Los Angeles River Headwaters Project

Canoga Park, between Owensmouth Avenue and Mason Avenue

Los Angeles County Flood Control District

P.O. Box 1460
Alhambra, CA 91802-1460

Tona Avalos
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626-458-4312
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Third
Third

530, A6 - D6

The project will construct recreational trails along a 1.25 mile reach of the river from Owensmouth Avenue to Mason Avenue. Enhancements to the site will include bioswales that will capture and treat surface runoff; native and drought-tolerant landscaping; improved fencing; rest-area amenities; educational and interpretive signage; a pedestrian bridge over De Soto drain; and a pedestrian bridge over the Brown's Creek tributary channel. The project will also include undercrossings at Canoga Avenue and De Soto Avenue along the north side to maintain a continuous path.
PROJECT SKETCH: Please attach a site-plan for your proposed project
EVALUATION CHECKLIST

FLOOD PROTECTION:

1. Will the proposed project incorporate channel modifications or the inclusion of structures in the channel that may impact the flow or capacity of the LA River?

   [X] Yes  [ ] No

   Comment: The project includes construction of undercrossings under existing street bridges which will be designed to have no negative impact on channel capacity.

2. Will the proposed project introduce additional water into the LA River? If so, please indicate type and source of water, and expected quantity?

   [ ] Yes  [X] No

   Comment: No additional water will be introduced into the river.

WATER QUALITY:

3. Does the proposed project help to improve the overall water quality of the Los Angeles River? If so, please describe any processes, practices, or Best Management Practices (BMPs) (See: www.casqa.org or www.lastormwater.org) that will be implemented?

   [X] Yes  [ ] No

   Comment: The project will include bioswales, a BMP that will naturally cleanse and infiltrate the captured stormwater to minimize runoff to the river.

4. Will any activity associated with the proposed project generate pollutants such as trash, pet waste or chemicals in the vicinity of the River? If so, please specify type and source of pollutant, and indicate what mitigation measures (if any) are included in your project?

   [ ] Yes  [X] No

   Comment: There may be trash generated by users of the pedestrian path, but trash receptacles will be included in the project.
ECOSYSTEM RESTORATION

5. Does the proposed project create habitat or ecosystem opportunities? If so, please describe.

[ ] Yes  [ ] No

Comment: The project will improve habitat by adding native plants to an area that was previously barren.

6. Does the proposed project include planned vegetation with native and historic Los Angeles River riparian/wetland species? If yes, please describe.

[ ] Yes  [ ] No

Comment: All plantings will be consistent with the Los Angeles River Master Plan Landscaping Guidelines and Plant Palettes.

7. Does the proposed project include planned vegetation improvements that would support threatened or endangered species? If so, please describe.

[ ] Yes  [x] No

Comment: 

8. Does the proposed project consider habitat connectivity to upstream, downstream and upland natural areas? If so, please describe.

[ ] Yes  [ ] No

Comment: Currently, there are no projects immediately upstream or downstream, but the native plantings added by the project could create a habitat corridor that may be enhanced by future projects.

9. Does the proposed project include creation, restoration, or enhancement of more natural hydrologic processes? If yes, please describe.

[ ] Yes  [x] No

Comment: 

LOS ANGELES RIVER COOPERATION COMMITTEE
PROJECT EVALUATION FORM

LOS ANGELES RIVER MASTER PLAN (LARMP) AND LOS ANGELES RIVER REVITALIZATION MASTER PLAN (LARRMP):

10. List design features of your project that are consistent with the LARMP and LARRMP.

Comment: The project will create value by constructing pedestrian trails, native landscaping, improved fencing, interpretive signage, in this significant location of the river.

11. Will the proposed project create new or expand existing recreational opportunities? If yes, please describe.

Yes ☒ No ☐

Comment: The project site was previously used only for maintenance activities. The project will open the area for public use and add pedestrian paths along both sides of the river.

12. Does the proposed project include aesthetic enhancements? If yes, please describe.

Yes ☒ No ☐

Comment: The project will improve an area that was previously barren by adding native plants, boulders, more aesthetic fencing, and interpretive signage.

