

**BOARD OF PUBLIC WORKS
MEMBERS**

CYNTHIA M. RUIZ
PRESIDENT

JULIE B. GUTMAN
VICE PRESIDENT

PAULA A. DANIELS
PRESIDENT PRO TEMPORE

ERNESTO CÁRDENAS
COMMISSIONER

VALERIE LYNNE SHAW
COMMISSIONER

JAMES A. GIBSON
EXECUTIVE OFFICER

CITY OF LOS ANGELES
CALIFORNIA



ANTONIO R. VILLARAIGOSA
MAYOR

DEPARTMENT OF
PUBLIC WORKS

BUREAU OF
ENGINEERING

GARY LEE MOORE, P.E.
CITY ENGINEER

1149 S. BROADWAY, SUITE 700
LOS ANGELES, CA 90015-2213

<http://eng.lacity.org>

March 17, 2009

Honorable Ed P. Reyes, Chair
Ad Hoc Committee on the Los Angeles River
Los Angeles City Council

c/o Maria Espinoza
City Clerk
City Hall, Room 395

Dear Councilmember Reyes and Honorable Members:

**RECOMMENDATIONS REGARDING LOS ANGELES RIVER ACCESS AND USES - COUNCIL FILE NO.
07-1342-S5**

Discussion

I am hereby submitting a report in response to the Council's October 17, 2008 motion instructing the Bureau of Engineering (BOE), with assistance of all appropriate City, State, and Federal agencies and community organizations, to prepare short- and long-term recommendations regarding actions, including policies, that will balance the needs of the Los Angeles River environment, such as wildlife and conservation, with human enjoyment of the River.

Recommendation

1. Approve the five (5) proposed principles offered by the Committee to guide the report's development;
2. Review and discuss the report's twelve (12) recommendations; and
3. Make the report available for public comment for a period of thirty (30) days.

If you have any questions regarding this report, please contact Carol Armstrong of the BOE Los Angeles River Project Office: (213) 485-5762.

Sincerely,

Gary Lee Moore, P.E.
City Engineer

GLM/CA/J:executive\kjdl\riveraccessanduse_rev

Attachment: Los Angeles River Access and Use: Balancing Equitable Actions with Responsible Stewardship (March 12, 2009)

cc: Romel Pascual, Mayor's Office



Los Angeles River Access and Use

Balancing Equitable Actions with Responsible Stewardship



March 12, 2009



Prepared by the
LOS ANGELES RIVER PROJECT OFFICE
City of Los Angeles
Department of Public Works
Bureau of Engineering



Public Works Building, 1149 S. Broadway, Suite 600, Los Angeles, CA 90015
213.485.5762 • www.lariver.org

Cover image: Potential multi-benefit project—shows water quality treatment wetlands with riparian habitat and recreational trail in a presently underutilized area known for illegal dumping—underneath the 134 Freeway at the confluence of the Verdugo Wash and the Los Angeles River. Source: 2007 City of Los Angeles, Los Angeles River Revitalization Master Plan, p. 6-16.

TABLE OF CONTENTS

I.	Overview	5
II.	Introduction	9
III.	The River's Ecological Context	11
	Biodiversity	
	Habitat	
	Vector Management	
	Pets and Other Domesticated Animals	
	Special Status Cases	
	Indigenous vs. Invasive Species	
	Water Supply	
	Water Quality	
	Flood Management	
	Governance Needs	
	Potential Access and Use Conflicts	
	Example Cases	
	Key Partners	
	Recommendations	
IV.	The River's Social Context	25
	Population Pressures and Quality of Life Concerns	
	Environmental Justice	
	Public Health	
	Key Stakeholders	
	Education	
	Recreation	
	Cultural Activities	
	Illicit Activities	
	Governance Needs	
	Potential Access and Use Conflicts	
	Example Cases	
	Key Partners	
	Recommendations	
V.	The River's Economic Context	41
	Businesses	
	Jobs	
	Property	
	Transportation System	
	Water Supply	
	Water Quality	
	Governance Needs	
	Potential Access and Use Conflicts	
	Example Cases	
	Key Partners	
	Recommendations	
VI.	References	45
VII.	Council Motion	47
VIII.	Map of the Los Angeles River	48
IX.	Local Regulations Pertaining to River Access and Use	49

OVERVIEW

With adoption of the Los Angeles River Revitalization Master Plan (LARRMP) in 2007, the City of Los Angeles pledged to make improvements to the first 32 miles of the Los Angeles River (River) that flow within its boundaries. The River drains a massive watershed (larger than 840 square-miles), which means it has far-reaching impacts both upstream and downstream, where it flows into the Pacific Ocean. The LARRMP envisions substantial changes that will result in environmental and quality-of-life benefits to the entire Southern California region by revaluing the River as a cherished place for residents and visitors to experience on a daily basis. In response to the motion passed by the City Council Ad Hoc Committee on the Los Angeles River on October 17, 2008 (See p. 47.), this report investigates the issues and steps that may be necessary to make recommendations regarding future policies that will “balance the needs of the river environment, such as wildlife and conservation, with human enjoyment of the river.”

As demonstrated in the LARRMP, advocates throughout the region have asked that the River be opened and made accessible as a public resource—with similar access and uses as those allowed for the nearby beaches of the Pacific Ocean. However, free access and use of the River has been historically limited due to concerns regarding safety related to seasonal storm flows (supercritical flows) and because of a lack of surveillance that has allowed illicit activities to proliferate in certain areas.

Large waterways all across the world pose similar challenges and opportunities to those of the River and there are many precedent cases that demonstrate successful public access with appropriate management oversight. This report compiles the input of many different River stakeholders and suggests that expanded public River access and use is possible if the proper safeguards are first put in place. Five key guiding principles have been proposed by the City Council’s Ad Hoc Committee on the River and have influenced the recommendations offered here; these are:

1. *Grant the public access to and expanded use of the River, its channel, and its easements;*
2. *Ensure that the public feels safe when visiting the River;*
3. *Establish a River access policy program that relies upon the rights and responsibilities of individuals (and, in the case of minors and/or disabled persons, their caregivers);*
4. *Guarantee that the River’s native wildlife and habitat are valued and protected; and*
5. *Commit that government must maintain and enable safe, public River access and use.*

In support of these principles, this report examines aspects of the River’s ecological, sociological, and economic contexts, anticipates future obstacles in the form of potential access and use conflicts, and proposes some near- and long-term recommendations. Areas that could conflict with other uses and may need to be specifically designated are as follows:

- ◆ Recreational uses in general (e.g., both inside and outside the channel, including wading swimming, boating, and fishing, that may conflict with each other and other uses, such as habitat areas)
- ◆ Botanical gardens (e.g., California/Mediterranean climate-friendly—in some cases, these gardens might include non-native, invasive species)
- ◆ Commercial spaces (e.g., under bridges in downtown)
- ◆ Community gardens (e.g., for food purposes—in some cases would be non-native, invasive species)
- ◆ Dog parks and trails (e.g., to avoid wildlife and equestrian interactions)
- ◆ Equestrian areas (e.g., to manage vector control, disease transmission)
- ◆ Farmer’s markets (e.g., because of noise, attraction of animals)
- ◆ Filming locations (e.g., because of light and noise)
- ◆ Grazing areas (e.g., to manage vector control and disease transmission)
- ◆ Habitat-only areas (e.g., to avoid disturbance to sensitive species)
- ◆ Recreational uses for elderly persons, very young persons, those with varying, but special needs
- ◆ Swimming and wading areas (e.g., to avoid conflicts with boats, fishing, or contamination of habitats)
- ◆ Trails with bridges and tunnels (e.g., must accommodate wildlife passage and ensure safe human vs. wildlife interactions)

It should be noted that, although the LARRMP and its proposed LA River Improvement Overlay (LA-RIO) district call for the use of native plants in landscaping, future projects on nearby parcels may still include non-natives and may take the form of ornamental or botanical gardens; therefore, they are mentioned here in order to consider the possibilities of how to best coordinate the coexistence of these uses. Other uses—such as farmer’s markets and animal husbandry—are also not explicitly called for in the LARRMP, but may still occur should communities choose to implement them; therefore, they are also referenced as possible uses that would need to be coordinated with River project development.¹

Both near- and long-term recommendations are explored within this report. These have been synthesized into action items for City departments and agencies as follows:

No.	Lead Agency	To Ad Hoc	Regular Action(s)	Recommendation
1.	All	As requested	Reports to City Interdepartmental Task Force on the River and Ad Hoc, as requested	Via a full Council motion, direct all City departments and agencies to include River access amenities in their projects near, or with an important nexus to, the River, including, but not limited to: dedication of lands (such as easements) for River access and trail connectivity, identification of lands that may accommodate public services and incorporation of bridge underpasses or other roadway amendments to accommodate safe human and wildlife passage within the River corridor.
2.	Community Redevelopment Agency	90 days	Report to Ad Hoc as requested	Direct the Community Redevelopment Agency (CRA), in consultation with the General Services Department (GSD) and real estate divisions of the Departments of Recreation and Parks (RAP), Transportation (DOT), Public Works (DPW), and Water and Power (DWP), and the Department of City Planning’s River Unit (DCP-RU), and other City staff as necessary, to identify opportunities for moving and/or consolidating City yards that are near the River in order to more efficiently co-locate those functions away from the River and simultaneously make River-adjacent lands available for LARRMP-related uses and report back to the Ad Hoc Committee within ninety (90) days.
3.	Community Redevelopment Agency	To be determined	Bi-monthly reports to City Interdepartmental Task Force on the River and Ad Hoc	Direct the CRA, in consultation with appropriate City staff and external agencies and organizations, to identify a prioritized list of properties for acquisition in order to fulfill the goals of the Los Angeles River Revitalization Master Plan, as well as a process and key large multi-sectoral projects and report on these to the Ad Hoc River Committee.
4.	Department of City Planning	60 days	Report to City Interdepartmental Task Force on the River and Ad Hoc, as requested	Direct the DCP, in consultation with appropriate City staff and external agencies and organizations, to investigate the feasibility of completing a watershed-based planning effort through the updating of the City’s Open Space Element of the General Plan that will address River ecology, River access, and water supply issues and report back to the Ad Hoc Committee within sixty (60) days.
5.	Department of Public Works, Bureau of Engineering	60 days	Bi-monthly report to City Interdepartmental Task Force on the River and Ad Hoc, as requested	Direct the Bureau of Engineering’s Los Angeles River Project Office (LARPO) to develop recommendations for a comprehensive River signage program, including scope, design, cost, funding, and implementation strategy, in consultation with appropriate City staff and external agencies and organizations, and report back to the Ad Hoc Committee within sixty (60) days.
6.	Los Angeles Police Department	90 days	Bi-monthly report to City Interdepartmental	Direct the Los Angeles Police (LAPD) and Fire Departments (LAFD) in consultation with General Services Department, external agencies, and local river organizations as appropriate, to determine the resources

¹ Activities described in this report may also require Section 404 of the Clean Water Act authorization from the U.S. Army Corps of Engineers or other agency permits, such as from the County of Los Angeles. These are anticipated, necessary coordination activities. In particular, the Corps supports early modifications which address safety and water quality so that these may be accomplished before recreation in or public access to the River channel is encouraged and before the Corps could encourage the use of any part of the active channel for boating or other purposes, candidate areas would need to have safe ingress and egress, not just in the immediate vicinity but also in areas downstream. The Corps also suggests that, in the event that some measures, structural or otherwise, can be implemented to reduce safety concerns, it is likely that seasonal limitations on in-channel activities will remain necessary due to flood risk.

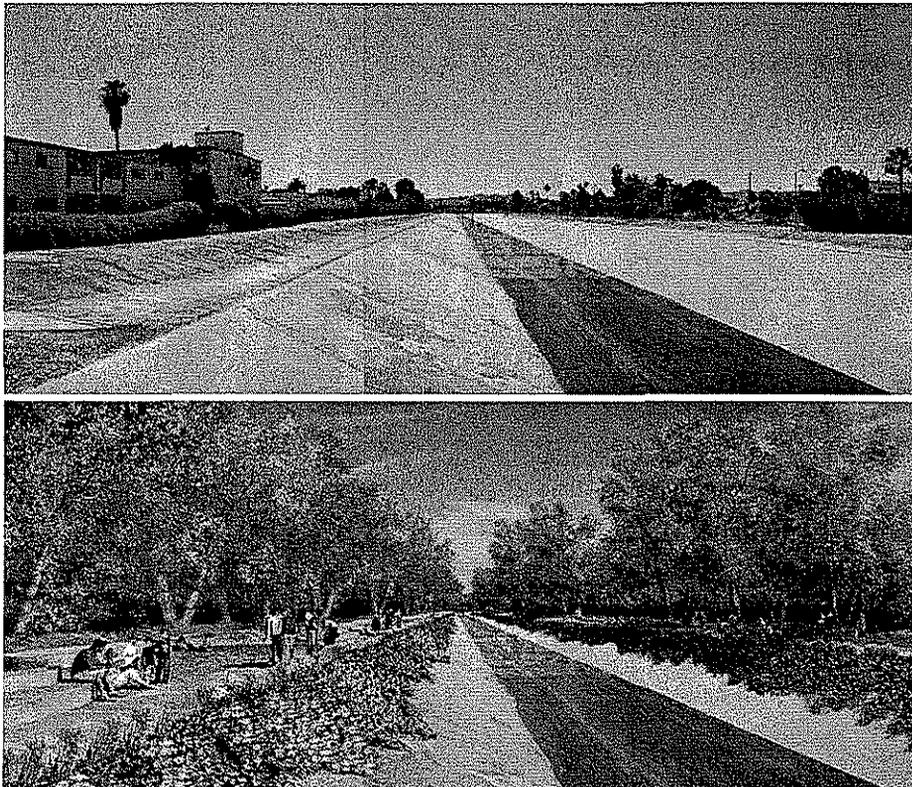
No.	Lead Agency	To Ad Hoc	Regular Action(s)	Recommendation
			Task Force on the River and Ad Hoc, as requested	required to deploy the necessary River security personnel and associated equipment, assess enforcement practices, and make recommendations that would facilitate adequate oversight of public access to the 32-miles of the River within the City on a daily basis and report back to the Ad Hoc Committee within ninety (90) days.
7.	Department of Recreation and Parks	90 days	Bi-monthly report to City Interdepartmental Task Force on the River and Ad Hoc, as requested	Direct the Department of Recreation and Parks (RAP) to work with the Office of the Chief Legislative Analyst, City Attorney's Office, risk management personnel, the Los Angeles Police (LAPD) and Fire Departments (LAFD), and in consultation with external agencies and organizations as appropriate, to identify resources for maintenance, maintenance personnel and associated equipment, existing barriers to public River access, including physical hazards and solutions to those in order to facilitate safe public access to all or portions of the 32-mile River corridor within the City and report to the Ad Hoc Committee with a process and key projects to accomplish these goals within ninety (90) days.
8.	Department of Transportation	90 days	Reports to City Interdepartmental Task Force on the River and Ad Hoc	Direct DOT, in consultation with appropriate City staff and external agencies and organizations, to develop a process and key projects to accomplish simultaneous River access and bicycle safety improvements, including the prioritization of the River bike path per the City's Bicycle Plan, intersection improvements, grade crossings, etc. and report to the City's Ad Hoc Committee within ninety (90) days.
9.	Department of Water and Power	90 days	Bi-monthly reports to City Interdepartmental Task Force on the River and Ad Hoc	Direct DWP, in consultation with appropriate City staff and external agencies and organizations, to establish the Watershed Infiltration for Supply and Environmental Restoration (WISER) committee of experts and task the committee with identifying ways to streamline River project guidance information, permitting processes, and regulatory compliance that will result in increased water supply benefits, better water quality and improved ecological health in the River corridor. Specific outcomes may include maps and guidelines designating areas within the River corridor and upstream in the River's watershed where certain projects may take place—such as green streets, water attenuation, water quality, groundwater recharge, and brownfield redevelopment. Maps may also indicate the best areas for water-contact recreation versus non-water-contact recreation given water quality and flow concerns. A representative of the WISER committee will participate in the City Interdepartmental Task Force on the River and report to the City's Ad Hoc Committee with its first report submitted within ninety (90) days outlining a process and key projects to achieve these objectives.
10.	Department of Water and Power	90 days	Reports to City Interdepartmental Task Force on the River and Ad Hoc	Direct DWP, in consultation with appropriate City staff and external agencies and organizations, to identify opportunities to coordinate its implementation of the SOLAR-LA program with River revitalization efforts, regularly participate in the City Interdepartmental Task Force on the River and report to the City's Ad Hoc Committee within ninety (90) days outlining a process and key projects to achieve this objective.
11.	Chief Legislative Analyst	90 days	Bi-monthly reports to City Interdepartmental Task Force on the River and Ad Hoc	Direct CLA to work with the appropriate city departments and external agencies to make recommendations on the establishment of a River Opportunities for Wildlife, Ecology, and Recreation (ROWER) committee of experts and task them with identifying ways to streamline River project guidance information, river projects, codes, permitting processes, and regulatory compliance that will result in increased access, safety, biodiversity and improved ecological health in the River corridor and report to Ad Hoc River Committee within 90 days.
12.	City Attorney	90 days	Report to Ad Hoc as requested	Request that the City Attorney, in consultation with BOE, CAO, and other appropriate City staff, recommend strategies to identify the prevailing codes, covenants, restrictions, regulations, laws, other legally-binding measures (such as permitting requirements), that would need to be amended in order to facilitate public access to the 32-mile River corridor (easements and channel areas) within the City and report to the City's Ad Hoc Committee within ninety (90) days.

