



Los Angeles River Master Plan Update

Steering Committee Meeting #8

Thursday, December 12, 2019, 9:00 a.m. – 12:00 p.m.

Summary

Location

Los Angeles County Public Works Headquarters
Conference Room A-B
900 South Fremont Ave,
Alhambra, CA 91803

Attendees

Steering Committee Members

- City of Los Angeles Mayor's Office, Michael Affeldt and Edward Belden, alternate
- City of Los Angeles Bureau of Engineering, Katherine Doherty alternate for Gary Lee Moore
- City of South Gate, Gladis Deras, alternate for Arturo Cervantes
- Council for Watershed Health, Eileen Alduenda
- Friends of LA River, Liliana Griego, alternate for Marissa Christiansen
- Heal the Bay, Katherine Pease, alternate for Shelley Luce
- Long Beach Conservation Corps, Kayla Kelly-Slatten, alternate for Dan Knapp
- Los Angeles City/County Native American Indian Commission, Rudy Ortega
- Los Angeles County 1st District, Martin Reyes, alternate for Waqas Rehman
- Los Angeles County 3rd District, Virdiana Velez, alternate for Katy Yaroslavsky
- Los Angeles County 4th District, Jocelyn Rivera-Olivas, and Daritza Gonzalez, alternate
- Los Angeles County Flood Control District, Keith Lilley
- Los Angeles Department of Water and Power, Rafael Villegas and Manuel Aguilar, alternates for Evelyn Cortez-Davis
- Los Angeles Waterkeeper, Bruce Resnik, and Melissa von Mayrhauser, alternate
- Metropolitan Transit Authority, Lauren Cencic, Maressa Sah, and Mitali Gupta, alternates
- River and Mountains Conservancy, Joseph Gonzalez and Marybeth Vergara, alternates for Mark Stanley
- Santa Monica Mountains Conservancy, Brian Baldauf and Sarah Rascon, alternates for Joseph T. Edmiston
- The Boethius Initiative UCLA Department of World Arts and Cultures, Julia Carnahan, alternate for Peter Sellers
- The Nature Conservancy, Miguel Ramos, alternate for Shona Ganguly



- Trust for Public Land, Robin Mark

Los Angeles County Public Works

- Carolina Hernandez
- Genevieve Osmeña
- Christine Wartman
- Ernesto Rivera
- Alynn Sun
- Kenneth Chow
- Mark Beltran

Consultant Team

- Mark Hanna, Geosyntec
- Najwa Pitois, Geosyntec
- Joe Goldstein, Geosyntec
- Yoshi Anderson, Geosyntec
- Jessica Henson, OLIN
- Joanna Karaman, OLIN
- Diana Jih, OLIN
- Tensho Takemori, Gehry Partners
- Shuo Zhai, Gehry Partners
- Dana McKinney, Gehry Partners
- Jack Hughes, Kearns & West
- Jenna Tourje, Kearns & West
- Joan Isaacson, Kearns & West
- Taylor York, Kearns & West
- Delia Torres, Languages 4 You
- Jon Switalski, River LA

1. Welcome, Introductions, and Agenda Overview

On December 12, 2019, Los Angeles County Public Works (Public Works) conducted the eighth Steering Committee meeting for the Los Angeles River Master Plan Update (Master Plan Update). The meeting began with a viewing of the final video in the River Stories series.

Genevieve Osmeña, Public Works' Project Manager for the Master Plan Update, provided welcoming remarks. She noted that this meeting was the final in the series and acknowledged the dedication that the Steering Committee members have displayed throughout the process to shape and improve the Master Plan. She informed them that



Public Works was finalizing the scope, schedule, and programmatic approach for the California Environmental Quality Act (CEQA) review of the Master Plan. Under the current timeline, the CEQA process would begin in the next few weeks and align public draft review of the Master Plan with public CEQA review.

Joan Isaacson, facilitator from Kearns & West, reviewed the meeting agenda, located in Appendix A. The major items included presentation and discussion of a summary of the third round of community engagement, a review of the planning process, a preview of the contents of the Master Plan, a presentation and discussion on resilience and adaptation, and a review of the environmental graphic guidelines.

2. Community Engagement Summary

Mark Hanna from Geosyntec and Jon Switalski from River LA gave an update and recap of community engagement activities. Hanna summarized the project team's coordination meetings with other organizations. These included the Upper LA River & Tributaries (AB466) Working Group, LA River Flow Study team at the Regional Water Quality Control Board, and Native American communities.

Switalski reviewed the third round of community meetings held in October 2019 in Canoga Park, North Long Beach, and Central Los Angeles. At these meetings, large boards were used to communicate with the public about what would be included in the Master Plan. Over 1,300 people attended the community meetings throughout the three rounds of engagement. There were 800 participants in the Youth Summit and 5,592 telephone town hall participants. There were nearly a million digital ad impressions. Full community engagement reports are available online at LARiverMasterPlan.org. Switalski concluded by thanking the community partners who helped expand community outreach. The most recent community partner event was with East Yard Communities for Environmental Justice. See pages 18 through 21 in Appendix B for more information.

Q&A/Discussion

- There were no questions or comments from the Steering Committee members for this agenda item.

3. The Los Angeles River Master Planning Process

Tensho Takemori from Gehry Partners, Jessica Henson from OLIN, and Hanna reviewed the Master Plan Update process. The Master Plan will exist alongside other types of plans, existing below system level plans and above implementation plans. The project team reviewed over 140 different planning documents during the Master Plan Update. The Master Plan 2020 will need updating in 20 to 25 years.



The Master Plan will be a vision- and goal-driven document built upon community needs derived from data and engagement feedback. New project sites were identified based on an alignment of need, opportunity, and cadence. Needs were assessed using multiple data sources, and “river rulers” helped to visualize distribution of needs and areas of overlapping need. From there, the project team identified sites and opportunities for projects like Los Angeles River rights-of-way and county-owned parcels. The project team used the concept of cadence to ensure project sites of various sizes were distributed equitably along the river. Each size of project has its own cadence. The project team included planned major projects from other efforts and filled in gaps for needs and cadence. The kit of parts addresses the needs identified for specific sites and the common elements needed to provide consistency in amenities along the river. See pages 22 through 32 in Appendix B for more information.

Q&A/Discussion

- There were no questions or comments from the Steering Committee members for this agenda item.

4. What’s in the Master Plan

Henson provided an overview of the contents for the Draft Master Plan, explaining that the document is organized into two key components – strategic directions and design framework. The strategic directions component addresses the Goals, Actions, and Methods (GAMs) as well as implementation responsibility and funding sources. The design framework builds on the GAMs and addresses needs, sites, a kit of parts and common elements, recommendations, and site examples. She provided an overview of the table of contents.

Henson displayed several example spreads from the Draft Master Plan. She noted that the project team wants the document to be beautiful and to feel like a magazine layout with large maps and graphics. Each goal will have a centerfold layout and the actions and methods will be laid out in detail. Since the Master Plan is intended as a public document, definitions and supporting materials will help illustrate concepts. The Master Plan will have two appendices: the design guidelines and technical document. Project proponents will need these as they plan projects. The Master Plan main volume will be translated into Spanish.

Henson said that a full Draft Master Plan would be sent to the subcommittee members around January 6, 2020, after which they would have five weeks for review and comment. A final draft for public comment is estimated to be ready in Spring 2020. See pages 33 through 39 in Appendix B for more information.



Q&A/Discussion

- Is it possible to have chapters of the Draft Master Plan distributed separately to make for easier review?
 - Yes, chapters of the Draft Master Plan will be distributed separately.
- Is the Steering Committee going to reconvene to discuss the Draft Master Plan?
 - There will be a subcommittee work session in January after the Draft Master Plan has been released to the subcommittee members. The project team will determine a way to share a summary of comments and responses when the review period is over.
- Will the technical document appendix be in the Draft Master Plan distributed to the subcommittee members?
 - No, the appendix materials are still being created, along with the design guidelines. It is to be determined if these will be shared for reference during the review.

5. Resiliency and Adaptation

Hanna then presented on resiliency and adaptation. He noted that the project team wanted to dedicate time to this subject based on community and Steering Committee member feedback and discussions at previous subcommittee meetings. Resiliency and Adaptation addresses how to plan for and/or recover after extreme events, such as major floods. The dual jurisdiction over the river channel by the US Army Corps of Engineers and the Los Angeles County Flood Control District could complicate recovery efforts. There are also multiple municipal jurisdictions along the river, adding further complexity.

Hanna reviewed pertinent studies and information that explain components crucial for understanding extreme flood events. This includes past locations of wetlands, river paths, and floodplains and where they are located now. The river is subject to many flash floods. Although average yearly rainfall is 14.4 inches, many years receive much less or much more rainfall than that average, making it difficult to predict flooding. Many people misunderstand a 100-year flood as a flood that only happens once every hundred years and, thus, is unlikely to happen in their lifetime. However, the term refers to a storm having a 1% probability of happening in any given year. Therefore, the project team is seeking to consistently refer to such storms as 1% storms. Two 1% events could occur in back-to-back years or even the same year. Climate change is likely to increase the frequency of extreme events. Research from UC Irvine indicates that the 1% event (i.e., the 100-year event) is more likely a 1.5% event (i.e., a 60- to 70-year event).

Federal Emergency Management Agency (FEMA) floodplain standards for insurance are based on the 1% event, or 100-year event. This level of capacity is not met along the



entire channel, therefore, there are areas along the LA River in the 1% floodplain. There are over 6,000 critical facilities within the 0.2% event floodplain (~500-year event floodplain). The GAMs address floodplain resiliency and channel capacity standards, but it is important to not assume that the existing system is the one that will always be there. There also needs to be an adaptation plan. This plan would envision how to rebuild or rethink after an extreme event. Implementation of that adaptation plan could also create more room for the river ahead of an extreme event.

Henson noted that the Multihazard Mitigation Council (2017) has found that investing in riverine flood hazard mitigation has a 7-to-1 cost ratio, meaning that every dollar spent on hazard mitigation to code requirements saves seven dollars in recovery costs. See pages 40 through 47 in Appendix B for more information.

Q&A/Discussion

- The Master Plan should outline a clearer direction for future resilience and a reimagined river; it is too open-ended as presented currently.
- Will the Master Plan have elements that identify opportunities to address climate change directly, by encouraging active transportation for example?
 - Other planning efforts, such as the Countywide Sustainability Plan are instrumental in this. Hazard mitigation and adaptation are important, so it is crucial to have critical facilities in the floodplain mapped by FEMA. Facilities, districts and agencies should plan for flood events. The County is also supporting a watershed approach through Measure W actions.
- Maybe for the subcommittee meetings the project team could pull out examples from the Master Plan that support resiliency and adaptation. There needs to be a watershed approach and a layered approach to resiliency.
 - There needs to be discussion of a layered approach, but it must be acknowledged that there is a real need for flood-carrying capacity. Studies have examined what would happen with 50 percent permeability in the County. Studies found it would only take a few percent off peak flows at the Narrows during a larger storm, although, it makes a significant difference in the common event. The project team did a watershed scale analysis for hydrology and the research data for the technical memos.
- There should be an adaptation plan as a living document and tangible steps to work with communities.
- There should be incentives for owners of houses and rental properties to invest in mitigation.
 - Agreed, good point.



6. Environmental Graphics

Henson presented an update on the wayfinding analysis and technical requirements for the environmental graphics. These will be included in the Master Plan appendices. The values driving the environmental graphics design process were legibility, graphic clarity, simplicity, timeless aesthetic, coordination with stakeholders, and lateral wayfinding to the river. The project team also looked at other signage for best practices.

Henson reviewed the results of the existing wayfinding signage survey. Informational, regulatory, warning and safety, and interpretive signage and displays are the most commonly found types along the LA River. This signage is typically located near existing access points. Directional, destination, and bikeway signage are the least commonly found, indicating the lack of lateral and other wayfinding along the trail once entered.

The environmental graphics in the design guidelines update include informational, regulatory, confirmatory, and directional (i.e., lateral wayfinding to the river) signage; mile markers; pavement markings; interpretive signs and displays; and large-scale icon graphics. Henson presented information on each, noting considerations for Americans with Disabilities (ADA) compliance, bilingual language use, Manual on Uniform Traffic Control Devices (MUTCD), and Native American place names and references. Signage should be consistent and regular, but there is flexibility for community-specific, culturally tied variation and other integration of arts, culture, and community expression. See pages 48 through 55 in Appendix B for more information.

Q&A/Discussion

- There is no single responsible agency for operations and maintenance (O&M) so maybe signage can help identify local jurisdictions.
- Signage could also point out significant areas, like downtown, to help connect people to other neighborhoods.
 - This is a good idea.
- Mile markers or addresses on signage could help community members report issues.
- Glendale Narrows used to have mile markers but people didn't know what the numbers meant. It might be necessary to provide more details so people know what they are.
 - Yes, good point.
- Include tribal specific places on signage.
 - The project team is working on names and references to Native American place marking.
- Will languages other than English be included on signage?
 - In some communities there is no question that languages other than English should be considered. The project team is still considering how to guide the



permitting process in determining what languages are appropriate or not. This should be discussed more in the subcommittee meetings.

- Will there be QR codes on signs?
 - This is a good idea that should be discussed more in the subcommittee meetings.
- There are many signs that state if a person enters the river corridor, they will be imprisoned or fined.
- What are plans for reconciling new with existing signage?
 - The project team doesn't have the answer to this yet but will keep considering plans.
- Signs could display jurisdictional logos.
- There could be LA River Way graphics for tributaries.
 - Park to Playa was the precedent the project team studied. It would be good to hear in the subcommittee meetings about the LA River and connecting to tributaries.
- Will there be further discussion at the subcommittee meetings about implementation, O&M, and funding?
 - Yes, we will talk about funding, what actions departments have discussed taking on, and gaps.
- Does ADA signage include Braille?
 - Braille can be difficult since it erodes outside quickly and is too high to reach on most signs, but it may work for interpretive signage.
- What about including project funding information on signs?
 - This is possible. There could be a simple version of a sign and one with more layers to capture information like this.
- There are often multiple funders with different requirements. Are signs limited by that?
 - The project team is determining what signs could be modified. The elements that relate to MUTCD and flood regulation should be consistent, but the others might be more flexible. The goal is to provide a full set of design files so everyone has the graphic templates.

7. Public Comment

No one requested to make a public comment or submitted a comment card at the meeting.

8. Wrap Up

Osmeña thanked the Steering Committee members and reminded them that subcommittee members would receive the full Draft Master Plan around January 6, 2020. There would also be a community event in summer 2020.



Appendix A

Meeting Agenda



Los Angeles River Master Plan Update

Steering Committee Meeting #8

Thursday, December 12, 2019, 9:00 a.m. – 12:00 p.m.

Agenda

Location

Los Angeles County Public Works Headquarters
Conference Room A-B
900 South Fremont Ave,
Alhambra, CA 91803

1. Welcome, Introductions and Agenda Overview (10 Minutes)

- Welcome
- Roundtable Introductions
- Meeting Purpose, Agenda, and Objectives
- CEQA Update

2. Community Engagement Summary (10 Minutes)

Objectives: 1) Report on community input and how it relates to the Master Plan Update and 2) solicit feedback.

- Additional Meetings
- Engagement Summary
- Community Partner Events
- Q&A/Discussion

3. The Los Angeles River Master Planning Process (30 Minutes)

Objective: Review the Master Plan Update process.

- Planning Context
- Research
- Data-Based
- Vision and Goal Driven
- Design
- Q&A/Discussion



4. What's in the Plan (20 Minutes)

Objective: Review what is in the Master Plan.

- Table of Contents
- Example Spreads
- Review Process
- Q&A/Discussion

5. Resiliency and Adaptation (30 Minutes)

Objective: Discuss strategies for resiliency and adaptation in the Los Angeles River Master Plan.

- Goals
- Short, Medium, and Long-Term Strategies
- Q&A/Discussion

6. Environmental Graphics (25 Minutes)

Objectives: 1) Present the wayfinding analysis and technical requirements for the environmental graphics update and 2) solicit feedback on proposed environmental graphics.

- Design Guidelines Overall Approach
- Coordination with Other Entities
- Wayfinding Analysis and Precedents
- Technical Requirements
- Logo, Font, and Symbolology
- Environmental Graphics Family
- Q&A/Discussion

7. Public Comment (15 minutes)

- Verbal Comments
 - Speakers to be called in order of speaker cards submittal, with caveat that all are welcome and encouraged to provide input, with or without filling out a card
 - Up to 15 minutes total for the Public Comment item
 - Total time per person will depend on number of speaker cards received
- Comment Cards
- Email Comments Anytime to LARiver@dpw.lacounty.gov



8. Wrap Up (5 Minutes)

- Upcoming Outreach Events
 - Community Event – Summer 2020 (Stay Tuned!)