13. Will the project provide or facilitate public access to the River? If yes, please describe.

Yes ☒ No ☐

Comment: There will be safe access to the pedestrian paths, however, users will not have direct access to the river (i.e. water).

14. Will the proposed project result in community revitalization (such as economic development, educational, artistic, cultural and/or other benefits and improvements)? If yes, please describe.

Yes ☒ No ☐

Comment: The interpretive signage included in the project will provide educational benefits to the public by displaying information about types of plants used and history of the river.

15. Who is the project intended to serve (i.e. youth, cyclists, artists, bird watchers)?

Comment: The project is intended to serve walkers, joggers, and other pedestrians in the community. It will also serve as a safe route to local schools.
16. Does your project implement BMPs for maximizing on-site capture, retention and/or infiltration of stormwater? If yes, please describe.

[X] Yes  [ ] No

Comment: The bioswales are a BMP that can naturally cleanse and infiltrate the captured stormwater to minimize runoff to the river.

17. Does your project implement water conservation practices and/or technologies (e.g. smart or weather-based irrigation devices, California friendly plants, water efficient fixtures) (See: www.ladwp.com or www.mwdh2o.com)? If yes, please describe.

[X] Yes  [ ] No

Comment: The project will install California native drought-tolerant plants and a smart irrigation system.

18. Does your project implement water reuse practices/technologies such as graywater or recycled water systems (See: www.ladbs.org/LADBSWeb/green-bldg.jsf or www.ladwp.com/ladwp/cms/ladwp001294.jsp)? If yes, please describe.

[ ] Yes  [X] No

Comment:________________________________________________________________________

OPERATION AND MAINTENANCE:

19. Who will be responsible for the operation and maintenance of the project after construction?

[X] District  [ ] City of LA

[ ] Army Corps  [ ] Others (Specify under comment)

Comment:________________________________________________________________________

20. Does your proposed project provide adequate access for LACFCD and/or Corps maintenance activities? If yes, please describe.

[X] Yes  [ ] No

Comment: The project will be constructed to maintain vehicular access along the channel right of way and within the channel.
SECURITY, SAFETY AND LIABILITY:

21. How will safety and security be addressed within the project limits?

Comment: The project will be closed during storm events, and we do not anticipate negative impact to the Security and Safety.

22. How will general liability for accidents/incidents occurring within the project limits be addressed?

Comment: The District would assume liability for the project.
LOS ANGELES RIVER COOPERATION COMMITTEE
PROJECT EVALUATION FORM

Project Name: North Atwater Park Multi-Modal Crossing

Project Proponent: LA River Revitalization Corporation

Maintenance Jurisdiction: LACFCD / Corps

Land Owner: Multiple: County of LA/ City of LA/ Private Party

RECOMMENDATION

On the basis of this evaluation, the project is:

☐ RECOMMENDED AS PROPOSED

☐ RECOMMENDED WITH MODIFICATIONS

☐ NOT RECOMMENDED

Disclaimer: Recommendations from the Los Angeles River Cooperation Committee do not release the project proponent from its responsibility to meet conditions of approval established by its participating agencies nor do they represent a commitment to expedite permits for the implementation of the proposed project.
PROJECT GENERAL INFORMATION

Note: All projects are expected to comply with the County's Los Angeles River Master Plan (LARMP) (See: http://lacounty.org/wmd/Watershed/LA/LA_River_Plan.cfm) and the City's Los Angeles River Revitalization Master Plan (LARRMP) (See: www.lariver.org) to the maximum extent feasible.

Project Name: North Atwater Park Multi-Modal Crossing

Project Location: South end of Atwater Park crossing Los Angeles River to Bike Trail

Project Proponent: LA River Revitalization Corporation

Mailing Address: 3780 Wilshire Blvd., Suite 250, Los Angeles, CA 90010

Contact Person: Jan Dyer Email: jan@mlagreen.com

Telephone Number: (213) 384-3844 Fax Number: (213) 384-3833

Supervisorial District: 3 City Council District: 4

Thomas Guide Page: 563/564

PROJECT DESCRIPTION:

A pedestrian/bicycle/equestrian bridge spanning the Los Angeles River from the area south of Atwater Park to the existing bicycle path on the west side of the river. The multi-modal bridge offers an opportunity to realize goals of the Los Angeles River Master Plan connecting surrounding communities to open space while providing a non-motorized bridge to traverse across and appreciate the river.
LOS ANGELES RIVER COOPERATION COMMITTEE
PROJECT EVALUATION FORM

PROJECT SKETCH: Please attach a site-plan for your proposed project
PROJECT SKETCH: Please attach a site-plan for your proposed project
**FLOOD PROTECTION:**

1. Will the proposed project incorporate channel modifications or the inclusion of structures in the channel that may impact the flow or capacity of the LA River?

   - Yes
   - No

   Comment: The project includes supports for the bridge located at the upper embankment of the river channel.

2. Will the proposed project introduce additional water into the LA River? If so, please indicate type and source of water, and expected quantity?

   - Yes
   - No

   Comment: ________________________________

**WATER QUALITY:**

3. Does the proposed project help to improve the overall water quality of the Los Angeles River? If so, please describe any processes, practices, or Best Management Practices (BMPs) (See: [www.casqa.org](http://www.casqa.org) or [www.lastormwater.org](http://www.lastormwater.org)) that will be implemented?

   - Yes
   - No

   Comment: ________________________________

4. Will any activity associated with the proposed project generate pollutants such as trash, pet waste or chemicals in the vicinity of the River? If so, please specify type and source of pollutant, and indicate what mitigation measures (if any) are included in your project?

   - Yes
   - No

   Comment: The North Atwater Multimodal Crossing is intended to separate the equestrian circulation from direct contact with the river, thereby eliminating horse waste from entering the river.
5. Does the proposed project create habitat or ecosystem opportunities? If so, please describe.

☐ Yes  ☒ No

Comment: __________________________________________________________

6. Does the proposed project include planned vegetation with native and historic Los Angeles River riparian/wetland species? If yes, please describe.

☐ Yes  ☒ No

Comment: __________________________________________________________

7. Does the proposed project include planned vegetation improvements that would support threatened or endangered species? If so, please describe.

☐ Yes  ☒ No

Comment: __________________________________________________________

8. Does the proposed project consider habitat connectivity to upstream, downstream and upland natural areas? If so, please describe.

☒ Yes  ☐ No

Comment: The project contemplates a future build-out of water quality terraces to provide habitat connectivity opportunities for avian and terrestrial species. However, the terraces are only conceptual and will not be part of this project. Our hope is that the water quality terraces will be evaluated as part of a pending ecosystem restoration feasibility study under the management of the U.S. Army Corps of Engineers.

9. Does the proposed project include creation, restoration, or enhancement of more natural hydrologic processes? If yes, please describe.

☐ Yes  ☒ No

Comment: __________________________________________________________
10. List design features of your project that are consistent with the LARMP and LARRMP.

Comment: The bridge are consistent with the LARMP as a means to provide open space connectivity and access to the river.

11. Will the proposed project create new or expand existing recreational opportunities? If yes, please describe.

Yes       No

Comment: The project will connect North Atwater Park with Griffith Park while also providing a crossing point for the LA River Greenway Trail and LA River Bike Path across the river.

12. Does the proposed project include aesthetic enhancements? If yes, please describe.

Yes       No

Comment: The bridge will be designed as a signature bridge that is both functional and sculptural.

13. Will the project provide or facilitate public access to the River? If yes, please describe.

Yes       No

Comment: The bridge will provide an opportunity for people to get close to and experience the river.

14. Will the proposed project result in community revitalization (such as economic development, educational, artistic, cultural and/or other benefits and improvements)? If yes, please describe.

Yes       No

Comment: The bridge will be a place for the celebration of the river and recreational functions that occur along its course.

15. Who is the project intended to serve (i.e. youth, cyclists, artists, bird watchers)?

Comment: The project will serve the great community of Los Angeles - youth, adults, seniors, pedestrians, nature enthusiasts, cyclists, and equestrian - and visitors alike.
16. Does your project implement BMPs for maximizing on-site capture, retention and/or infiltration of stormwater? If yes, please describe.