INTRODUCTION

The 2007 Los Angeles River Revitalization Master Plan (LARRMP; See: www.lariver.org.) was adopted as the City's long-term blueprint for bringing about positive change in the 32-mile Los Angeles River (River) corridor through the creation of new parks, open spaces, trails, recreational amenities, habitat areas, and community connections. The LARRMP includes recommendations encouraging changes to the River that will allow people to freely circulate in and around the channel. The River corridor includes areas that may be considered the "active channel" as well as the "channel rights-of-way" adjacent to it, which fall within the operations and maintenance jurisdiction of either the County of Los Angeles or the U.S. Army Corps of Engineers, and "areas bordering the River channel rights-of-way" that are owned by various public and private parties. Currently, access to the River channel is restricted and contact with River water is not encouraged and, without the necessary permits, is often considered illegal. However, in order for the LARRMP to be implemented in the way that it was intended, many issues regarding appropriate access and use must be addressed.

In response to the motion passed by the City Council Ad Hoc Committee on the Los Angeles River on October 17, 2008 (See p. 47.), this report identifies and examines salient issues regarding River access and uses, drawing upon public comments made to the Committee at its meeting on October 20, 2008, at a subsequent public meeting on December 4, 2008, and via ongoing consultations with various stakeholders.

The report is organized around three key themes, recognizing that the River is central to many interrelated aspects of life in Los Angeles—**ecological** (how people interact with their natural environment), **social**, and **economic**. Each theme includes a discussion of future governance needs related to River access and use, potential conflicts, example cases, key partners, and recommendations (both near- and long-term). Although some conclusions are offered, the report should be viewed as a living document given that the relevance of its assumptions and recommendations will change as the River landscape is transformed through implementation of the LARRMP over time.



These images illustrate the intent of the LARRMP to provide access to the River with habitat and recreational enhancements. Source: pp. 4-4 to 4-5.

THE RIVER'S ECOLOGICAL CONTEXT

The City's River revitalization efforts must balance human interests in accessing and using the River with improvements that will ensure an environment supportive of healthy, sustainable biodiversity. This section provides a summary of key ecological issues impacting River access and use followed by a list of near- and long-term recommendations to set in motion the necessary simultaneous, multi-benefit outcomes.

Biodiversity

The River flows 32 miles within the City of Los Angeles (See map on p. 48.) through an area that is home to more than 1 million people, 390,000 housing units, 480,000 workers, 35,000 businesses, and 80 schools. The River is a massive waterway—stretching a total of 51 miles from Canoga Park to Long Beach—with an immense potential for impacting avian and aquatic biodiversity in the region, the state, the nation, and the world. Since the River drains an approximately 840-square mile watershed, its flows are impacted by many upstream contaminants which are then flushed directly to the *world's largest water body—the Pacific Ocean*. Given this direct relationship, the River has profound impacts on water resources of global importance—both near coastal ecosystems and distant ones impacted by mobile contaminants, including plastics and polystyrene generated in the Southern California region. Such contaminants may bioaccumulate in aquatic, avian, and terrestrial species, causing harm in subsequent generations or via the food chain as these species move through and interact within various near and distant water bodies.

The River is also located within the Pacific Flyway, an important *global migration route* for countless avian species. Any habitat creation along the River and into its adjacent communities—particularly by connecting to large open spaces, such as Griffith Park and the Santa Monica and Verdugo mountain ranges—would have important implications for sustaining a variety of species, including those listed as special status (e.g., threatened or endangered) species and their survival worldwide.

The California Floristic Province, which includes the larger Southern California Coastal region and the River's watershed, has been designated by Conservation International as one of the *world's 25 hotspots for biodiversity loss*.

Habitat

The River's situation within a densely urbanized landscape makes habitat creation a considerable challenge. However, a potential 64 miles of riverfront easement space exists within the City (102 miles total, along the entire River) that would improve the River environment and simultaneously create a continuous habitat corridor. Tree canopies would serve as habitat for birds and small mammals. Lower-level plantings would serve as habitat for terrestrial species, including amphibians. Transitions from woodland to riparian (within the River channel) could facilitate circulation of species and foster the growth and proliferation of aquatic species. Plantings that hang over the River channel (See image on the previous page.) would also foster seed transport to downstream locations. Some suggest that seed transport may not be effective if downstream portions of the River are not yet naturalized, but since the long-term vision is for expanded ecosystem value within the River channel—upstream to downstream and vice versa—this remains an option. Certainly nearer term projects will involve planting River-adjacent parcels and rights-of-way until such time that additional land may be acquired to foster expanded habitat creation, etc.

The River offers one of the nation's and the world's most significant opportunities to introduce meaningful environmental value back into the post-industrial urban landscape. A "greened" River corridor would also result in a considerable reduction in the urban heat island effect (thereby reducing local heating/cooling costs and demand for associated energy production), and a reduction in the generation of greenhouse gases (as many miles of trees would serve as a substantial carbon sink); see, e.g., Groth et al. 2008 *Quantifying the Greenhouse Gas Benefits of Urban Parks*, prepared for The Trust for Public Land.

- A way to achieve progress toward these goals is to prioritize greening of the River easements and planting at least portions of River-adjacent publicly-owned spaces in the near-term.

Vector Management

A variety of species may be considered “pests” in urban environments, such as rats, mice, opossum, raccoons, cockroaches, and termites. There are many private businesses that conduct pest control activities, including the use of potentially harmful chemicals. The County of Los Angeles has jurisdiction over vector control related to public health concerns—such as controlling for mosquitoes that may transmit the West Nile Virus or birds that may fall victim to the avian flu.

Abandoned pets may become feral animals, causing a threat to domesticated animals and people. The City has jurisdiction over such animal management practices within the River corridor (Randall 2008). Coyotes, mountain lions, and other wildlife that face decreasing habitat and food resources are becoming increasingly familiar with people and not fearful of contact with them; in some cases they are even beginning to view domesticated animals as prey. This scenario points to the importance of increasing (not decreasing) habitat within the River corridor region and also highlights the necessity of implementing wildlife passages that are safe for people and both wild and domesticated species. Although some suggest that wildlife passages should be single-use projects, the reality in urban Los Angeles is that people and wildlife do and will continue to share circulation routes; given this, new ideas should be brought to designing passages that anticipate such interactions and allow for them to occur within the safest conditions possible.

Whenever one species is controlled, it affects the entire ecosystem through foodchain and other environmental interactions. For example, when pesticides or herbicides are used to control vectors, they also impact the habitats of these species, which in turn can have transfer effects on other species—such as when sprays near the River settle on the water and are absorbed and transported downstream. Also, when one food source is eliminated, another must be found, which can cause species to adapt their predatory and migration behaviors.

- The region should anticipate that an increase in habitat to support a greater number and diversity of species will raise new vector management issues. It is important to note that nature, if left undisturbed, develops its own means of managing such resource fluctuations. Therefore, it likely makes sense to move toward more natural forms of vector control versus more chemical- or kill-based methods. However, the geographic frame of reference for vector management policies is critical—and more responsible approaches are based on habitat and other wildlife behavior-based parameters instead of on political or built-environment jurisdictions.

Pets and Other Domesticated Animals

Many people in the Los Angeles region own pets. Pet dogs, in particular, often require daily outdoor exercise to remain healthy and to habitually deposit wastes. Given that the River corridor in general is deficient in open spaces that may accommodate people, there is an associated deficiency in such spaces for people who own pet dogs. Many people who live along the River also likely own pet cats and, in some cases, may allow their cats to freely roam outside.

As the River corridor is developed with trails and parks, some spaces may be dedicated as dog trails or parks in order to separate uses so that people who do not wish to encounter dogs do not have to do so and it may prove advisable to restrict cats to indoor areas to protect them from interactions with wildlife.

There are also some long-standing equestrian communities and facilities along the River, notably near Griffith Park and in Burbank. As the River corridor is developed with trails and open spaces, equestrian activity may be expected to increase. According to Carvel Bass, a senior ecologist with the U.S. Army Corps of Engineers’ Los Angeles District, horses are known to attract cow birds, which threaten the survival of a known special status species—the least Bell’s vireo—which has been observed within the River corridor.

- Since this kind of interaction will likely increase among various species as the River is developed, thoughtful attention needs to be given to a wildlife management policy that allows such species to coexist.

Special Status Cases

The presence of special status species requires the intervention of regulatory agencies to ensure their protection and conservation. Within the River corridor, the U.S. Fish and Wildlife Service and the California Department of Fish and Game have jurisdiction over impacts to special status species. The City may expect that, as the River corridor is developed with new habitat areas, special status species will be attracted to the region on both permanent and seasonal bases. Given existing regulations, should a special status species take up residence on private property, disturbance to that property would fall under the jurisdiction of the above-mentioned regulatory agencies and certain permitting requirements would apply. This would likely be time- and cost-consuming and potentially inefficient if individual analyses and permits were processed in multiple cases. Instead, the applicable City, State, and Federal experts should consider wider approaches to handle complex species and habitat interactions more responsibly on a River corridor basis. Over time, it is expected that special status species would take residence in the restored habitat concentrated in and near the River channel, but this cannot be very accurately predicted and therefore such anticipatory thinking is necessary.

Indigenous vs. Invasive Species

As indicated above, an increase in biodiversity along the River corridor will mean an increase in the interactions between indigenous and invasive species, which will need to be addressed holistically, accounting for system interaction effects, such as shared habitats, instead of on a species-by-species basis. Friends of the Los Angeles River (2008) conducted a study of fish in the River and concluded that no native species are currently present; however, the species that are present provide important means of food for other, including native, species and the activity itself is a cherished pastime of local Angelenos. Thus, planning is necessary that accommodates the existing species without inhibiting the future return of indigenous species. It should be noted that there is no intention to introduce new populations of non-native fish species into the River and therefore it may be necessary to introduce new policies and enforcement practices regarding this, but it may still occur if residents do not heed such rules and/or regulations.

The 2007 LARRMP adopted the County of Los Angeles' Los Angeles River Master Plan's (1996) associated Landscaping Guidelines and Plant Palettes, which call for the use of native, drought-tolerant plant species, where possible. Given that a variety of plant species from all over the world thrive in the region's Mediterranean climate, landscape management that removes exotic species is increasingly difficult.

For instance, in the River, the invasive *Arundo donax* large reed has become a significant problem. The plant establishes in dense thickets and proliferates to the point of inhibiting the growth of native species in the soft-bottomed portions of the River. Whereas the removal of this plant is considered a priority for improving ecosystem health, in some cases—such as through Elysian Valley—the entire River channel has become so impassable that more drastic approaches may be necessary in order to ensure adequate flood protection (See discussion below under “Flood Management.”).

- It is important to remember that impacts to one species often have many unanticipated impacts on many other species, so a thoughtful, incremental, and potentially reversible approach may be advisable. For instance, collecting and storing seeds and other genetic material from existing species in a “seed bank” would allow future research and reintroduction of diminished or eradicated species, should that be deemed desirable.

Water Supply

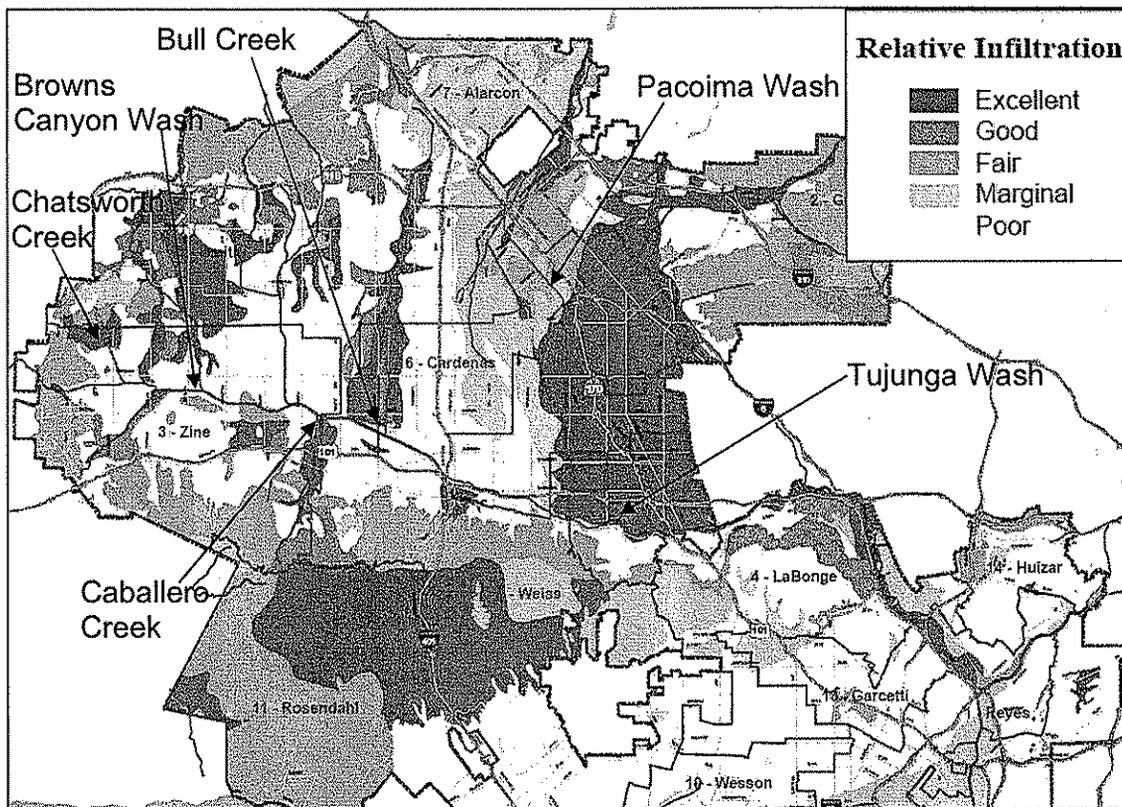
In order to maintain a healthy level of ecosystem value that will sustain habitat vegetation and attendant species, the River must contain a certain level of water at all times. As part of the City's Water/Wastewater

Integrated Resources Plan (IRP) approved by the City Council in November 2006, a study was performed by the U.S. Bureau of Reclamation to determine water resource needs for the River. That report, *Los Angeles River Physical and Biological Habitat Assessment* (2004), concluded that 28 million gallons per day of dry weather flow will maintain the existing level of habitat. This report was incorporated into the findings of the IRP. The IRP considered this water need in determining the potential for expansion of recycled water use delivered through the Los Angeles Department of Water and Power (DWP)'s water supply network. DWP's *Water Supply Action Plan* (May 2008) specifies goals and timeframes for expansion of recycled water in Los Angeles. Maximizing recycled water will utilize some of the water currently being discharged into the River from the Donald C. Tillman Wastewater and the LA/Glendale Wastewater Reclamation Plants.

Since a major goal of the LARRMP is to restore ecological value to the River where possible, new wetlands and other riparian habitat-based projects may be implemented; however, it is anticipated that future projects will be designed to use less water and/or to potentially use return flows from other projects. These efforts will require additional coordination between the departments and agencies, as discussed below.

In order to implement environmental restoration projects in the River channel, it is necessary to reduce the velocity of flows that the River receives. A variety of methods may be employed to do this, including surface spreading, low-impact development (LID), green street projects, and widening the River corridor. However, these activities must take place upstream and, in order to significantly modify the concrete lining of the River channel (such as through removal of concrete from the bottom and/or the sides (via terracing)), upstream water attenuation and storage (such as through the use of cisterns, rain barrels, detention and retention basins or via groundwater recharge, where feasible) is required to accommodate meaningful downstream restoration activities. This strategy is consistent with one of the region's most pressing concerns: its water supply. Since Los Angeles (and all of Southern California) is facing unprecedented uncertainty regarding future drinking water availability, any and all methods to ensure a reliable water supply should be explored.

DWP has identified the North East San Fernando Valley upstream of the River—in the Tujunga Wash, Pacoima Wash, and Sun Valley watersheds—as an appropriate location for infiltrating water that will replenish the depleted groundwater aquifer. Other areas with excellent potential for infiltration include upstream of Chatsworth Creek, Browns Canyon Wash, Caballero Creek, and Bull Creek (in the Sepulveda Basin) (See map on the following page.).



Source: City of Los Angeles, BOE Stormwater Group, May 2007

- Given that these areas are appropriate for infiltration/aquifer replenishment and could simultaneously intercept flows heading to the River, which would accommodate greater ecosystem restoration viability in the River, it is advisable to focus efforts there in the near-term.
- Removing impervious surfaces from upstream streets, parking lots and other large, paved areas and replacing these with pervious surfaces could accommodate simultaneous infiltration and downstream restoration. Thus, green street projects should be targeted in these areas.
- Additionally, placing cisterns or other water attenuation, storage, or infiltration devices under large spaces, such as parking lots, ball fields, the Chatsworth reservoir, Pierce College, portions of the Sepulveda Basin, and underneath the runways of Van Nuys Airport would also accomplish simultaneous water supply and ecosystem restoration goals.
- Other efforts to encourage the use of recycled water—such as requiring all developments to install parallel “purple pipe” systems or encouraging decentralized, on-site treatment and reuse systems—would aid both water supply and River revitalization.

Andy Lipkis of TreePeople and other River advocates have consistently called for policies and projects that will allow the interception of stormwater flows before they enter the River, which would simultaneously achieve multiple objectives:

- Capture and store water for future (potable and non-potable) uses, forestalling an impending drinking water shortage and providing means of security for living through future drought seasons;

- Ensure a consistent supply of water to maintain riparian habitats; and
- Reduce dependence on distant (including Bay-Delta) sources of water.