Input, Questions, Ideas? Contact Genevieve Osmeña at (626) 458-4322 or LARiver@dpw.lacounty.gov



Appendix B

Meeting Presentation

LOS ANGELES RIVER

MASTER PLAN UPDATE

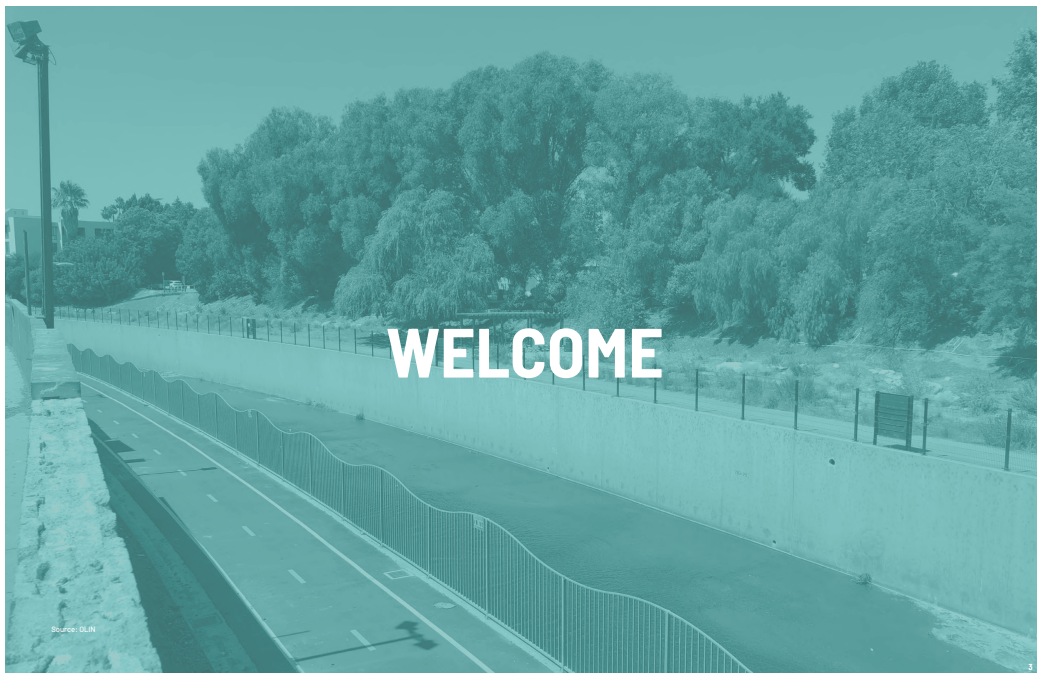
Steering Committee Meeting #8



12 December 2019

1

RIVER STORY



MEETING PURPOSE AND AGENDA

PURPOSE OF TODAY'S MEETING



WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP

MEETING AGENDA

WELCOME & AGENDA OVERVIEW	COMMUNITY ENGAGEMENT UPDATE	LA RIVER MASTER PLAN 2020	WHAT'S IN THE PLAN	RESILIENCE & ADAPTATION	ENVIRONMENTAL GRAPHICS	PUBLIC COMMENT	WRAP UP
<ul style="list-style-type: none"> River Story #8 Welcome and Steering Committee Updates Roundtable Introductions Meeting Purpose, Agenda and Objectives CEQA Update 	<ul style="list-style-type: none"> Additional Meetings Engagement Summary Community Partner Events Discussion/Q&A 	<ul style="list-style-type: none"> Planning Context Research Data-Based Vision & Goal Driven Design Discussion/Q&A 	<ul style="list-style-type: none"> Table of Contents Example Spreads Review Process Discussion/Q&A 	<ul style="list-style-type: none"> Goals Short, Medium, & Long Term Strategies Discussion/Q&A 	<ul style="list-style-type: none"> Design Guidelines Overall Approach Coordination w/ Other Entities Wayfinding Analysis & Precedents Technical Requirements Logo, Font, & Symbolology Environmental Graphics Family Q&A/Discussion 	<ul style="list-style-type: none"> Verbal Comments Comment Cards 	<ul style="list-style-type: none"> Important Upcoming Dates

INPUT, QUESTIONS, IDEAS?
 Contact Genevieve Osmeña at (626) 458-4322
 or LARiver@dpw.lacounty.gov

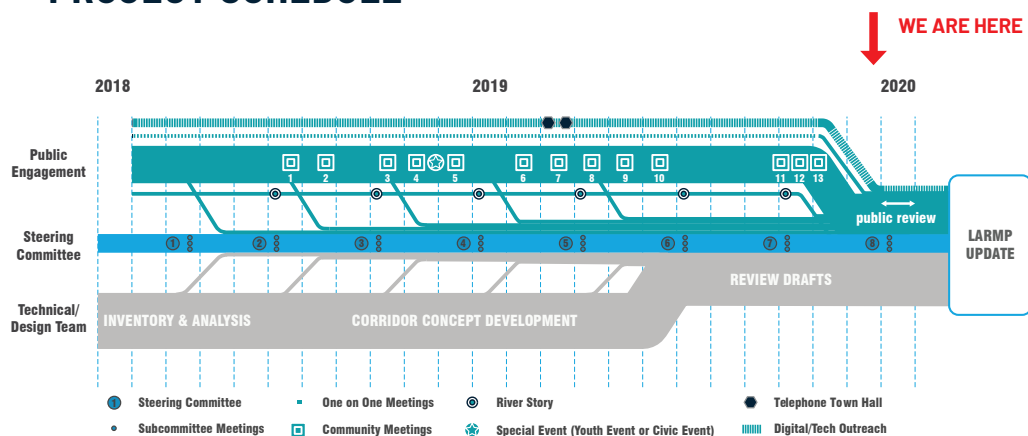
WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP

GUIDES FOR PRODUCTIVE DISCUSSIONS

- Everyone equally contributes.
- Stay concise.
- Listen for understanding.
- Help forge paths for solutions.



PROJECT SCHEDULE



[WELCOME](#)
[ENGAGEMENT](#)
[LARMP 2020](#)
[WHAT'S IN THE PLAN](#)
[RESILIENCE & ADAPTATION](#)
[ENVIRONMENTAL GRAPHICS](#)
[PUBLIC COMMENT](#)
[WRAP UP](#)

Source: USACE, Los Angeles District, E-1517 - NW of 7th St - 9-7-1927. <http://cespl.maps.arcgis.com/apps/MapSeries/index.html?appid=e15894dbf7c5418c96285a0e74039e05>

MEETINGS WITH OTHER ORGANIZATIONS

UPPER LA RIVER & TRIBUTARIES (AB466)

September 26, 2019, November 14, 2019, & Ongoing



- Chapters 1-4 of the plan document are online for public review
- Commenting will be open online for all chapters until 1/20/2020
- Ongoing coordination on sites
- Ongoing coordination to integrate AB466 and LARMP

LA RIVER FLOW STUDY: RWQCB

October 18, 2019

CITY OF LA COUNCIL DISTRICT COORDINATION

Ongoing

NATIVE AMERICAN COMMUNITIES ONGOING COORDINATION

November 5, 2019

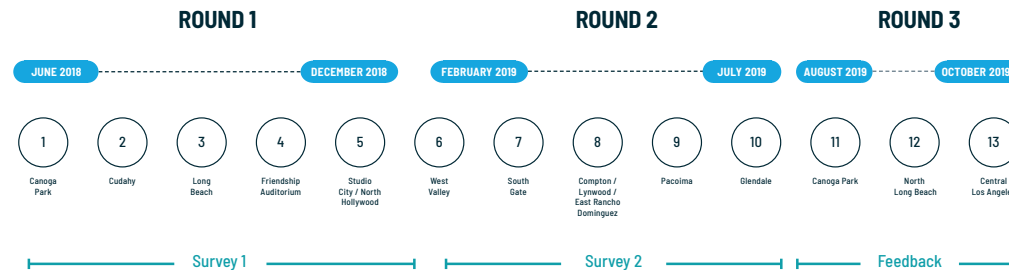


- LARMP team shared and received feedback on Land Acknowledgment
- LARMP team presented updated signage guidelines
- Public Works team introduced plan for department liaisons for tribes
- FTBIM will provide additional feedback by end of November

CITY OF LONG BEACH SUSTAINABLE CITY COMMISSION

December 4, 2019

COMMUNITY ENGAGEMENT MEETINGS SUMMARY



ENGAGEMENT BY THE NUMBERS

1306 Community members attended meetings in Rounds 1-3

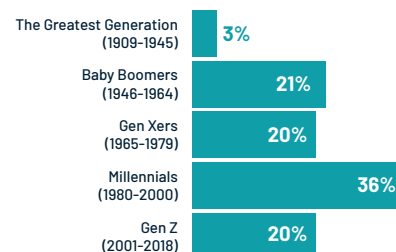
800 Youth Summit Participants

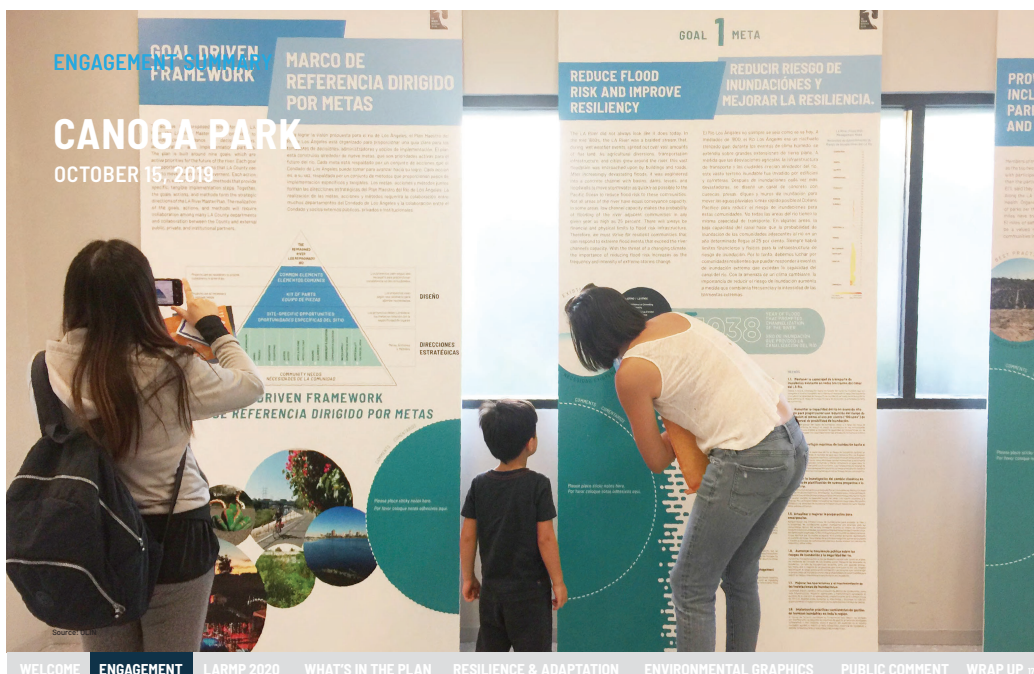
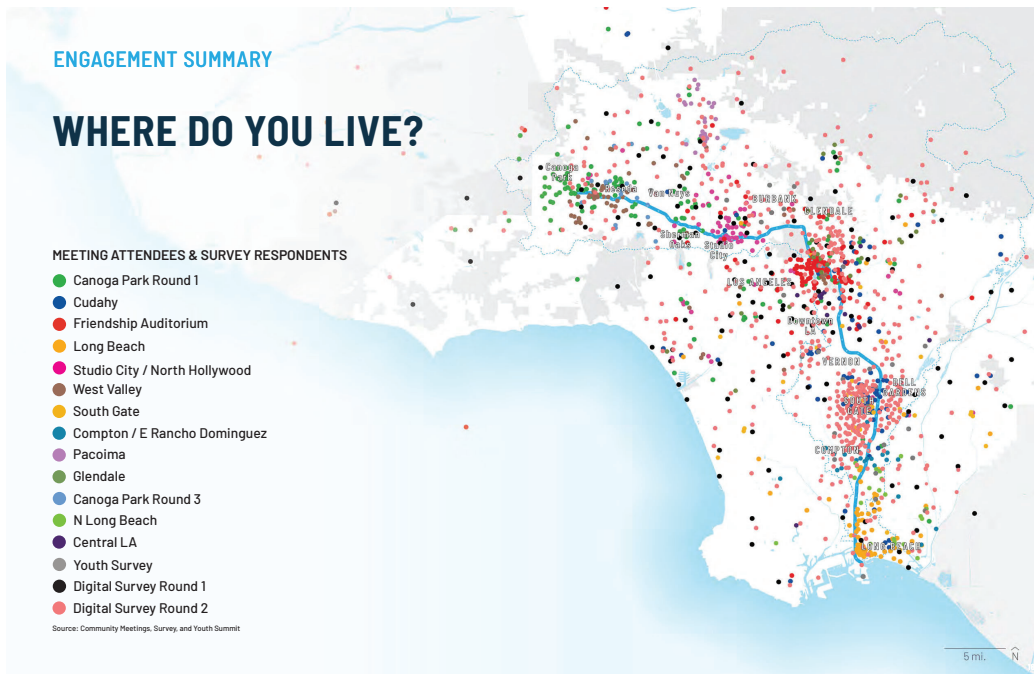
1650 Completed surveys

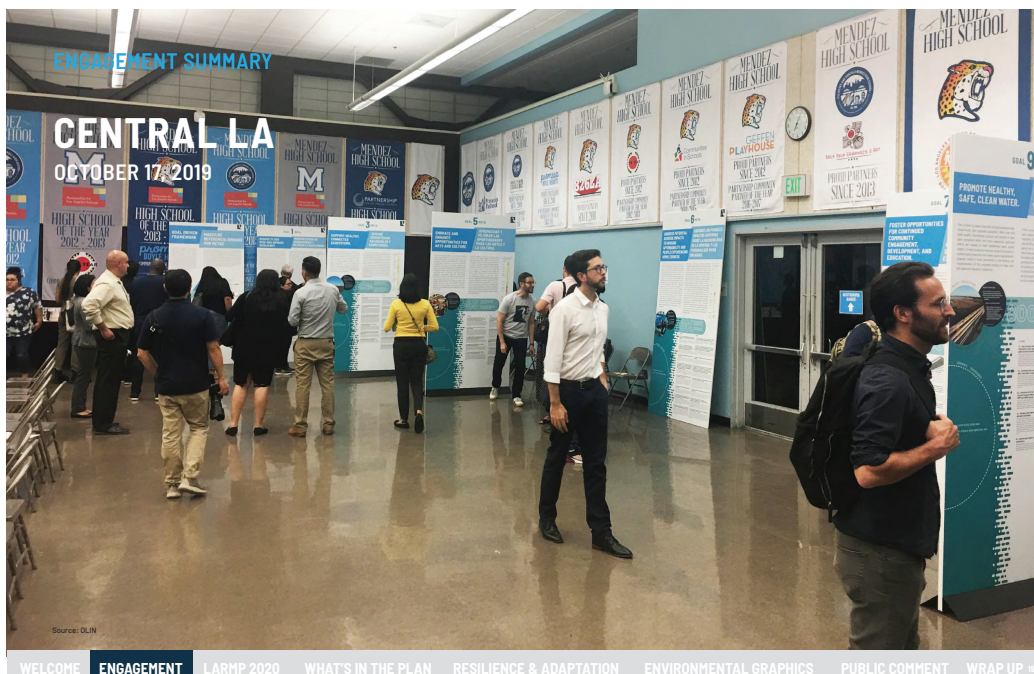
5,592 Telephone Town Hall Participants

981,898 Digital Ad Impressions

GENERATIONS REPRESENTED:

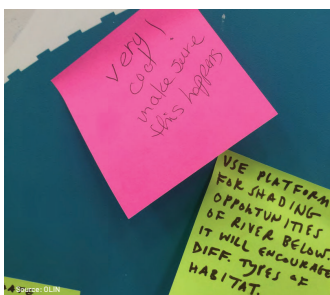






ENGAGEMENT SUMMARY

WHAT WE HEARD: COMMUNITY INPUT



- I love the community-based 'Goal Driven Framework'
- Bathrooms every mile
- Utilize solar and wind power
- Local schools should learn about water quality
- More junior park rangers
- More fruit trees!

ENGAGEMENT SUMMARY

THANK YOU TO OUR COMMUNITY PARTNERS!

- Resource Conservation District of the Santa Monica Mountains
- Pacoima Beautiful
- Fernandeños Tataviam Band of Mission Indians
- Gabrielino-Tongva Tribe
- Anahuak
- From Lot to Spot
- East Yard Communities for Environmental Justice
- Friends of the LA River
- Las Fotos Project
- Weaving the River

EAST YARD COMMUNITIES FOR ENVIRONMENTAL JUSTICE RIVER TALKS

NOVEMBER 21, 2019



Source: Gehry Partners

WELCOME

ENGAGEMENT

LAMP 2020

WHAT'S IN THE PLAN

RESILIENCE & ADAPTATION

ENVIRONMENTAL GRAPHICS

PUBLIC COMMENT

WRAP UP 22



Source: DLN

23

Q & A AND DISCUSSION

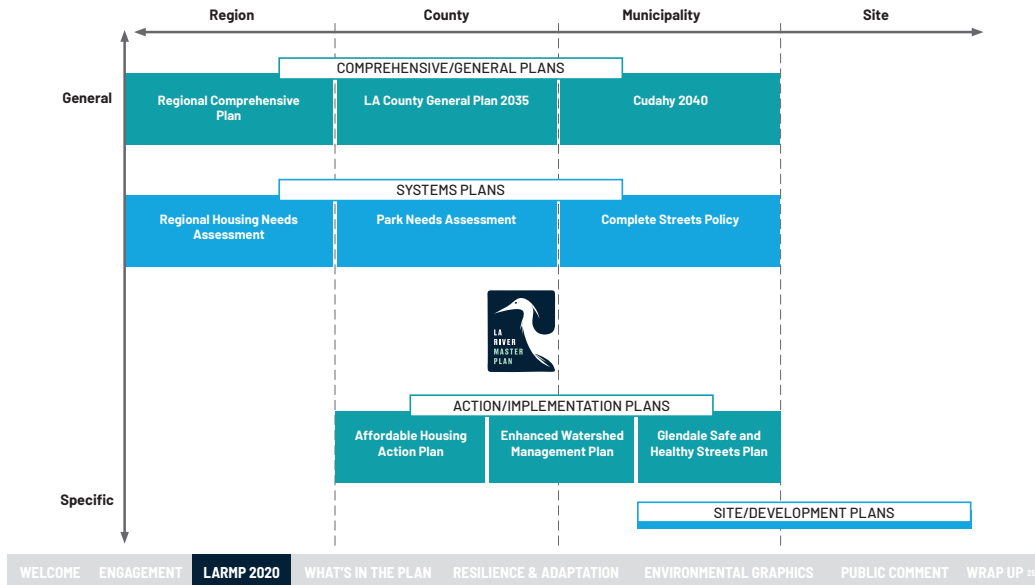


Source: DLN

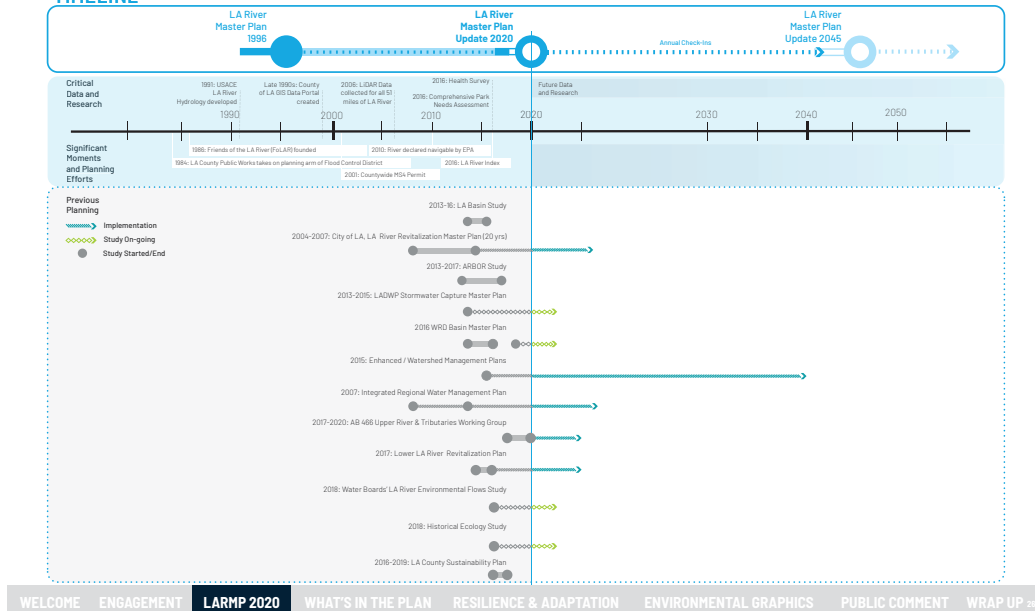
24

LA RIVER MASTER PLAN 2020

PLANNING CONTEXT



TIMELINE



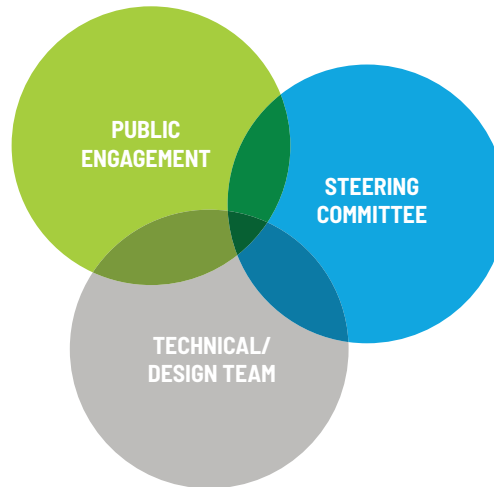
LAMP 2020

RELEVANT PLANNING EFFORTS

140+

NUMBER OF DOCUMENTS REVIEWED AS PART OF LAMP LITERATURE REVIEW

PLAN INPUT



WELCOME ENGAGEMENT **LARMF 2020** WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 23

