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**2020 Proposed WORKING DRAFT VERSION 5:** Los Angeles River Master Plan Update  
June 2019.

*(Currently this summary is in present tense, and in its final version it will become past tense.)*

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## Vision: The Reimagined River

**Fifty-one miles of connected open space that includes clean water, native habitat, parks, multiuse trails, art, and cultural resources to improve health, equity, access, mobility, and economic opportunity for the diverse communities of LA County, while providing flood risk management.**

Alternate: The LA River is an iconic, 51-mile corridor of connected open space, seamlessly woven together with neighboring communities, that 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 admire the marvels of infrastructure and flood risk management and to celebrate a thriving urban habitat, a place to learn from the past and to shape the future.

### Executive Summary

One million people live within one mile of the Los Angeles River. More impressively, one out of four Californians lives within one hour of the river. Channelized to protect lives and property from flooding during the late 19<sup>th</sup> through the mid-20<sup>th</sup> centuries, the Los Angeles River has largely been separated from our social and ecological communities. While fragmented jurisdictions, land ownership, and funding present hurdles in rethinking the LA River, the 2020 Los Angeles River Master Plan seeks to reimagine the LA River from a single use corridor to a tangible, multi-benefit resource for the communities of Los Angeles County, while still meeting the needs of flood risk management. The 2020 Plan recognizes the need for resilient systems that address the most complex issues facing the Los Angeles Region, such as climate change, population growth, resource scarcity, and social inequity.

The 2020 Los Angeles River Master Plan builds on over two decades of planning efforts for the Los Angeles River, including efforts by LA County (1996), the City of Los Angeles (2007), the

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Lower LA River Working Group (2018), and the Upper LA River and Tributaries Working Group (2019). The research and project database that forms the foundation for this plan covers over 130 planning efforts from across the watershed.

The 2020 Master Plan Update process began in 2016 with a motion by the Board of Supervisors to update the 1996 Los Angeles County LA River Master Plan. The update process, led by Los Angeles County Public Works, is supported by an Internal County Team with representatives from each LA County department. A Steering Committee of 41 members representing municipalities, non-profit organizations, or other governmental and non-governmental entities provides input and expertise in issues related to water, people, or the environment. In addition to the technical team and steering committee, the update process includes a robust public engagement program designed to provide opportunities for LA County residents to express ideas for the future of the river.

The 2020 Master Plan is based on a watershed and community approach to update the plan. This approach is unique from previous efforts in that analysis work, including ecosystem, demographic, and hydrologic studies were conducted for the entire 834 square mile watershed. Recognizing that these systemic and natural elements cannot be studied in isolation, several studies were investigated at an area larger than the watershed. This research is now publicly available and can be utilized for parallel efforts within the watershed.

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There is no singular, 51-mile solution for the LA River. Projects along the river should reflect the needs and opportunities of specific reaches and provide multiple benefits that respect the needs of flood risk management while enhancing the environment and strengthening our communities through the celebration of local culture and creation of jobs. While design strategies in the Master Plan focus on elements along the main stem within and immediately adjacent to the river right-of-way,<sup>1</sup> the Master Plan's vision, goals, actions, and methods require an understanding of, and coordination with, communities, the watershed, and parallel efforts such as the Upper River and Tributaries Working Group (AB466), the Lower LA River Working Group, Metro, the Regional Water Quality Control Board, the LA County General Plan, the LA County Sustainability Plan, the LA County Regional Parks Needs Assessment, and watershed management plans. Additionally, coordination between LA County, municipalities, other governmental entities, and non-profit organizations will be necessary to achieve the robust vision and goals of this Master Plan. The Reimagined LA River relies on these collective efforts to envision the future of the LA River, its watershed, and all of LA County.

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<sup>1</sup> The LA River Right-of-Way is within the operations and maintenance jurisdiction of Los Angeles County Public Works (Flood Control District) and the United States Army Corps of Engineers (USACE).

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### **Organization of the Master Plan Document**

The 2020 LA River Master Plan is organized based on a series of goals, actions, and methods. Each goal represents an active future priority for the LA River. These goals, which include many principles from previous or parallel planning efforts, guide policy and project development throughout the Master Plan.

Within each goal, a series of actions describes steps that should be taken to achieve the goal. Actions include a series of tangible methods that describe specific ways to reach the goals. In many cases, actions are related to specific LA County Departments and their missions. The realization of the goals will require collaboration between many LA County departments.

### **Role of the County and Coordination**

Similar to the 1996 LA River Master Plan, the 2020 Plan will be used to guide all departments of LA County in decision making for LA River projects and facilities owned, operated, funded, permitted, and/or maintained by the County. Other agencies and municipalities are encouraged to adopt the LA River Master Plan for their jurisdictions and communities and partner with LA County in making the Reimagined River a reality.

The LA River Master Plan will help ensure a Reimagined LA River by:

- Establishing a comprehensive long-term vision for the river that is based on robust community engagement.
- Utilizing a goal-based framework for policy and design.
- Identifying goals, actions, and methods that will be undertaken by LA County along the LA River corridor and throughout the watershed to achieve the vision for the river.
- Identifying strategic partnerships between LA County and other entities that will be needed meet the full realization of the goals, actions, and methods.
- Identifying how LA County can support other entities in meeting the goals, actions, and methods.
- Promoting design excellence.