Since California is the nation's most populous state and Los Angeles is the nation's second most populous city, water resource use in the region has far-reaching implications. Development of additional local water resources will reduce Los Angeles' dependence on imported water supplies (Implementation of environmental restoration activities in the Owens Valley and the Eastern Sierra have required half of the water supply that was historically delivered to Los Angeles through the Los Angeles Aqueduct.).

According to Catherine Shuman (2008), manager of the ongoing U.S. Army Corps of Engineers' Los Angeles River Ecosystem Restoration Feasibility Study, supercritical flows in the River make upstream water attenuation, storage, or groundwater recharge nearly impossible without drastic infrastructure measures and considerable investments. The City is the local sponsor of the River Feasibility Study and is pursuing multi-objective goals through development of the Study's Alternative with Restoration Benefits and Opportunities for Restoration (ARBOR). The ARBOR will focus on an approximately 9-mile reach of the River channel. While the Study is focused primarily on ecosystem restoration goals, water supply and water quality goals may also be supported by the Corps as incidental project purposes in the achievement of expanded ecosystem value.

- In addition to serving as the local sponsor for the River Feasibility Study, the City (via the Department of Water and Power) is also the local sponsor for the Headworks Feasibility Study (located on the River), and given these roles, the City should explore the means necessary to ensure that the federal government is supportive of its efforts to reach water supply independence in concert with River restoration. The City is now well-positioned, through the Department of Public Works, DWP, and Department of City Planning to set in motion the kind of policies and programs necessary to implement such changes—such as through a comprehensive, simultaneous update to outdated and overlapping elements of the General Plan.

Water Quality

In order to maintain a healthy River and coastal environment, it is necessary to improve the River's water quality. Approximately 80 percent of the dry-weather flow within the River comes from sewage treatment plants, which means it is Clean Water Act Title 22-compliant water. However, River water becomes contaminated as it drains off of streets, parking lots, and other impervious surfaces that contribute oils, chemicals, nutrients, and other pollutants. The City's Bureau of Sanitation maintains jurisdiction over the River's water quality and is currently implementing a variety of programs to achieve improvements:

- Integrated Resources Plan
- River Keepers
- Cleaner River Through Effective Stakeholder TMDLs (CREST) program (See: www.crestmdl.org.)
- Water Quality Compliance Master Plan
- Green Streets/Wetlands Program
- Low Impact Development Program
- Climate Change Adaptability Planning

Michael Antos of the Los Angeles and San Gabriel Rivers Watershed Council (2008) is overseeing two water quality monitoring projects that will impact future River access and use—one for the San Gabriel River (begun in 2005, to be completed in 2010) and one for the Los Angeles River (begun in 2008 and expected to last 5 years). The projects are built upon the Countywide National Pollutant Discharge Elimination System (NPDES) permit requirements and two beneficial use classifications (Rec. 1 (body contact) and Rec. 2 (non-body contact)) and seek to answer five broad questions: 1) What is the condition of the streams in the watershed?; 2) Are the conditions of areas of unique value in the watershed getting better

or worse?; 3) Are the water bodies meeting their prevailing water quality objectives?; 4) Is it safe to swim in the water bodies?; and 5) Are fish caught within the water bodies safe to eat?

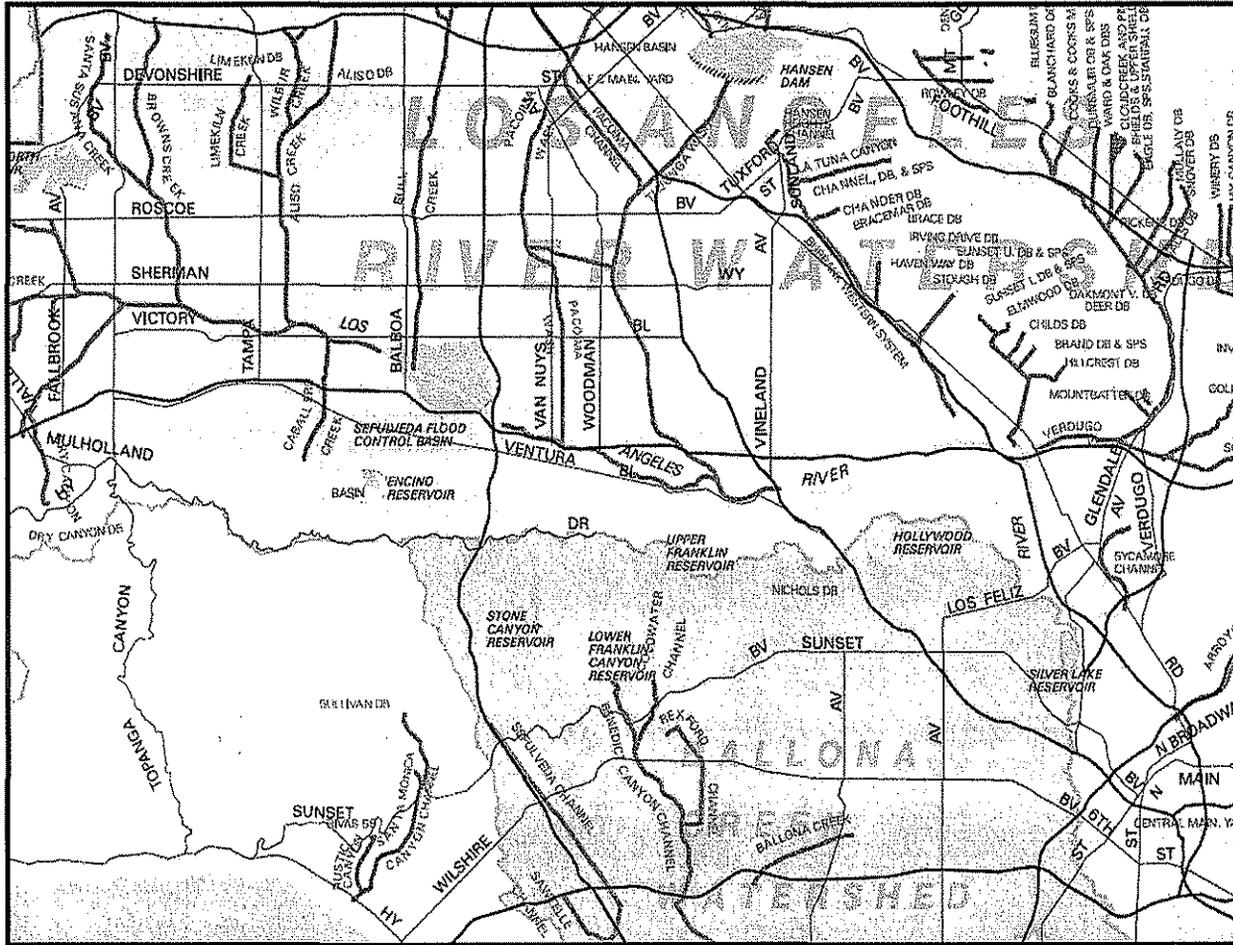
- Because of the reciprocal impacts between water quality and recreational use, both the Bureau of Sanitation and Los Angeles and San Gabriel Rivers Watershed Council staff involved in these efforts should be involved in the recommended wildlife committee recommended subsequently in this section.
- In addition to these efforts, it may be advisable to investigate chronic polluters, such as car washes and commercial laundry facilities (that generate specific kinds of water pollution) or to develop programs that address certain uses, such as gas stations, which could implement flow diversion programs to bioswale areas, keeping contaminated flows from directly entering the storm drain system.
- Another possibility is to look at all City-owned properties, such as DWP transmission centers or easements and retrofit them to encourage infiltration with plantings that also provide habitat value.
- The City should also take advantage of brownfield redevelopment funds that assist property owners with cleanups, including groundwater contamination.
- Lastly, an inventory of likely upstream brownfields/polluters would help in determining how best to improve water quality. One prominent site that has contributed contaminated flows to the River is the Santa Susana Rocketdyne/Boeing facility, undergoing a cleanup process overseen by the California Department of Toxic Substances Control and the Regional Water Quality Control Board.

Flood Management

The U.S. Army Corps of Engineers (Corps) and the County of Los Angeles Flood Control District maintain flood management jurisdiction over the River and its tributaries.

As part of its ongoing management of the River channel, which it constructed in the 1930s and 1940s, the Corps conducts operations and maintenance (O&M) activities that include investing millions of dollars to dredge the sediment that collects at the mouth of the River in Long Beach. The Corps shares responsibility for O&M with the County Flood Control District (See map below.). The County has primary responsibility for the River's tributaries and most of the San Fernando Valley.

- Over the long-term, better upstream management of sediment (such as employed in the case of the Isar River in Munich, Germany) would be expected to reduce the amount of sediment reaching Long Beach. Therefore, more regular, smaller-scale sediment management practices upstream should be explored to replace the more drastic, expensive, large-scale practices that take place where the River connects with the Pacific Ocean—this could potentially result in much less disruption to the coastal ecosystem and port-related activities.



Within the City, the Corps maintains the Sepulveda Basin, Glendale Narrows, and Downtown stretches of the River. A significant characteristic of the Corps areas is that they contain the River's soft-bottomed sections, which require considerably different kinds of maintenance in terms of vegetation and sediment management.

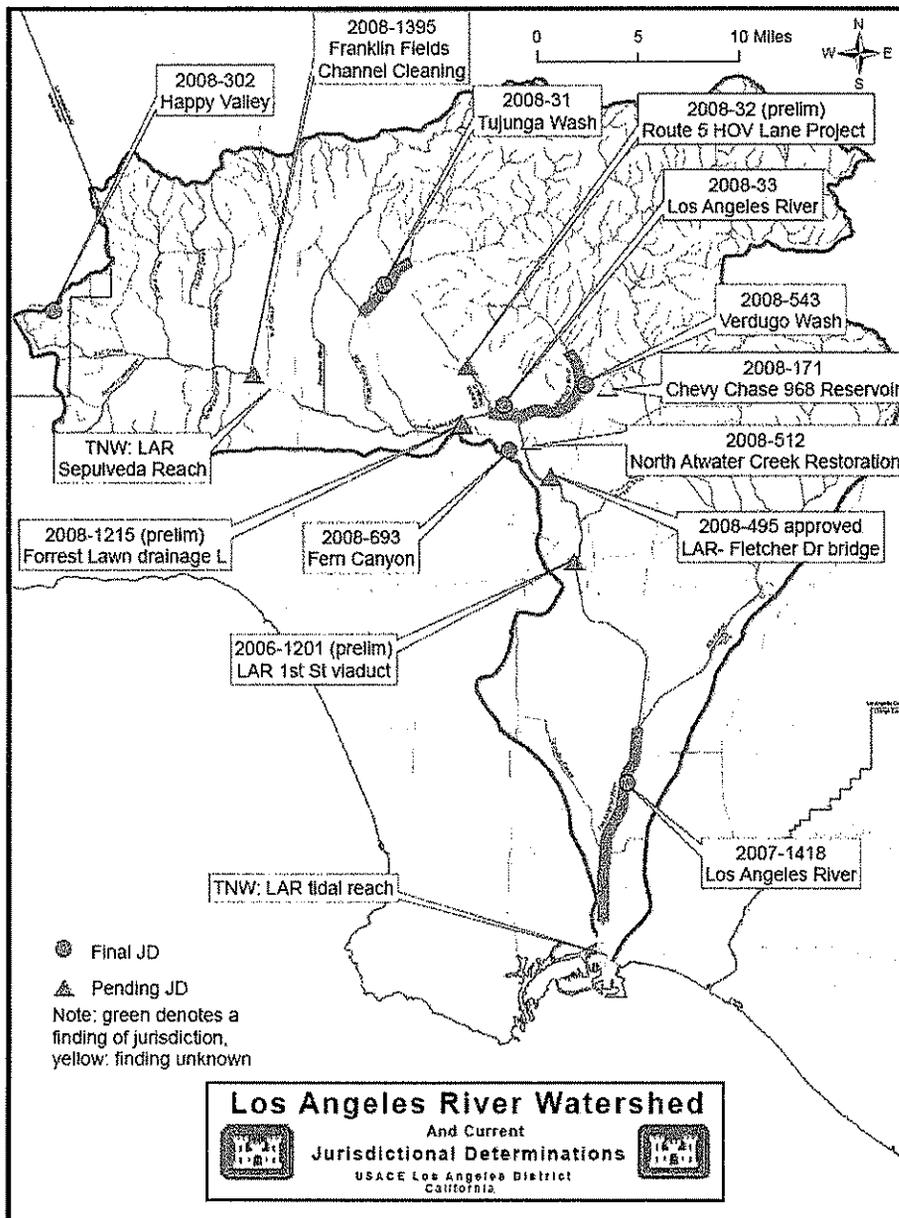
In both the Sepulveda Basin and the Elysian Valley portions of the River, the vegetation has grown so thick that it inhibits the free flow of water, threatening the flood control capability of the channel. Given this, the Corps must obtain the necessary O&M funds to remove the vegetation that is clogging the River—first in the Elysian Valley area because of its proximity to urban, including residential, uses. This will mean also removing valuable ecosystem functions.

Given the Corps' missions and responsibilities, the City should explore the possibility of having the Corps assist in replacing/compensating for the lost ecosystem value that results from the necessary, but long-delayed flood management practices (possibly by assisting with an acquisition strategy to enable use of the Taylor Yard G-2 parcel for simultaneous flood management and environmental restoration purposes).

Navigability

In June 2008, the Corps issued a decision regarding the “navigability” status of the River, which has implications for future River access and use. In August 2008, the U.S. Environmental Protection Agency (USEPA) assumed sole responsibility for Traditional Navigable Water (TNW) determinations in the Los Angeles River. EPA's TNW evaluation is currently underway. The Corps continues to assert Clean Water Act geographic jurisdiction in the Los Angeles River itself and a number of its tributaries as Relatively

Permanent Waters (RPWs) in accordance with the guidance issued subsequent to the Supreme Court's *Rapanos* decision. According to the Corps, they have yet to disclaim geographic jurisdiction for any tributary to the Los Angeles River, and will continue to determine geographic jurisdiction on tributaries to the Los Angeles River on a case-by-case basis (See map below, which depicts geographical jurisdictional determinations finalized since the Corps' TNW determination in June 2008.)



Source: U.S. Army Corps of Engineers, Los Angeles District (January 29, 2009)

Additionally, the Corps has provided the following information concerning its position:

- Prior to and after the Rapanos guidance, the Corps' ability to assert geographic jurisdiction never extended into upland areas;
- Local authorities continue to maintain jurisdiction over developments within upland areas;
- Within tributaries and adjacent wetlands, state and local authorities continue to maintain jurisdiction over developments through zoning, ordinances, permitting, etc.; and
- Activities described in this “Los Angeles River Access and Uses” report could require Section 404 of the Clean Water Act authorization from the Corps if such activities result in discharges of dredged or fill material in waters of the United States within the Los Angeles River watershed.

Related to the navigability decision, numerous advocates in Southern California have called for special consideration by the federal government that recognizes the River’s quality (and all Southwest rivers’ qualities generally) as an ephemeral stream (one that tends to be dry portions of the year with significantly larger flows during rainy seasons)—suggesting that the “navigability” status of the River should not matter when weighing Clean Water Act protections.

Regardless of the federal decision regarding navigability, the debate underscores a need for the City and the State to be prepared to put in place regulations that will result in the appropriate protections to guarantee a healthier watershed.

Governance Needs

Because the River’s ecological health involves a complex interaction of biodiversity, habitat, water supply, water quality, and flood management issues, the agencies with responsibility for developing policies and programs related to these issues need to coordinate more efficiently on a continuing basis. Specifically, Garry George of Audubon California has suggested that a River wildlife technical advisory committee be convened to ensure science-based protection and conservation work is done within the region by convening experts from a variety of advocacy organizations as well as the U.S. Fish and Wildlife Service and California Department of Fish and Game. Ellen Mackey of the Los Angeles and San Gabriel Rivers Watershed Council is also supportive of this idea. The U.S. Army Corps of Engineers (Shuman and Bostwick 2008) have expressed interest in convening such a group to inform their Feasibility Study as a “Habitat Evaluation Team.”

- In the near-term, a possibility is to have Council District 13’s regular River Management and Maintenance Committee) develop a proposal regarding the best way to establish this committee.
- Over time, this group—possibly called the River Opportunities for Wildlife, Ecology, and Recreation (ROWER) committee—could oversee the implementation of streamlined regulatory permitting processes, such as master permits or the establishment of wider planning areas—including Special Area Management Plans, Habitat Conservation Plans or Natural Community Conservation Plans that encompass the River region—and conduct special studies that would qualify for National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) compliance. The process would have numerous benefits: improved efficiency (by treating the whole River watershed as an interrelated ecological environment and producing information that is useful to numerous agencies and project proponents), cost savings (by eliminating the need for some project-specific special studies and allowing public agencies to contribute funds to support wider-scale studies that may be used by specific project proponents), and establishing an institutional permanence (by collecting and maintaining an electronic archive of River documents and data that is freely-accessible and user-friendly).
- This group might convene a subcommittee or special task force—possibly the Watershed Infiltration for Supply and Environmental Restoration (WISER) committee—to address water supply and

quality issues. For instance, to implement local green street projects, a variety of agencies need to be consulted during the permitting process. If these experts meet on a regular basis, they could identify a streamlined process for approving and implementing green street and related infiltration projects—such as those along utility easements. Since such projects would be providing habitat and function as movement corridors for wildlife, their work should be done in concert with the ROWER committee. Since DWP oversees the City's water supply management and owns considerable amounts of land in many upstream tributary easements and properties, it may be the appropriate lead for convening this group, in conjunction with the Bureau of Sanitation, which has responsibility for the River's water quality.