VISION

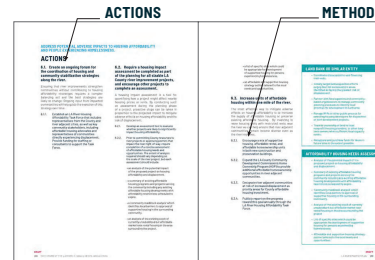
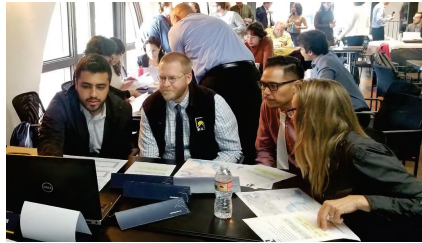
The Reimagined River

The iconic LA River flows through a 51-mile connected public open space that is seamlessly woven together with neighboring communities. It is an integral part of daily life in LA County—a place to enjoy the outdoors and to get across town, a place to appreciate the serene and to bring all people together, a place to celebrate a thriving urban habitat and respect feats of infrastructure, a place to learn from the past and to shape the future.

WELCOME ENGAGEMENT **LARMF 2020** WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 23



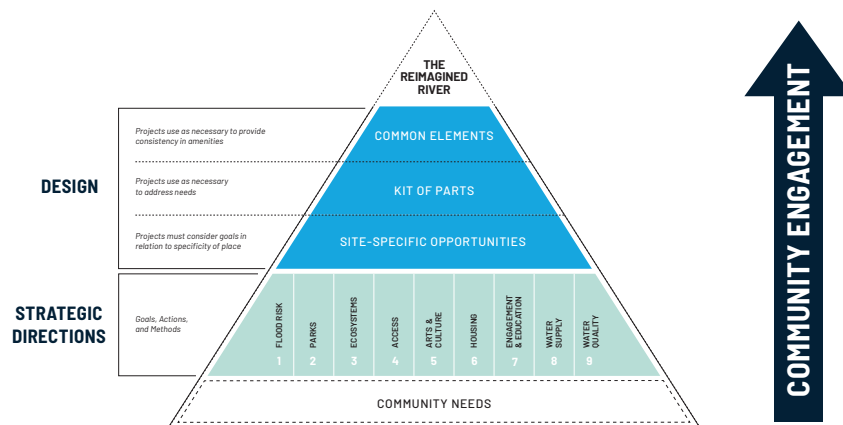
LAMP 2020 GOALS, ACTIONS, METHODS (GAM)



WELCOME ENGAGEMENT **LAMP 2020** WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP

LAMP 2020

PROJECTS SHOULD BUILD UPON THE GOALS USING THE KIT OF PARTS AND COMMON ELEMENTS

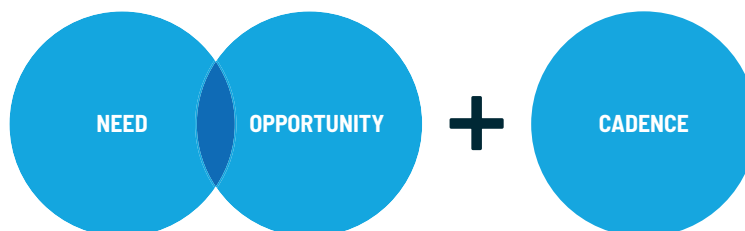


WELCOME ENGAGEMENT **LAMP 2020** WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP

LAMP 2020

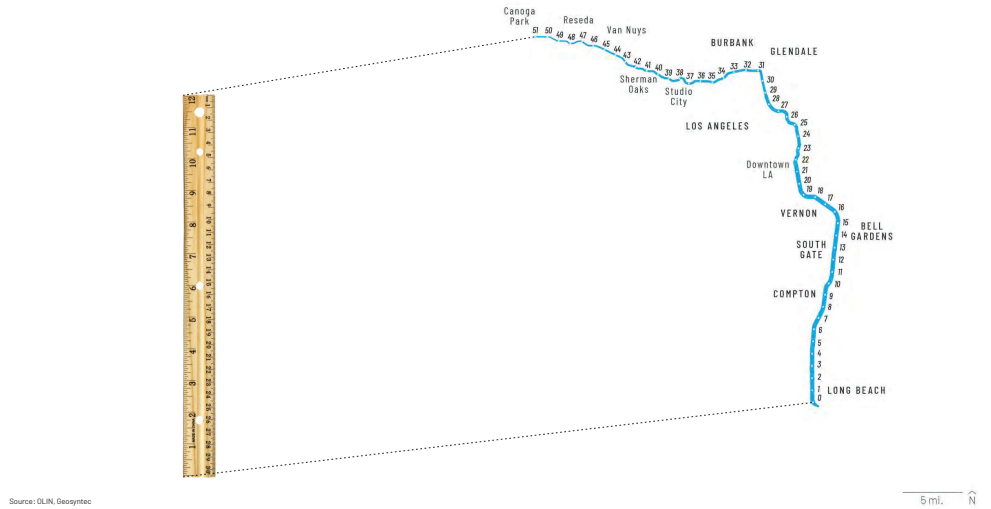
HOW DO WE LOCATE NEW PROJECTS?

Align need, opportunity, and cadence along the LA River Corridor.

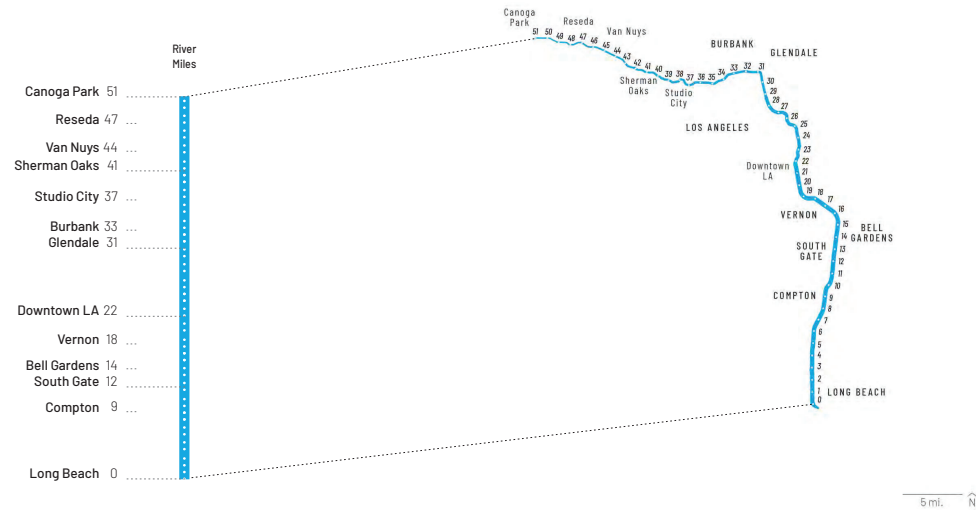


WELCOME ENGAGEMENT **LAMP 2020** WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP

THE LA RIVER RULER



THE LA RIVER RULER



EXAMPLE

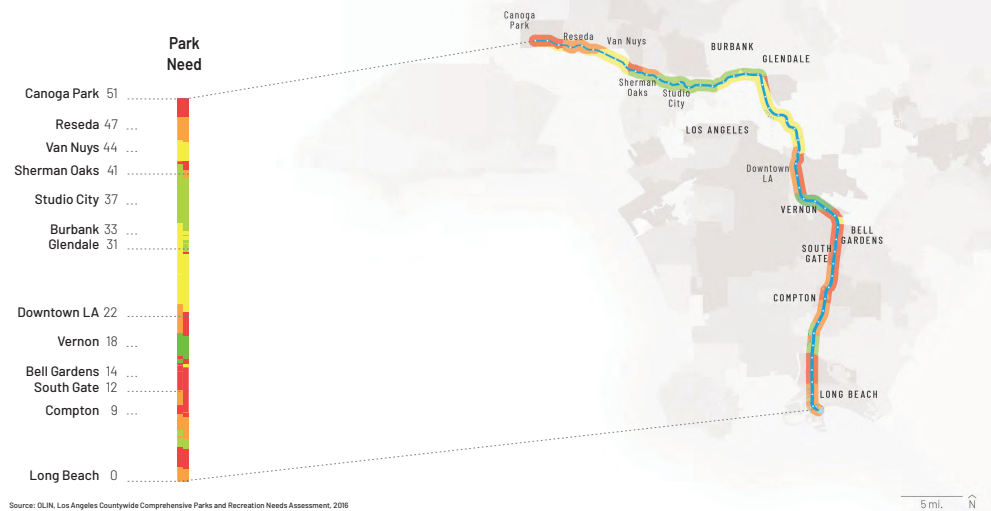
PARK NEED

Park Need Analysis:

- Very High
- High
- Moderate
- Low
- Very Low

Source: Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment, 2016

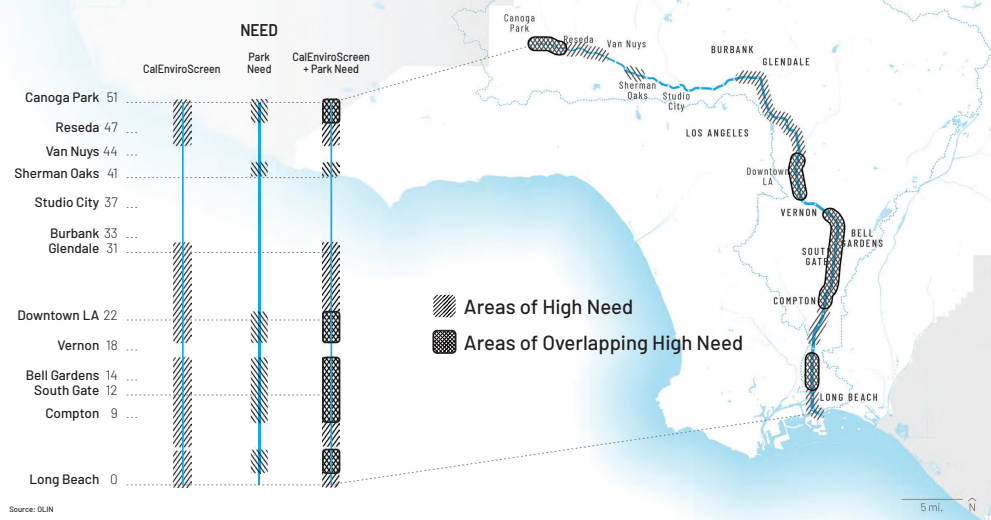
PARK NEED ALONG THE LA RIVER CORRIDOR



IDENTIFY AREAS OF HIGHEST NEED



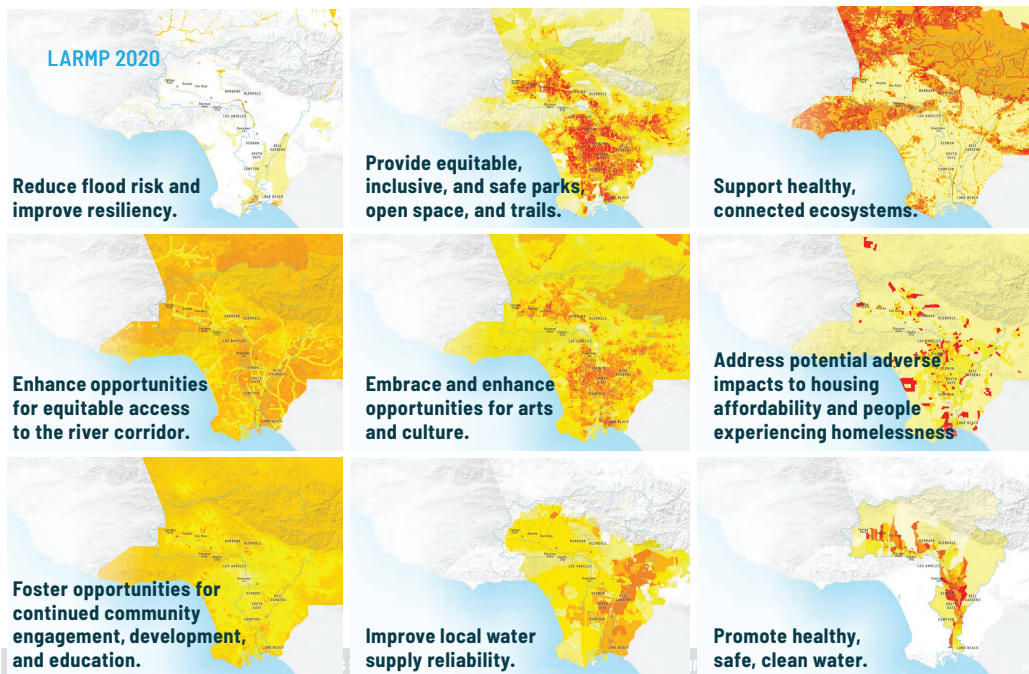
IDENTIFY AREAS OF OVERLAPPING HIGH NEED



LAMP 2020 RIVER RULERS



WELCOME ENGAGEMENT **LAMP 2020** WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 40



LAMP 2020

OPPORTUNITY

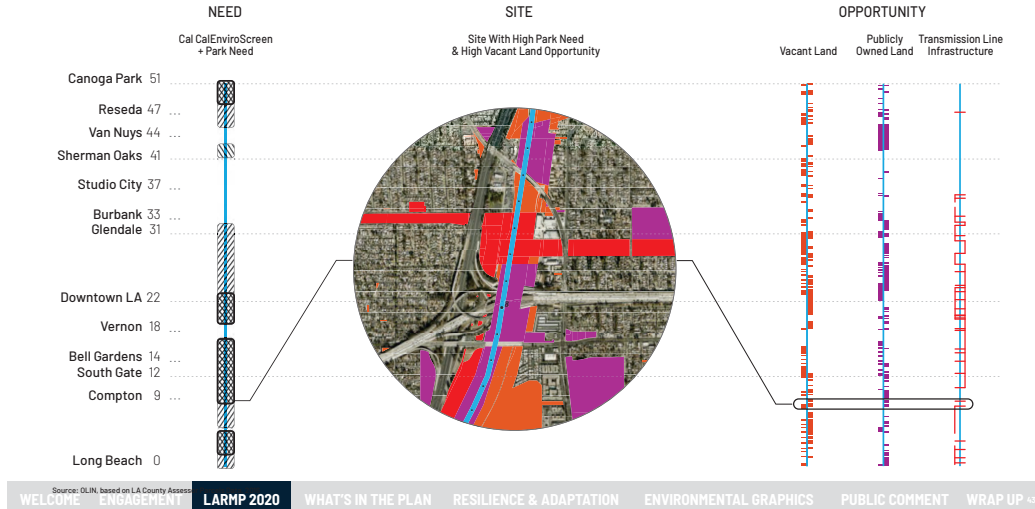
Capitalize on areas that have the greatest capacity to site new projects.

LAND ASSETS:

- LA River Right-of-Way
- LA County Owned Parcels (Priority to Vacant & Underutilized)
- Other Publicly Owned Parcels (Priority to Vacant & Underutilized)
- Other Underutilized Right-of-Way
- Vacant Private Parcels
- Underutilized Private Parcels (Only Applied to Housing Need)
- Pedestrian Street Network

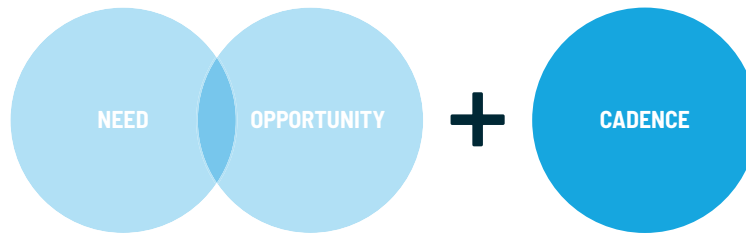
WELCOME ENGAGEMENT **LAMP 2020** WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 40

COMPARE AREAS OF HIGHEST NEED & OPPORTUNITY



HOW DO WE LOCATE NEW PROJECTS?

Align need, opportunity, and cadence along the LA River Corridor.



CADENCE

Confirm projects are distributed along the river equally and vary in scale.