Public Works shall establish an implementation team responsible for ongoing coordination after the completion of the Master Plan.

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## 1. Goal: Reduce flood risk and improve resiliency.

The LA River did not always look like it does today. In the mid 1800's, the LA River was a braided stream that, during wet weather events, spread out over vast amounts of flat land. As agricultural diversions, transportation infrastructure, and cities grew around the river, this vast floodplain was encroached upon by buildings and roads. After years of devastating floods, it was engineered into a concrete channel with basins, dams, levees, and floodwalls to move stormwater as quickly as possible to the Pacific Ocean and reduce flood risk to these communities. Not all areas of the river have equal flood capacity. In some areas, low channel capacity makes the probability of a flood in any given year as high as 25 percent. This is partially due to deferred operations and maintenance caused by funding constraints. There will always be financial and physical limits to flood risk infrastructure. Therefore, we must strive for resilient communities that can respond to extreme flood events that exceed the river channel's capacity. With the threat of a changing climate, the importance of reducing flood risk increases as the frequency and intensity of extreme storms change.

### 1.1. Increase capacity of the river in high risk areas and provide flood risk management to at least the one-percent ("100-year") flood event.

- 1.1.1. Prioritize natural features and processes for flood risk reduction.
- 1.1.2. Purchase or otherwise reclaim land along the channel and immediately adjacent floodplain areas to increase floodplain areas.
- 1.1.3. Widen and deepen the channel or raise levees.
- 1.1.4. Build bypass channels and tunnels.
- 1.1.5. Manage sediment in the river channel and before it accumulates in the river channel.
- 1.1.6. Manage vegetation and remove invasive plants.
- 1.1.7. Retrofit infrastructure and other obstructions, such as bridges, to remove hydraulic constrictions.

### 1.2. Reduce flows into the river.

- 1.2.1. Evaluate regional scale upstream flood detention basins.
- 1.2.2. Manage dry-weather flows to discourage the growth of invasive and non-native vegetation within the flood channel.

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**Deleted:** <#>**Increase capacity of the river in high risk areas and provide flood risk management to at least the 100-year flood event.**¶  
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<#>Manage sediment in the river channel and before it accumulates in the river channel.¶  
<#>Manage vegetation and remove invasive plants.¶

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**1.3. Include climate change research in the planning process for new projects along the river.**

- 1.3.1. Conduct inter-institutional study on climate change impacts in the LA Basin and how they impact hydrology and sea level rise.
- 1.3.2. Apply latest accepted climate change prediction models in flood risk reduction planning.

**1.4. Improve and refine emergency preparedness.**

- 1.4.1. Increase awareness of the hazards associated with high flows in the river.
- 1.4.2. Develop appropriate Emergency Action Plans that cover specific areas of the river where needed, including the dams and levees along the mainstem and the tributaries.
- 1.4.3. Conduct emergency preparedness exercises that test Emergency Action Plans.
- 1.4.4. Improve flood forecasting capabilities.
- 1.4.5. Refine warning and monitoring criteria for the river corridor.
- 1.4.6. Develop appropriate warning systems such as sirens, lights, or geo-targeted text message alerts to inform users of impending rain or rising water.
- 1.4.7. Develop flood-specific evacuation plans.
- 1.4.8. Consider and plan for evacuation of communities in floodplains, with particular attention to special needs populations.
- 1.4.9. Evaluate critical infrastructure and facilities located in the floodplain and reduce vulnerability to flood hazards.
- 1.4.10. Review and revise policies regarding closing the river trail during storms.
- 1.4.11. Assist local law enforcement and emergency responders in developing emergency response/evacuation plans for river adjacent communities and river users.
- 1.4.12. Encourage adjacent river communities to develop personalized evacuation plans.

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**1.5. Increase public awareness of flood hazards and river safety.**

- 1.5.1. Develop a website to assist in educating other agencies, cities, and the general public on river issues (including flood risk management and dangers posed by the river during heavy rainfall events).
- 1.5.2. Post consistent signage and communication about flood risk and river safety on bridges and access points.
- 1.5.3. Develop and implement an educational program on flood and river safety.
- 1.5.4. Encourage residents and businesses in the floodplain to consider purchasing flood insurance.

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**1.6. Improve facility operations and maintenance.**

- 1.6.1. Expand coordination between responsible agencies and consolidate responsibilities under the Flood Control District through divestiture to streamline O&M, facility management, funding, and permitting.
- 1.6.2. Review and update operations and maintenance protocols and best practices
- 1.6.3. Implement new technologies such as real-time monitoring, reporting, and controls.
- 1.6.4. Implement dam and levee safety programs that ensure the flood management infrastructure delivers their intended benefits while reducing risks to people, property and the environment through continuous assessment, communication and management.

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**1.7. Implement regionally consistent floodplain management practices.**

- 1.7.1. Establish partnerships among the various levels of government to develop minimum floodplain regulatory requirements.
- 1.7.2. Update and improve hydrologic data and models for the LA River watershed.
- 1.7.3. Update and improve flood inundation mapping.
- 1.7.4. Manage floodplain development according to the National Flood Insurance Program.
- 1.7.5. Encourage only flood resilient projects in the floodplain.
- 1.7.6. Encourage acquisition of land within the floodplain to serve as a buffer for flooding.