Potential Access and Use Conflicts

- ⊗ Humans and animals (wildlife and domesticated species), e.g., coyotes in backyards or on trails, discarded fishing lines harming birds
- ⊗ Wildlife and domesticated species, e.g., dogs and raccoons or horses and mountain lions
- ⊗ Indigenous and invasive species, e.g., large reed plantings and willows, cow birds and least Bell's vireo, carp and steelhead trout
- ⊗ Human impacts to water, e.g., trash, cars, businesses, brownfields
- ⊗ Domesticated species impacts to water, e.g., pet waste, horse waste
- ⊗ Wildlife impacts to water, e.g., wastes
- ⊗ Vegetation-related impacts to water, e.g., chemical treatments
- ⊗ Other impacts to water, e.g., using paint to cover graffiti that then flows into water

Example Cases

City of Oklahoma City, Oklahoma (See: www.okc.gov/maps/river/rules.html)

City of Portland, Oregon: River Renaissance Initiative (See: www.portlandonline.com/river/.)

City of Chicago, Illinois: A Bird's Eye View of the Migratory Bird Route, Bird Agenda 2006, Bird-Safe Building Design Guide, Birds and Buildings: Collision Review Worksheet, and the Chicago Region Birding Trail Guide (See: www.cityofchicago.org/.)

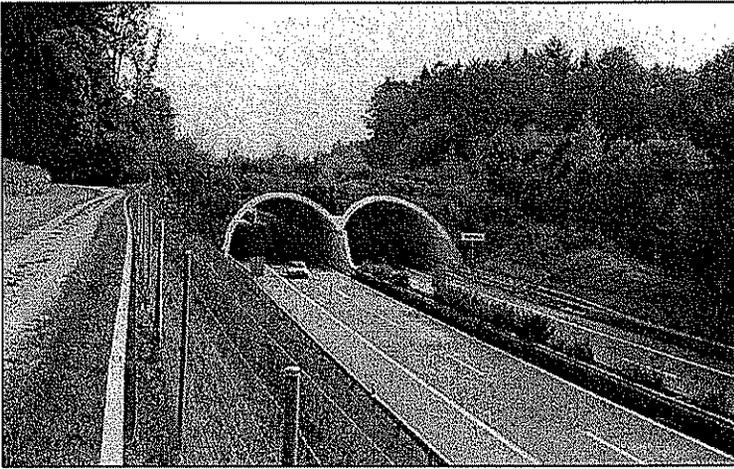
Riverside County, California: The Riverside County Integrated Project, including the Multi-Species Habitat Conservation Plan (See: www.rcip.org/.)

U.S. Department of the Interior and Arizona Fish and Game Department's Lower Colorado River Multi-Species Conservation Program, Arizona (See: www.lcrmscp.gov and www.azgfd.gov/w_c/LowerColoradoRiverMulti-speciesConservationPrograms.shtml.)

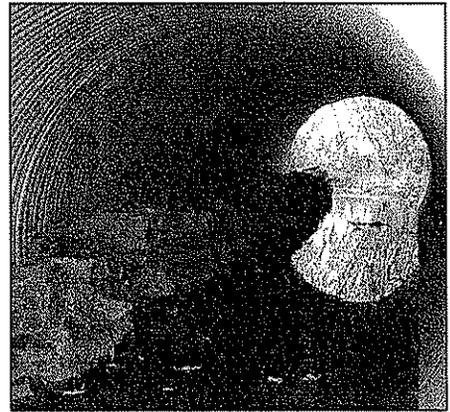
U.S. EPA "Area of Concern" program for the Great Lakes (See: www.epa.gov/glnpo/aoc/index.html.)

San Joaquin River Partners' (Chico, California) computer program for designing plantings to targeted species' needs (See River Partners Journal, Volume 2, Issue 2 and www.riverpartners.org.)

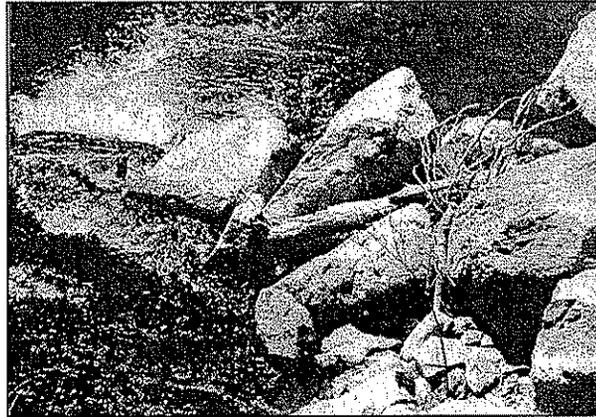
The Federal Highway Administration of the U.S. Department of Transportation has developed some guidance regarding the creation of road infrastructure projects, including bridges and tunnels, that facilitate the safe passage and interaction of wildlife and humans. See images on the following page.



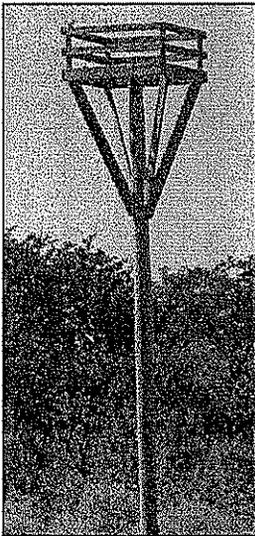
Design accommodates habitat, wildlife passage, trails, and vehicles
 Source: Scott Jackson, UDOT/FHWA 2000, p. 5.



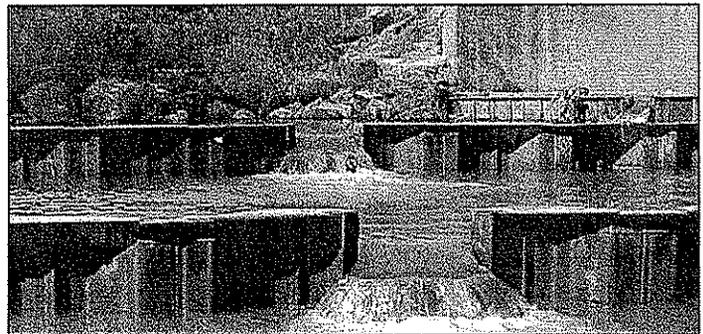
Rock ledge provides walkway
 Source: UDOT/FHWA (Undated), p. 43.
 Oregon DOT



Rock spurs stabilize banks, aerate water, and make fish passage easier (Provo River, Utah, Utah DOT)
 Source: UDOT/FHWA (Undated), p. 46.



Raptor platform at the Rixey Bayou Wetland Mitigation Area (Arkansas State Highway and Transportation Department)
 Source: UDOT/FHWA, p. 48.



Steel overhangs on fish ladders allow lampreys to reach upstream spawning grounds shared with steelhead trout (Spooner Creek, New York) Source: UDOT/FHWA (Undated), p. 41.

Key Partners

- ⊙ U.S. Army Corps of Engineers
- ⊙ U.S. Environmental Protection Agency (Water and brownfield experts)
- ⊙ U.S. Department of the Interior (Bureaus of Reclamation, Land Management, National Park Service)
- ⊙ U.S. Department of Agriculture (Soil Conservation Service, Extension Service programs)
- ⊙ State of California (various and numerous departments and agencies, e.g., Caltrans)
- ⊙ County of Los Angeles
- ⊙ Santa Monica Mountains Conservancy/Mountains Recreation and Conservation Authority
- ⊙ Metropolitan Water District
- ⊙ Regional Water Quality Control Board
- ⊙ Los Angeles and San Gabriel Rivers Watershed Council
- ⊙ Friends of the Los Angeles River
- ⊙ North East Trees
- ⊙ TreePeople
- ⊙ Los Angeles Conservation Corps
- ⊙ Los Angeles Neighborhood Land Trust
- ⊙ Arroyo Seco Foundation
- ⊙ Audubon Society
- ⊙ California Native Plant Society
- ⊙ Ducks Unlimited
- ⊙ Metro
- ⊙ LAUSD, colleges, universities, trade programs
- ⊙ Neighborhood Councils

Near-term Recommendations

- ELO1:** Explore establishment of the ROWER committee of experts and task them with identifying ways to streamline River project guidance information, permitting processes, and regulatory compliance that will result in increased biodiversity and improved ecological health in the River corridor. Specific outcomes would include maps and design guidelines designating areas within the River corridor where certain uses should take place—such as “wildlife only,” “boating,” “fishing,” “dog parks and trails,” “equestrian uses,” “limited or no human access allowed,” “seasonal use areas,” etc.
- ELO2:** Explore establishment of a “seed bank” and associated research programs to conserve/preserve native species.
- ELO3:** Establish the WISER committee (or subcommittee) of experts and task them with identifying ways to streamline River project guidance information, permitting processes, and regulatory compliance that will result in increased water supply benefits, better water quality (such as a water quality monitoring/testing program that could become a part of routine patrolling/maintenance activities), and improved ecological health in the River corridor. Specific outcomes would include maps and design guidelines designating areas within the River corridor where certain projects should take place—such as green streets, water attenuation, water quality, groundwater recharge, and brownfields redevelopment. Maps would also indicate the best areas for water-contact recreation versus non-water-contact recreation given water quality and flow concerns.
- ELO4:** Prioritize large-scale infrastructure projects that will result in increased water supply benefits and simultaneous reductions of flow (dry weather and stormwater) to the River, resulting in increased possibilities for environmental restoration within the River corridor, such as DWP’s spreading ground projects.
- ELO5:** Identify and map the drainage areas of River-adjacent parcels to determine which areas would be able to treat the largest volume of flows prior to entering the River. Also, include an analysis of where to best treat flows that enter the River through its largest storm drains.
- ELO6:** Prioritize green street and infiltration projects in River tributary areas that have the most appropriate soils for this (the North East San Fernando Valley (Tujunga and Pacoima Washes), Chatsworth Creek, Browns Canyon Wash, Caballero Creek, and Bull Creek and the Sepulveda Basin).
- ELO7:** Ask residents—possibly through their Neighborhood Councils—to identify and design River street-end interface projects that will result in habitat, infiltration, water quality, and access

improvements. Possibly have the Ad Hoc Committee hold a design competition to award funds to the best of these projects.

- ELO8:** Consider directing all City departments and agencies to include River access amenities in projects near the River, including, but not limited to: dedication of lands (such as easements) for River access and trail connectivity and incorporation of bridge underpasses or other roadway amendments to accommodate safe human and wildlife passage within the River corridor.
- ELO9:** Consider directing the Department of City Planning to undertake a watershed-based planning effort that will address River ecology and water supply issues and simultaneously meet the requirements of updating the General Plan Conservation, Open Space, and Recreation elements: the Conservation, Open space, Recreation, and Environmental stewardship or “CORE Element.”

Long-term Recommendations

- EL10:** Develop strategies with the state and federal governments to position the River as a priority for implementing policies that will reduce region’s dependence on external sources of water, reduce its harmful impacts to the coast and ports, and improve regional air and water quality to address related public health concerns.
- EL11:** Implement a Special Area Management Plan, Habitat Conservation Plan, Natural Community Conservation Plan and/or other multi-species plans (or designations—such as the entire River as a Significant Ecological Area (SEA)) that will facilitate more efficient establishment of indigenous species-based biodiversity within the River corridor and watershed.

THE RIVER'S SOCIAL CONTEXT

Population Pressures and Quality-of-Life Concerns

Two issues of paramount importance to River revitalization are water and transportation. Both of these are central to ensuring the survival of the region and the health of its population. Los Angeles is the nation's second most populous city and has been called "the sprawl capital of the world" because of the way it has rapidly grown into its once-hinterlands. The City continues to outpace many other large cities in terms of growth, which has taken a toll on the environment and quality of life—particular regarding water, air quality, and land use.

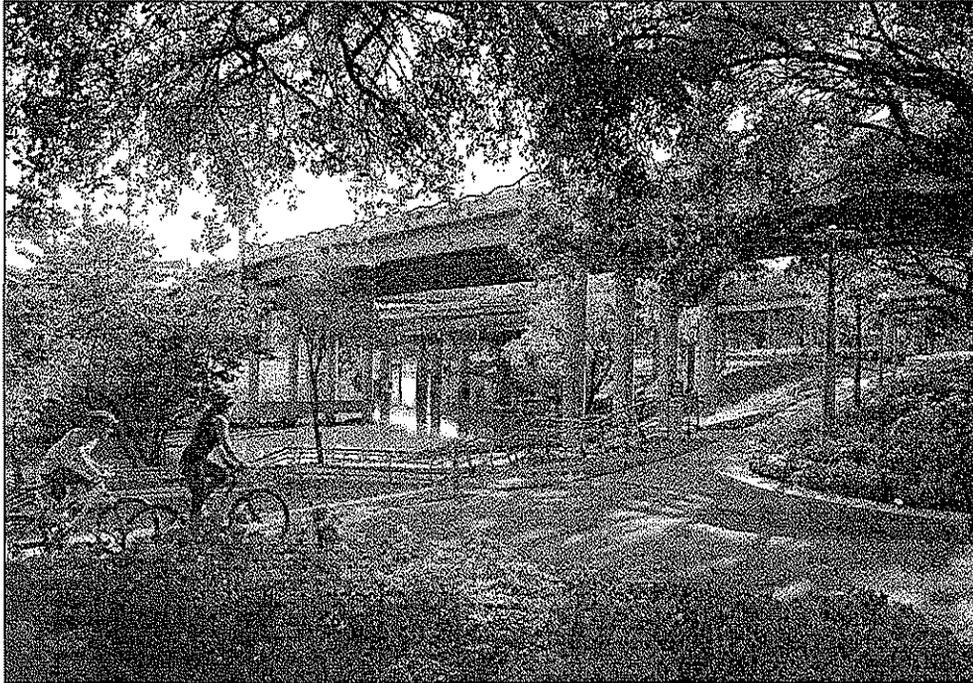
The pattern of urban development in Los Angeles may be characterized as inefficient in terms of the movement of people and goods because, unlike the more compact, predictable concentric ring cities (with dense central downtowns and successive "rings" of suburbs) in the Midwest (e.g., Chicago) and eastern U.S. (e.g., Washington, DC) and Europe, Los Angeles is multi-polar and its transportation system has adapted to this—making convenient and cost-efficient public transportation less viable.

The relationship between the River and the transportation system is an important one because the River is at the heart of many of the region's quality-of-life issues related to mobility. All of the areas along the River suffer from chronic traffic congestion, many stretches of the River are bordered or crossed by freeways, roadways, and rail lines, and these inhibit access to the River in many cases. The River empties into Long Beach Harbor, which is home to two of the world's busiest ports—ports that will face increasing global competition as the Panama Canal's capacity is expanded.

The River offers an important opportunity to help alleviate transportation-related problems in Los Angeles by providing a 32-mile bikeway/greenway connector to the 19-mile path that stretches to Long Beach. Completion of the 32-mile River greenway will not only provide recreational benefits, but also serve as an important means of circulating in and around the City. An efficient River Greenway will encourage people to bicycle to work, school, on shopping errands, etc. and would provide a potential means of emergency evacuation in times of crisis (since roadways would likely be too congested for this purpose). Once completed, the entire 51-mile bikeway (*servicing 102 miles of urban waterfront*) would be available to millions of people and could help ameliorate critical regional issues—by encouraging workers at the ports to commute by bicycle instead of cars, it would assist in reducing the air quality problems in that "hot spot" of concern, by encouraging people throughout the region to use bicycles instead of cars, it would reduce the amount of cars on local roadways and result in a reduction in the regional production of greenhouse gases, and, the associated greening would provide a carbon sink to assist with a reduction in the urban heat island effect (thereby reducing local heating and cooling costs and reducing the need for more external/upstream power supplies).

As mentioned previously, water supply is a persistent concern in Southern California. The River offers a way to address this through implementation of projects in its upstream watershed that will result in infiltration of flows into aquifers in the North East Valley, and through implementation of green street and other attenuation, storage and infiltration projects that will replace impervious surfaces with pervious ones.

- Upstream attenuation, storage, and groundwater recharge of water will have simultaneous benefits in the main channel of the River by allowing more expansive environmental restoration.
- Many future River projects may be irrigated with either recycled water, if available, or treatment plant flows (which provide 80-percent of the River's dry-weather flow), thereby fostering greater regional water conservation. Providing natural open spaces, habitat, parks, and greenways will have recreational and psychological benefits for millions of urban residents who currently have little or no access to these kinds of resources.



Areas under freeways can be converted into meaningful wildlife passages while also providing recreational opportunities (Sabine Promenade, Houston, Texas).

Source: *Urban Land*, Vol. 67, No. 10, p. 84, October 2008

Environmental Justice

Numerous local organizations have stressed the importance of making sure that the River's revitalization addresses environmental justice issues (See, e.g., the City Project's work at: www.cityprojectca.org). Of key concern in Los Angeles is the growing disparity of access to and use of open space resources, including parks, ball fields, and natural areas by those living in low-income communities of color. Whole generations are growing up in Los Angeles without any meaningful relationship to the natural environment.

- The River offers an opportunity to redress environmental justice problems by not only providing numerous new green spaces, but also by ensuring free access to them. Because access is such an important issue for many underserved communities along the River (particularly in Boyle Heights and south of downtown), implementing the River bike path should be a near-term priority.

Public Health

A number of public health concerns may be directly linked to environmental causes in Los Angeles. These include alarming rates of asthma (due to poor air quality—which may be directly linked to exposure to particulate matter generated from cars on freeways), juvenile/adolescent onset diabetes, and obesity (linked to poor nutrition and lack of exercise).

