TRANSMITTAL TO CITY COUNCIL

Case No.	Planning Staff Name(s) and Contact No	C.D. Nos.
CPC-2007-3036-CA	DEBORAH KAHEN 213-978-1395	1,2,3,4,5,6,9,12,13,14,

Related Case No(s).	Last Day to Appeal
CPC-2009-3125-CA	NA

Location of Project (Include project titles, if any.

LOS ANGELES RIVER IMPROVEMENT OVERLAY (LA-RIO)

Applicant(s) and Representative(s) Name(s) and Contact Information, if available.

CITY OF LOS ANGELES

Appellant(s) and Representative(s) Name(s) and Contact Information, including phone numbers, if available.
N/A

Final Project Description (Description is for consideration by Committee/Council, and for use on agendas and official public notices. If a General Plan Amendment and/or Zone Change case, include the prior land use designation and zone, as well as the proposed land use designation and zone change (i.e. "from Very Low Density Residential land use designation to Low Density land use designation and concurrent zone change from RA-1-K to (T)(Q)R1-1-K). In addition, for all cases appealed in the Council, please include in the description only those items which are appealable to Council.)

Code Amendment to establish the Los Angeles River Improvement Overlay which will implement the first River Improvement Overlay District. The LA-RIO consists of a required point system for a new development near the Los Angeles River to implement the design standards and guidelines that foster improved private property and public right of way development with regard to watershed, urban design, and mobility.

Items Appealable to Council
N/A

Fiscal Impact Statement	ENV. No.	Commission Vote:
"If determination states administrative costs are recovered through fees, indicate "Yes." Yes	ENV-2007-3037-MND	7-0

In addition to this transmittal sheet, City Clerk needs:
(1) Original & (1) copy of the Commission, Zoning Administrator or Director of Planning Determination
(2) Staff Recommendation Report (1)
(3) Environmental document used to approve the project, if applicable (1);
(4) Public hearing notice (1);
(5) Commission determination mailing labels (1) note: Condo projects & Appeals only require a copy of the list(s), not the labels.
(6) Condo projects only: (1) copy of Commission Determination mailing list (includes project's tenants; and 500 foot radius mailing lists)

JAMES WILLIAMS, Commission Executive Assistant I City Planning Commission	MAR 20 2009 Date

DEPARTMENT OF
CITY PLANNING
200 N. SPRING STREET, ROOM 525
LOS ANGELES, CA 90012-4801
AND
6262 VAN NUYS BLVD., SUITE 351
VAN NUYS, CA 91401

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REGINA M. FREER
VICE-PRESIDENT
SEAN O. BURTON
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March 19, 2009

Planning and Land Use Management Committee
Council of the City of Los Angeles
City Hall, Room 395
Los Angeles, CA 90012

ATTN: Barbara Greaves, Legislative Assistant

CITY PLAN CASE NO. CPC-2007-3036-CA

Transmitted herewith is a proposed ordinance that establishes the Los Angeles River Improvement Overlay (LA-RIO), which will implement the first River Improvement Overlay District (RIO). The LA-RIO consists of a required point system for new projects near the Los Angeles River that foster improved private property and public right of way development with regard to watershed, urban design, and mobility. In addition, the LA-RIO includes green street standards and guidelines for public and private streets to increase pedestrian and bicycle safety and accessibility, native habitat areas, and opportunities to treat and infiltrate stormwater.

The Planning Department held two public hearings on the LA-RIO on December 12, 2008 in the San Fernando Valley and on December 15, 2008 in Downtown Los Angeles. On February 12, 2009, the City Planning Commission approved the attached findings of the Department of City Planning staff as its findings and approved the proposed ordinance.