[ ] Yes  [X] No

Comment: 

17. Does your project implement water conservation practices and/or technologies (e.g. smart or weather-based irrigation devices, California friendly plants, water efficient fixtures) (See: www.ladwp.com or www.mwdh2o.com)? If yes, please describe.

[ ] Yes  [X] No

Comment: 

18. Does your project implement water reuse practices/technologies such as graywater or recycled water systems (See: www.ladbs.org/LADBSWeb/green-bldg.jsp or www.ladwp.com/ladwp/cms/ladwp001294.jsp)? If yes, please describe.

[ ] Yes  [ ] No

Comment: 

OPERATION AND MAINTENANCE:

19. Who will be responsible for the operation and maintenance of the project after construction?

[ ] District  [ ] City of LA

[ ] Army Corps  [X] Others (Specify under comment)

Comment: The LA River Corp. will maintain the bridge with the goal to transfer management responsibilities to the City in the future.

20. Does your proposed project provide adequate access for LACFCD and/or Corps maintenance activities? If yes, please describe.

[X] Yes  [ ] No

Comment: Maintains access to river bed beneath bridge.
SECURITY, SAFETY AND LIABILITY:

21. How will safety and security be addressed within the project limits?

**Comment:** Bridge structure will be designed to safely light approaches and deck. Bridge will be designed to meet AASHTO code. Designed without hidden/concealed places.

22. How will general liability for accidents/incidents occurring within the project limits be addressed?

**Comment:** Bridge will be designed to meet AASHTO code. Equestrian access will be fully separated from the river. Bridge and landings will be lit for safe crossing and access.
Palmdale to Los Angeles
High-Speed Train Project
**Recommended LAUS to SR 2 Alignment Alternatives**

**Tunnels - T1 and T3**
- Redesigned to avoid cut and cover tunnel through State Historic Park. Tunnels beneath park are now bored tunnel.
- Extend tunnel past Rio de Los Angeles State Park

**Metrolink Alignment (was in trench, change to at-grade)**
- Metrolink, Amtrak and Freight operators remain at-grade
- HST at-grade allows access between park and river by bridge or underpass

**Tunnel - T2 (Withdrawal)**
- Requires realignment of Gold Line Yard and Station

**San Fernando Road Alignment (Withdrawal)**
- Disruption to Rio de Los Angeles State Park during construction
- Community concerns
- Land take from park and school

**Los Angeles River Bridges**

**Gold Line Yard Maintenance Facility**
**Supplemental Alternative Analysis Recommendations**

**LAUS to SR 2**
- 2 tunnel options crossing under the LA River ending just south of SR 2
- 1 surface/elevated option crossing the LA River to east bank
- Drop San Fernando Road and Metrolink trench alignment options in Rio de Los Angeles Park
- Follow Metrolink/UPRR/Amtrak alignment at-grade adjacent to Rio de Los Angeles Park for the surface/elevated option

**Sylmar to Palmdale**
- No significant change at this time pending additional discussions with stakeholder groups.
- Bring recommendation at a future Board Meeting

**SR 2 to Sylmar**
- 3 station options
  - Burbank/ Buena Vista
  - Branford Street
  - San Fernando
Next Steps

Ongoing Public Involvement

July 8, 2010
- Preliminary Draft Alternatives Analysis submitted to CHSRA Board and released on www.cahighspeedrail.ca.gov
- Hosted 4 Community Open Houses – August 23/Palmdale, August 25/Burbank, August 26/Santa Clarita, September 21/Downtown Los Angeles

March 3, 2011
- Supplemental Alternatives Analysis to CHSRA Board
- Released on www.cahighspeedrail.ca.gov and available for public comment

Winter 2011/2012
- Draft EIR/EIS

Summer 2012
- Final EIR/EIS

Winter 2012
- Record of Decision / Notice of Determination

California High-Speed Train Project
Los Angeles to Anaheim High-Speed Train Project
Phased Implementation Approach