Although much of the River is lined or crossed by freeways, which generate noise and particulate matter, the River still offers an important connection to large public open spaces—such as Elysian Park, Griffith Park, and the Sepulveda Basin—which many people cannot currently access. Some members of the public expressed concerns during development of the LARRMP that providing parks near or under freeways is inadvisable because it would encourage people to congregate in areas where particulate matter exposure would be concentrated and severe. This is a legitimate concern, especially in the near-term. However, a greenway concept encourages connections—so that people would be able to move through these areas and continue along the River—not necessarily congregate in them in the near-term.

- Over time, it is expected that the growth of trees and vegetation will serve as buffers and carbon sinks and that the technology of cars will improve to the point that particulate matter will be less of a public health concern. The near-term priority, therefore, should be on access and circulation, with the longer-term priority being an improvement in the value of the long-standing tree canopies and vehicle technology/energy. However, research into the best methods for both can move forward simultaneously.
- Regarding diabetes and obesity, a River greenway would provide new means of free, regular exercise to assist in combating these health conditions. Walking, hiking, cycling, and access to ball fields—such as those at Taylor Yard, Griffith Park, and in the Sepulveda Basin—would be provided by the River greenway. New River projects can and should focus on the value of exercise to physical and mental health and can include fitness areas, outdoor classrooms, etc. Fitness and nature programs could be combined via educational hikes, bicycle rides, equestrian activities, and those related to gardening, farming, and raising animals.
- Healthy nutrition could be encouraged by: (1) dedicating space along the River for fair-type uses that could accommodate a regular farmer’s market (such as the ones at City Hall and the Central Library in Downtown LA); (2) dedicating space for animal grazing (such as the CRA’s use of goats in local lots) and raising; (3) creating community gardens and nurseries (such as within utility easements—see the Aliso Creek confluence for an example of a long-standing local community garden); (4) conducting research on agriculture and food systems (creating a “seed bank”); and (5) incorporating the history of California agriculture into signage and displays. Cooking classes and competitions could highlight the value of growing and eating healthy foods. Produce from the River gardens could be shared with local food banks. Local produce companies could sponsor these activities.

Key Stakeholders

Children and Students

There are more than 80 schools within one-half mile of the River. This provides an important opportunity to engage children in the River revitalization efforts—by fostering environmental stewardship behavior as early as possible. If children grow up cherishing the River, then they will commit to saving it for future generations. Other opportunities to engage children in River programs include working with pre-schools, day care centers, religious organizations, sports teams/groups, and programs for children with special needs.

- Possible child-focused programs may involve converting hardscape at schools into food-based or botanical gardens, or developing age-appropriate trail links to or playgrounds near the River.

Elderly

Daily exercise is critical for all people, including the elderly who often have mobility and health concerns that should be considered in determining the kinds of River facilities would be most enjoyable for and useful to them. Low-impact, easily accessible trails with frequent opportunities for rest breaks, access to wildlife viewing, and educational information appropriate to their interests would likely be advisable in certain areas along the River corridor.

- A mapping exercise could be undertaken to identify areas where such projects might be most appropriately located. Additionally, elderly access concerns should be incorporated into the design of all River projects. Health care companies could be approached to sponsor such activities.

Employers and Employees

In addition to physical benefits, regular exercise can benefit individuals psychologically and thereby improve their overall health, which can result in lower health care costs—a benefit to individuals and their employers. By encouraging local employers to consider participating in the design and development of River projects—

such as bikeways and associated facilities (bicycle parking, showers/changing areas), trails, resting areas, ball fields, etc., employers can ensure that projects will benefit their employees and their companies. Successful case examples should be highlighted so that they may be replicated throughout the River corridor. Also, for people working multiple, part-time jobs, the River bikeway/greenway could provide an easy, less-expensive means of commuting between jobs.

- Locations for employee-focused projects may include bicycle trails, related facilities, and outdoor meeting and/or resting areas in Canoga Park, near the studios, in River Glen, or downtown.

Residents

Throughout the LARRMP process, residents who live next to or near the River expressed concerns about current conditions along it, citing gang activity and a lack of security as ongoing problems. Graffiti, vandalism, and drug dealing were among the issues raised.

Since most of the River easement is legally considered off-limits to people, those who enter these areas are breaking the law—by trespassing or loitering. Human activities within the River channel are also considered illegal unless work is being conducted by the public agencies who maintain it (or their contractors). The County, in consultation with the Corps, can issue permits sanctioning access to the River easements and channel on a case-by-case basis, but unless such a permit has been secured, human activity in unimproved areas of the easements and within the channel is prohibited by law. Since such places often attract criminal activities because they are not subject to the same formal and informal civic vigilance of public places, dangerous circumstances persist.

In areas where the channel areas have been improved with publicly-accessible trails and greenways—such as in the Tujunga Wash area of the City—crime can be addressed by designing a wide-open, easily visible, accessible, and regularly-patrolled open space. Residents in the vicinity of the Tujunga Wash project initially opposed having the channel area be open to the public because of security concerns, but since opening, the project is now widely embraced by local residents as a valuable natural and recreational resource (MRCA 2008).

Visitors

Local law enforcement personnel (e.g., Murphy, LAPD; Bushman, LAFD; Torres and Randall, RAP; and Young, MRCA, 2008) indicate that securing the River area is challenging today and it will require new approaches to guarantee safe public access in the future when more people will be allowed into the currently restricted areas.

- Among their recommendations to adequately facilitate public River access are: more staff, additional training, targeted public education programs, multi-lingual signage, efficient signage and gate systems, and security lighting. (Also see subsequent section on “Illicit Activities.”)
- Currently, there is not enough staff to adequately patrol and maintain the River corridor. This situation will be exacerbated when public access to more or all areas of the River easement and channels is allowed. Not only is additional staff needed, but new training will also be required. Various agencies possess different skill sets—such as for swiftwater rescue, water safety, fire management, working with the homeless, dealing with gang activity, caring for injured wildlife, etc. A River patrol skill set could be identified that could be used to train personnel from all of the different agencies as well as the River Keepers.
- Additional equipment will likely also be needed to perform patrol and surveillance activities and to perform maintenance activities—such as vacuum vehicles to clean pervious pavement and special tools for brush clearance. Stations for parking and caring for this equipment and these vehicles would need to be identified.

- As a near-term priority, River mile-marker signs can be made available for the entire River corridor—on both banks. Walt Young of the MRCA recommends using “left” and “right” banks (when facing downstream) in the signage and in incident reporting (instead of other directional references since the River changes from “north” and “south” banks in the Valley to “east” and “west” in the Glendale Narrows and through downtown.).



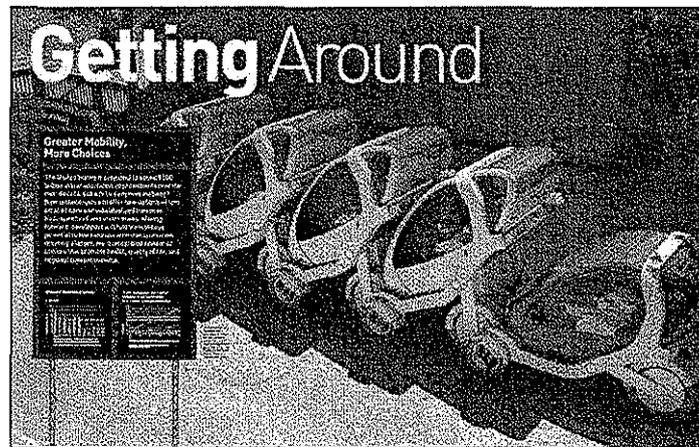
Example of the mile marker signs that were placed along the River in Elysian Valley as part of a pilot program.

- The mile-marker system will need to be integrated into the LAPD wireless mapping system and the LAFD Swiftwater Rescue Map system. Regarding incident reporting, the LAPD and LAFD need to respond to cross-streets, so signage that indicates these on bridges and other River crossings would be helpful. All personnel—including dispatchers and responders—could be trained with a protocol that reflects this.
- Signs such as the example shown below (from downtown Los Angeles) that use cut-out letters might be more effective as street name indicators if hung underneath River bridges since they would still be legible even if graffiti-ed.



- The Ad Hoc Committee may wish to hold a design competition to include local artists in the design of the River signs. Sign artists/designers could be tasked with creating them out of local, recycled materials using local, under- or unemployed workers. A sign workshop/metalcraft design and training center/studio/exhibit space could be created near the River in conjunction with a “greening” of one of the nearby metal recyclers in the downtown area. This workshop could also focus on producing eco-friendly designs for River lighting systems, fencing, benches, and other amenities.
- Some progress can be made by designing projects in the River easements and channel so that they are more easily accessible for people and first responders—by eliminating hiding spaces, walls, impassable stands of vegetation and debris, and other infrastructure that can encourage and conceal illegal activities. Creating new underpasses, crosswalks, and signals can allow safe, continuous and more efficient passage for both River visitors as well as maintenance and law enforcement personnel.

- Other ways to ensure a safer River environment for residents and visitors are to enhance the surveillance capacity of local law enforcement with an expanded River Keepers program (youth employed by the Los Angeles Conservation Corps), bicycle patrols or rangers, or to possibly introduce a fleet of small vehicles—Rivermobiles—capable of moving more efficiently in, out, and around the River channel environment. A design competition could be introduced by the Ad Hoc Committee challenging local automotive experts with designing an environmentally-friendly, multi-purpose fleet of Rivermobiles that could allow River Keepers (and other personnel) to perform a variety of maintenance, security, water quality testing, ecological assessment, and public education functions during the course of their work. This would provide a regular, visible, and approachable means of providing civic vigilance and committed River stewardship. Local companies could sponsor the work of River Keepers or adopt stretches/reaches of the River to support maintenance and security efforts.



A new fleet of Rivermobiles can assist with emergency response, education, and maintenance while also highlighting Southern California's automotive ingenuity—and could be replicated around the world. *Source:* Urban Land, Vol. 67, No. 10, p. 48, October 2008

- Kiosks or stations could be strategically located along the River (possibly historical trolley “Red Car” train cars) to be used as information booths, bicycle repair shops or police substations.).

Individuals with Special Needs

There are a variety of special needs populations in the Los Angeles area who could benefit from the River’s revitalization. Some of these are: the unemployed, persons with mobility- and other impairments, those suffering from physical and mental illnesses, those who reside in convalescent or rehabilitation facilities, and veterans. Each of these populations could be better served by access to and involvement in River amenities. Local organizations who regularly work to serve such individuals could be invited to identify and design projects—such as outdoor training facilities and rehabilitation facilities—that would help provide individuals with special needs regular access to and enjoyment of the River. Health care companies could be approached to sponsor these activities.

- The Ad Hoc Committee could ask for input from local public social service organizations on design elements for River projects that would be most appropriate for the people they serve.

Education

There are a variety of opportunities to foster both informal and formal educational projects along the River corridor. Local colleges and universities could assist in the design and implementation of projects, such as outdoor classrooms, mobile classrooms, or facilitate implementation of satellite River campuses. Participation in River revitalization by sponsoring projects (such as a River Museum or River Institute) or

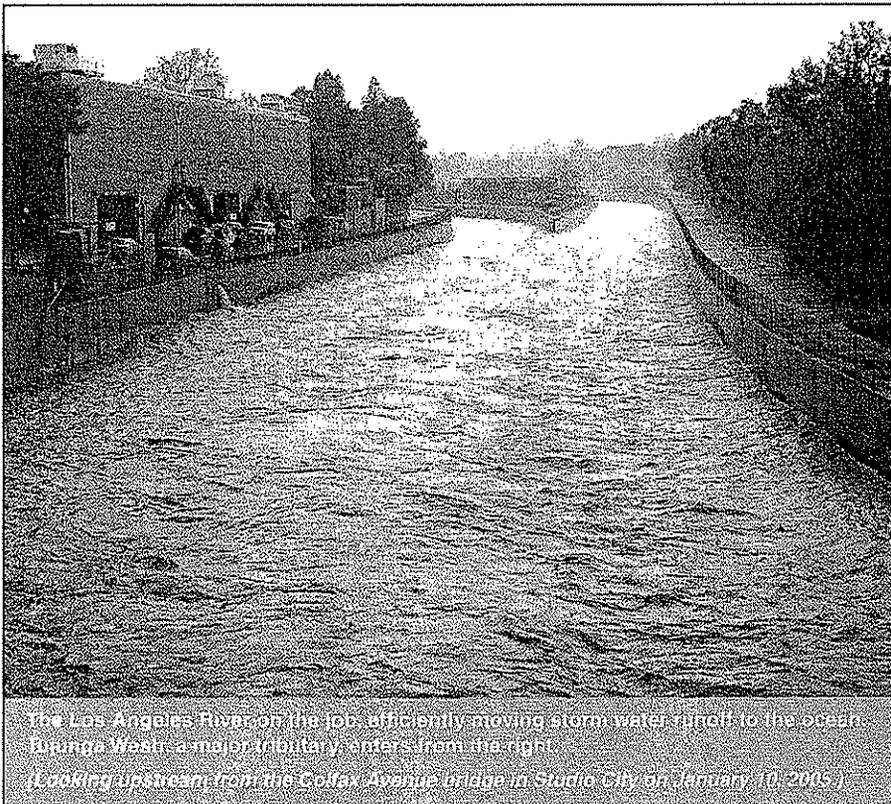
offering scholarships for students to study the River, or spearheading Sister River partnerships with other cities around the world, would go a long way in sharing knowledge about the River and encouraging environmental stewardship values. Regular River clean-ups, adoptions of River stretches or projects and conducting environmental improvement projects—possibly acknowledged by the Ad Hoc Committee would further reinforce the role of educational institutions in River revitalization. Experts (from local schools and universities) in all of the issue areas discussed within this report could be asked to provide research and recommendations to inform the development of appropriate River projects and policies.

- The Ad Hoc Committee could ask for local schools and universities to take ownership of River project ideas, designs and fundraising—possibly through the “adopt a reach” program.

Active Recreation

The LARRMP identified a need for providing many more active recreational amenities within the River corridor—these include facilities that will support walking, jogging/running, hiking, cycling, boating, fishing, swimming, climbing, baseball, softball, basketball, soccer, polo, and many other activities.

Water Contact



The Los Angeles River on the job, efficiently moving storm water runoff to the ocean. Brunga Wash, a major tributary, enters from the right. (Looking upstream from the Colfax Avenue Bridge in Studio City on January 10, 2005.)

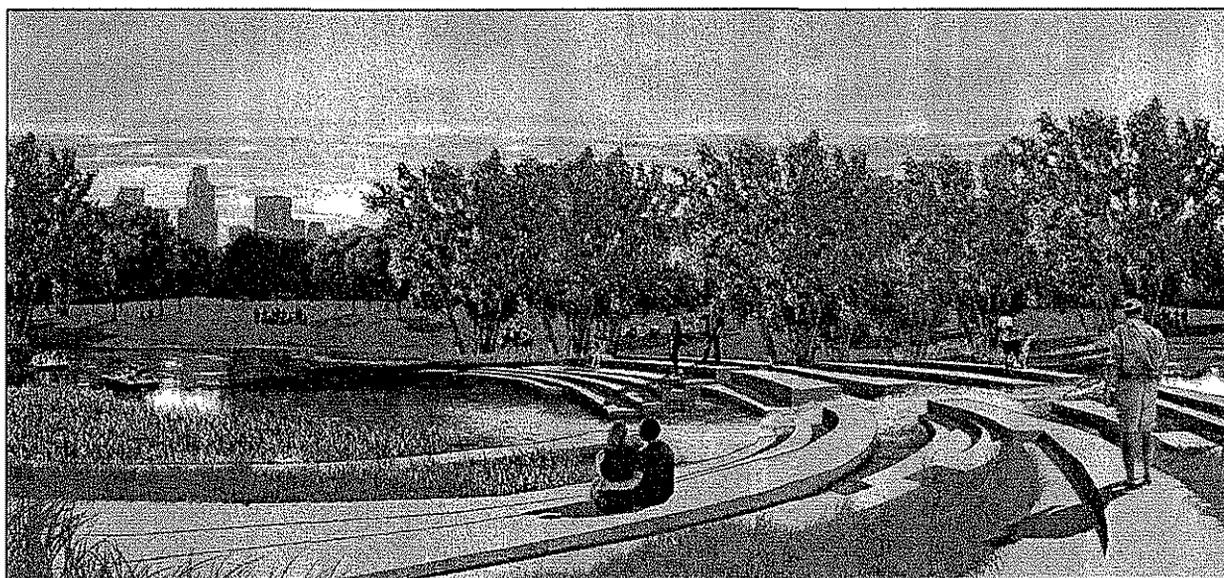
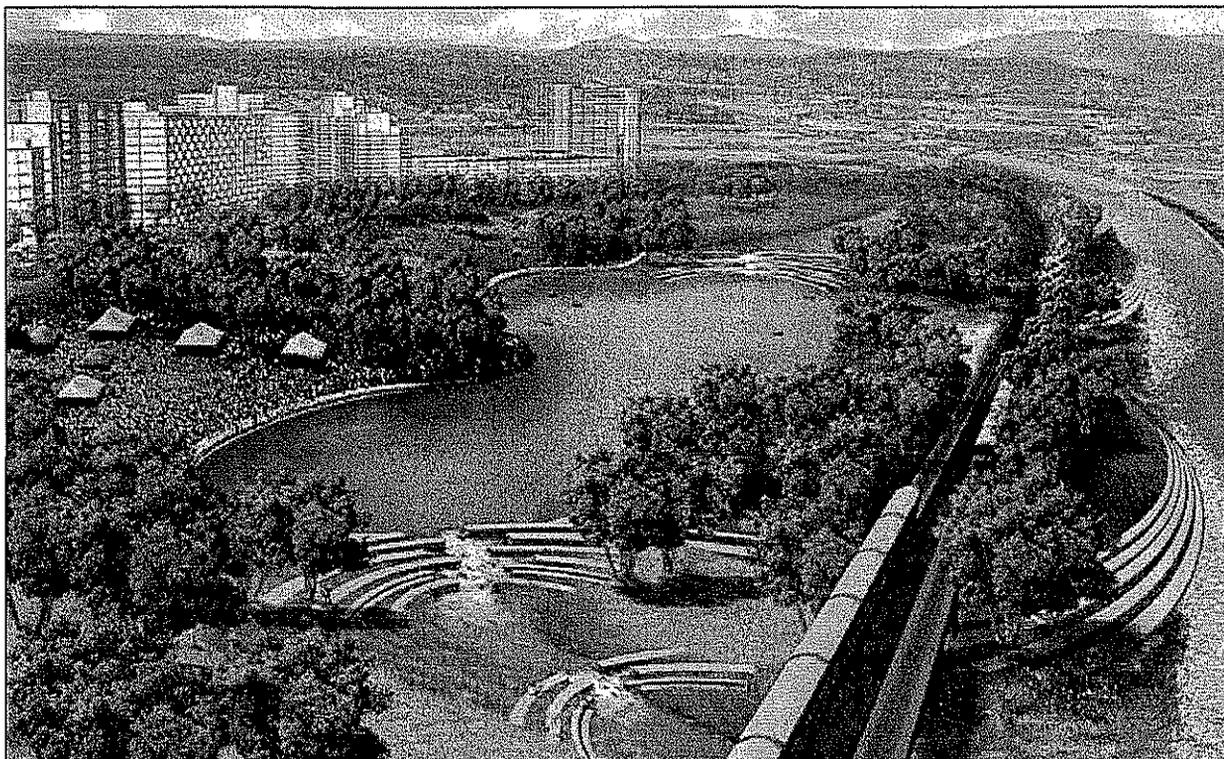
Active recreational activities that would involve contact with the River include fishing, swimming and wading. These activities are now prohibited in the channel. Given the channel’s current conditions—lack of easy ingress and egress—and the River’s poor water quality, water-contact recreation is inadvisable in the near-term. Because of the seasonal flow variations in the River (with supercritical flows during the rainy season), water-contact recreation in some areas is not advisable even in the long-term. Such areas include the box-channel configuration in Studio City where the water reaches very high levels during the rainy season.