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## 2. Goal: Provide equitable, inclusive, and safe parks, open space, and trails.

Members of the community identified walking and bicycling as the top two activities they participate in along the river—with combined participation greater than all other activities combined. Yet, 61% said they do not use the river due to safety concerns, identified by 61% of participants. This is apparent when looking at available parks and trails. Twelve of seventeen cities along the LA River do not meet the World Health Organization's minimum standards of 2.2 acres of parks per thousand people, and only 31 of the river's 51 miles have trails. By aiming to provide 51 miles of safe, connected open space, the LA River can be a valued recreational resource for the surrounding communities in LA County.

### 2.1. Create 51 miles of connected open space.

- 2.1.1. Create a park setting along the entire river utilizing this plan's design guidelines ([LA River Design Guidelines](#)).
- 2.1.2. Utilize river channel right-of-way and adjacent areas to increase park space.
- 2.1.3. Promote the river as a greenway spine of the larger LA County regional parks, multi-use trails, habitat, and open space network.
- 2.1.4. Use river areas to assist in ensuring all LA County residents live within a ½ mile of a park.
- 2.1.5. Create two new regional parks south of Downtown LA and one new regional park west of Sepulveda Basin, while continuing the development of large regional parks currently underway.
- 2.1.6. Provide amenities and experiences in existing and new park spaces that are not currently available at nearby parks and increase unique programming along the river corridor.
- 2.1.7. Preserve and create viewsheds along the river, between adjacent neighborhoods and the river, and from bridges over the river.
- 2.1.8. Secure ongoing and long-term funding for land acquisition, construction, and maintenance of additional [parks and recreational facilities](#).
- 2.1.9. Increase recreation uses within the corridor where compatible with ecological function.

### 2.2. Complete the LA River Trail so that there is a continuous bicycle and pedestrian route along the entire river, on both sides.

- 2.2.1. In places where right of way is too narrow for a river trail, pursue easements on adjacent property to complete the trail or utilize bridges, platforms, or cantilevers.
- 2.2.2. Increase the extent of multi-use trails parallel to the river with separate paths for active transport, pedestrians, and equestrians in areas of high traffic.
- 2.2.3. Provide bicycle parking and encourage bicycle rental facilities along the river.
- 2.2.4. Develop signage and curriculum that promotes the benefits of using the river trail for recreation and improved health.
- 2.2.5. [Include shade trees and shade structures along the trail.](#)

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**2.3. Provide support facilities at a regular cadence along the length of the river, on both sides.**

- 2.3.1. Ensure there is a shaded place to rest every half mile, on average, along the river.
- 2.3.2. Ensure there is access to a public restroom every mile, on average, along the river.
- 2.3.3. Ensure there is wayfinding information at river access points and every half mile, on average, along the river.
- 2.3.4. Supplement County facilities and services with concessionaire agreements for food, convenience item sales, recreation equipment rentals, recreation instruction, and guided tours.
- 2.3.5. Ensure there are trash receptacles at a regular cadence along the river on both sides.

**2.4. Ensure design excellence within and along the river corridor.**

- 2.4.1. Utilize unified design guidelines for adjacent parks and river amenities that are flexible enough to reflect the diversity of local communities. *(LA River Design Guidelines)*.
- 2.4.2. Encourage local jurisdictions to adopt this plan's design guidelines. *(LA River Design Guidelines)*.
- 2.4.3. Require this plan's guidelines *(LA River Design Guidelines)* be followed for all projects permitted by the County, constructed on County property, or funded by the County.

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**2.5. Encourage compatibility of the river and adjacent land uses.**

- 2.5.1. Encourage the entire river channel and corridor to be zoned as open space.
- 2.5.2. Encourage the re-zoning of incompatible land uses, such as waste sites, adjacent to the river, where feasible.
- 2.5.3. Develop buffering strategies to mitigate air quality and other impacts of incompatible uses, such as industrial uses, that are expected to remain adjacent to the river.
- 2.5.4. Use County and local development and zoning review processes to ensure compatibility and, where feasible, add new river-adjacent amenities.

**2.6. Repurpose single-use spaces, such as power-line easements, rail rights-of-way, or flood infrastructure, to serve multiple functions such as multi-use trails or habitat.**

- 2.6.1. Develop master agreements with utilities for easements to maximize use of ground space under overhead or above buried utility lines for parks, open space, and trails.
- 2.6.2. Discuss options to create multi-use space with private rail companies.
- 2.6.3. Foster opportunities for urban agriculture to encourage access to local healthy foods.

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**2.7. Promote life safety along the river.**

- 2.7.1. Improve safety signage, including what to do in an emergency.
- 2.7.2. Utilize this plan's consistent 51-mile marker system (0 at Long Beach, 51 at Canoga Park) to assist response teams in locating emergencies along the river.
- 2.7.3. Ensure anchor points for swift water rescue teams.
- 2.7.4. Remove hazards and dangerous objects, such as old fencing, metal, or debris, from the river corridor.