This action was taken by the following vote:
Moved: Burton
Seconded: Montanez
Ayes: Cardoso, Hughes, Lara, Woo, Roschen
Absent: Freer, Kezios

James Williams, Commission Executive Assistant
City Planning Commission

Attachments: Findings, Ordinance
cc: Jeri Burge, Deputy City Attorney, Land Use Division

ATTACHMENT

LAND USE FINDINGS

The City Planning Department recommends that the City Planning Commission, in accordance with Charter Section 558, find:

1. In accordance with Charter Section 556, the proposed ordinance (Appendix A) is in substantial conformance with the purposes, intent and provisions of the General Plan. The proposed ordinance will positively contribute to the improvement of water quality and supply and the provision of ecological corridors for birds and wildlife as defined in Chapter 6 of the Open Space and Conservation Element; and will promote effective and efficient approaches to reducing stormwater runoff and protecting water quality as defined in Objective 9.6 of Chapter 9 of the Framework Element of the General Plan; and

2. in accordance with Charter Section 558 (b)(2), the proposed ordinance (Appendix A) will be in conformity with the public necessity, convenience, general welfare, and good zoning practice in that it will contribute toward protecting the City's natural settings from the effects of the encroachment of urban development as defined in Objective 6.1 of Chapter 6 of the Framework Element of the General Plan; and will protect and enhance the diversity and sustainability of the natural ecologies of the Santa Monica and San Pedro bays by requiring that future development near and along the Los Angeles River provide watershed protection and revitalization measures in accordance with the City's Conservation Element of the General Plan; and

3. in accordance with Charter Section 558 (b)(2) and the City's General Plan Framework Objective 6.2, the proposed ordinance (Appendix A) will maximize the use of the City's existing open space network and recreation facilities by providing connections to them. The LA-RIO will provide a variety of urban design measures that promote safe pedestrian and bicycle access to the Los Angeles River; and

4. in accordance with Charter Section 558 (b)(2) and the City's General Plan Framework Objective 6.4, the proposed ordinance (Appendix A) will ensure that the City's open spaces contribute positively to the stability and identity of the communities and neighborhoods in which they are located or through which they pass by encouraging a positive interface between the Los Angeles River and its adjacent properties. The LA-RIO will encourage developments to include entryways that face the River to increase visibility and the safety of River Greenway users; and

5. in accordance with Charter Section 558 (b)(2), the proposed ordinance (Appendix A) will have no adverse effect upon the General Plan, specific plans, or any other plans being created by the Department of City Planning because the proposed ordinance is consistent with the General Plan and carries out the General Plan goals, policies and objectives discussed above.

ENVIRONMENTAL FINDING

A Mitigated Negative Declaration (ENV-2007-3037-MND) was prepared for the proposed project. On the basis of the whole of the record before the lead agency including any comments received, the lead agency finds that, with imposition of the mitigation measures described in the MND, there is no substantial evidence that the proposed project will have a significant effect on the environment.

However, the following mitigation measures shall not be imposed as they were included in error in the MND. The LA-RIO does not build a specific project. Therefore, no construction is associated with this project. Therefore, the following mitigation measures shall not be imposed:

- Noise Mitigation Measures

Upon further analysis, the Department of City Planning has determined that there is no conflict between the LA-RIO and cultural Resources. Therefore, the following category of the Initial Checklist should be amended as follows:

- The removal of the comment "Project plans may conflict with cultural resources." The finding of "Less Than Significant with Mitigation" remains the same.

The attached Mitigated Negative Declaration (Appendix B) reflects the lead agency's independent judgment and analysis. For the reasons set forth in the attached Mitigated Negative Declaration, the project will not have a significant effect on the environment. Staff hereby recommends adoption of the Mitigated Negative Declaration, with the revisions stated above.

ORDINANCE NO. _____

An ordinance amending Section 19.01 of the Los Angeles Municipal Code to establish the Los Angeles River Improvement Overlay (LA-RIO) Fee.