Source: Aqueduct Magazine, Vol. 77, No. 2, May 2006, p. 32.

Swimming and wading would be most appropriate where easy ingress and egress are possible and the threat of storm flows is minimal. To accommodate these conditions, off-channel ponded areas could be created that would be physically separated from storm flows. The separation gates could also serve to filter River water, so that larger contaminants would be removed before the water was ponded. Fountains and aeration systems would be needed to assist with improving water quality in ponded areas on a continuing basis. The presence of wildlife—including avian and bat species that could deposit guano in and near swimming areas—would need to be controlled. Off-channel swimming areas could be constructed outside of the County easement

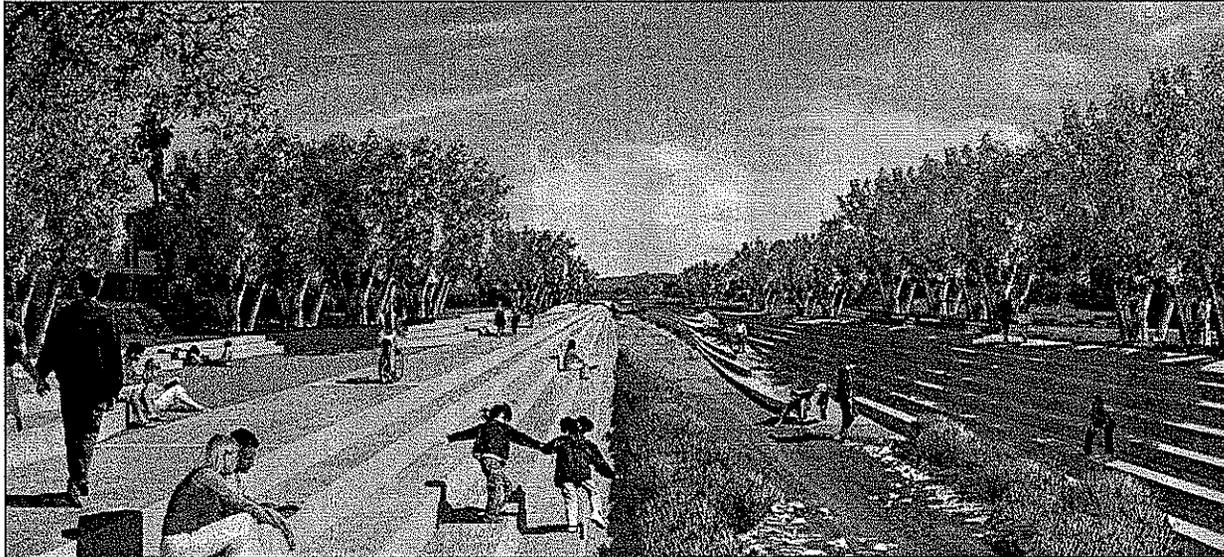
areas. Swimming would likely be designated as a seasonal use; appropriate locations are likely within the Sepulveda Basin and where ponded water can be safely separated from storm flows.

Wading within the River is possible in the long-term and is likely most appropriate where the channel area is wide and easiest to enter and exit. Terracing could enable this kind of mobility—such as in the San Fernando Valley stretches of the River, from its beginning in Canoga Park. Here water quality is an significant issue. A possibility is to cap the River so that most of its regular flow continues at the subsurface level—possibly being filtered through subsurface wetlands with portions of it redirected to above-ground flow once cleaned so as to enable safe water contact. Wading could take place year-round with appropriate signage, warning systems, and monitoring during high flow seasons. The presence of personnel (such as regular patrols) with



Off-channel ponded areas could allow swimming, boating, and wading.

lifeguarding/water safety skills would be required, and life jackets, life boats, and lifesavers would be necessary equipment for overseeing water-contact recreation. This activity would require the approval of both the County of Los Angeles Flood Control District and the Corps.



Terracing of the River channel walls in Canoga Park could allow wading and safe entry and exit.

Fishing is an important activity that not only provides food to families, but is also a cultural practice of many global societies whose livelihoods stem from surviving on waterways and water resources. Fishing is already taking place in the River (See, e.g., the 2008 FoLAR study.) and is likely only going to increase in popularity. Although there are currently few or no native fish species in the River, a long-term goal is to encourage their return. Given this, educational programs need to be a part of future policies governing the practice of fishing in the River. Results of the Los Angeles and San Gabriel Rivers Watershed Council water quality monitoring investigation, which includes an analysis of fish prevalence and health (Antos, 2008), will further inform future guidelines regarding the practice of fishing.

- It may be advisable to establish a revised permitting program, with City involvement, to ensure that fishing practices are monitored and to guarantee that fish populations are not depleted. Thus, ongoing research needs to accompany fishing activities in order to track the kind, condition, and numbers of fish species in the River. Catch-and-release fishing can occur with relatively low levels of damage to fish populations, but sustenance fishing can deplete populations and impact food chains and ecosystem health if not monitored over time. According to John O'Brien from the California Department of Fish and Game, allowing sustenance fishing or take of non-native species should be encouraged whenever possible and safe to do so. Most, if not all, of the fish species in the River are non-natives, so encouraging catch-and-release fishing would not make sense until native game species can be re-established. Given this, it is likely advisable to allow sustenance fishing (at least in the near-term) and, if there appears to be an interest in catch-and-release fishing, allow this also, but both should be done only in designated areas, possibly during restricted periods. This issue should be considered by the River Opportunities for Wildlife, Ecology, and Recreation (ROWER) committee recommended in "The River's Ecological Context" section.
- Currently, some of those who have been fishing in the River have created an environmentally-damaging condition by disposing of their monofilament fishing line in the water, which has caused damage to local wildlife through their consumption of it (e.g., geese, other birds, and some aquatic species); fish hooks have also been found in the wings of ducks and other species. Better education

about safe fishing practices is needed, along with adequate signage regarding practices and appropriate locations for fishing as well as new stations for convenient disposal of fishing line, excess bait, etc. Outdoor sporting equipment and supply stores may be possible funders of these amenities.

Non-Water Contact

Active recreation involving non-water contact—such as boating and kayaking (where the intent is to not enter the water, but navigate through it) is feasible in the near-term (See, e.g., the 2008 River Expedition report and associated recommendations via: www.lalacomes.com/lariver). Again, the most appropriate areas for this are where the channel allows the safest and easiest entry and exit. To accommodate this use, boat launches or floating piers could be installed. Wildlife viewing could be a simultaneous activity in some areas. The Sepulveda Basin is likely the most appropriate area for this kind of activity in the near-term, since the configuration of the channel is wider and soft-bottomed. Some vegetation should be removed to eliminate invasive species and avoid impediments to the free flow of water through the area, which would also facilitate navigation. In some cases, boating areas should be designated so as not to interfere with wildlife habitat. In the more natural areas of the River, no motorized boating should be allowed due to potential noise and water quality impacts, but less-polluting motorized boats (such as electric vessels) could eventually be used—possibly in the downtown/Arroyo Seco area for tours focusing on the history of the founding of the City and the development of downtown. Nature tours could be conducted with smaller vessels in the Sepulveda Basin and Glendale Narrows (and this is a recommendation in the 2008 River Expedition report). A Riverboat tour proposal has already been submitted to the City by interested residents (in late 2008). Thus, boating is a potential revenue-generating resource and should be both explored and closely supervised.

A River tour or taxi system, similar to that in Milwaukee (See image below and: www.watertaximilwaukee.com.) could be developed in order to generate revenue that would support long-term River maintenance and security efforts. Staffing and oversight requirements should be investigated in consultation with the County, the Corps, and the City's Department of Recreation and Parks—likely through the proposed ROWER committee discussed in the previous section of this report.

- Similarly, active recreation, such as ball playing and polo, should be coordinated with these agencies so that they do not interfere (e.g., via noise, lighting/glare) with in-channel activities. Habitat buffer zones may help in ensuring a safe, healthy separation between such activities.

Passive Recreation

The LARRMP identified a need for providing more passive recreational amenities near the River—these include facilities to support creation of wildlife viewing and interaction activities, such as ornithology, gardening, and more solitary activities like meditation and the appreciation of nature.



Milwaukee “water taxis” 22-foot long (by 9-foot wide) electric Duffy boats that hold 11 passengers plus a captain with a canopy that can hold in heat or air conditioning. The taxis make regular stops at 12- to 15-minute intervals; for \$10, people can use it for unlimited trips between 11 am and 7 pm (Sunday through Thursday), and 11 am until midnight on Fridays and Saturdays. A one-way fare is \$5.

Source: www.watertaximilwaukee.com

Water Contact

Any activities involving water contact should only be allowed if the water quality is deemed acceptable for such activities. Small-craft boating may involve water contact and therefore might be appropriate in only certain areas in the near-term. Wildlife viewing may involve water contact via wading or walking through streams; and, thus is likely feasible in the near term in designated areas, but, like all in-channel activities, should be prohibited during the rainy season. Wildlife viewing trails and platforms could help facilitate year-round safe practices and simultaneously—through signs and other informational displays and tours—educate the public about such practices. In general, wildlife viewing/appreciation activities should be separated from other uses—such as active recreation. The recommended River Wildlife Committee in “The River’s Ecological Context” section would be an appropriate forum for designing such facilities. Again, habitat buffer zones would likely ensure safer, healthier separation between wildlife areas and recreational uses.

Non-Water Contact

Passive recreation that does not involve water contact is feasible in the near-term; however, it is important to designate specific areas for these activities early so that other, longer-term uses may be coordinated with them in mind. Areas that are impacted by freeway or other noise and with considerable existing night-time illumination would likely not be appropriate for these designations. Areas with viable connections to larger open spaces—such as through new parks or green street projects would be preferable. A relatively low-impact recreational use—such as an outdoor yoga sanctuary or meditation garden might be an appropriate transitional use between passive and active recreational facilities. An example is the Japanese Garden at the Donald C. Tillman wastewater treatment plant in the Sepulveda Basin.

Cultural Activities

Art

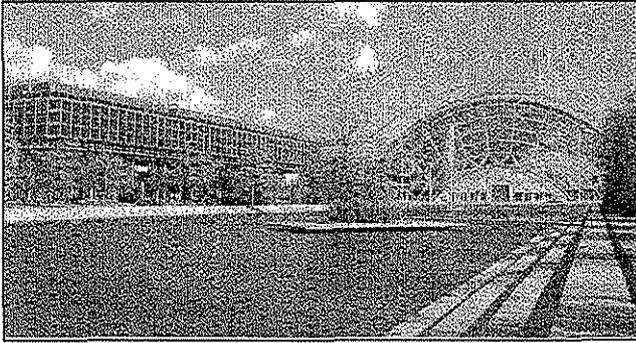
Los Angeles possesses a thriving, world renowned art scene that can and should be incorporated into River revitalization. Outdoor exhibits, including permanent sculptures, can enhance the 32-mile River greenway and make River places become favorite destinations. A River art walk could become a collaborative project of local art museums, studios, and educational programs, offering a place for regular, art-based activities. An outdoor design studio could facilitate the creation of art and classes teaching art-related skills. This activity would need to be coordinated with the City’s Department of Cultural Affairs and, depending upon its location in relation to the River, possibly with the County.

History

The River plays a central role in the history of the City, the region, the State, the nation, and the world. This role should be explored and celebrated in River projects. Near-term projects can create educational points highlighting the naming of the City at the Arroyo Seco, the de Anza Trail (in conjunction with the National Park Service), historic River bridges, the history of the City’s development via industrial, rail, water, and film industries, and countless others. Longer-term projects can create monuments to this history in the form of a River Museum or Cultural Crossroads project near the Autry Museum at Griffith Park, which can highlight the history of indigenous tribes and both figuratively and literally link them to the River. Another long-term project is the potential “Competitors Trail” that can provide a bicycle trail from the Rose Bowl in Pasadena to the Coliseum south of downtown, featuring a ride along both the Arroyo Seco and the River.

Public Performances

Los Angeles is home to many of the world’s most talented actors and musicians, with a thriving institutional support structure for related creative talent-based industries. In the near-term, creation of a series of small outdoor stages along the 32-mile River Greenway can encourage both formal and impromptu performances that will foster civic activity and pride, while a longer-term vision of a large, emblematic River Theater can make a worldwide statement. (See images on the following page.)

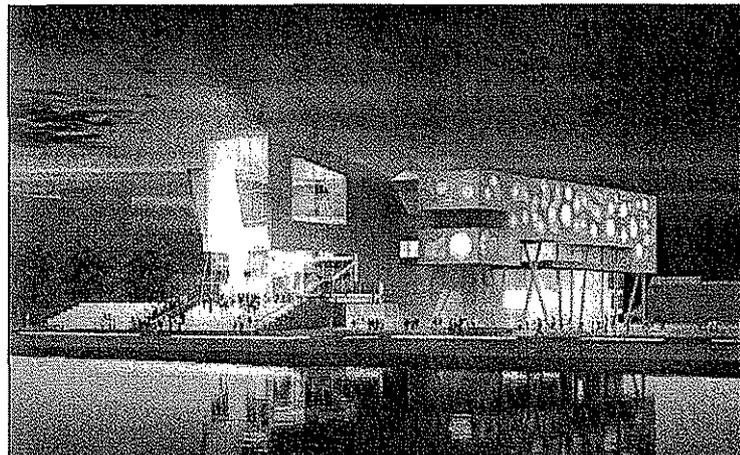


In Leipzig, Germany, the Congress Centre Leipzig is part of the Neue Messe (New Trade Fair), which has been constructed and integrated into a landscaped park.
Source: Urban Land, Vol. 67, No. 10, p. 108, October 2008



The Clyde Waterfront project in Glasgow, aimed at rejuvenating an 8-mile zone of former industrial land along the River Clyde, is the largest regeneration project ever undertaken in Scotland. This image demonstrates the viability of providing near-water open space without inviting water contact.
Source: Urban Land, Vol. 67, No. 10, p. 106, October 2008

The central Aalborg (Denmark) harborfront will include the 285,000-square-foot House of Music with an 1,800 seat concert hall and the University of Aalborg Music and Architecture Departments.
Source: Urban Land, Vol. 67, No. 10, p. 135, October 2008



Illicit Activities

Gang Activity

With increased River accessibility, there is a danger that gang activity could spread into other areas. However, with increased use of the River corridor, combined with more opportunities for youth to participate in and benefit from a revitalized River, and with more frequent human and technological surveillance and enforcement, this is expected to be effectively managed.

- A special River law enforcement committee—Strategies for Assuring Freer Enjoyment of the River (SAFER)—could be convened, including the Mayor’s Office experts on gang response, to ensure that the River security approach is adequately staffed and prepared.

Graffiti and Other Vandalism

Graffiti is a persistent and pervasive problem within the River corridor. The County and the Corps maintain responsibility for removing graffiti from the River’s channel walls in their respective areas (See map on p. 11.). Graffiti is removed by covering it with neutral-colored paint, but this practice has its own environmental impacts via paint cost, chemical content, and potential air and water quality pollution. It is expected that the practice of graffiti will be reduced with an increased level of surveillance and enforcement; however, near-term strategies should be devised to combat the problem as well.

- For instance, increasing the number and geographic coverage of the River Keepers could assist with graffiti reduction. Over the long-term, ponding water via the use of rubber dams or similar devices would prevent entry into the River channel for graffiti creation. Plantings, such as vines that drape over the River channel—such as those used on freeway sound walls—would also discourage the creation of graffiti since it would be illegible on such a surface.