XL

ex: Regional Parks, Water Recharge Area

L

ex: Community Park, Cultural Center

M

ex: Neighborhood Parks, Community Center, Bridges

S

ex: Pocket Parks, Park Nodes, Access Gateways, Restrooms, Pavilions

XS

ex: Pavilions, Lighting, Environmental Graphics, Benches

LARMP 2020

XS, S PROJECTS

43 NEWLY PROPOSED PROJECTS
123 ADDITIONAL PROJECTS FROM PLANS
42 IMPROVED ACCESS POINTS

- ✚ XS, S Proposed Projects
- ✚ XS, S Projects from Plans*
- ✚ Potential Access Points to Upgrade
- Existing Access Points

Sources: OLIN, Gehry Partners, Geosyntec

*Plans referenced include Lower Los Angeles River Revitalization Plan, Los Angeles River Revitalization Master Plan, and Metro LA River Path Project

5 mi. N

LARMP 2020

M, L, XL SITE-BASED PROJECTS

22 PROPOSED PROJECT SITES
54 PLANNED MAJOR PROJECTS

- Proposed Project Sites
- Planned Major Projects

Sources: OLIN, Gehry Partners, Geosyntec

5 mi. N

LARMP 2020

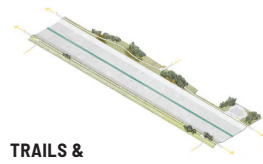
SITES AND NEEDS



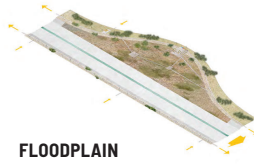
Sources: OLIN, Gehry Partners, Geosyntec

- Potential Project Site
- Planned Major Project
- VERY HIGH NEED
- HIGH NEED
- NEED

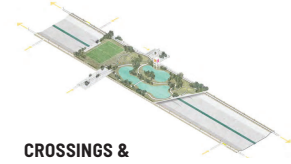
KIT OF PARTS: CATEGORIES



**TRAILS &
ACCESS GATEWAYS**



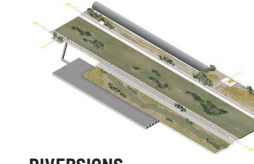
**FLOODPLAIN
RECLAMATION**



**CROSSINGS &
PLATFORMS**



**CHANNEL
MODIFICATIONS**



DIVERSIONS

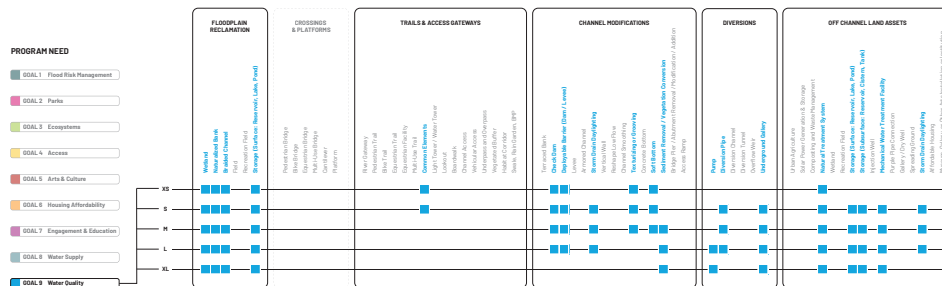


**OFF CHANNEL
LAND ASSETS**

Source: OLIN, Gehry Partners, Geosyntec

WELCOME ENGAGEMENT **LAMP 2020** WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 48

KIT OF PARTS FRAMEWORK

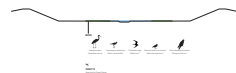


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BIODIVERSITY PROFILES

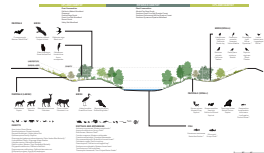
CHANNEL CONDITIONS

CONCRETE CHANNEL



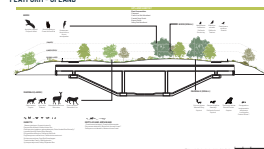
BASIN CONDITIONS

SOFT-BOTTOM BASIN

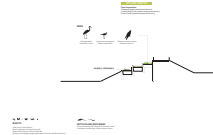


PLATFORM CONDITIONS

PLATFORM - UPLAND

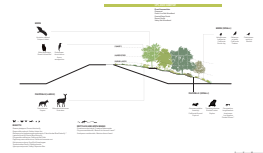


CONCRETE TERRACES

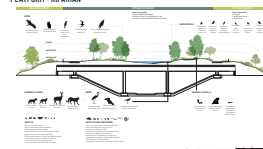


LANDSIDE CONDITIONS

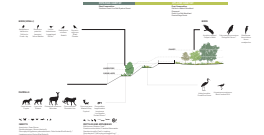
LANDSIDE ROW - UPLAND



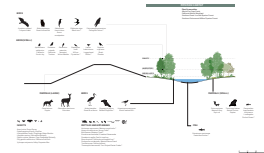
PLATFORM - RIPARIAN



CONCRETE RAMP

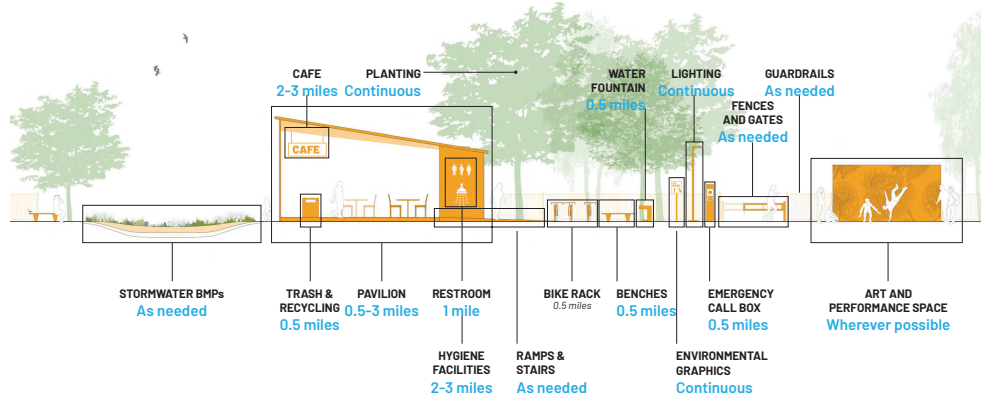


LANDSIDE ROW - RIPARIAN



INVENTORY OF REPEATED COMMON ELEMENTS

Developed Under Design Guidelines



WELCOME ENGAGEMENT **LAMP 2020** WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 62

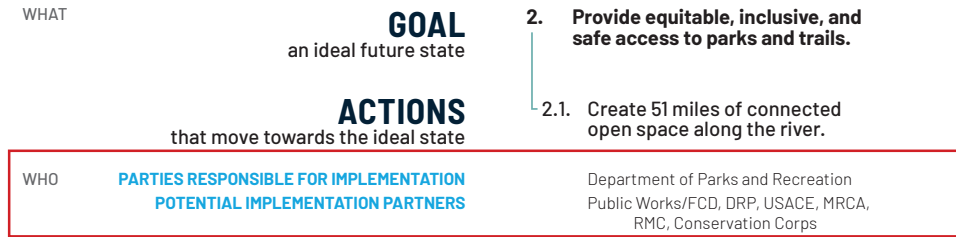
RM 30.9: FERRARO FIELDS SIDE CHANNEL



RM 30.9: FERRARO FIELDS SIDE CHANNEL



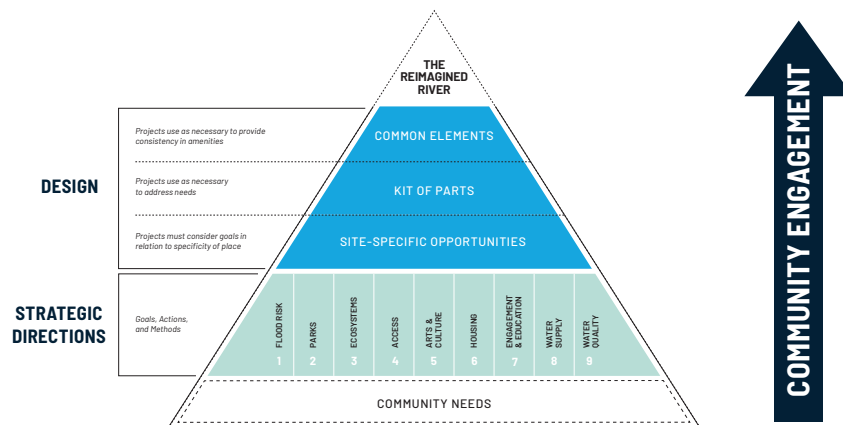
IMPLEMENTATION PLAN HIERARCHY



LARMP 2020

THE REIMAGINED RIVER

Projects should build upon the Goals using the Kit of Parts and Common Elements





WHAT'S IN THE PLAN

WHAT'S IN THE PLAN

STRATEGIC DIRECTIONS

- **Goals, Actions, Methods**
- **Implementation Responsibility and Partners**
- **Funding Sources**

DESIGN FRAMEWORK

- **Needs Analysis**
- **Sites**
- **Kit of Parts and Common Elements**
(possible intervention strategies)
- **System Recommendations**
- **Design Examples**

WHAT'S IN THE PLAN

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LARMP

SECTION I:
INTRODUCTION

- **Executive Summary**
- **Master Plan 2020**

SECTION II:
CONTEXT

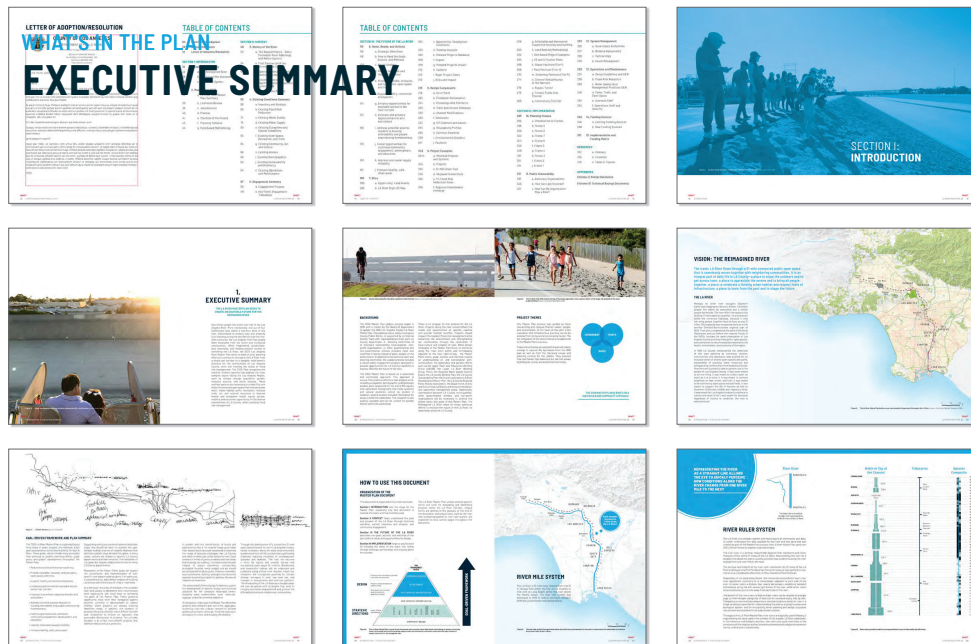
- **History of the River**
- **Existing Conditions Summary**

SECTION III: FUTURE
OF THE LA RIVER

- **Goals and Needs**
- **Sites**
- **Design**

SECTION IV:
IMPLEMENTATION

- **Public Stewardship**
- **System Management**
- **Operations and Maintenance**
- **Funding Sources**
- **Implementation and Funding Matrix**



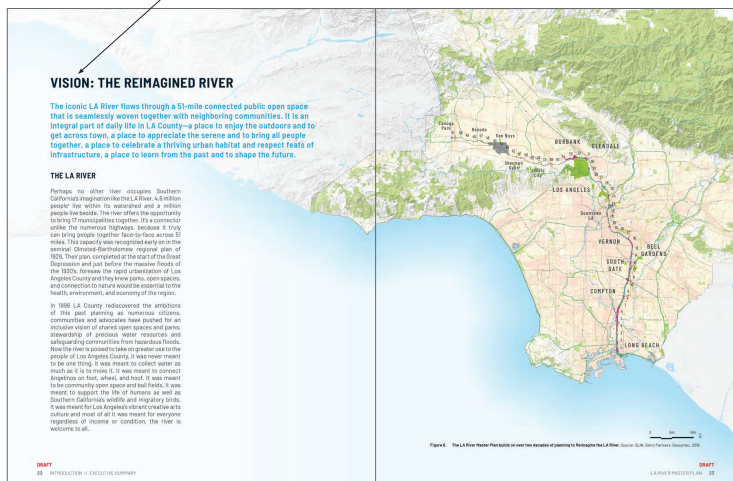
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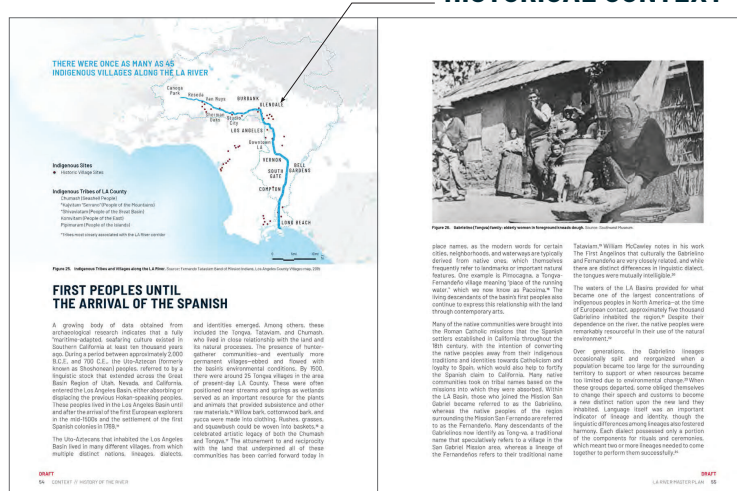
VISION STATEMENT



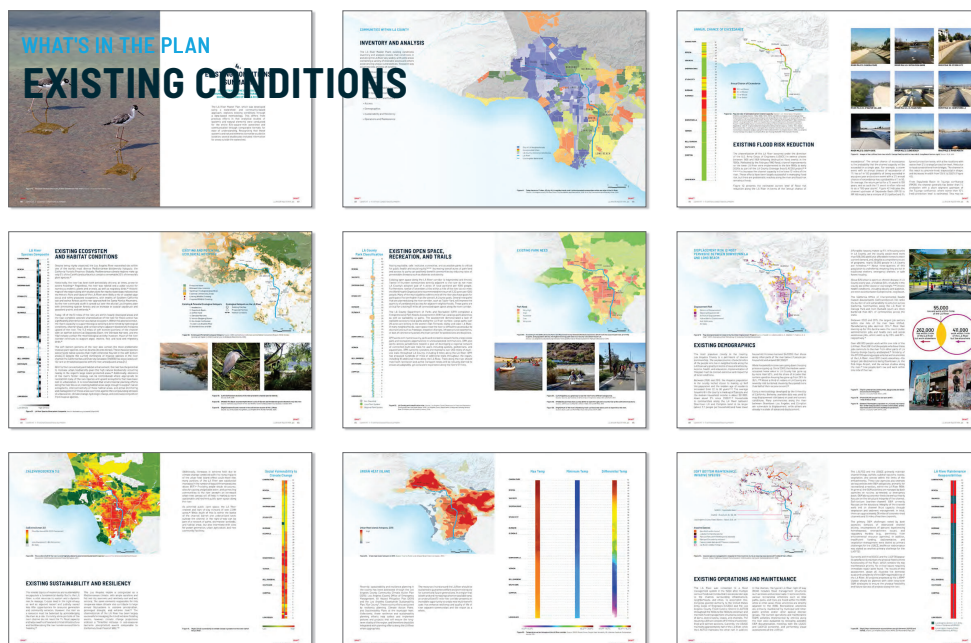


WHAT'S IN THE PLAN

HISTORICAL CONTEXT



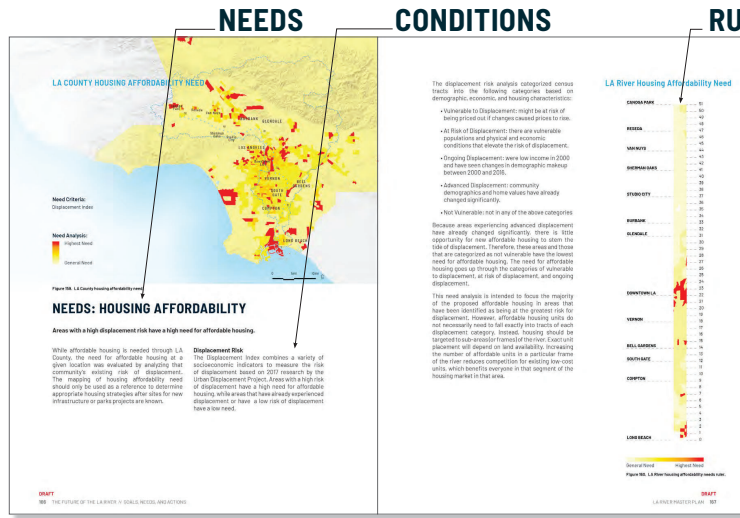
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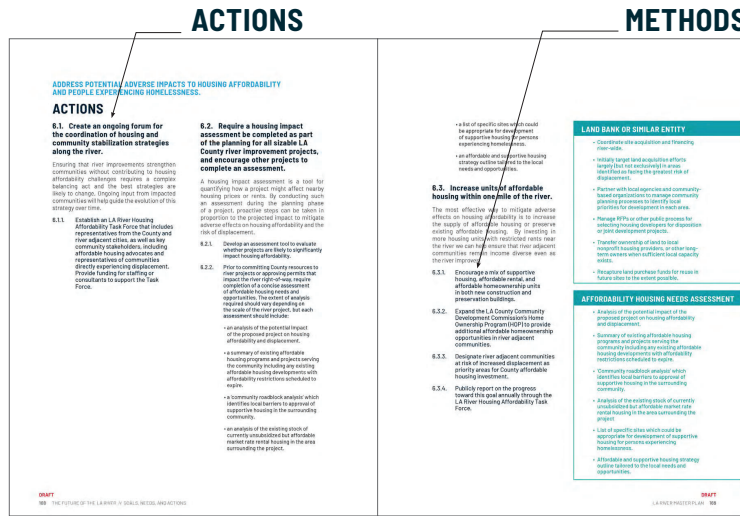


