deliverables

- Analysis (report) of water surface elevation, average velocity, average shear stress, percent of time usable for three flow rates at Upper LA River reaches.
- Channel cross-section of Upper LA River showing WSE for up to three flow rates.
- Prepare for the 2-D HEC-RAS or possibly the 3-D model for the Upper LA River reaches
- Documentation of Basis of Design Testing that may include drawings, 3D models, and physical models at appropriate scale of Upper LA River reaches
- Determination of areas where channel banks do not have sufficient capacity to contain the design flow and create GIS mapping of these areas.

Task Two – Data Acquisition

Objective

The objective of this task is to obtain readily available data pertaining to water resources and land-use and other Evaluation Criteria, and develop a framework for how to obtain or create more difficult data (such as aging infrastructure) for later Phases. Begin to analyze GIS needs for the development of a content management system (CMS) and to enable spatial prioritization of potential intervention/capital improvement locations within Upper LA River reaches.

Activities

- Obtain water resources and land-use data (e.g., GIS shape files) for Upper LA River reaches

- Develop a framework for how to obtain, develop, or create “difficult to obtain data” (e.g., aging infrastructure).
- Prepare for GIS data inclusion in future CMS that enables spatial prioritization of potential intervention/capital improvement locations within Upper LA River reaches with respect to water quality and water supply (recharge).
- Provide ecosystem services analysis for Upper LA River reaches.
- Determine Upper LA River reaches site improvement costs/site maintenance O&M analysis.
- Quantify public health benefit assessment including consideration of urban growth, public health and access to open space within Upper LA River reaches.
- Coordinate and supply ecosystem services and public health benefit datasets for future CMS.

Deliverables

- Water resource and land-use data and maps for Upper LA River reaches.
- Framework for how to obtain, develop, or create additional data.
- Produce GIS maps as data inclusion for future CMS.
- Compilation of ecosystem services data and analysis for Upper LA River reaches.
- Compilation of public health benefit data and analysis for Upper LA River reaches.
- Compilation of and analysis of site improvement costs/site maintenance data and analysis for Upper LA River reaches.
- Conduct precedent analysis, based off of data for Upper LA River reaches, of stewardship and management of arid river systems.

Task Three – Water Resources Research and Benefits Estimation

Objective

The objective of this task is to estimate and understand the volumes of water within the Upper LA River reaches originating in the tributary watersheds and entering the system from wastewater discharges, urban runoff, springs and seeps, and groundwater upwelling. Additionally, this task will explore the range of demands on the water within the Upper LA River reaches to determine how to address the increased need for local water supply.

Activities

- Develop water resource attributes and appropriate siting of such attributes for the Upper LA River reaches
 - Water quality enhancements for low flow conditions and potential intervention design flow conditions from tributary storm drains
 - Aquifer recharge opportunities within the Upper LA River reaches, with potential to divert flows
 - Analysis of surface/subsurface storage for non-potable direct use and potentially potable direct use within the Upper LA River reaches
- Develop a framework for how to obtain, develop, or create data not readily available.
- Obtain/develop water supply data for lands within the Upper LA River reaches (scaling up from readily available data may need to occur).
- Obtain/develop water demand data for lands within Upper LA River reaches (scaling up from readily available data may need to occur).
- Provide GIS data for future CMS to enable spatial prioritization of potential intervention/capital improvement locations with respect to water demand and supply.

- Develop an estimation of the realistic potential the Upper LA River reaches may provide to the region’s water supply portfolio.
- Develop a framework for accurately calculating the realistic potential the Upper LA River reaches LAR may provide to the region’s water supply for future Phases.

Deliverables

- “Summary Technical Memorandum”
- Framework for developing difficult data sets for future Phases.
- Framework for more accurate calculations for future Phases.
- Water resource maps for Upper LA River reaches.

Task Four – Initial Beta Tests and Econometrics

Objective

Based on “Basis of Design Testing” Task One, begin to narrow down locations within Upper LA River reaches to identify best approach to test design process methodology, including more detailed hydrology analysis. Demonstrate best approach to depict concept designs by offering programmatic definitions as solutions. Determine types of designs that would pass “do no harm” criteria with respect to the USACE design discharge, as well as function intended, like usable public space, up to the intervention design flow rate. Propose possible capital improvement recommendations based on beta test analysis, if applicable. Develop economic valuation methodology to analyze public benefits for evaluation criteria.