Illegal dumping has become a problem along the River—especially in areas with little visibility, such as the cul de sac at the end of Doran Street under the 134 Freeway. As such areas are made more accessible and visible, this practice is expected to decline; however, in the near-term, such places need to be recorded and monitored because they pose long-term water and land contamination problems. The above-mentioned practice of identifying “hotspots” including storm drain outlets and brownfields would help identify and redress such pollution concerns.

Other kinds of vandalism along the River include the theft of copper wire from light and utility fixtures. This practice has become more common with the increase of global demand (and concomitant price increase) for copper. A near-term approach to solve the problem is more frequent surveillance and enforcement, but a longer-term strategy is a less energy-intensive lighting system that does not require the use of copper—such as a solar-based system.

Homeless

Displacement of homeless people who currently live in and near the River is a concern that must be addressed in the near-term. The island areas of the River are a popular location of homeless encampments because they provide relative privacy and security. These areas will be drastically changed when the in-channel vegetation is removed to enhance flood protection (particularly in the Elysian Valley area). The existence of homeless encampments in the River points to a need to think about where the homeless will go once permanently removed from the River environment. This, in turn, points to the larger issue of gentrification that is likely to occur as the River’s revitalization encourages a rise in nearby property values.

The River should be understood as an equal-access resource and therefore accessibility enhancements—such as development of the 32-mile greenway—should be prioritized, particularly in low-income areas where access to cars is less likely. River-adjacent areas should be designated to accommodate a mix of income levels and services unique to those. Space could be reserved in the downtown area that would accommodate

transient populations while fostering easier access to important bridging social capital elements—such as food, training, jobs, and medical services (which already exist in the area).

Governance Needs

In order to designate areas along the River for specified uses, approval of the County and the Corps is essential—even if the areas impacted do not include the River channel, the intentions regarding impacts to special status species and the larger watershed, associated ecosystem, and potential recreational benefits for the entire Southern California region should be coordinated since these fall under the jurisdiction of federal and state as well as local agencies.

Potential Access and Use Conflicts

- ☒ Active vs. Passive recreation uses (in-channel), e.g., fishing and boating
- ☒ Active vs. Passive recreation uses (outside-channel), e.g., baseball and ornithology
- ☒ Active vs. Passive recreation uses (in- vs. outside-channel), e.g., soccer and boating
- ☒ Human and wildlife interactions
- ☒ Other impacts to water (e.g., using paint to cover graffiti that then flows into water)

Example Cases

For implementing the River greenway and associated elements:

Anacostia River, Washington, DC: www.anacostiawaterfront.net.

Guadalupe River, San Jose, California: www.sjparks.org/Trails/GRiver/index.asp.

Napa River, Napa, California: www.cityofnapa.org

Platte River, Denver, Colorado: River trail system: www.denvergov.org and www.udfed.org/publications/pdf/fhn/fhn2007/spr.html

For gardening and urban agriculture:

Los Angeles Neighborhood Land Trust: www.lanlt.org

Local Future Farmer's of America Chapters: www.ffa.org

Local 4H Chapters: www.fourhcouncil.edu

Horses in the 'Hood (Tarzana, California): www.horsesinthehood.org

Community Food Security Coalition: www.foodsecurity.org.

Key Partners

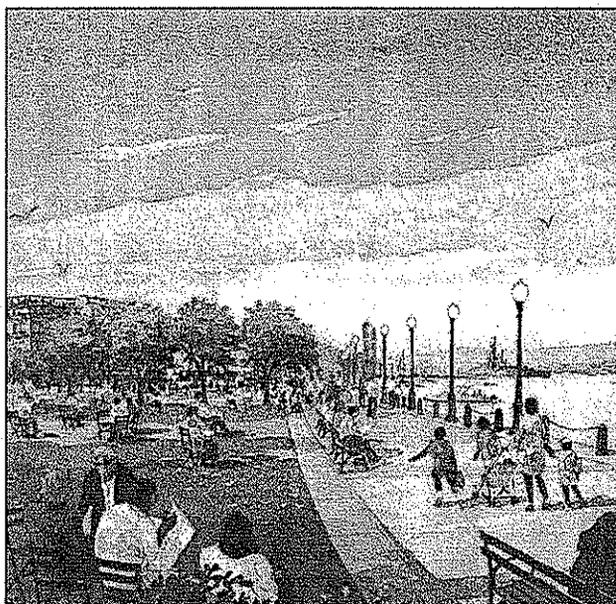
- | | |
|--|---|
| ☉ U.S. Army Corps of Engineers | ☉ Los Angeles County Bicycle Coalition |
| ☉ U.S. Department of Agriculture
(Cooperative Extension Service/University
of California Cooperative Extension
Service) | ☉ Arroyo Seco Foundation |
| ☉ State of California (various and numerous
departments and agencies) | ☉ Metro |
| ☉ County of Los Angeles | ☉ LAUSD, colleges, universities, trade
programs |
| ☉ Santa Monica Mountains
Conservancy/Mountains Recreation and
Conservation Authority | ☉ Places of worship |
| ☉ Metropolitan Water District | ☉ Los Angeles Homeless Services Authority:
www.lahsa.org |
| ☉ Los Angeles and San Gabriel Rivers
Watershed Council | ☉ Los Angeles Regional Food Bank:
www.lafoodbank.org |
| ☉ Friends of the Los Angeles River | ☉ Los Angeles Conservation Corps:
www.lacc.org |
| ☉ North East Trees | ☉ Representatives of indigenous persons, such
as tribal organizations |
| ☉ Trust for Public Land | ☉ Social and Public Art Resource Center |
| ☉ TreePeople | ☉ Homeless assistance organizations |
| ☉ Los Angeles Conservation Corps | ☉ Environmental justice organizations |
| | ☉ Public health organizations |
| | ☉ Neighborhood Councils |

Near-term Recommendations

- SC01: Investigate the need for revised City and County codes (See p. 45-46.) regarding River access and use governance.
- SC02: Investigate the need for revised permitting processes to regulate River recreational uses (e.g., develop standard practices and design guidelines and streamline City green street project approval process).
- SC03: Hire and train additional River security and maintenance personnel.
- SC04: Identify and acquire additional equipment (e.g., bicycles, Rivermobiles and/or lifeguarding accessories, etc.)
- SC05: Install a more complete River signage system (including emergency response mile markers and new signs on bridges).
- SC06: Implement limited, pilot-trial programs regarding certain River access and uses with simultaneous monitoring programs in order to identify opportunities and challenges.
- SC07: Prioritize recreation projects that will simultaneously result in infiltration (for drinking water supply) and environmental restoration benefits.
- SC08: Prioritize implementation of the River bike path and trail components to ensure access to underserved populations.
- SC09: Prioritize the relocation or reorganization of City-owned properties near the River and confluences with its tributaries so that continuous access along the River may be maintained (explore the possibility of conservation easements/dedications on portions of properties, etc.).
- SC10: Conduct a mapping exercise that will result in River projects to benefit special needs populations (e.g., youth, un- and underemployed, those with disabilities, the elderly, etc.)
- SC11: Host design competitions for local groups to identify and articulate specific River projects.
- SC12: Host a design competition for a new, expanded River signage program.

Long-term Recommendations

- SC13: Implement the necessary City and County code changes necessary to facilitate desired River access and use parameters.
- SC14: Implement the necessary permitting process revisions to allow the desired River access and uses.
- SC15: Formalize maintenance and security agreements with the County, the Corps, and other public agencies.
- SC16: Implement new programs for River access and use that were proven successful during their pilot-trial phases.
- SC17: Identify and secure properties for River projects.
- SC18: Conduct and complete brownfield redevelopment projects as necessary.



Vision for a restored Anacostia River waterfront in Southeast Washington, DC—accommodating multiple, simultaneous uses with safety aspects in the design.

Source: District of Columbia, Office of Planning (2003), “The Anacostia Waterfront: Imagine, Act, Transform”

THE RIVER'S ECONOMIC CONTEXT

Los Angeles River revitalization is expected to not only result in an improved natural environment, but an increased quality of life for regional residents by increasing the value of the River as a cherished cultural resource and daily destination. River revitalization can bring about increased opportunities for recreation and circulation—offering opportunities for improved public health and non-motorized means of commuting. In addition to offering a wider variety of activities, these will generate economic returns as well—through increased tourism, property values, investments, and jobs. These benefits may be realized as follows:

For Businesses

- Potential revenue from tourism-related industries when the River environment improves.
- Potential revenue from River-recreational activities, performances, etc.
- Potential revenue from artistic and cultural activities, exhibits, etc.
- Potential revenue from improved quality-of-life vis-à-vis walkability/access to a variety of commercial businesses.
- Potential revenue for new business starts—in industries serving additional visitors and tourists.
- Potential cost savings from improved air quality with implementation of the 32-mile River Greenway.
- Potential cost savings from improved public health associated with recreational elements of the 32-mile River Greenway.
- Potential cost savings from a reduction in the need to address existing illicit activities in the River corridor.

For Jobs

- Potential near-term jobs associated with designing and implementing River projects.
- Potential near- to long-term jobs associated with constructing River projects.
- Potential near- and long-term jobs associated with staffing additional law enforcement, surveillance, water safety, maintenance, and River Keeper positions.
- Potential long-term jobs available for new maintenance practices including sediment management.
- Potential long-term jobs available for associated revenue-generating activities, including educational and tourism-related aspects of River projects, bicycle and boat rental and supplies, wildlife viewing and appreciation activities, farmer's market and botanical garden projects, etc.

For Properties

- Property values of River-adjacent and River-accessible parcels can be expected to increase.
- The quality of properties within the River may be expected to improve given a stress on “riverly” improvements, such as green building, energy, and water use practices.

For the Transportation System

- Improvements in local public access to multiple-modes of transportation, but particularly increased used of public transportation may be expected through implementation of the 32-mile River Greenway.
- Bicycles and pedestrians using the River as a non-motorized transportation system will enhance and improve transportation options throughout the region, including increased access to transit and the workplace.
- Improvements in accessibility to the ports and local and regional (light rail and commuter) rail systems.
- Improvements in accessibility through grade separations and other safety measures that will facilitate River access and eliminate conflicts with rail (passenger and freight).

For the Water Supply

- River projects that result in upstream infiltration, as well as capture and reuse of stormwater, will assist in reducing the region's dependence on external sources of water.
- River projects that can utilize available water from the River or recycled water will preserve potable water supplies.

For Water Quality

- River projects that result in improvements in water quality will increase the kind and condition of aquatic and related wildlife species, thereby resulting in a healthier ecosystem with improved aesthetic benefits—this will result in increased value of fish (for consumption purposes) and improved coastal ecosystems (increased value of coastal and port-related tourism and ocean species (some related to commercial activities)).
- River projects that result in the use of recycled water for irrigation and other purposes will assist in water conservation.

For Renewable Energy

- Many public and private properties in the LA River watershed offer opportunities for deployment of solar energy panels as part of DWP's SOLAR-LA program. These efforts should be coordinated with River revitalization in order to ensure that the City's goals of adding ecosystem value and solar power generation can be met simultaneously.

Governance Needs

- Improved coordination with multiple and varied public and private section businesses, associations, transportation, and real estate interests is necessary.
- A targeted approach to ensuring that existing communities equitably benefit in River revitalization

Potential Access and Use Conflicts

- Commuters and recreational users
- Public and private sector uses

Example Cases

In addition to the above-listed cases, see: www.americanrivers.org.

Key Partners

- | | |
|---|---------------------------------------|
| • Federal government (e.g., U.S. Army Corps of Engineers) | • Chambers of commerce |
| • State government | • Neighborhood Councils |
| • Local government (DWP (SOLAR-LA); CRA (CleanTech Corridor program), etc.) | • Industry advocacy groups |
| • Rail authorities | • Worker advocacy groups |
| • Port authorities | • Schools, colleges, and universities |
| • Individual businesses | • Places of worship |
| | • Neighborhood Councils |

Near-term Recommendations

- EC01:** Explore establishment of a business- and transportation-focused committee, possibly entitled the Mobility Opportunities through Valuable Engagement with the River (MOVER), to make recommendations through the River Revitalization Corporation concerning near- and long-term River projects, access, and uses.
- EC02:** Direct DWP, in consultation with appropriate City staff and external agencies and organizations, to identify opportunities to coordinate its implementation of the SOLAR-LA program with River

revitalization efforts, regularly participate in the City Interdepartmental Task Force on the River and report to the City's Ad Hoc Committee within ninety (90) days outlining a process and key projects to achieve this objective.

EC04: Work with existing organizations to assist in implementing their established programs, such as the National Park Service- Juan Bautista de Anza National Historic Trail and the Rim of the Valley Corridor.

EC05: Implement the 32-mile River Greenway.

Long-term Recommendations

EC06: Establish programming, such as an annual River Concert at Dodger stadium and other fundraising events in conjunction with the River Foundation, FoLAR, and others.

EC07: Work with the private sector to implement large-scale River projects with considerable multi-sectoral benefits, including a River Museum, Great World Rivers Institute, Pacific Horizon Park, River Theater, etc.



Houston's Discovery Green brings together the city's diverse, cosmopolitan population, providing structured access to the lake and nearby commercial and recreational amenities.
Source: Urban Land, October 2008, p. 89.

REFERENCES

Persons Consulted:

- Antos, Michael. (2008). Los Angeles and San Gabriel Rivers Watershed Council, Water Programs Coordinator
- Backlar, Shelly. (2008). Friends of the Los Angeles River, Executive Director.
- Bass, Carvel H. (2008). U.S. Army Corps of Engineers, Los Angeles District, Senior Ecologist, Operations.
- Bostwick, Tiffany. (2008). U.S. Army Corps of Engineers, Los Angeles District, Environmental Coordinator
- Bushman, Edward. (2008). Los Angeles Fire Department, Battalion Chief in charge of disaster preparedness, urban search and rescue, CERT education, and swiftwater rescue
- Castanon, David J. (2008). U.S. Army Corps of Engineers, Los Angeles District, Chief, Regulatory Division.
- Daniels, Paula. (2008). City of Los Angeles, President Pro Tempore, Board of Public Works
- George, Garry. (2008). Audubon California, Chapter Network Director.
- Hanna, Mark, Ph.D. (2008). Los Angeles Department of Water and Power, Watershed Management Section, Water Resources Division.
- Kharaghani, Shahram. (2008). City of Los Angeles Department of Public Works, Bureau of Sanitation
- Linton, Joe. (2008). "LA Creek Freak" web log, author; Down by the Los Angeles River (2005), author.
- Lipkis, Andy. (2007/8). TreePeople, Executive Director.
- Mackey, Ellen. (2008). Los Angeles and San Gabriel Rivers Watershed Council, Ecologist.
- McAdams, Lewis. (2008). Friends of the Los Angeles River, Founder and Boardmember
- McKenzie, Meredith. (2008). Arroyo Seco Foundation, Watershed Sustainability Program Manager.
- Murphy, William A. (2008). Los Angeles Police Department, Captain III, North East Division
- O'Brien, John. (2008). California Department of Fish and Game, Associate Fisheries Biologist.
- Randall, Gregory. (2008). City of Los Angeles Department of Animal Services, Wildlife Specialist
- Romero, Barbara. (2008). Mountains Recreation and Conservation Authority.
- Shuman, Catherine M. (and various other staff) (2008). U.S. Army Corps of Engineers, Los Angeles River Ecosystem Restoration Feasibility Study Manager
- Smith, Larry. (2008). North East Trees, Executive Director and Greenway LA
- Torres, Albert. (2008). City of Los Angeles Department of Recreation and Parks, Chief Park Ranger
- Van Wagoner, William. (2008). City of Los Angeles, Department of Water and Power, Managing Water Utility Engineer, Water Resources Division
- Young, Walt. (2008). Mountains Recreation and Conservation Authority, Chief Ranger

Publications and Other Resources:

- Anacostia Waterfront Initiative (The). (2003). The Anacostia Waterfront Initiative: Imagine, Act, Transform. Washington, DC. www.anacostiawaterfront.net.
- City of Calabasas. (2008). The Las Virgenes Creek Restoration Project: Healing a Stream. Calabasas, California. www.cityofcalabasas.com.
- Community Conservancy International. (2008) The Green Solution Project: www.ccint.org/greensolution.html.
- Environment Now. (2007). Top Achievements of the Environmental Community in Southern California: Action. Results. Change. 2007. Santa Monica, California. www.environmentnow.org.
- Friends of the Los Angeles River. (2008). State of the River 2: The Fish Study, September 2008. Los Angeles, California. www.folar.org.
- Los Angeles Department of Water and Power. (2008). Water Supply Action Plan. www.ladwp.com.
- Occidental College Urban and Environmental Policy Institute: <http://departments.oxy.edu/uepi/>.

River Partners. (2006). River Partners, 580 Vallombrosa Avenue, Chico, California 95926. www.RiverPartners.org.

San Joaquin River Parkway and Conservation Trust, Inc. (2008). 1550 East Shaw Avenue, Suite 114, Fresno, California. www.riverparkway.org.

Santa Monica Mountains Conservancy/Mountains Recreation and Conservation Authority. (2005). The Los Angeles River Urban Wildlife Refuge. Berkeley, California.

Smith, Larry. (2008). Six Guiding Principles for Overseeing Los Angeles River Access and Use:

1. Do no harm (Do not let gentrification drive out residents and businesses, be cautious about the use of eminent domain—it is best to have willing partners);
2. The legal framework of risk-management needs revamping—remove a critical barrier to access—at some point, people need to have some common sense, there is a need for more public education about the power of water and we need to rely upon the “old-fashioned” values of individual accountability and responsibility;
3. Respect diversity in associations in people, plants, and local materials (We do not need to reinvent the wheel—removing barriers is the role of government—but the development of programs and projects is not necessarily—these must be collaborative and do not have to be done solely by governments);
4. Follow the water, use nature, use organic solutions;
5. The more benefits arising from each project, the better;
6. Promote more meaningful community stewardship—with more eyes on the River, there are more people taking responsibility for it and the safer and more sustainable it will be.