- Agreements with owners and key stakeholders
- Potential Elements for an Initial Operating Phase for HST:
  - ROW acquisition
  - LAUS Run-Thru Tracks (HSR/Amtrak/Metrolink)
  - Grade Crossing Safety Enhancements
  - Positive Train Control (PTC) Coordination
  - Existing track relocations in key areas to support the final build-out (i.e. tracks south of 1st Street)
  - Station modifications
  - Utility relocations
Potential Elements for an Initial Operating Phase for HST
California High-Speed Train Project

Next Steps

UPDATED PROJECT SCHEDULE

Ongoing Public Involvement

2011

- Refine phased implementation approach and address community concerns

Spring/Summer 2012

- Finalize 15% design
- Continue work on EIR/EIS

Fall 2012

- Release Draft EIR/EIS for public review

California High-Speed Train Project
Next Steps

- Set up operator working sessions
- Continued local and regional stakeholder technical working groups
- Analyze Phased Implementation Approach for an Initial Operable Project
- Environmental Impact Analysis for Initial Operating Phase
- Confirm Phased Implementation Approach and Integrate into the Dedicated and Consolidated Shared Alternatives
- Adjust EIR/EIS to incorporate Phased Approach
Los Angeles to San Diego via the Inland Empire High-Speed Train Project
LOS ANGELES APPROACHES AND CONNECTIONS

UPRR/Adjacent
• Alignment withdrawn
LOS ANGELES APPROACHES AND CONNECTIONS

UPRR/Adjacent
- Alignment withdrawn
LOS ANGELES APPROACHES AND CONNECTIONS
Next Steps

- Preliminary Alternatives Analysis Report to CHSRA Board
  
- Public Open House Meetings (up to 28 meetings in four counties)
  - Continue to work with communities and So Cal IGC on alignment refinements

- Supplemental Alternatives Analysis Report *

- Preliminary Engineering *
  - Draft Environmental Impact Statement/Report *

- Draft Environmental Impact Statement/Report *
  - Record of Decision and Notice of Determination

*Schedule subject to change dependent upon project funding
Los Angeles River
Headwaters Project

Los Angeles County Flood Control District
Project Limits

Los Angeles County Flood Control District
Recreational Trails

Los Angeles County Flood Control District
Under-crossings

Los Angeles County Flood Control District
De Soto Drain Bridge

Los Angeles County Flood Control District
Browns Creek Bridge

Los Angeles County Flood Control District
Bioswales

Los Angeles County Flood Control District
Interpretive Signage

LARMP Sign Guidelines

Possible Themes:

• Significance of the Headwaters
• History of the River
• Bioswales – functions and benefits
• Watershed management principles
• Native plants used in project

Community input will be sought for final signage

Los Angeles County Flood Control District
Community and Stakeholder Collaboration

- LARMP Stakeholder Outreach
- LARMP Advisory Committee
- Integrated Regional Water Management Plan
- Collaboration with City’s proposed bikepath

Los Angeles County Flood Control District
Public Access and Connectivity

• City of Los Angeles’ Bikepath between Mason Avenue and Vanalden Avenue
• Metro’s Canoga Transportation Corridor (aka Orange Line Extension)
• Three nearby Schools
• John Quimby Park
• Topanga Plaza
• Adjacent residents and businesses

Los Angeles County Flood Control District
Project Schedule and Cost

- Complete Design by
  - December 2011
- Start of Construction by
  - June 2012
- Complete Construction by
  - April 2013
- Estimated Cost
  - $7 million
- Prop 84 Grant Award:
  - $1.9 million

Los Angeles County Flood Control District
Questions?

Los Angeles County Flood Control District
Atwater Park Multimodal Crossing

a major urban design and development catalyst along the LA River

Buro Happold  Mia Lehrer + Associates  Fuscoe Engineering  Gardiner & Theobald  Tetra Tech