Activities

- Provide creative and hydraulic input approach for interventions/capital improvement designs.
- Determine best approach to implementing interventions as capital improvement recommendations (e.g., changes to channel shape, widening of low-flow channel, landscaping) into 1-D and/or 2-D model for selected Upper LA River reaches to be beta tested.
- Determine best approach to depict concept landscape designs for selected beta tested areas.
- Determine best approach to depict conceptual ecological habitat and pedestrian access profiles, based upon flood profile models.
- Determine needed engineering approaches in hydrologic, hydrodynamic, and hydraulic support for future concept designs of selected intervention/capital improvement sites within Upper LA River reaches.
- Explore available funding sources and suggested metrics for selected design interventions/capital improvements within the Upper LA River reaches to prepare approach to quantifiable community benefits and positive economic impacts.
- Quantify capital funding sources aligned with expected implementation costs based on per-acre benchmarks for similarly complex, infrastructure-intensive urban projects.

Deliverables

- Demonstrate best approach to depict concept designs for selected beta tested areas within Upper LA River reaches
- Demonstrate best approach to depict conceptual ecological habitat and pedestrian access profiles, based upon flood profile models, within Upper LA River reaches

- Demonstrate needed engineering approaches in hydrologic, hydrodynamic, and hydraulic support for future concept designs of selected intervention/capital improvement sites within Upper LA River reaches
- Proposed intervention/capital improvement ideas of designs for select locations within Upper LA River reaches.
- Documentation of initial beta testing thoughts for Upper LA River reaches that may include drawings, 3D models, and physical models at appropriate scale.
- Establish methodology for the econometric analysis of the benefits created by the Evaluation Criteria

Task Five – Public Engagement

Objective

Propose an engagement strategy (with timeline) for communities within Upper LA River reaches that builds a robust public dialogue around the vision for a seamless, iconic experience along the river. The citizens who live along the river in the Upper reaches – and the larger Los Angeles regional community – will be included in this revitalization process so that they feel a sense of ownership in its success. The engagement strategy can be built as a product of stakeholder input and create a process that fosters a two-way, engaging conversation with citizens, organizations and communities within the Upper LA River reaches.

Activities

- Undertake a landscape analysis of the types of engagement strategies that have and have not worked with similar projects nationwide.
- Under-go a data assessment of the population most impacted by the revitalization project within the Upper LA River reaches.
- Design several instruments, such as surveying, focus group and interview questions and programs for Upper LA River dialogues.
- Engage targeted key stakeholders and constituencies within Upper LA River reaches through possible efforts such as public opinion surveys, in-person interviews, one-on-one meetings and focus groups (multi-lingual approach required).
- Conduct public and stakeholder dialogues with members of the design and technical teams as needed.

Deliverables

- Launch engagement assessment for communities within Upper LA River reaches.
- Conduct Initial Outreach within Upper LA River reaches.
- Collect feedback/dialogue results received (online and offline) for further cultivation.
- Provide a baseline on where the communities within the Upper LA River reaches currently stand on the project overall, but, more importantly, how they would like to be engaged in the process, what mediums they find most useful, what messengers they trust, and how likely they would be to participate in various engagement tactics over the time needed to launch a public capital campaign/initiative
- Present 'Initial Findings Report' with lessons learned, refined audiences personas and metrics identified to track our progress on desired outcomes.

Task Six - Project Management and Administration

Objective

Ensure project deliverables are completed on time and within budget by creating realistic project plans, estimating time and effort, and managing team coordination in an effective manner.



Consultant & Program Management

- Act as change control barrier for project and implement change control management system for core technical design and engineering team.
- Chair and minute weekly core technical design and engineering team meetings.
- Schedule follow up meetings and conference calls as necessary.
- Prepare summary reports of weekly progress to distribute to relevant Board members and committee chairs.
- Define PM needs for Phase 2.

Contract Management

- Guide and make recommendations regarding contracting relationships and structures.
- Guide and make recommendations regarding negotiating and executing agreements with consultants.
- Lead negotiation meetings as needed to execute final agreements with consultants.

Cash Flow Budget & Schedule Management

- Preparation of Master Cash Flow Budget & Schedule and management of core technical team to adhere to Master Cash Flow Budget & Schedule.
- Conduct budget cost management for and cost reporting on a weekly basis.
- Identify and assist with resolving technical, schedule, and/or budget issues that arise with the design tasks.

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