EXISTING
CONDITIONS

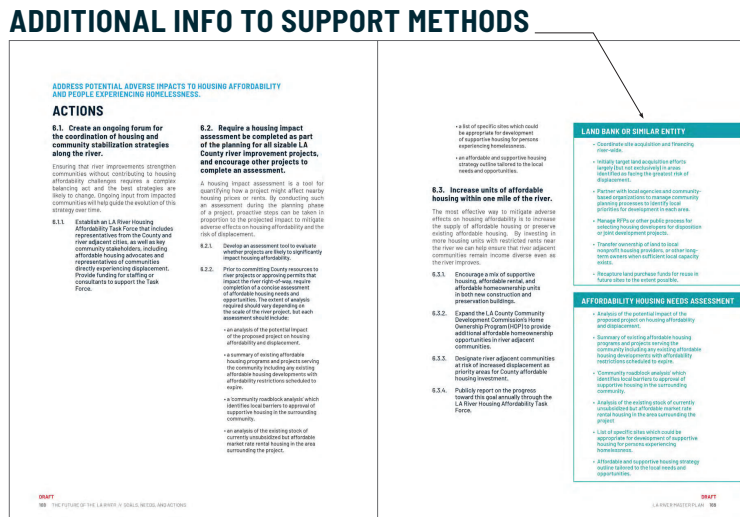
RULER



WHAT'S IN THE PLAN



WHAT'S IN THE PLAN



WHAT'S IN THE PLAN

SITES

3 SITES

THE PLAN IDENTIFIES THREE SITES FOR THE LA RIVER RIBBON OF-BAY PROJECT. THESE SITES ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

OPPORTUNITY LAND ASSETS

THE PLAN IDENTIFIES LAND ASSETS THAT ARE AVAILABLE FOR DEVELOPMENT. THESE ASSETS ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

LA RIVER RIBBON OF-BAY

THE PLAN IDENTIFIES THE LA RIVER RIBBON OF-BAY PROJECT. THIS PROJECT IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

DESKTOP ANALYSIS

THE PLAN IDENTIFIES THE DESKTOP ANALYSIS. THIS ANALYSIS IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

PLANNED PROJECTS DATABASE

THE PLAN IDENTIFIES THE PLANNED PROJECTS DATABASE. THIS DATABASE IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

SITES

THE PLAN IDENTIFIES THE SITES. THESE SITES ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

IMPACT

THE PLAN IDENTIFIES THE IMPACT. THIS IMPACT IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

SITES AND LOCAL IMPACT

THE PLAN IDENTIFIES THE SITES AND LOCAL IMPACT. THIS IMPACT IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

MAJOR PROJECT ZONES

THE PLAN IDENTIFIES THE MAJOR PROJECT ZONES. THESE ZONES ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

WHAT'S IN THE PLAN

DESIGN

8 DESIGN COMPONENTS

THE PLAN IDENTIFIES EIGHT DESIGN COMPONENTS. THESE COMPONENTS ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

TRAILS AND ACCESS GATEWAYS

THE PLAN IDENTIFIES TRAILS AND ACCESS GATEWAYS. THESE TRAILS AND GATEWAYS ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

SIT OF PARTS: DIVERSITY PROFILES

THE PLAN IDENTIFIES THE SIT OF PARTS: DIVERSITY PROFILES. THESE PROFILES ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

COMMON ELEMENTS

THE PLAN IDENTIFIES COMMON ELEMENTS. THESE ELEMENTS ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

REGIONAL CONNECTIVITY

THE PLAN IDENTIFIES REGIONAL CONNECTIVITY. THIS CONNECTIVITY IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

ATTRITABLE AND FUNDAMENTAL SUPPORTIVE

THE PLAN IDENTIFIES ATTRITABLE AND FUNDAMENTAL SUPPORTIVE. THESE SUPPORTIVE ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

CONNECTIVITY CORRIDOR

THE PLAN IDENTIFIES THE CONNECTIVITY CORRIDOR. THIS CORRIDOR IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

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WHAT'S IN THE PLAN

IMPLEMENTATION

IMPLEMENTATION

THE PLAN IDENTIFIES IMPLEMENTATION. THIS IMPLEMENTATION IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

ADVOCACY ORGANIZATIONS

THE PLAN IDENTIFIES ADVOCACY ORGANIZATIONS. THESE ORGANIZATIONS ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

NEW CAN GET INVOLVED?

THE PLAN IDENTIFIES NEW CAN GET INVOLVED?. THIS INVOLVEMENT IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

FUNDING SOURCES

THE PLAN IDENTIFIES FUNDING SOURCES. THESE SOURCES ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

EXISTING FUNDING SOURCES

THE PLAN IDENTIFIES EXISTING FUNDING SOURCES. THESE SOURCES ARE LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

IMPLEMENTATION AND FUNDING MATRIX

THE PLAN IDENTIFIES IMPLEMENTATION AND FUNDING MATRIX. THIS MATRIX IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

HOW TO READ THE IMPLEMENTATION AND FUNDING MATRIX

THE PLAN IDENTIFIES HOW TO READ THE IMPLEMENTATION AND FUNDING MATRIX. THIS MATRIX IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

IMPLEMENTATION AND FUNDING MATRIX

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IMPLEMENTATION AND FUNDING MATRIX

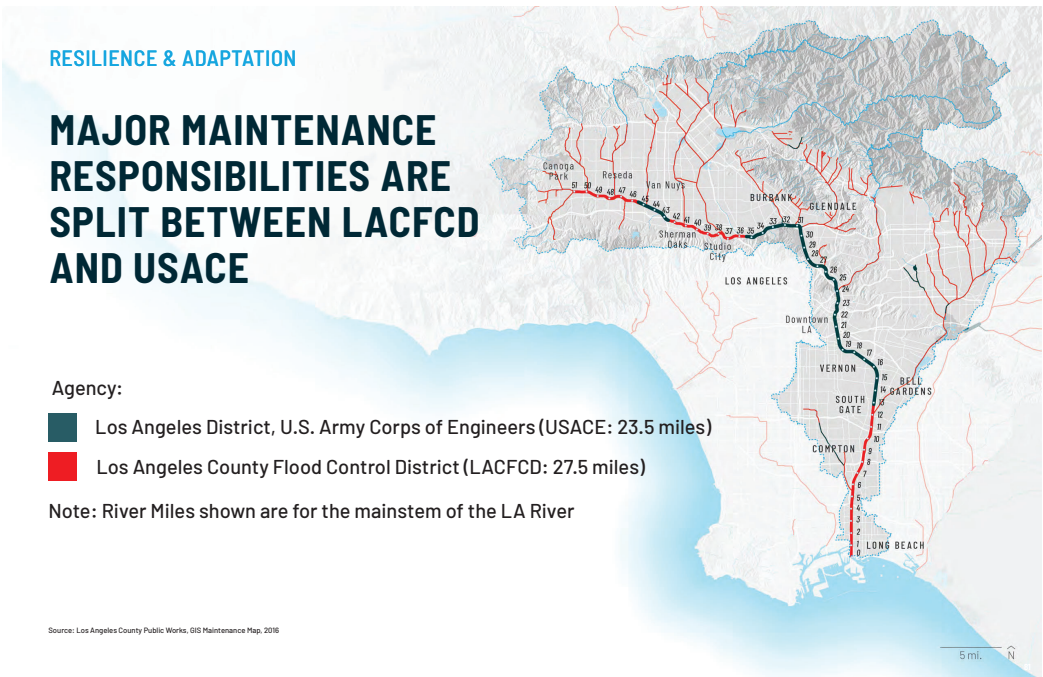
THE PLAN IDENTIFIES IMPLEMENTATION AND FUNDING MATRIX. THIS MATRIX IS LOCATED ALONG THE LA RIVER CORRIDOR, FROM THE LA RIVER CORRIDOR TO THE LA RIVER CORRIDOR.

FUNDING

WELCOME ENGAGEMENT LARMP 2020 **WHAT'S IN THE PLAN** RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 75

- **Additional River Rulers**
- **Hydrology and Hydraulics Analysis**
- **Needs Mapping and Weighting**
- **Project Database / Library of Sources and Data Catalog**

WELCOME ENGAGEMENT LARMP 2020 **WHAT'S IN THE PLAN** RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 2020



RESILIENCE & ADAPTATION

TODAY THERE ARE 17 CITIES, 23 CITY OF LA NEIGHBORHOODS, AND 4 UNINCORPORATED COMMUNITIES WITHIN ONE MILE OF THE LA RIVER

- City of LA Neighborhoods
- Incorporated Cities
- LA County Unincorporated Areas
- LA River
- Los Angeles Watershed

Source: Los Angeles county GIS Data Portal, City Boundaries and Annexations, 2016 & LA City Communities and Planning Areas, 2014.

RESILIENCE & ADAPTATION

HISTORICAL WETLAND ECOLOGY (1870)

- Historical Wetlands
- Current Wetlands
- Historical and Current Wetlands
- Historical Floodplain

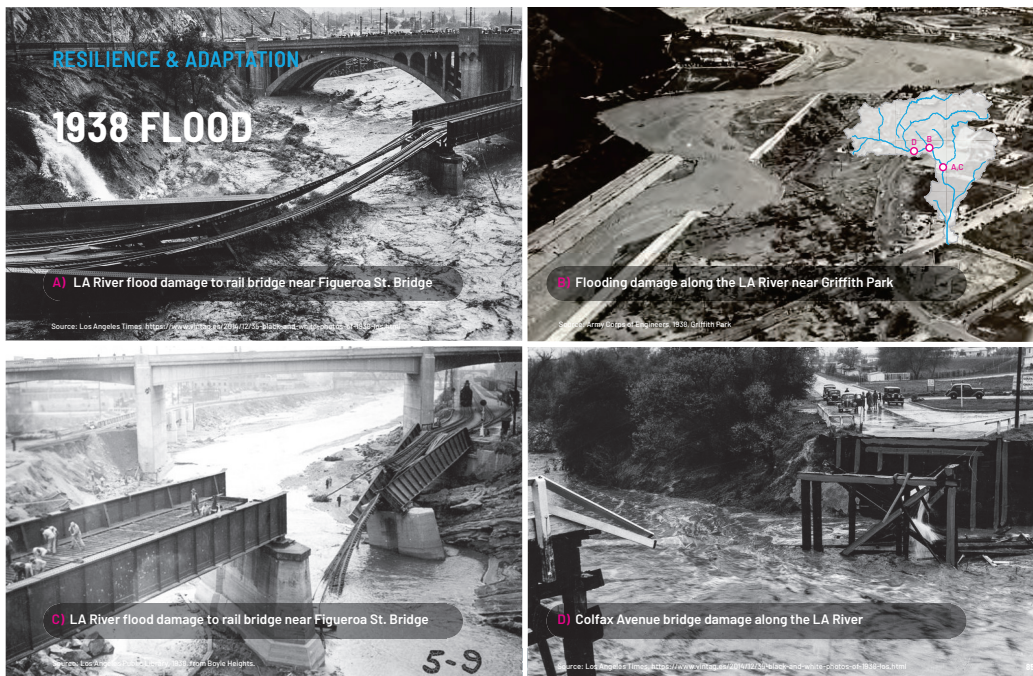
Source: Adapted from: Charles Ralston, 1998. Regional restoration goals for wetland resources in the Greater Los Angeles Drainage Area: A landscape-level comparison of recent historic and current conditions using Geographical Information Systems. Dissertation, UCLA

RESILIENCE & ADAPTATION

HISTORICAL FLOODING AND RIVER PATHS

- Areas Subject to Inundation
- Historical River Paths

Source: Based on Blake Oumprecht, "The Los Angeles River: Its Life, Death, and Possible Rebirth," 2009, California State University, Northridge Environmental Geography Lab, Historical Ecology, 2008, Geosyntec, OLIN



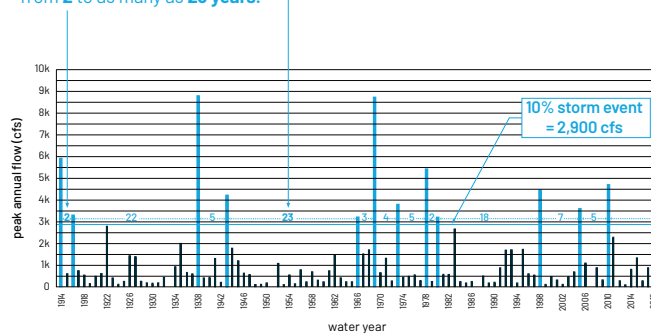
RESILIENCE & ADAPTATION

STORM PROBABILITY

Defining the 1% storm:

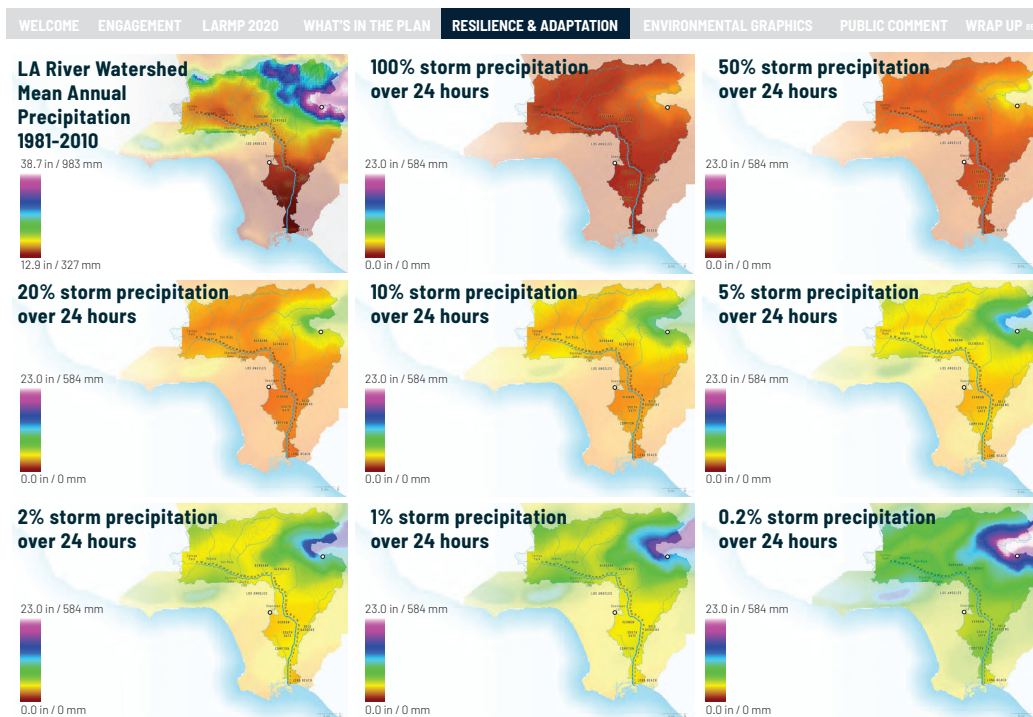
- A storm that has a 1% probability of happening in any given year.
- A storm that happens once every 100 years (i.e., a "100-year" storm) on average.
- 1% (i.e., 100-year) events can happen in back-to-back years or even the same year.
- Over 30 years (i.e., the length of standard home mortgage), the probability of having a 1% event is 25%.
- Climate change is likely to increase the frequency of extreme events.

The 10% storm occurs on average once every 10 years. However, the time between 10% storm events varies and in this example ranges from 2 to as many as 23 years.



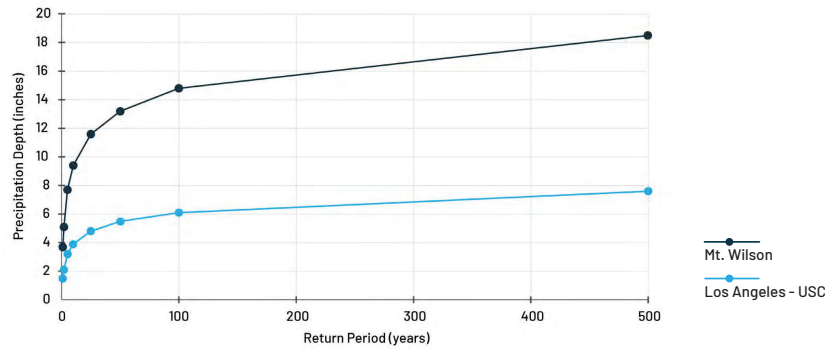
Incidence of the 10% storm event for the Arroyo Seco near Pasadena, CA, (USGS 11098000)

Source: Geosyntec



STORM RETURN PERIODS

24-hour Precipitation Depth versus Return Period

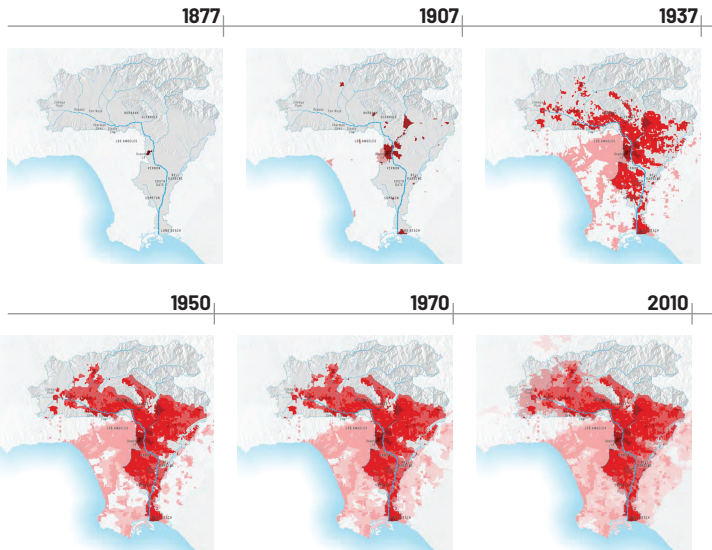


Source: Los Angeles County GIS Data Portal, Rainfall Intensity, 2011

NEARLY ALL OF THE LA RIVER CORRIDOR IS DEVELOPED

Historical Urban Footprint

- 1877
- 1907
- 1937
- 1950
- 1970
- 2010



EXTREME EVENTS HAPPEN

SUPERSTORM SANDY

Source: Jolliffe, R., Flickr User, 2012, <https://flic.kr/p/4pGmB>

HURRICANE HARVEY

Source: Chandler, J., Flickr User, 2017, <https://flic.kr/p/Y4872D>

Laboratory

RESILIENCE & ADAPTATION

ATMOSPHERIC RIVERS

Source: Wikipedia, 2010. https://en.wikipedia.org/wiki/Atmospheric_river#/media/File:Atmospheric_river_SOES_WV_20070220_000.jpg

Los Angeles Times

MONDAY, FEBRUARY 16, 2015

Plan for post-grip-in-storm

CHILDREN play at the Whittier Narrows Recreation Area, Offside with the U.S. Army Corps of Engineers say that the 65-year-old Whittier Narrows Dam would fail in the event of a very large, very rare storm.