THE PEOPLE OF THE CITY OF LOS ANGELES DO ORDAIN AS FOLLOWS:

Section 1. Section 19.01 of the Los Angeles Municipal Code is amended by adding a new Subsection Z to read:

Z. LA-RIO CLEARANCE FEE.

Type of Application	**Fee**
Application for the LA-RIO, pursuant to Section 13.12, Non-Single Family Projects	$272
Application for the LA-RIO, pursuant to Section 13.12, Single Family Projects	$136

GIS/Fae Tsukamoto
City Hall, Room 825
Mail Stop 395

Council District 1
City Hall, Room 410
Mail Stop 201

Hearing Officer (ROTHMAN)
City Hall, Room 763
Mail Stop 395

Council District 2
City Hall, Room 475
Mail Stop 202

Council District 3
City Hall, Room 450
Mail Stop 204

Council District 4
City Hall, Room 480
Mail Stop 206

Council District 5
City Hall, Room 440
Mail Stop 208

Council District 6
City Hall, Room 455
Mail Stop 210

Council District 9
City Hall, Room 420
Mail Stop 215

Council District 12
City Hall, Room 405
Mail Stop 220

Council District 13
City Hall, Room 470
Mail Stop 222

Council District 14
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DEPARTMENT OF CITY PLANNING
RECOMMENDATION REPORT

LOS ANGELES CITY PLANNING DEPARTMENT

CITY PLANNING COMMISSION

DATE:	February 12, 2009	**CASE NO:**	CPC-2007-3036-CA
TIME:	After 8:30 a.m.*	**CEQA:**	ENV-2007-3037-MND
PLACE:	City Hall, Room 1010 200 North Spring Street Los Angeles, CA 90012	**LOCATION:**	Los Angeles River Vicinity
		COUNCIL DISTRICTS:	1, 2, 3, 4, 5, 6, 9, 12, 13, 14
		PLAN AREAS:	Canoga Park – Winnetka – Woodland Hills – West Hills, Reseda – W. Van Nuys, Encino - Tarzana, Van Nuys – N. Sherman Oaks, Sherman Oaks – Studio City – Toluca Lake – Cahuenga Pass, Hollywood, NE Los Angeles, Silverlake – Echo Park, Central City North, Boyle Heights

PUBLIC HEARING NOT REQUIRED

REQUEST: Establishment of the Los Angeles River Improvement Overlay District (LA-RIO) District.

SUMMARY: To establish the Los Angeles River Improvement Overlay (LA-RIO) (Appendix A), which will implement the first River Improvement Overlay District (RIO). The LA-RIO consists of a required point system for new development near the Los Angeles River to implement design standards and guidelines that foster improved private property and public right of way development with regard to watershed, urban design, and mobility. In addition the LA-RIO includes green street standards and guidelines for public and private streets to increase pedestrian and bicycle safety and accessibility, increase native habitat areas, and increase opportunities to treat and infiltrate stormwater.

RECOMMENDATION:

1. **Adopt** the staff report as its report on the subject.
2. **Adopt** the attached findings and recommend adoption by the City Council.
3. **Approve** the Mitigated Negative Declaration as the CEQA clearance on the subject and recommend its adoption by the City Council.
4. **Approve** the proposed ordinance (Appendix A) and recommend adoption by City Council.

S. GAIL GOLDBERG, AICP
Director of Planning

JOHN M. DUGAN, AICP
Deputy Director

JANE BLUMENFELD
Principal City Planner

THOMAS ROTHMANN
City Planner

CLAIRE BOWIN, AICP, LEED-AP
City Planner, River Unit

DEBORAH KAHEN
Planning Assistant, River Unit
(213) 978-1395

ADVICE TO PUBLIC: *The exact time this report will be considered during the meeting is uncertain since there may be several other items on the agenda. Written communications may be mailed to the *Commission Secretariat, 200 North Main Street, Room 532, Los Angeles, CA 90012* (Phone No. 213/978-1300). While all written communications are given to the Commission for consideration, the initial packets are sent to the week prior to the Commission's meeting date. If you challenge these agenda items in court, you may be limited to raising only those issues you or someone else raised at the public hearing agendized herein, or in written correspondence on these matters delivered to this agency at or prior to the public hearing. As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability, and upon request, will provide reasonable accommodation to ensure equal access to this programs, services and activities. Sign language interpreters, assistive listening devices, or other auxiliary aids and/or other services may be provided upon request. To ensure availability of services, please make your request no later than three working days (72 hours) prior to the meeting by calling the Commission Secretariat at 213/978-1300.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