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**2.8. Promote public safety along the river.**

- 2.8.1. Coordinate with the River Rangers program.
- 2.8.2. Ensure adequate and consistent lighting along the river trail that complies with guidelines to reduce light pollution.
- 2.8.3. Ensure emergency phones are located along the river trail.
- 2.8.4. Utilize CPTED (Crime Prevention Through Environmental Design) principles in projects.
- 2.8.5. Encourage adjacent neighborhood watch groups to include the river in their area of influence.
- 2.8.6. Consider the use of video monitoring systems in isolated locations.

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### 3. Goal: Support healthy, connected ecosystems.

The LA River watershed sits within one of the world's most diverse Mediterranean biodiversity hotspots. Due to urbanization, the region has the largest number of endangered and threatened species and species of special concern in the contiguous 48 states. The river as an ecosystem has been altered from its historic state, first through agriculture and irrigation and later through channelization. In community meetings and surveys, the issue most important to participants was protecting vulnerable plants and animals, identified as a priority by 52% of participants. Planning and development efforts along the river must create habitat areas large enough to support native ecosystems.

#### 3.1. Increase ecosystem function along the river corridor.

- 3.1.1. Prioritize projects that include improvements to ecosystem function.
- 3.1.2. Collaborate to collect data on ecosystem function within the LA River watershed and along the LA River corridor.
- 3.1.3. Collaborate with scientific research teams to increase the knowledge available about wildlife along the LA River and create species profiles for different conditions along the river.
- 3.1.4. Continue to track the Regional Water Quality Control Board Environmental Flows study to determine habitat opportunities.

#### 3.2. Increase plant species biodiversity and focus on the use of local California native plants in and around the river corridor.

- 3.2.1. Develop reach specific plant species guidelines related to ecological zones along the river with keystone species to create desirable ecosystems.
- 3.2.2. Consider long-term trends, such as population growth, climate change, future water regimes, resiliency, and sustainability, to create adaptive and dynamic biodiversity plans that are resilient to the urban context.
- 3.2.3. Incentivize the creation of nurseries along the river that can supply native plants for new, large river parks.
- 3.2.4. Develop plant palettes that make the river a planned reserve for plant biodiversity as climate changes.
- 3.2.5. Actively manage and remove invasive species from the river corridor and adjacent areas, utilizing best management practices.
- 3.2.6. Utilize locally sourced native seed on projects.

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**3.3. Create a connective network of habitat patches and corridors to facilitate the movement of wildlife and support a diverse ecological community.**

- 3.3.1. Utilize key sections of the river corridor itself to increase habitat areas.
- 3.3.2. Create habitat “stepping stone” patches in areas that are densely developed and do not have existing significant ecosystem functions.
- 3.3.3. Promote the creation of linkages between upland and riparian ecosystems.
- 3.3.4. Promote the creation of vegetated buffers at the edges of existing significant habitat areas as well as between habitat areas and vehicular areas.
- 3.3.5. Protect and enhance existing native, resilient, and biodiverse ecosystems (Plant communities are defined in the LA River Design Guidelines).
- 3.3.6. Support, in parallel with regional efforts, a reach specific regime for low flows in the river that contributes to ecological function.
- 3.3.7. Where possible, plant a continuous greenway of trees for increased cooling, forage, and roosting and nesting habitat.

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**3.4. Encourage cities along the river to adopt sustainability strategies.**

- 3.4.1. Provide technical assistance to cities seeking to develop or improve sustainability or climate plans.
- 3.4.2. Encourage cities to require LEED certification, ENVISION, or comparable standards, for public projects.
- 3.4.3. Encourage cities to utilize nature-based approaches to projects.

**3.5. Use environmentally responsible practices for operations and maintenance of the river channel and adjacent lands.**

- 3.5.1. Train maintenance staff to work with native ecosystems.
- 3.5.2. Ensure pest management and vector control is incorporated early during project development and coordinated with the Greater LA County Vector Control District.
- 3.5.3. Adopt Integrated Pest Management (IPM).
- 3.5.4. Limit pollution through the use of zero emission maintenance equipment.
- 3.5.5. Support the development of soil systems that can improve soil moisture retention and plant health.
- 3.5.6. Support water conservation strategies within the channel to balance water supply needs between municipalities, ecosystems, and recreation.
- 3.5.7. Eliminate the use of chemical herbicides in operations and maintenance.

**3.6. Use the river corridor as a living laboratory where ongoing innovation is encouraged.**

- 3.6.1. Use pilot projects to promote innovation, such as methods for localized air pollution mitigation, renewable power generation, natural solutions to water quality and runoff attenuation, increasing plant biodiversity, monitoring native plants and wildlife, and the production of sustainable local resources.
- 3.6.2. Recognize exemplary projects along the LA River and watershed through the LA County Green Leadership Awards Program.

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#### 4. Enhance opportunities for equitable access to the river corridor.

Today, ease and availability of access to trails along the LA River is highly variable. About 90 access points connect people to trails that serve 30 of the river's 51 miles. Yet, only one-third of these access points have signs and only 70% connect to sidewalks. Many access points are well served by bus, but only two Metro rail stops fall within a half mile of an access point to the river. It is therefore not surprising that not knowing where to go was among the top five reasons people who participated in community meetings and surveys cited for not visiting the LA River. The LA River is intended to be a resource for use by all of LA County, and to be a resource the river must be accessible and usable.

##### 4.1. Create welcoming access points and gateways to the LA River and LA River Trail to optimize physical access along its length, on both sides.