Souers, Amy and Betsy Otto. (Undated). Restoring Rivers Within City Limits (reference provided by Friends of the Los Angeles River; accessible online via: www.open-spaces.com/article-v3n4-rivers.php)

The Trust for Public Land. (2008). Quantifying the Greenhouse Gas Benefits of Urban Parks, prepared by Philip Groth, Rawlings Miller, Nikhil Nadkarni, Marybeth Riley, and Lilly Shoup of ICF International.

University of California at Los Angeles Institute of the Environment: www.ioe.ucla.edu/

University of Southern California Center for Sustainable Cities: <http://college.usc.edu/geography/ESPE/>

Urban Rivers Network. (2008).

U.S. Bureau of Reclamation. (2004). Los Angeles River Physical and Biological Habitat Assessment. Natural Resources Group. www.usbr.gov.

U.S. Department of the Interior, National Park Service. (2000). Juan Bautista de Anza National Historic Trail Map and Guide. Oakland, California. www.nps.gov/juba.

U.S. Department of Transportation, Federal Highway Administration, Office of Natural Environment. (2000). Critter Crossings: Linking Habitats and Reducing Roadkill. FHWA-EP-00-004. Washington, DC. www.fhwa.dot.gov/environment.

U.S. Department of Transportation, Federal Highway Administration, Office of Natural Environment. (Undated). Keeping it Simple: Easy Ways to Help Wildlife Along Roads. FHWA-EP-03-066. Washington, DC. www.fhwa.dot.gov/environment.

U.S. Environmental Protection Agency Pacific Southwest Region (Region 9). EPA Progress Report 2007. EPA-909-R-07-003. San Francisco, California. www.epa.gov/region9.

U.S. Fish and Wildlife Service. (2003). 2001 National and State Economic Impacts of Wildlife Watching: Addendum to the 2001 National Survey of Fishing, Hunting and Wildlife-Associated Recreation. Report 2001-2. James Caudill, Ph.D., Division of Economics, Arlington, Virginia. <http://federalaid.fws.gov>.

CITY COUNCIL MOTION

AD HOC River OCT 17 2008

MOTION

PUBLIC WORKS

The City of Los Angeles approved the Los Angeles River Revitalization Master Plan (LARRMP) in 2007. The plan includes conceptual images that demonstrate future conditions that would allow people to enter the river channel. Currently access to the river channel is restricted and contact with river water is not encouraged due to safety, liability, and water quality concerns.

Regarding the natural elements of the river - including its fish and wildlife - the federal government (through the U.S. Fish and Wildlife Service) and the state (through the California Department of Fish and Game) maintain jurisdiction over species and habitats, while the Corps of Engineers issues permits for wetlands. While people are known to fish in the river, it is not considered a sanctioned activity. Boating is also an activity that takes place on the river, but it is also not presently encouraged.

In order for the LARRMP to be implemented in the way that it was intended, these issues regarding access and use must be addressed. Certainly long term solutions are in process as the river is restored, but in the short term, agencies should work towards development of consistent policies that balance the needs of the river environment including wildlife conservation with enjoyment of the river.

I THEREFORE MOVE that the Council instruct the Bureau of Engineering, with assistance of all appropriate City, State, and Federal agencies and community organizations, prepare both short and long term recommendations to address concerns stated in this motion, including consistent policies that balance the needs of the river environment such as wildlife and conservation, with human enjoyment of the river.

I FURTHER MOVE that the Council instruct the Bureau of Engineering to report back to Ad Hoc River Committee within 60 days.

PRESENTED BY



ERIC GARCETTI
Councilman, 13th District



ED P. REYES
Councilman 1st District

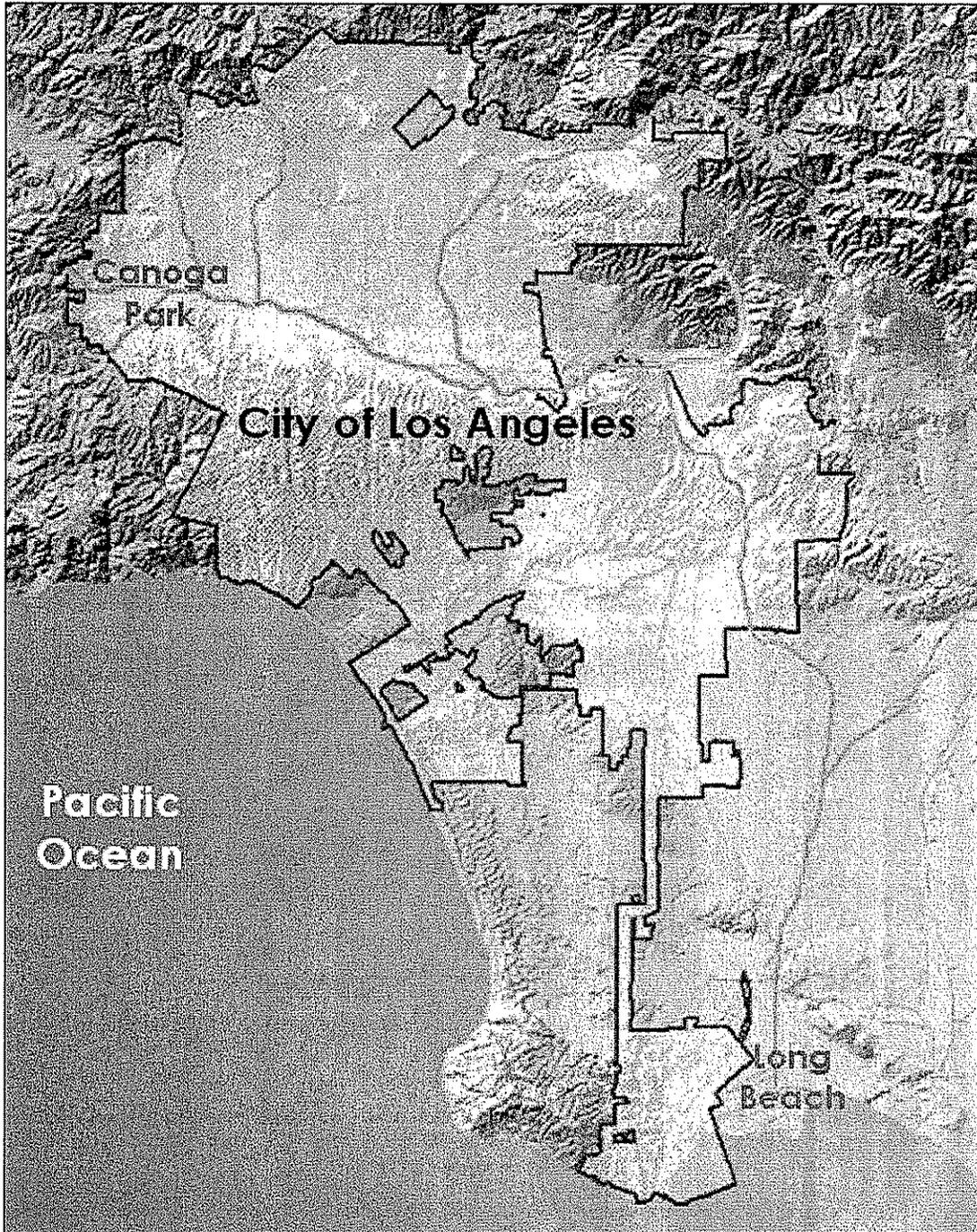
SECONDED BY



07-1342-85

86

MAP OF THE LOS ANGELES RIVER



The Los Angeles River is 51 miles long—its first 32 miles flow through the City of Los Angeles.
(outlined in purple in the map above).

LOCAL REGULATIONS PERTAINING TO RIVER ACCESS AND USE

COUNTY OF LOS ANGELES

Some Los Angeles County regulations (See: municipalcodes.lexisnexis.com/codes/lacounty/.) that pertain to access and use of the Los Angeles River* include:

Chapter 11.38 WATER AND SEWERS: 11.38.590 Industrial waste discharges; 11.38.600 Keeping animals or fowl; Part 4 (various) Water Conservation (landscaping, washing vehicles, decorative fountains, etc.);

Chapter 12.84 LOW IMPACT DEVELOPMENT STANDARDS (LID reduces the impact from the development and provides the benefits of: 1) Replenishing groundwater supplies; 2) Improving the quality of surface water runoff; 3) Stabilizing natural stream characteristics; 4) Preserving natural site characteristics; and 5) Minimizing downstream impacts;

Chapter 20.94 CHANNELS: 20.94.020 Maintenance (Owner responsibilities); 20.94.030 Using property prohibited without permit (Terms and conditions); 20.94.040 Placing obstructions, refuse and contaminating substances in channels prohibited; and 20.94.050 Bridges and dip crossings

Chapter 20.96 VEHICLES ON FLOOD CONTROL LEVEES: 20.96.010 Operating vehicles on levees or channels prohibited (Exception);

Chapter 20.98 ENCROACHMENTS ON CREEKS AND CHANNELS: 20.98.010 Entering or encroaching on certain creeks or channels deemed misdemeanor when;

Chapter 22.52 GENERAL REGULATIONS: 22.52.460 Obstructions prohibited where:

A) A person shall not place or cause to be placed in the channel or bed of any river, stream, wash or arroyo, or upon any property over which the Los Angeles County Flood Control District has an easement for flood control purposes duly recorded in the office of the county recorder of Los Angeles County, any wires, fence, building or other structure, or any rock, gravel, refuse, rubbish, tin cans or other matter which may impede, retard or change the direction of the flow of water in such river, stream, wash or arroyo, or that will catch or collect debris carried by such water, or that is placed where the natural flow of the stream and floodwaters would carry the same downstream to the damage or detriment of either private or public property adjacent to the said river, stream, wash, arroyo or channel.

CITY OF LOS ANGELES

Some City of Los Angeles regulations (See: www.amlegal.com/los_angeles_ca.) that pertain to access and use of the Los Angeles River* include:

LAMC ARTICLE I: INCORPORATION AND POWERS

Sec. 104. Restrictions on the Powers of the City.

(d) Use of Los Angeles River Bed. The bed of the Los Angeles River, or any part of it, as now or hereafter defined and located, shall not ever be sold, granted, leased, transferred or alienated in any way, but shall be kept at all times for municipal purposes, free and clear of all encumbrances and obstructions, except as follows:

(1) Franchises or rights may be granted by ordinance for crossings over or under the riverbed to railways, pipelines or other public utilities, plants or equipment, as long as they do not obstruct the flow of the Los Angeles River in times of flood, nor conflict with any longitudinal use of the riverbed by the City itself or other uses authorized in this section.

(2) Franchises may be granted for the construction and operation of railroad tracks longitudinally along the riverbed only when such construction and operation is required in connection with a grade crossing plan for the elimination of grade crossings and the unification of all public terminal rail facilities, other than street and interurban railways, after the grade crossing plan has been approved by two-thirds of the voters voting on the question at a general or special election.

(3) The City may grant permits for the removal of sand and gravel from the riverbed, so long as the removal of sand and gravel does not jeopardize or injure any structures authorized by this section.

ADMINISTRATIVE CODE ARTICLE VI: PROPRIETARY DEPARTMENTS: DEPARTMENT OF WATER AND POWER

Sec. 671. The Los Angeles River.

The City of Los Angeles shall continue in the ownership and enjoyment of all the rights to the water of the Los Angeles River, vested in it and its predecessors, including the Pueblo of Los Angeles, and is hereby declared to have the full, free and exclusive right to all the water flowing in the river and also the exclusive ownership of, and the exclusive right to develop, economize, control, use and utilize all the water flowing beneath the surface in the bed of the river at any point from its sources to the intersection of the river with the southern boundary of the City.

Sec. 672. Possession, Management and Control of Water and Power Assets.

The Board of Water and Power Commissioners shall have the possession, management and control of:

(a) **Water and Water Rights, Lands, and Facilities.** Whether situated inside or outside of the City or the State of California, all the water and water rights of the Los Angeles River, all other water or water rights of every nature and kind owned or controlled by the City, and all the lands, rights-of-way, sites, facilities and property used for the capture, transportation, distribution and delivery of water for the benefit of the City, its inhabitants and its customers. The water and water rights, lands, rights-of-way, sites, facilities and other interests of the City related to its water business under the possession, management and control of the board shall be known as the Water Assets.

Sec. 673. Water and Water Rights.

(a) **Los Angeles River.** The City shall not sell, lease or otherwise dispose of the City's rights in the waters of the Los Angeles River, in whole or in part.

Sec. 19.129.7. Procedure for Establishment of Eligibility to Receive Reward.

1. For the purposes of this article, "illegal dumping" means depositing or causing to be deposited any combustible or noncombustible rubbish or any refuse of any kind whatsoever upon or in any street, or upon any private premises in this City, or in the Los Angeles River, or in the bed of the River without having obtained a written permit to do so from the Board of Public Works and from the owner of the premises upon which it is proposed to deposit noncombustible rubbish.

SEC. 53.06. ANIMALS AT LARGE.

No person owning or having possession, charge, custody or control of any animal, except cats which are not in heat or season, shall cause, permit or allow the animal to stray, run, or in any manner to be at large in or upon any public street, sidewalk or park, except as otherwise expressly provided in section 63.44 of this Code, or in the bed of the Los Angeles River or upon any unenclosed lot or land. (Amended by Ord. No. 160,401, Eff. 11/1/85.) A municipality may, under its police power, enact Ordinances prohibiting animals from running at large. Amyx J. Tabor C 1863 23 C 370.

SEC. 53.06.2. RESTRAINT OF DOGS. (Dogs Only)

(Amended by Ord. No. 160,401, Eff. 11/1/85.)

(a) Every person owning or having charge, care, custody or control of any dog shall keep such dog exclusively upon his own premises provided, however, that such dog may be off such premises if it be under the control of a competent person and restrained by a substantial chain or leash not exceeding six feet in length, or under the control of a competent person on a dog exercise or training area established pursuant to section 63.44 of this Code.

(b) (Amended by Ord. No. 162,538, Eff. 8/27/87.) Notwithstanding any other provision of this code, every violation of any of the provisions of this section shall be punishable as an infraction as follows:

1. Upon a first conviction, by a fine of twenty-five dollars (\$25) .
2. Upon a second conviction, and the offense occurred within one year of a prior violation of this section which resulted in a conviction, by a fine of forty-five dollars (\$45).
3. Upon a third or subsequent conviction, and the offense occurred within one year of a prior violation of this section which resulted in a second or subsequent conviction, by a fine of sixty-five dollars (\$65).

Ordinance No. 55,665.

People v. Barnsdall 1945, CR A 2103.

Brotemarkel v. Snyder 1950, 99 CAC 388, 390.

(Rev. No. 56 - 1995)

SEC. 53.08. ANIMALS IN LOS ANGELES RIVER BED. (Equine Only)

No person shall stake out, herd or graze any animal in or upon the bed of the Los Angeles River unless such animal is under the immediate control of some person over the age of fifteen (15) years who is at all times within fifty (50) feet of the animal. Any horse, mule, ass or ox which is harnessed or saddled, at the time, in the actual custody and control of some person is exempted from the operation of this section. (Amended by Ord. No. 150,337, Eff. 1/1/78.)

SEC.63.44. REGULATIONS AFFECTING PARK AND RECREATION AREAS

(Added by Ord. No. 153,027, Eff. 11/16/79.)

A. Definitions: As used in this section:

Beach shall include public seashore and shoreline areas bordering the Pacific Ocean that are owned, managed or controlled by the City. (Added by Ord. No. 163,039, Eff. 1/17/88.)

Park shall include every public park, roadside rest area, playground, zoological garden, ocean, beach or other recreational facility area, together with any parking lot, reservoir pier, swimming pool, golf course, court, field, bridle path, trail, or other recreational facility, or structure thereon, in the City of Los Angeles and under the control, operation or management of the Board of Recreation and Park Commissioners, the Los Angeles County Department of Parks and Recreation, the Los Angeles County Department of Beaches, or the Los Angeles Memorial Coliseum Commission. Park does not include any State Historic Park located within the City of Los Angeles.

Board shall mean the Board of Recreation and Park Commissioners.

B. Within the limits of any park or other City-owned Harbor Department designated and controlled property within the City of Los Angeles: (Amended by Ord. No. 174,737, Eff. 9/9/02.)

1. No person under the age of 18 years shall cause, permit or allow any ungelded equine animal to be present in said park.

2. (Amended by Ord. No. 160,401, Eff. 11/1/85.) No person shall cause, permit or allow any animal owned or possessed by him or any animal in his care, custody or control to be present in said park except:

(a) Equine animals being led or ridden under reasonable control upon bridle paths or trails provided for such purposes; or

(b) Equine or other animals which are hitched or fastened at a place expressly designated for such purposes; or

(c) Dogs which have been specially trained and are being used by blind or otherwise disabled persons to aid and guide them in their movements. (Amended by Ord. No. 172,088, Eff. 7/30/98.)

(d) (Amended by Ord. No. 170,233, Eff. 2/17/95.) Dogs or cats when led by a leash not more than six (6) feet long, or when confined within the interior of a vehicle, or dogs under the control of a competent person in designated dog exercise and training areas

* If future River access and uses are to more closely resemble the kinds of activity presently allowed at public beaches, harbors, and marinas, then the applicable codes for these should also be analyzed.