This could leave us all wet

California's 'other big one' — a mega-storm of biblical scope — could swamp cities in the L.A. Basin, experts say

Whittier Narrows Dam

Scientists said it could "blow the top off the dam" and they say a mega-storm could cause the dam to fail, leaving a massive reservoir of water pouring down the Los Angeles River. Although it might sound absurd to those who still recall the great flooding of 1941, the U.S. Army Corps of Engineers says the dam could be destroyed by a storm of biblical scope. The Corps' engineers say that California may be due for one of the most powerful storms in its history.

The new megastorm... which some say is overdue... all the more powerful because of the intense rainfall... would last for weeks and would cause more than 1.5 trillion gallons of water to pour down the Los Angeles River. The Corps' engineers say that California may be due for one of the most powerful storms in its history.

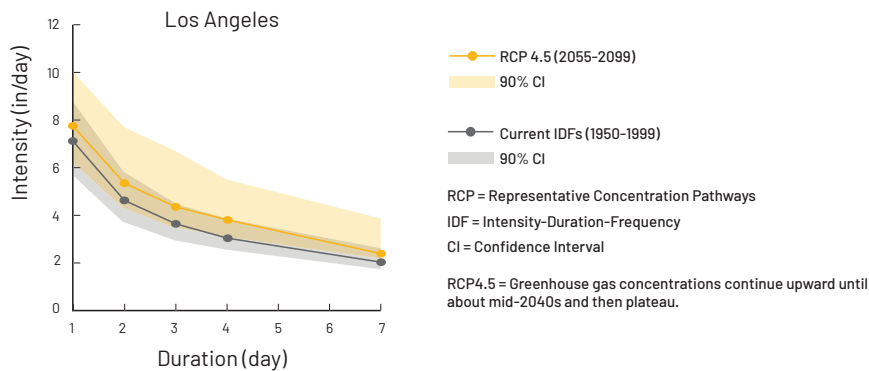
Source: Sahagun, L.A. Times, February 16, 2015. <https://www.latimes.com/local/california/la-me-10-mega-storm-dam-failure-20150216-story>

WELCOME
ENGAGEMENT
LARMP 2020
WHAT'S IN THE PLAN
RESILIENCE & ADAPTATION
ENVIRONMENTAL GRAPHICS
PUBLIC COMMENT
WRAP UP #

RESILIENCE & ADAPTATION

CLIMATE CHANGE

Current rainfall design frequencies may underestimate future climate conditions.



Source: Modified from AghaKouchak, Amir, Eliseo Ragnio, Charlotte Love, and Hamed Moftakharli. (University of California, Irvine). 2018. Projected changes in California's precipitation intensity-duration-frequency curves. California's Fourth Climate Change Assessment. California Energy Commission. Publication Number: CCA4-CEC-2018-005. Geosyntec, GLN

RESILIENCE & ADAPTATION

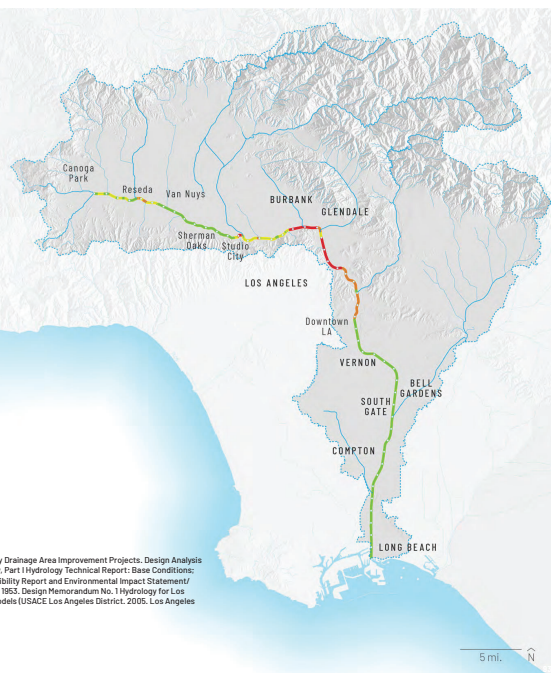
CHANNEL CAPACITY¹

Annual Chance of Exceedance

- 10% or Worse
- 2% or Worse
- 1% or Worse
- 1% or Better

Footnotes:
 1. U.S. Army Corps of Engineers (USACE) Los Angeles District. 1966a, 1966b, 1967a, 1967b, and 1969. Los Angeles County Drainage Area Improvement Projects. Design Analysis Report and Design Memorandum. USACE Los Angeles District. 1961. Los Angeles County Drainage Area (LACDA). Review. Part 1 Hydrology Technical Report: Base Conditions. USACE. Los Angeles District. 2005. Los Angeles River Ecosystem Restoration Integrated Feasibility Report, Final Feasibility Report and Environmental Impact Statement/Environmental Impact Report, Appendix E, Table 17: Original Design Discharge and Existing Channel Capacity. USACE. 1963. Design Memorandum No. 1 Hydrology for Los Angeles River Channel, Overmouth Avenue to Sepulveda Flood Control Basin. Geosyntec analysis using HEC-RAS models (USACE Los Angeles District. 2005. Los Angeles County Drainage Area Upper Los Angeles River and Tujunga Wash HEC-RAS Hydraulic Models).

Source: Geosyntec, GLN



FLOOD HAZARDS

- 1% Annual Chance of Exceedence Flood Plain (FEMA & USACE)
- 0.2% Annual Chance of Exceedence Flood Plain (FEMA & USACE)
- Tsunami Inundation Area (CalOES)
- 1.41 meter Sea Level Rise with 100 Year Storm Event (Cal-adapt)

Source: Los Angeles County GIS Data Portal, Flood Zones; The Flood Insurance Study (FIS) for Los Angeles County was issued by FEMA in 2008 and revised in 2018 & USACE, Floodplain Management Services Special Study Los Angeles River Floodplain Analysis, October 2016. Mapping limited to area from Barham Boulevard to First Street; & State of California, 2009, Tsunami Inundation Map for Emergency Planning, produced by California Emergency Management Agency, California Geological Survey, and University of Southern California - Tsunami Research Center Cal-Adapt, Sea Level Rise Tool, 1.41 meters Sea Level Rise Scenario, 2018, http://keystone.gisc.berkeley.edu/cc_gas_study_layers/South_coast/

5 mi.

CRITICAL FACILITIES

A structure or other improvement that, because of its function, size, service area, or uniqueness, has the potential to cause serious bodily harm, extensive property damage, or disruption of vital socioeconomic activities if it is destroyed or damaged or if its functionality is impaired.

Critical facility types based on:

Los Angeles County Comprehensive Floodplain Management Plan, September 2016

- Disaster and Emergency Operations Center
- Police and Fire Stations
- Medical Facilities
- Schools
- Hazardous Facilities

Source: Los Angeles County GIS Data Portal, Points of Interest, 2016 & EPA, FRG Geospatial Data, 2018

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CRITICAL INFRASTRUCTURE

A structure or other improvement that, because of its function, size, service area, or uniqueness, has the potential to cause serious bodily harm, extensive property damage, or disruption of vital socioeconomic activities if it is destroyed or damaged or if its functionality is impaired.

Critical infrastructure types based on:

Los Angeles County Comprehensive Floodplain Management Plan, September 2016

- Evacuation Routes
- Transition Lines
- Passenger Rail
- Wastewater Treatment Plants
- Electric Power Facility
- Oil and Gas Facilities
- Public Transit Facilities
- Bridges
- Freeway Exits

Source: Los Angeles County GIS Data Portal, Points of Interest, 2016 & Los Angeles County GIS Data Portal, Disaster Routes, 1998 & California Department of Transportation, California Rail Network, 2013 & EPA, FRG Geospatial Data, 2018 & State of California Energy Commission, California Electric Transmission Line, 2018 & California Department of Conservation, All Wells, 2018

96

FLOOD HAZARDS & CRITICAL FACILITIES & INFRASTRUCTURE

- Disaster and Emergency Operations Centers
- Police and Fire Stations
- Medical Facilities
- Schools
- Hazardous Facilities
- 100 Year Floodplain (FEMA & USACE)
- 500 Year Floodplain (FEMA & USACE)
- Tsunami Inundation Area (CalOES)
- 1.41 meter Sea Level Rise with 100 Year Storm Event (Cal-adapt)
- Evacuation Routes
- Transmission Lines
- Passenger Rail
- Wastewater Treatment Plants
- Oil and Gas Facilities
- Electric Power Facilities
- Transit Facilities
- Bridges
- Freeway Exits

Source: Los Angeles County GIS Data Portal, Points of Interest, 2016 & Los Angeles County GIS Data Portal, Disaster Routes, 1998 & California Department of Transportation, California Rail Network, 2013 & EPA, FRG Geospatial Data, 2016 & State of California Energy Commission, California Electric Transmission Line, 2016 & California Department of Conservation, All Wells, 2016 & Los Angeles County GIS Data Portal, Flood Zones: The Flood Insurance Study (FIS) for Los Angeles County was issued by FEMA in 2009 and revised in 2016 & USACE, Floodplain Management Services Special Study Los Angeles River Floodplain Analysis, October 2016; Mapping limited to area from Barham Boulevard to First Street; & State of California, 2009, Tsunami Inundation Map for Emergency Planning, produced by California Emergency Management Agency, California Geological Survey, and University of Southern California - Tsunami Research Center Cal-Adapt, Sea Level Rise Tool, 1.41 meters Sea Level Rise Scenario, 2016, <http://sealevelrise.giscenter.usc.edu/cal-adapt-study-layer/south-coast/>

SYSTEM: 1% FLOOD RISK REDUCTION AREAS¹

Short-Term Priorities:

1. Improve channel areas under 1% flood capacity.
2. Improve resiliency of critical infrastructure and facilities in the 1% and 0.2% floodplains by developing and implementing specific flood risk reduction strategies.

Long-Term Policies:

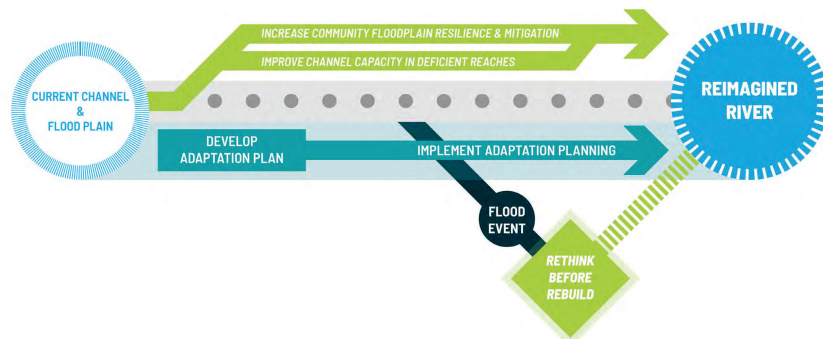
1. Improve community and system resilience through strategic adaptation planning

- 100 Year Flood Plain (FEMA & USACE)¹
- 500 Year Flood Plain (FEMA & USACE)¹
- Areas that do not meet 1% flood capacity needs¹

Footnotes:
1. U.S. Army Corps of Engineers (USACE) Los Angeles District, 1986a, 1986b, 1997a, 1997b, and 1999, Los Angeles County Drainage Area Improvement Projects, Design Analysis Report and Design Memoranda, USACE Los Angeles District, 1991, Los Angeles County Drainage Area (LACDA) Review, Part I Hydrology Technical Report: Base Conditions; USACE, Los Angeles District, 2015, Los Angeles River Ecosystem Restoration Integrated Feasibility Report: FIDRA Technical Report and Environmental Impact Statement/ Environmental Impact Report, Appendix E, Table 17: Original Design Discharge and Existing Channel Capacity; USACE, 1953, Design Memorandum No. 1 Hydrology for Los Angeles River Channel, Owensmouth Avenue to Sepulveda Flood Control Basin; Geosyntec analysis using HEC-RAS models (USACE Los Angeles District, 2005, Los Angeles County Drainage Area Upper Los Angeles River and Tujunga Wash HEC-RAS Hydraulic Models).

Source: Geosyntec, OUN

RESILIENCE & ADAPTATION STRATEGY



RETHINK BEFORE REBUILD

POST-DISASTER RECOVERY FRAMEWORK



WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN **RESILIENCE & ADAPTATION** ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP

MITIGATION SAVES MONEY

National Benefit-Cost Ratio Per Peril <small>*BCR numbers in this study have been rounded</small>	Federally Funded	Beyond Code Requirements
Overall Hazard Benefit-Cost Ratio	6:1	4:1
Riverine Flood	7:1	5:1

Footnotes:
1. Benefit-cost ratio for riverine flooding based on modeling of the 1% annual chance flood.
Source: Hazhazard Mitigation Council (2017) Natural Hazard Mitigation Saves 2017 Interim Report: An Independent Study.

WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN **RESILIENCE & ADAPTATION** ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP



Source: Joe Mabel (2001) Wikipedia. https://commons.wikimedia.org/wiki/File:Los_Angeles_River_valley_01.jpg



ENVIRONMENTAL GRAPHICS

APPENDICES

DESIGN GUIDELINES

- Plant Species
- Soils Guidelines
- Trail Widths Requirements
- **Environmental Graphics**
- Permitting Overview
- O&M Planning
- Integration of Arts and Culture
- Project Scale and Programming

TECHNICAL DOCUMENTS

- Additional River Rulers
- Hydrology and Hydraulics Analysis
- Needs Mapping and Weighting
- Project Database / Library of Sources and Data Catalog

ENVIRONMENTAL GRAPHICS

VALUES FOR ENVIRONMENTAL GRAPHICS UPDATE

LEGIBILITY

GRAPHIC CLARITY

SIMPLE, TIMELESS AESTHETIC

COORDINATION WITH STAKEHOLDERS

LATERAL WAYFINDING TO THE RIVER

PRECEDENTS - PARKS & REC TRAIL SIGNAGE



Source: Los Angeles County Department of Parks and Recreation, Los Angeles County Trail Signage Handbook, 2008.

INFO

- Developed by LA County Dept. of Parks and Rec, adopted in 2018
- For use on all county trails - often along mountain trails

PROS

- Clear and clean layout
- Sans serif font (ADA compliant)
- Icons for multi-trail use

CONS

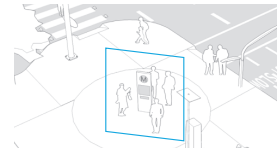
- Low relative contrast - can blend into planting
- Materials and construction may not be suitable for an urban context

WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 100

PRECEDENTS - METRO SIGNAGE

SIGNAGE AND WAYFINDING

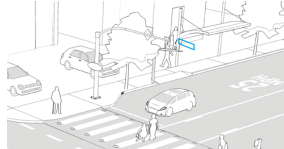
Metro Signage and Maps



Medallion Signage



Time-to-Station Signage



Real-Time Signage Adjacent to Station



Source: Los Angeles County Metropolitan Transportation Authority and Alta Planning Design, First and Last Mile Strategic Plan, March 2014, pg 34-37.

INFO

- Strategic Plan developed for Metro in 2014
- Guidelines for overall transit network

PROS

- Emphasis on lateral wayfinding
- Strong visual identity and branding
- Guidelines allow for flexibility in use

CONS

- No mention of coordination with signage of other jurisdictions

WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 100

INTERNATIONAL SIGNAGE PRECEDENTS

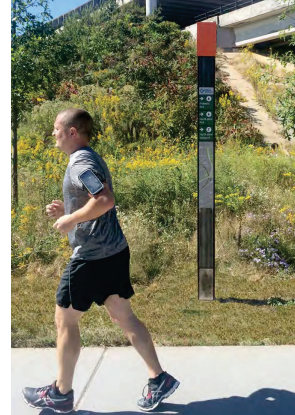
LEGIBLE LONDON



LEGIBLE SYDNEY



ATLANTA BELTLINE



NYC BEACHES



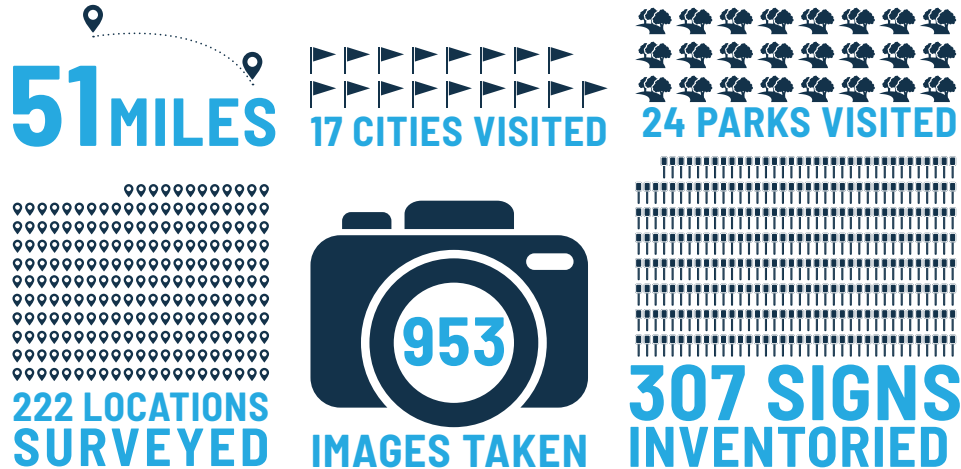
SYRACUSE CONNECTIVE CORRIDOR



Source: Legible London: Flickr Creative Commons, "To Make Your Transit System Easier to Navigate, Use a Better Font." Mobility Lab, September 13, 2016. <https://mobilitylab.org/2016/09/13/use-a-better-font/>. Accessed 07/31/2018. Legible Sydney: "Copyright Photo, not for posting. City of Sydney, Legible Sydney Design Manual, 2016. <https://www.cityofsydney.nsw.gov.au/vision/sustainable-sydney-2030/transport-and-access/visible-green-network/wayfinding-signage#page=element=load>. Accessed 07/31/2018. Atlanta Beltline: "Copyright Photo, not for posting. Atlanta Beltline Wayfinding Program. <https://mapdesign.com/projects/atlanta-beltline/>. Accessed 07/31/2018. NYC Beaches: "Copyright Photo, not for posting. Pentagram, NYC Beaches, 2013. <https://www.pentagram.com/work/nyc-beaches/story>. Accessed 07/31/2018. Syracuse Connective Corridor: "Copyright Photo, not for posting. Pentagram, Syracuse Connective Corridor, 2013. <https://www.pentagram.com/work/syracuse-connective-corridor/story>. Accessed 07/31/2018.

WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 100

OVERVIEW OF EXISTING WAYFINDING SURVEY

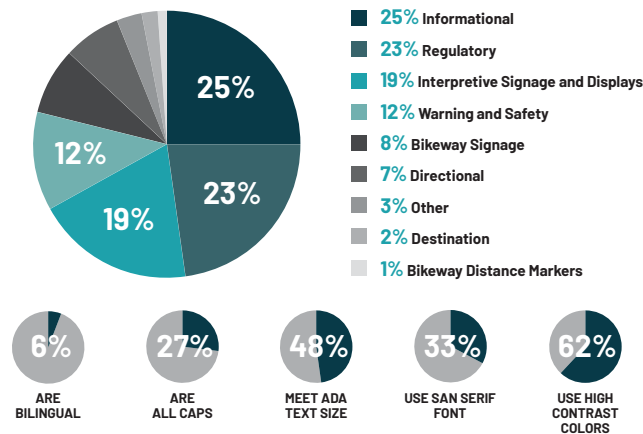


WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP

ENVIRONMENTAL GRAPHICS

INVENTORY OVERVIEW

OF THE 307 TOTAL SIGNS SURVEYED:



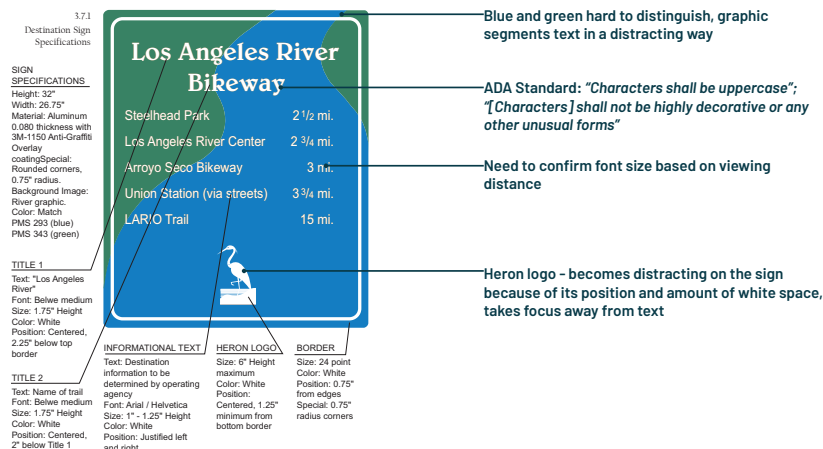
OVERALL OBSERVATIONS:

- Informational, regulatory, interpretive signage and displays, and warning and safety signage are the most commonly found type of signage along the LA River, typically located near existing access points.
- Directional, destination, and bikeway signage are the least commonly found signage, highlighting the lack of lateral wayfinding and wayfinding along the trail once entered.
- There is a lack of continuity in signage from upper to lower river and throughout parks. Various forms and graphics standards are used between cities and Parks & Rec.
- There is a lack of maintenance of signs and surrounding contexts - many were in poor condition or covered with graffiti.
- There is inconsistent sign placement, sequence, and orientation at access points.

WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP

ENVIRONMENTAL GRAPHICS

EXISTING SIGNS - ACCESSIBILITY ANALYSIS



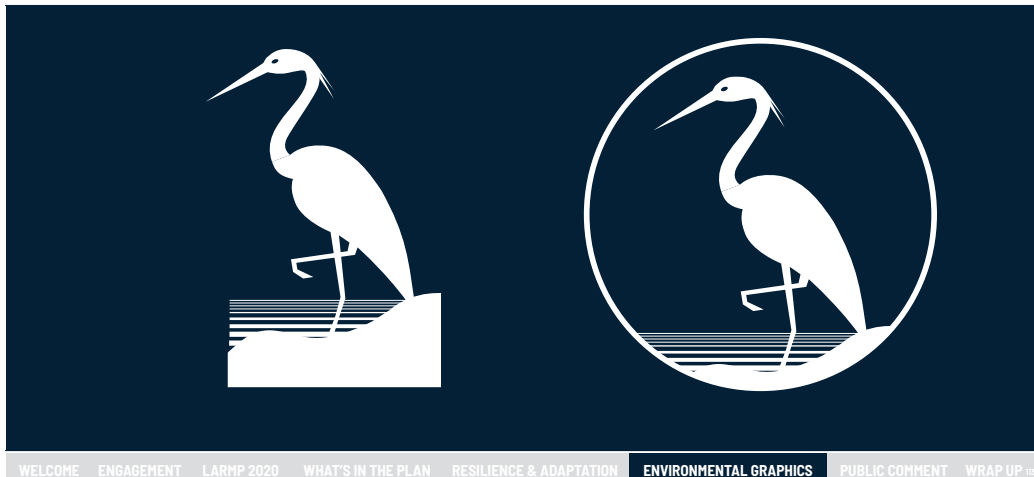
Source: Diagram on page 24, Figure 3.7.1, of the 2003 LARMP Signs Guidelines.

WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP

EXISTING HERON LOGO EXPRESSION



HERON LOGO EXPRESSION



EXISTING TERMINOLOGY



TERMINOLOGY

LA RIVER

WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION **ENVIRONMENTAL GRAPHICS** PUBLIC COMMENT WRAP UP 16

ENVIRONMENTAL GRAPHICS

RIVER MILES



ENVIRONMENTAL GRAPHICS

ENVIRONMENTAL GRAPHICS IN GUIDELINES UPDATE

1. INFORMATIONAL
2. REGULATORY
3. CONFIRMATION
4. DIRECTIONAL (LATERAL WAYFINDING TO THE RIVER)
5. MILE MARKERS
6. PAVEMENT MARKINGS
7. INTERPRETIVE SIGNS AND DISPLAYS
8. LARGE SCALE ICON GRAPHICS

WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION **ENVIRONMENTAL GRAPHICS** PUBLIC COMMENT WRAP UP 16

SUITE OF LA RIVER ENVIRONMENTAL GRAPHICS

Project Size	Distance to Project 1 MILE	1/2 MILE	500 FT	GATEWAY	WITHIN PROJECT
	WAYFINDING			PROJECT IDENTITY + INFORMATION	
XL					
L					
M					
S					
XS					

WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION **ENVIRONMENTAL GRAPHICS** PUBLIC COMMENT WRAP UP 18

ENVIRONMENTAL GRAPHICS PARAMETERS FOR APPLYING GUIDELINES

	INFORMATIONAL	REGULATORY	CONFIRMATION	DIRECTIONAL	MILE MARKERS	PAVEMENT MARKINGS	INTERPRETIVE SIGNS AND DISPLAYS	LARGE SCALE ICON GRAPHICS
ADA SIZE Size to be determined by height of sign and viewing distance as outlined in ADA standards	YES	SOMETIMES Yellow public safety signs meet this requirement, park rule signs do not	YES Exception is the trail map sign, which has text that is meant to be read up close	YES	YES	YES File numbers will be big enough, but ADA standards do not apply to graphics on pavement	NO	NO Any text will likely be big enough, but ADA standards do not apply to graphics in murals or other artwork
ADA FONT See last font, capitalized as necessary per ADA standards; use open-source Barlow font	YES	YES	YES	YES	YES	YES File numbers will be Barlow font, but ADA standards do not apply to graphics on pavement	YES	NO Text is not required, but if used Barlow is encouraged but not mandatory
CONTRAST Recommended contrast ratio is 70:1 achieved when recommended colors of white and RAL 5003 are used	YES	YES	YES	YES	YES	YES	YES	NO Guidelines color is not required, choices are to artist's discretion
BILINGUAL Language dependent on neighborhood Examples: Spanish, Chinese, Korean, Russian	NO	YES	NO	NO	NO	NO	YES	STRONGLY ENCOURAGED Ensure that an accessible path of travel leads to sign and that braille is within reach if used
UNIVERSAL DESIGN Include braille or audio components for environmental graphics	STRONGLY ENCOURAGED Ensure that an accessible path of travel leads to sign and that braille is within reach if used	STRONGLY ENCOURAGED Ensure that an accessible path of travel leads to sign and that braille is within reach if used	STRONGLY ENCOURAGED Ensure that an accessible path of travel leads to sign and that braille is within reach if used	SOMETIMES Encouraged for wayfinding along pedestrian paths of travel	NO	NO	STRONGLY ENCOURAGED Ensure that an accessible path of travel leads to sign and that braille is within reach if used	STRONGLY ENCOURAGED Ensure that an accessible path of travel leads to sign and that braille is within reach if used
NATIVE AMERICAN PLACE NAMES & REFERENCES Content dependent site location along the LA River - reference tribal nation name map in Design Guidelines, p. 305	STRONGLY ENCOURAGED Contact appropriate Native Community representative per site location and River Mile	NO	STRONGLY ENCOURAGED Contact appropriate Native Community representative per site location and River Mile	STRONGLY ENCOURAGED Contact appropriate Native Community representative per site location and River Mile	NO	NO	STRONGLY ENCOURAGED Contact appropriate Native Community representative per site location and River Mile	STRONGLY ENCOURAGED Contact appropriate Native Community representative per site location and River Mile

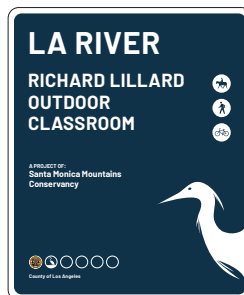
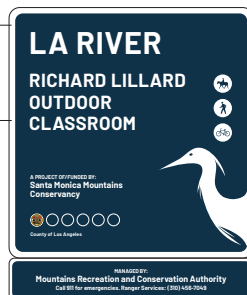
WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION **ENVIRONMENTAL GRAPHICS** PUBLIC COMMENT WRAP UP 18

ENVIRONMENTAL GRAPHICS

INFORMATIONAL

40x48" same as 2003 LARMP Sign Guidelines

ADA Standard met for imperative information
If hung between 70" and 120" off the ground, minimum 2" high type



PURPOSE AND PLACEMENT

- Informs visitors about a park or trail, including the owner, funding source(s), and agencies and organizations involved with the project.
- Place one at the primary entrance of the park or trail, with as little other signage as possible.

WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION **ENVIRONMENTAL GRAPHICS** PUBLIC COMMENT WRAP UP 18

ENVIRONMENTAL GRAPHICS ALONG THE RIVER



WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 122

ENVIRONMENTAL GRAPHICS

ENVIRONMENTAL GRAPHICS ON THE WAY TO THE RIVER



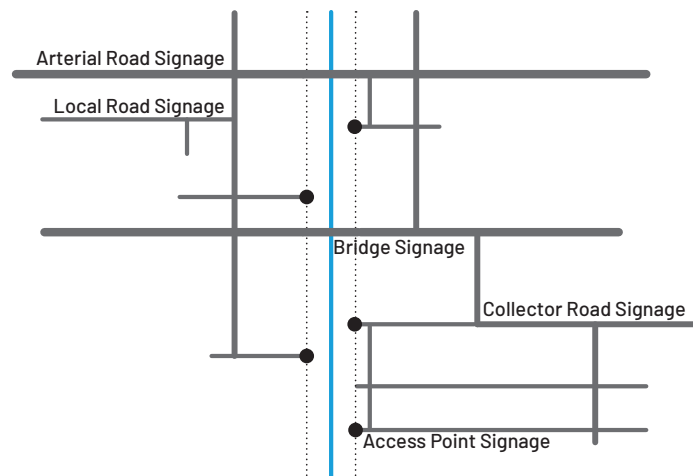
PURPOSE AND PLACEMENT

- Alerts travelers to the location of the river and trail. Will set traffic patterns to and from the river.
- Jurisdictionally, these signs will be located in the CalTrans ROW, City of LA DOT ROW, unincorporated LA County, or other individual cities.
- Placement should follow jurisdictional and traffic standards, establishing preferred routes to the river.

WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 122

ENVIRONMENTAL GRAPHICS

LATERAL WAYFINDING



WELCOME ENGAGEMENT LAMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS PUBLIC COMMENT WRAP UP 122

PLACEMENT

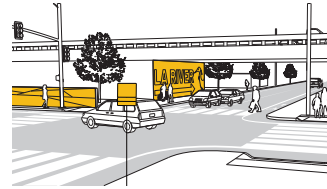
**ARTERIAL ROAD
ENVIRONMENTAL GRAPHICS**



**BRIDGE
ENVIRONMENTAL GRAPHICS**



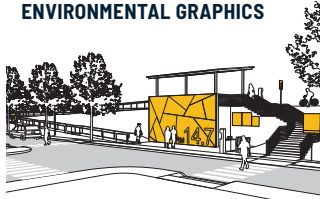
**COLLECTOR ROAD
ENVIRONMENTAL GRAPHICS**



**LOCAL ROAD
ENVIRONMENTAL GRAPHICS**



**ACCESS POINT
ENVIRONMENTAL GRAPHICS**



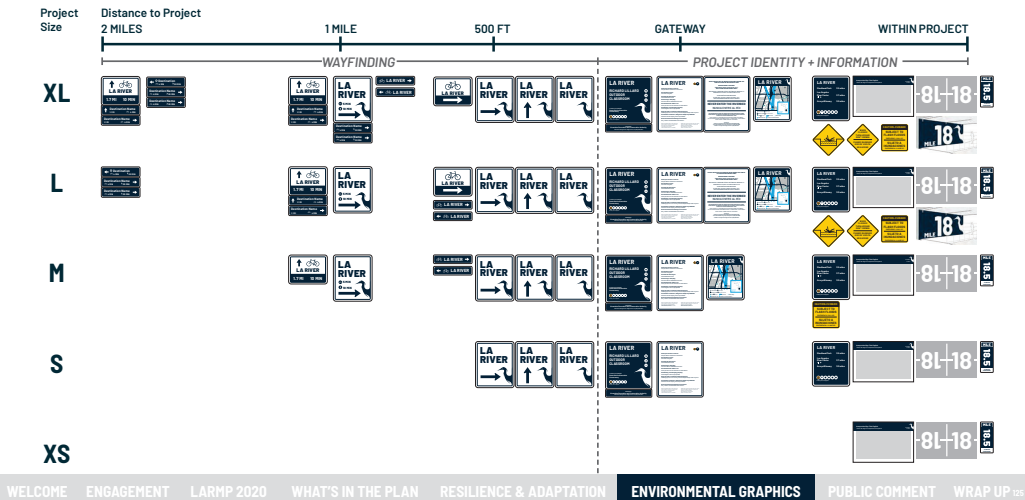
**RIVERSIDE / TRAIL
ENVIRONMENTAL GRAPHICS**



WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION **ENVIRONMENTAL GRAPHICS** PUBLIC COMMENT WRAP UP 155

ENVIRONMENTAL GRAPHICS

SUITE OF LA RIVER ENVIRONMENTAL GRAPHICS



ENVIRONMENTAL GRAPHICS

ENVIRONMENTAL GRAPHICS - COMMUNITY EXPRESSION

CAN BE MODIFIED

- INFORMATIONAL
- INTERPRETIVE SIGNS AND DISPLAYS
- LARGE SCALE ICON GRAPHICS

CONSISTENT

- REGULATORY
- CONFIRMATION
- DIRECTIONAL
- MILE MARKERS
- PAVEMENT MARKINGS



PUBLIC COMMENT OPTIONS

- **Verbal comments**
 - Speakers to be called in order of speaker cards submitted (optional)
 - Up to 15 minutes total for the Public Comment item
 - Total time per person will depend on number of speaker cards received
- **Comment cards**
- **Email comments to LARiver@dpw.lacounty.gov**



Important Upcoming Dates:

- SubCommittees to Receive Full Draft - January 6, 2020
- Final Draft for Public Comment - May 2020
- Community Event - Summer 2020

STAY TUNED!

INPUT, QUESTIONS, IDEAS?

Contact Genevieve Osmeña at (626) 458-4322
or LARiver@dpw.lacounty.gov

WELCOME ENGAGEMENT LARMP 2020 WHAT'S IN THE PLAN RESILIENCE & ADAPTATION ENVIRONMENTAL GRAPHICS MOVING FORWARD **WRAP UP 131**



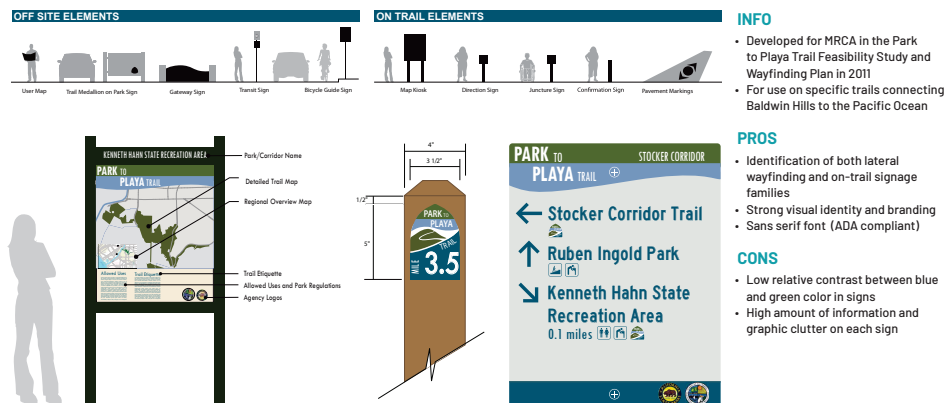
LARiverMasterPlan.org

APPENDIX

ENVIRONMENTAL GRAPHICS

ENVIRONMENTAL GRAPHICS GUIDELINES

PRECEDENTS - PARK TO PLAYA TRAIL SIGNAGE

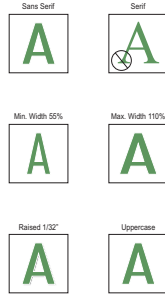


*Copyright Imagery not for posting. Source: Alta Planning Design for MRCA, Park to Playa Trail Study and Wayfinding Plan, 2011.

ADA SIGN REQUIREMENTS: FONT

Characters / Fonts

Fonts for room and area identification are required to be sans serif and shall not be italic, oblique, script or decorative. Characters should be raised a minimum of 1/32" and between 5/8" and 2" in height.



Source: Signs of Our Times, Inc. ADA Sign Regulations. <https://signsofourtimes.com/resource-center> (2018).