- 4.1.1. Make the river trail and gateways universally accessible and inclusive.
- 4.1.2. Prioritize access for areas with limited access or areas that need improvements to existing access points.
- 4.1.3. Prioritize access near major destinations, including schools, libraries, parks, transit stops, and job centers.

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##### 4.2. Increase safe transportation routes to the river.

- 4.2.1. Coordinate with LA County transportation plans, including Vision Zero, the Bicycle Master Plan, and the Step by Step Pedestrian Plan.
- 4.2.2. Provide pedestrian and bicycle connections across the river every half-mile.
- 4.2.3. Require all new pedestrian or road bridges over the river to provide pedestrian and bicycle access to the river trail.
- 4.2.4. Provide continuous pathways between the river and nearby recreation spaces.
- 4.2.5. Encourage cities to adopt complete streets policies to better connect neighborhoods to the river.
- 4.2.6. Increase the extent of multi-use trails that connect to the river with separate paths for active transport, pedestrians, and equestrians.
- 4.2.7. Coordinate with transportation planning to enhance public transit to and along the river.
- 4.2.8. Coordinate with transportation planning to encourage transit lines that cross the river to have stops that provide access to the river trail.
- 4.2.9. Promote the use of public transportation to connect to the river trail.
- 4.2.10. Develop informational materials and signage that highlight the river as an alternative to other modes of transportation to major job centers and destinations.

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## 5. Goal: Embrace and enhance opportunities for local arts and culture.

The LA River has been at the heart of Los Angeles history since its founding, when Indigenous and Spanish cultures relied on the river as a community resource. While some historical structures remain, other histories have been lost and deserve to be recovered and retold. The river should also reflect the diversity of its neighboring cultures, communities and organizations, and include the provision of space for cultural uses along its course. As an iconic part of the Los Angeles County landscape, the LA River has long captured the imagination of photographers, painters, and other artists as well. Its banks have been used to host performances and collaborative art, as a projection screen, and as a canvas, with at least two dozen feature films having used the river as a backdrop. LA County has the opportunity to be at the forefront of creating high quality arts and cultural experiences that support the adaptation of an industrial landscape and flood channel into a major cultural destination that draws residents and tourist alike and promotes the equitable inclusion of LA County's diverse cultural sector and local communities.

### 5.1. Develop a comprehensive 51-mile arts and culture corridor along the river.

- 5.1.1. Site permanent civic art, temporary art installations, cultural amenities, and cultural facilities along the river where appropriate.
- 5.1.2. Encourage incubation of diverse talent through commissions for local as well as regional and national artists and cultural organizations.
- 5.1.3. Secure reliable funding for art and cultural projects along the river.

### 5.2. Integrate artists, cultural organizations, and community members in planning processes and project development along the river.

- 5.2.1. Create a framework for arts and cultural asset mapping to identify preliminary resources and opportunities along the 51 miles of the LA River.
- 5.2.2. Share, monitor, and cultivate the asset mapping on the LA County Department of Arts and Culture website, and help reaffirm and build the LA River community as a vital and growing county resource.
- 5.2.3. Use both quantitative and qualitative data in planning arts and cultural activities along the river.

### 5.3. Galvanize the LA River cultural identity.

- 5.3.1. Activate the river by creating ongoing opportunities for cultural activities, gatherings, festivals, art, and performance along the river.
- 5.3.2. Support community-based arts and cultural organizations along the river, and actively promote river spaces to local groups and communities as available for their use.
- 5.3.3. Integrate civic art commissions and community engagement into the design criteria of the river corridor, including interpretive signage, cultural markers, interactive displays and other media, functional art, cultural amenities, and cultural facilities.

### 5.4. Streamline permitting processes for artwork and cultural activities along the river.

- 5.4.1. Simplify permitting for permanent art along the river.
- 5.4.2. Simplify permitting for holding events and performances along the river.

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**6. Goal: Address potential adverse impacts to housing affordability and people experiencing homelessness.**

Since 2000, LA County residents have been paying more for housing. The median owner-occupied home value has gone up by over 50%, from \$298,800 to \$465,900 between 2000 and 2016 (in 2016 dollars). Among renters, the percentage of household income spent on housing went up from 28 to 35% in the same time period. About a third (32%) of renters in the county are severely rent burdened, meaning they spend more than half of their income on rent. As the affordable housing shortfall has risen, so has the number of people experiencing homelessness, which now exceeds 50,000 people across LA County. Approximately 7,000 persons experiencing homelessness are living in neighborhoods adjacent to the river. As the LA River moves toward the vision of becoming 51 miles of connected open space, it is critical to consider how this vision will impact housing and homelessness. With the goal of increasing parks and open space, there is potential to negatively impact housing affordability. It is therefore important to proactively implement a meaningful strategy for preventing displacement and ensuring continuing affordability of housing in river adjacent communities. It is possible to improve neighborhoods without causing negative effects of gentrification.

**6.1. Create an ongoing forum for the coordination of housing and community stabilization strategies along the river.**

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6.1.1. To ensure oversight and implementation of housing and community stabilization strategies, establish an LA River Housing Affordability Task Force that includes representatives from the County and river adjacent cities, as well as key community stakeholders, including affordable housing advocates and representatives of communities directly experiencing displacement. Provide funding for staffing or consultants to support the Task Force.