4 April 2011
project team

buro happold
bridge architecture, engineering, lighting

mia lehrer + associates
landscape architecture and site ecology

fuscoe engineering
water engineering and site civil engineering

gardiner & theobald
cost modeling, quantity surveys, scheduling

tetra tech
project management
where we are in the process

understanding of the site
opportunities, “hot buttons” and constraints
research into past efforts and their criteria

development of credible solutions
realistic spans, foundations and geometry
river issues / timing / agency

agency and stakeholder review
preliminary meetings – awareness in the City
state/federal agency discussions pending
neighborhood meetings in the next 30 days
the program

the use
equine, pedestrian, bicycle

the budget
between 2.8 and 3m dollars (hard costs)

the schedule
ideally completed in a three year period
the program is a major driver of the design criteria
program dictates dimensions of width and clearances
and how robust a structure is required

equestrian and pedestrian/bicycles are two very different requirements and will require a hybrid response

other factors that are considered
approval process:
   Corps of Engineers, City, County, stakeholders

constructability (cost/value equation)

opportunities for parallel exploration
river master plan realization
   ecological factors
   water quality
   riparian restoration
qualitative enhancement for the park and connections
an understanding of the site
Los Angeles River Revitalization Master Plan

Location
looking along the channel to the north
Looking west:
- Existing equestrian crossing
- Highway beyond

Looking east:
- Overhead towers
- Location of east landing
- Existing access ramp
- Sand bar and river landscape

Looking across the channel:
development of credible solutions
Design Criteria
based on the site and program

length of the span
230 to 280 feet clear span
Long span in a tight space

27 to 30 feet wide to safely allow all users to pass
Equestrian and pedestrian/bicycles have two very different surface and structural loading requirements and will require a bridge deck that will accommodate both

other site constraints
power lines inhibit approach from the east
no construction on the river during the winter
design criteria
dictates the type of bridge designed

cable stayed/ suspension
foundation would be in the river (potentially longer approvals)
span of 250 feet with mast at 100-140 feet
mast size and method of erection add substantial cost
urban design-scale of the bridge dwarfs the park

arch
260 foot span with arch height of 45 feet
cable array will hang the deck surface
configuration of arch will clear power lines
large sections may be difficult to erect on site
efficient but often done configuration

cable truss type
230 foot span
componentized construction with smaller (easier erection) units
evolution of traditional truss into a hybrid form
derives its form from nature and
uses a fraction of the material (high performance, efficient)
arch concept

a clear span of 260 feet across the river

cement foundation expresses the aesthetic of the archetypal LA river crossing

the paired arches are a simple form; iconic

arch span in context on the river
truss option
solution derives from traditional engineering concepts
the computer now allows for the intricate exploration of new and more efficient ways of developing a truss structure
the concept is called tensegrity – in building and in nature, is a balanced integrity of tension and compression resulting in one of the lightest and most efficient structural systems possible.
inherently sustainable, the structure mimics nature in its structural integrity and beauty of line and form using only what is needed to attain integrity
35 foot wide deck- separation between equestrians and pedestrians

cable array

steel tube upright columns

generated wire frame of structure showing the openness of the structure
The deck is approximately 35 feet wide to accommodate equestrian and pedestrian flow. Deck surfaces are wood plank.

Approximately 30 feet tall, the structure is a series of steel uprights supported in tension with cables each working with the next set to rigidly stabilize the structure.
agency and stakeholder review
Agencies

City of Los Angeles
- Council District 4 and Council Ad Hoc River Committee
- Bureau of Engineering & the River Project Office
- Recreation & Parks
- LA Dept of Water and Power

US Army Corps of Engineers
- LA County Flood Control District/DPW
- Caltrans
- MRCA
Strategy

Augment the numerous outreach meetings associated with the:

- 1996 Los Angeles River Master Plan
- 1999 bridge concept
- 2007 Los Angeles River Revitalization Master Plan
- ongoing North Atwater Park expansion
- ongoing River Update Meetings (RUMs)

The RRC and Design Team are working with CD4 and meeting with key players individually to inform and gain feedback on the project.

- Neighborhood Councils
- Equestrian and Bicycle Community
- Non-profits

This will followed by a series of general public outreach meetings.
construction strategy
Construction Scheduling Concept (to be better defined as information becomes available)

This is based on a traditional project delivery process. Design build or integrated delivery could cut 2-3 months from this schedule.

- Winter work moratorium period on the LA River
- Shop drawings, shop fabrication and long lead items
- Delivery to site and erection of structure
- Project completion could be on site sooner with integrated delivery
opportunities for parallel exploration
Los Angeles River Revitalization Master Plan

existing

proposed

site ecology / landscape