ADA Compliant

FUTURA MEDIUM 123

FRUTIGER BOLD 123

LUCIDA DEMIBOLD 123

TREBUCHET BOLD 123

HELVETICA 123

Not Compliant

TIMES ROMAN

GARAMOND

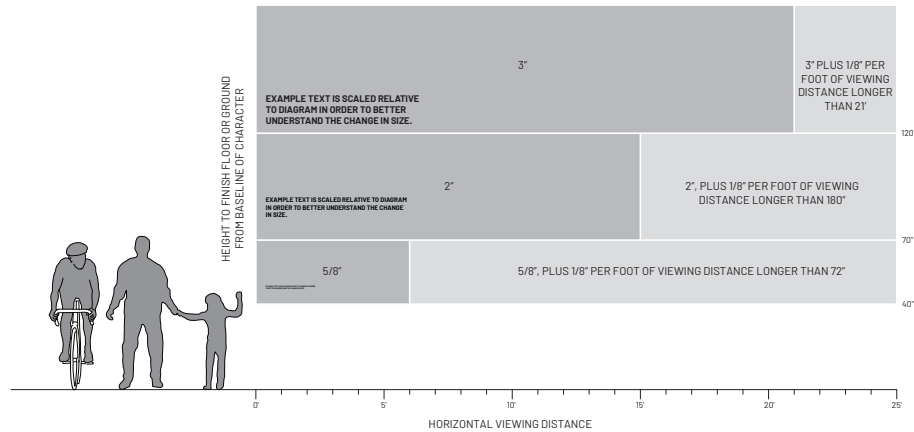
TIMES ROMAN

Times Roman

Maximum letter stroke for a tactile sign is 15% of character height as measured by the top of a beveled character.



ADA SIGN REQUIREMENTS: CHARACTER HEIGHT



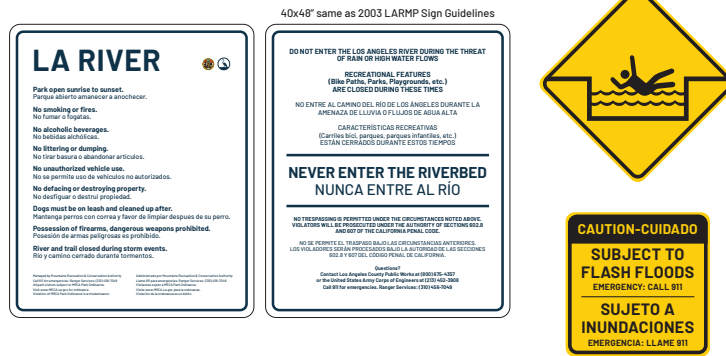
Source: OLIN diagram, standards from U.S. Department of Justice, (2010). 2010 ADA Standards for Accessible Design, Washington, DC: U.S. Department of Justice.

SYMBOLS

MUTCD



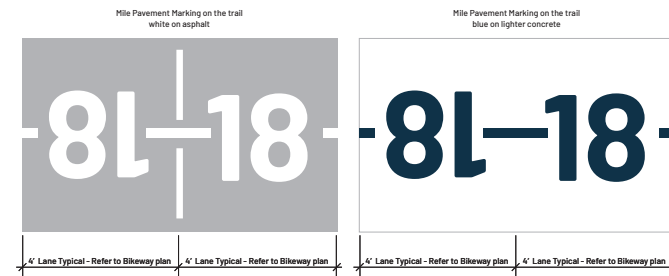
REGULATORY



PURPOSE AND PLACEMENT

- Alerts user to the rules and regulations of the park or trail. Also informs users about safety best practices along the river channel.
- Place one set of rules near the entrance. Other signage about the channel should be placed at regular intervals along the channel trail itself.

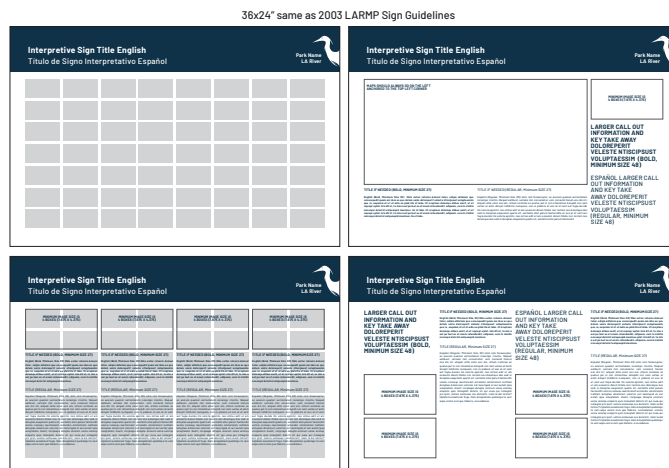
PAVEMENT MARKINGS



PURPOSE AND PLACEMENT

- Demarcates the distance from the outfall into the ocean (mile 0) to the headwaters (mile 51).
- Paint one every mile along the trail.

INTERPRETIVE



PURPOSE AND PLACEMENT

- Educates trail and park users. Presiding agency will determine the content and use of interpretive signs.
- Placement should be out of the main route of circulation - and trail rest areas, access points, river pavilions, overlooks.

MILE MARKERS

6x14.5"
Hung between 40" and 70" off the ground



PURPOSE AND PLACEMENT

- Demarcates the distance from the outfall into the ocean (River Mile 0) to the headwaters (River Mile 51).
- Place one every half mile along the trail, on the riverside of the trail.

CONFIRMATION

28.75x32" same as 2003 LARMP Sign Guidelines
Limited to 3 destinations per sign
to meet MUTCD requirements

ADA Standard met for
imperative information
If hung between 40"
and 70" off the ground,
minimum 5/8" high type
Type here is .91"

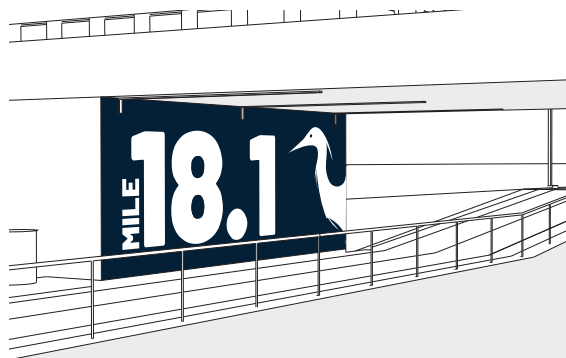


PURPOSE AND PLACEMENT

- Informs trail users that they are on the correct route. Can include distances or time, but does not direct (no arrows).
- Place one set of rules near the entrance. Other signage about the channel should be placed at regular intervals along the trail itself.
- Signs showing destinations should show locations that are ahead on the trail and on the same side of the river bank. They should be double-sided, and can include symbols that indicate locations that have amenities such as restrooms and first aid.
- Trail map signs should be placed at access points so that users can identify access points and exits before they embark on their route.

LARGE SCALE ICON GRAPHICS

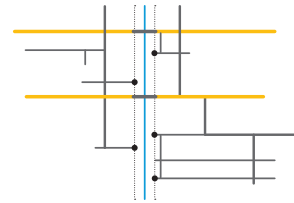
TRAIL UNDERPASSES



PURPOSE AND PLACEMENT

- Adds to the characters of the river and informs users about location.
- Place along blank walls, underpasses, or other key moments to highlight river mile or local context.

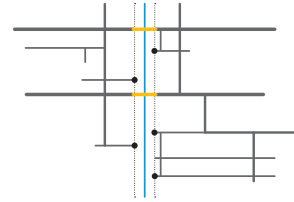
ARTERIAL ROAD ENVIRONMENTAL GRAPHICS



BEST PRACTICE GUIDELINES

- Per MUTCD, do not place Community Wayfinding along Freeways and Expressways.
- Per MUTCD, do not place Community Wayfinding in a location that competes visually with standard traffic signs.
- Use existing posts and traffic light posts where possible.
- At large pedestrian intersections, combine wayfinding with large totems at corners to avoid sign clutter.
- Apply Directional signage with existing bike lanes / pavement markings where applicable.
- Direct users to nearest access point.

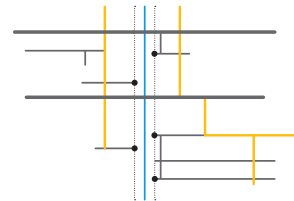
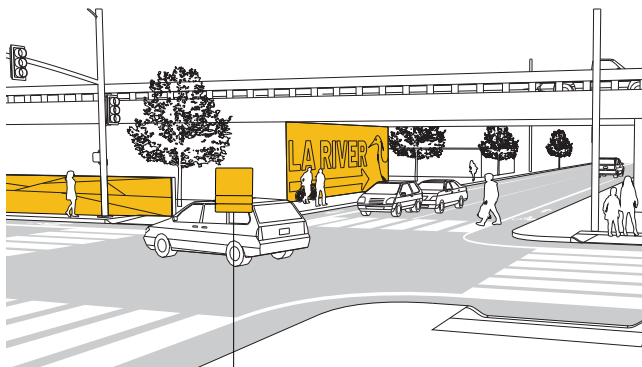
BRIDGE ENVIRONMENTAL GRAPHICS



BEST PRACTICE GUIDELINES

- Per MUTCD, do not place Community Wayfinding along Freeways and Expressways.
- Per MUTCD, do not place Community Wayfinding in a location that competes visually with standard traffic signs.
- Use existing posts where possible.
- Apply Confirmation Signage that the bridge is crossing the LA River, isolated from other traffic signs.

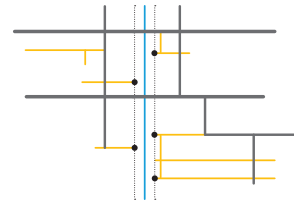
COLLECTOR ROAD ENVIRONMENTAL GRAPHICS



BEST PRACTICE GUIDELINES

- Per MUTCD, do not place Community Wayfinding in a location that competes visually with standard traffic signs.
- Use existing posts and traffic light posts where possible.
- At large pedestrian intersections, combine wayfinding with large totems at corners to avoid sign clutter.
- Apply Directional signage with existing bike lanes / pavement markings where applicable.
- Direct users to nearest access point.

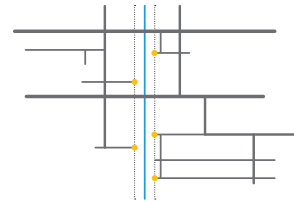
LOCAL ROAD ENVIRONMENTAL GRAPHICS



BEST PRACTICE GUIDELINES

- Per MUTCD, do not place Community Wayfinding in a location that competes visually with standard traffic signs.
- Use existing posts where possible.
- Apply Directional signage with existing bike lanes / pavement markings where applicable.
- Direct users to nearest access point.
- Be sensitive to context - In Residential areas, restrict signage to public ROW and minimize signage as needed.

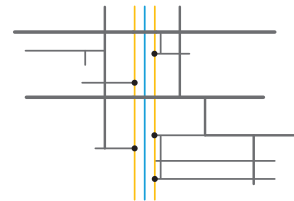
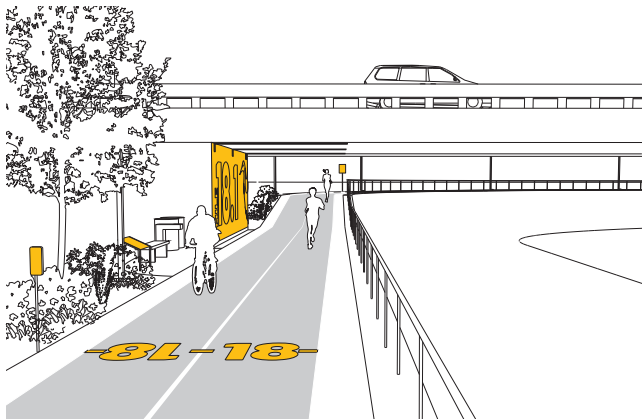
ACCESS POINT ENVIRONMENTAL GRAPHICS



BEST PRACTICE GUIDELINES

- Place one Informational sign at the entry point of each access point.
- Place Regulatory "Park Rules" sign further back, alongside River Pavilion, trail, or other amenity.
- Apply Regulatory "Warning and Safety" signage along channel at regular intervals. (Every mile?)
- Use environmental graphics for neighborhood expression.
- Use existing posts where possible.

RIVERSIDE / TRAIL ENVIRONMENTAL GRAPHICS



BEST PRACTICE GUIDELINES

- Place Mile Markers and pavement markings every .5 miles.
- Place Confirmation and Destination signs as needed along the trail (at least every mile).
- Use environmental graphics for trail underpasses and bare walls along the trail.
- Use existing posts where possible.

ENVIRONMENTAL GRAPHICS - COMMUNITY EXPRESSION

ELEMENTS THAT MUST BE CONSISTENT:

- Barlow font
- Heron symbol or icon
- Color - Besides the color variation in natural materials, any additional non-neutral colors should match the guidelines RAL

*Exception is with large scale icon graphics, where artist has discretion on final outcome.

LA RIVER



ENVIRONMENTAL GRAPHICS - COMMUNITY EXPRESSION

VARIATION ALLOWED IN THESE ELEMENTS:

- Materials (should not impact water quality, such as galvanized metals)
- Form
- Content

*Exception is with large scale icon graphics, where artist has discretion on final outcome.

ADDITIONAL ITEMS FOR ENVIRONMENTAL GRAPHICS GUIDELINES UPDATE

SIGN MATERIALITY

ATTACHMENTS - MOUNTING BRACKETS

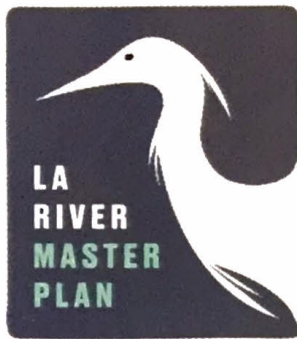
BIKE TRAIL PAINT - WATER BASED / THERMOPLASTIC

COLOR MATCHING



Appendix C

Steering Committee Sign-in Sheets



Los Angeles River Master Plan Update

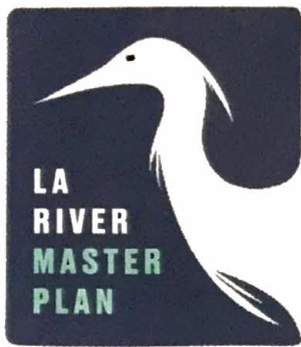
Steering Committee Meeting
December 12, 2019 9 a.m. to 12 p.m.

LOCATION

Los Angeles County Public Works Headquarters
900 South Fremont Ave, Alhambra, CA 91803
Conference Room A-B

Sign In for Members

NAME OF AGENCY	PRIMARY MEMBER	INITIALS	OFFICIAL ALTERNATE	INITIALS	NOTES
Los Angeles Department of Water and Power	Evelyn Cortez-Davis		Rafael Villegas	RV	
			Manuel Aguilar	MA	
Los Angeles Neighborhood Land Trust	Keshia Sexton		Beth Kent		
Los Angeles Waterkeeper	Bruce Reznik	BR	Melissa von Mayrhauser	MvM	
Metropolitan Transportation Authority	Lauren Cencic	LC	Sarah Schurtz	Mitali Gupta MG	
			Maressa Sah	MS	
Mujeres De La Tierra	Irma R. Muñoz		Paola Machan		
Pacoima Beautiful	Veronica Padilla-Campos		Andres Ramirez		
Public Counsel	Heidi Liu				
Regional Water Quality Control Board	Renee Purdy				
Rivers and Mountains Conservancy	Mark Stanley		Joseph Gonzalez	JP	
			Marybeth Vergara	MBV	
Santa Monica Mountains Conservancy	Joseph T. Edmiston		Brian Baldauf	BB	
			Melissa Vega		
			Sarah Rascon	SR	
Sierra Club Long Beach Area	Gabrielle Weeks				
The Boethius Initiative UCLA Department of World Arts and Cultures	Peter Sellars		Julia Carnahan	JC	
			Catherine Gudis		
			Andrew Martinez		
The Nature Conservancy	Shona Ganguly		Kelsey Jessup		
			Jill Sourial		
			Miguel Ramos	MR	
The Trust for Public Land	Robin Mark	RM			
Urban Waters Federal Partnership (National Park Service)	Justin Yee		Anne Dove		
US Army Corps of Engineers	Eduardo DeMesa		Chris Solek		
US Department of Housing and Urban Development	Pauline K. Louie				
Water Replenishment District	Robb Whitaker		Kimberly Badescu		



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Conference Room A-B

Sign In for Members

NAME OF AGENCY	PRIMARY MEMBER	INITIALS	OFFICIAL ALTERNATE	INITIALS	NOTES
City of Downey	Sean Ashton				
City of Long Beach			Tyler Curley		
City of Los Angeles (Mayor's Office)	Michael Affeldt	my	Katie Mika		
			Edward Belden	EB	
City of Los Angeles Bureau of Engineering	Gary Lee Moore		Deborah Weintraub		
			Katherine Doherty	KED	
City of Paramount Public Works	Adriana Figueroa				
City of South Gate	Arturo Cervantes		Gladis Deras	GD	
Council for Watershed Health	Eileen Alduenda	EA	Yareli Sanchez		
East Yard Communities for Environmental Justice	mark! Lopez		Alessandro Negrete		
			Jessica Prieto		
Friends of the LA River (FoLAR)	Marissa Christiansen		Manuel Gomez Liliana Griego LG		
From Lot to Spot	Viviana Franco		Maria De Leon		
			Jessica Cervantes		
Heal the Bay	Shelley Luce		Katherine Pease	KP	
			Amanda Wagner		
LA-Mas	Mia Lehrer				
Long Beach Conservation Corps	Dan Knapp		Kayla Kelly-Slatten	KKS	
Los Angeles Business Council	Mary Leslie		Rory Stewart		
Los Angeles City/County Native American Indian Commission	Rudy Ortega	RO	Alexandra Valdes		
			Andrea Garcia		
Los Angeles County 1st District	Waqas Rehman		Guadalupe Duran-Medina		
			Martin Reyes	MR	
Los Angeles County 2nd District	Karly Katona		Carmen Gosey		
Los Angeles County 3rd District	Katy Yaroslavsky		Virdiana Velez	AV	
Los Angeles County 4th District	Jocelyn Rivera-Olivas	JO	SParilitza Gonzalez	SPG	
Los Angeles County 5th District	Edel Vizcarra		Susie Osuna		
Los Angeles County Bicycle	Eli Kaufman				
Los Angeles County Business Federation	Hilary Norton		Lori Garcia		
Los Angeles County Flood Control District	Keith Lilley	KL	Carolina Hernandez	CH	