**6.2. Require a housing impact assessment be completed as part of the planning for all sizable river improvement projects**

6.2.1. Develop an assessment tool to evaluate whether projects are likely to significantly impact housing affordability.

6.2.2. Prior to committing County resources to river projects or approving permits that impact the river right-of-way, require completion of a concise assessment of affordable housing needs and opportunities. The extent of analysis required should vary depending on the scale of the river project, but each assessment should include:

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- an analysis of the potential impact of the proposed project on housing affordability and displacement.
- a summary of existing affordable housing programs and projects serving the community including any existing affordable housing developments with affordability restrictions scheduled to expire.
- a 'community roadblock analysis' which identifies local barriers to approval of supportive housing in the surrounding community.
- an analysis of the existing stock of currently unsubsidized but affordable market rate rental housing in the area surrounding the project
- a list of specific sites which could be appropriate for development of supportive housing for persons experiencing homelessness.
- an affordable and supportive housing strategy outline tailored to the local needs and opportunities.

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**6.3. Increase units of affordable housing within one mile of the river.**

- 6.3.1. Encourage a mix of supportive housing, affordable rental, and affordable homeownership units in both new construction and preservation buildings.
- 6.3.2. Expand the LA County Community Development Commission's Home Ownership Program (HOP) to provide additional affordable homeownership opportunities in river adjacent communities.
- 6.3.3. ~~Designate river adjacent communities at risk of increased displacement as priority areas for County affordable housing investment.~~
- 6.3.4. Publicly report on the progress toward this goal annually through the LA River Housing Affordability Task Force.

**6.4. Develop an affordable housing land bank authority, land acquisition loan fund, or similar organization to strategically purchase land along the river and hold it for future development as affordable housing or permanent supportive housing.**

- 6.4.1. ~~Commission a study to identify all public agency owned land within one mile of the LA River and identify surplus or underutilized sites appropriate for development of affordable or supportive housing, including sites where housing could be collocated with other uses.~~
- 6.4.2. Designate and fund a single land bank or similar entity within county government or an outside partner to:
  - ~~coordinate site acquisition and financing river-wide.~~
  - ~~Initially target land acquisition efforts largely (but not exclusively) in areas identified as facing the greatest risk of displacement.~~
  - ~~Partner with local agencies and community-based organizations to manage community planning processes to identify local priorities for development in each area.~~
  - ~~Manage RFPs or other public process for selecting housing developers for disposition or joint development projects.~~
  - ~~Transfer ownership of land to local nonprofit housing providers, or other long-term owners when sufficient local capacity exists.~~
  - ~~Recapture land purchase funds for reuse in future sites to the extent possible.~~

**6.5. Secure funding for affordable housing in parallel with funding for river projects.**

- 6.5.1. ~~As new financing tools are created to fund river improvements, set aside a portion of funding to support land acquisition and affordable housing whenever possible. While many infrastructure financing sources will not allow use for affordable housing, using a portion of river specific funding for housing, when possible, can leverage additional affordable housing financing and expand the amount of affordable housing built adjacent to the river.~~
- 6.5.2. ~~Commission a study of the potential for an affordable housing specific tax increment financing tool as a means of significantly expanding funding for affordable housing along the river by capturing a small share of future growth in property tax revenue exclusively for affordable housing.~~
- 6.5.3. Leverage existing housing subsidies to finance permanent supportive housing for people formerly experiencing homelessness on key sites adjacent to the river.
- 6.5.4. Require all residential projects with a commitment of County resources, such as funding or land, to set aside at least 25% of the units to be affordable to extremely low, very low, and low-income households.

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**6.6. Incentivize stronger tenant protection policies along the river.**

- 6.6.1. Develop resources to expand tenant education and counseling, and inform tenants living adjacent to river improvement projects about the availability of counseling services, including those available through LA County Department of Consumer and Business Affairs.
- 6.6.2. Develop resources and provide technical assistance to encourage cities to adopt stronger tenant protection policies, including rent stabilization and just cause for evictions.
- 6.6.3. Fund a grant program to provide staffing support to community-based organizations in high-risk communities to conduct direct outreach and counseling to tenants at risk of displacement.
- 6.6.4. Expand County funding for eviction legal defense services for tenants, and target this resource to areas of the county (including many river adjacent communities) likely to experience concentrated displacement.
- 6.6.5. Prioritize river investment programs in communities that have established tenant protections.

**Deleted: <#>Help protect the affordability of existing stable neighborhoods through the promotion of community ownership of land.¶**  
**<#>Create a 'start up' fund to provide modest grants to support the development of local community land trust organizations (including land trusts sponsored by existing community organizations).¶**  
**<#>Provide technical assistance grants to promote the creation of community land trusts.¶**  
**<#>Support**

**6.7. Support persons experiencing homelessness along the river by coordinating outreach and by building new permanent supportive housing.**

- 6.7.1. Identify sites for permanent supportive housing within 1 mile of the river.
- 6.7.2. Coordinate and support existing efforts to provide temporary and interim supportive housing until the implementation of permanent solutions.
- 6.7.3. Coordinate and support existing efforts of the County's coordinated homeless outreach system and their work along the LA River.
- 6.7.4. Connect persons living in or near the river to the coordinated entry system for access to housing opportunities for which they are eligible.
- 6.7.5. Build on the platform provided through Measure H to support more local cities in developing proactive homeless support programs and policies.

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**6.8. Integrate best practices for working with persons experiencing homelessness utilizing the river corridor.**

- 6.8.1. Review and update guidelines for clearing of encampments along the river to increase notification timelines and coordination with outreach teams.
- 6.8.2. Continue and improve the LA County Public Works temporary sanitation stations program while developing more robust sanitation facilities.
- 6.8.3. Provide, at a regular cadence of approximately every mile, permanent facilities for sanitation that are regularly maintained, staffed, and coordinated with river amenities.
- 6.8.4. Coordinate with the River Rangers program to train rangers to interact with persons experiencing homelessness.

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**7. Goal: Foster opportunities for continued community engagement, development, and education.**

Among the hundreds of community groups that are present along the river, there are over three dozen organizations and initiatives that focus on the river itself, some of which have been active for over three decades. Healthier, more socially connected communities were the third most important river-related issue for community members. The LA River's connection to the region's history, ecology, and culture makes it a prime venue and tool for both community engagement and education. Community members felt it was most important for people to learn how the river benefits and supports the environment (38%): ecology, habitat, and vegetation (33%); and current hydrology and uses of the river (21%). Though some adjacent communities currently take advantage of the river, a reimagined river with increased activity could serve as a platform and front door for all surrounding communities.

**7.1. Provide spaces for people of all ages and abilities to learn about the ecology, hydrology, engineering, and cultural and natural history of the river and its watershed.**

- 7.1.1. Install interpretive signage, cultural markers, interactive displays, or other media that reflect community input and local culture.
- 7.1.2. Create outdoor classroom spaces that can be used by schools.
- 7.1.3. Prioritize connectivity to the river from schools, cultural centers, and other education facilities.

**7.2. Develop educational materials for people of all ages to learn more about the past, present, and future of the river corridor; natural resource protection; and the wildlife and water of the LA River.**

- 7.2.1. Work with educational institutions to develop sample curricula for teachers of students of different ages to use when bringing their classes to the river.
- 7.2.2. Develop self-guided educational tours.
- 7.2.3. Coordinate with the River Rangers program to provide educational tours that feature Traditional Ecological Knowledge.
- 7.2.4. Work with Native American communities to develop a curriculum telling the history of indigenous peoples whose lives and traditions depend on the LA River.

**7.3. Engage populations indigenous to the region to celebrate and document the river's role in indigenous culture.**

- 7.3.1. Foster an ongoing conversation and collaboration with Native American communities about the LA River.
- 7.3.2. Streamline the permitting process for access to traditional religious, cultural, and ceremonial spaces along the LA River corridor.
- 7.3.3. Utilize place names from Native languages in signage along the LA River.

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**7.4. Promote the river and natural ecosystem as an economic asset to surrounding communities.**

- 7.4.1. Utilize local resources and workforce to design, build, operate, and maintain projects, art, and amenities along the river, where possible.
- 7.4.2. Work with homeless service providers to identify opportunities to train and match individuals experiencing homelessness with jobs or other vocation training.
- 7.4.3. Encourage local businesses and river-related groups to engage youth in internships related to the river.
- 7.4.4. Promote recreation as an economic resource.
- 7.4.5. Provide workforce training to maintain nature-based projects.

**7.5. Improve the interface between the river corridor and adjacent communities.**

- 7.5.1. Visually enhance river boundaries.
- 7.5.2. Encourage existing river-adjacent development to orient its “front door” toward the river and public transportation.
- 7.5.3. Integrate cultural markers and signage.
- 7.5.4. Continue to solicit input from communities along the river throughout implementation of this plan and hold community meetings to update residents on the progress of plan implementation.
- 7.5.5. Require that County funded infrastructure and open space projects engage local residents and community stakeholders in planning.
- 7.5.6. Ensure the physical design of river improvements is consistent with the physical and social character and culture of each neighboring community.
- 7.5.7. Identify community vulnerabilities, such as displacement risk, flood risk, or climate vulnerability, and associated impacts with regard to river improvement projects.
- 7.5.8. Develop a project mitigation strategy for identified threats to community and resident stability, particularly forces of economic displacement, flood risk, and climate risk.

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## 8. Improve local water supply reliability.

More than 50% of the region's water supply is imported from the Colorado River, the Sacramento-San Joaquin River Delta, and the Eastern Sierras. In the Los Angeles Basin, 57% of water is imported, 34% comes from groundwater, and 9% is sourced from recycled water, water conservation measures, and local surface water diversions. In community meetings and surveys, supplementing water supply was the second most important issue related to the LA River for participants, identified by 48% of participants. Increasing population, regulatory requirements, natural disasters, and demands on the water system accentuate decreasing reliability in the sources of imported water supplies that is caused by cyclical droughts and climate change. Dry weather and wet weather flows in the LA River present opportunities to develop and diversify local water resources to reduce dependence on imported water and increase the reliability and resiliency of the region's water supply.

### 8.1. Capture and treat stormwater and dry weather flows before they reach the river channel for groundwater recharge, direct use, or release for downstream beneficial uses.

- 8.1.1. Encourage and incentivize water capture and direct use on public and private properties.
- 8.1.2. Provide incentives for private property owners to capture and treat stormwater on site.
- 8.1.3. Coordinate dry-weather flow efforts among jurisdictions and along the tributaries and other sub-watersheds.
- 8.1.4. Implement stormwater capture projects within the watersheds and along the tributaries of the LA River.

### 8.2. Divert and treat stormwater and dry weather flows within the river channel for groundwater recharge, direct use as recycled water, and to supply water for parks and ecological areas.

- 8.2.1. Implement direct diversion and treatment projects for recharge in the Central Basin.
- 8.2.2. Implement direct diversion and treatment projects for use as recycled water.
- 8.2.3. Consider direct diversions from the channel for use in river adjacent parks and ecological areas.

### 8.3. Employ and encourage efficient water use.

- 8.3.1. Conduct an inter-institutional study on climate change impacts to water supply planning in the LA Basin.
- 8.3.2. Apply the latest accepted climate change prediction models to water supply planning.
- 8.3.3. Encourage and incentivize households and neighborhoods to adopt best practices in water management.
- 8.3.4. Provide incentives for new projects to utilize Waterwise methods.
- 8.3.5. Encourage water conservation, water use efficiency measures, and the use of recycled or on-site collected water for irrigation in new developments, retrofit projects, parks, and ecological areas.

### 8.4. Improve facility operations and maintenance.

- 8.4.1. Expand coordination between responsible to streamline operations and maintenance, facility management, funding, and permitting.
- 8.4.2. Review and update operations and maintenance protocols and best practices.
- 8.4.3. Implement new technologies such as real-time monitoring, reporting, and controls.

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**8.5. Continue measures to clean up the regional groundwater aquifers.**

8.5.1. Explore state legislation to empower local agencies, and provide technical and financial support for improvement of water quality on local systems and remedy regional groundwater threats

8.5.2. Coordinate with the Upper Los Angeles River Area (ULARA) Watermaster, the water purveyors, and the responsible parties to advance groundwater remediation and improve the management and use of the San Fernando Groundwater Basins.

8.5.3. Coordinate with the Water Replenishment District, the water purveyors, and the responsible parties to advance groundwater remediation and improve the management and use of the Central and West Coast Groundwater Basins.

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## 9. Goal: Promote healthy, safe, clean water.

The LA River is an impaired water body with multiple beneficial uses and regulated pollutants. While over 800 water quality improvement projects are planned or have been completed within the river's watershed, additional efforts are needed to meet established water quality targets. In many locations there are enough projects proposed or constructed to meet water quality requirements on the river's main stem. However, there is much uncertainty in the funding and implementation of these plans to keep pace with the approved planned milestones.

### 9.1. Improve water quality and contribute to the attainment of water quality requirements to protect public and environmental health.

- 9.1.1. Develop corridor-based water quality projects and programs, leading to implementation and operations and maintenance.
- 9.1.2. Support, encourage, and incentivize watershed water quality project and program development, implementation, and operations and maintenance.

### 9.2. Coordinate water quality improvements with Measure W.

- 9.2.1. Support the establishment of an oversight committee to direct efforts following any new or existing regional funding initiatives.
- 9.2.2. Follow prescriptive watershed planning along with adaptive management practices as detailed in the regional Watershed Management Programs/Enhanced Watershed Management Programs (WMPs/EWMPs).
- 9.2.3. Assist with establishing procedures for a credit program to assist property owners.
- 9.2.4. Provide technical and/or financial support for: feasibility studies; water quality planning; resilience planning; real property acquisition for project development; pilot projects to test new technologies and/or methodologies focused on water quality, local water supply, and community investments; and retrofit programs.

### 9.3. Coordinate with the Watershed Management Program/Enhanced Watershed Management Program (WMP/EWMP) Groups.

- 9.3.1. Ensure development within the watershed incorporates low impact development techniques to increase infiltration and capture throughout the built watershed.
- 9.3.2. Expand stormwater capture for groundwater recharge, increase distributed stormwater capture, and reduce effective imperviousness in the watershed, prioritizing nature-based solutions where possible.
- 9.3.3. Actively coordinate with the Upper Los Angeles River, Los Angeles River Upper Reach 2, and Lower Los Angeles River watershed management groups to develop regional and distributed projects and programs that contribute to meeting goals for regional water quality improvement.
- 9.3.4. Prioritize the removal of pollutants of concern according to timelines contained within the implementation plans and the Clean Water Act.
- 9.3.5. Prioritize catchments where needs are greater than can be met with planned or developed projects.
- 9.3.6. Continue to implement and enforce regional policies for green streets, low impact development, and other watershed improvement initiatives.
- 9.3.7. Prioritize nature-based solutions to improve water quality.
- 9.3.8. Publicize water quality metrics and monitoring results.

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**9.4. Increase public awareness of river water quality.**

9.4.1. Develop a website to assist in educating other agencies, cities, and the general public on river issues such as water quality.

9.4.2. Post consistent signage and communication about water quality on bridges and access points.

9.4.3. Develop and implement an educational program on river water quality.

**9.5. Improve facility operations and maintenance.**

9.5.1. Expand coordination between responsible to streamline O&M, facility management, funding, and permitting.

9.5.2. Review and update operations and maintenance protocols and best practices.

9.5.3. Implement new technologies such as real-time monitoring, reporting, and controls.

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