The proposed ordinance (Appendix A) establishes the Los Angeles River Improvement Overlay (LA-RIO) District as a guideline for new and significantly rehabilitated projects located within its boundaries, which extend approximately one-half to one mile from both sides of the 32-mile long portion of the river within the City limits. The related proposed ordinance (Case Number CPC-2008-3125-CA) establishes the RIO as enabling legislation for a supplemental use district for waterways. The proposed ordinance (Appendix A) implements that enabling legislation by establishing the first of these districts for the Los Angeles River.

The Los Angeles River Revitalization Master Plan (LARRMP) was adopted by City Council in May, 2007 along with 25 directives to City, County, and Federal agencies to begin its implementation. One of those directives instructed the Department of City Planning to establish the LA-RIO as a pedestrian and ecologically friendly interface between existing communities and the River. As such, the Planning Department developed the LA-RIO guidelines and standards by focusing on the cleansing and replenishment of the watershed and through the refinement of urban design, and mobility options for projects near the River.

The LA-RIO has three components, all of which address project design: the Property Improvement Guidelines, Complete Green Street Standards, and Complete Green Street Guidelines. The Property Improvement Guidelines establishes a point system in which a minimum number of points within three categories (watershed, urban design, and mobility) are required for individual projects within the LA-RIO boundaries. The Complete Green Street Standards and the Complete Green Street Guidelines establish new design requirements and guidelines for public and private streets to increase pedestrian and bicycle safety and accessibility, increase native habitat areas, and increase opportunities to treat and infiltrate stormwater.

STAFF REPORT

REQUEST

The City Council adopted a master plan for the revitalization of the Los Angeles River known as the Los Angeles River Revitalization Master Plan (LARRMP) in May, 2007. As part of that action, the City Council directed the Department of City Planning to implement an overlay zone to create an interface between the Los Angeles River and the communities that lie adjacent to it. The proposed ordinance (Appendix A) implements the City Council directive.

BACKGROUND

Prior to its channelization, the Los Angeles River flowed freely through the City from the confluence of Bell Creek and the Arroyo Calabasas in today's Canoga Park community to its entry into the Pacific Ocean in Long Beach. Subject to wide fluctuations in volume and velocity, the River often breached its banks and flooded large portions of the Los Angeles Basin. In 1938, the River overflowed its banks and caused over $40 million in damage and 113 deaths, thereby hastening the perception that engineering its course would minimize the risk of another catastrophe. The subsequent construction of the channel by the Army Corps of Engineers was to accommodate 50-year magnitude storms and was a monumental engineering feat. In 1960 the channelization of the River was completed.

This channelization transformed the Los Angeles River into the spine of the City's expanding storm drainage system. However, over time, the channel became a neglected urban landscape while its banks attracted a high concentration of blighted land uses. The environmental condition continued to worsen as Los Angeles became denser. Extensive non-porous citywide paving diverted larger amounts of stormwater runoff into the River, resulting in increased water pollution.

DISCUSSION

Over the past two decades, the City and other organizations have engaged in efforts to revitalize the Los Angeles River and its watershed. The City has invested in parks, bike paths, bridges, street improvements, and other projects. Los Angeles County has begun to implement its own Los Angeles River Master Plan, adopted by the County Board of Supervisors in 1996. California's Conservancies and California State Parks have fostered the creation of numerous new open space amenities in the River Corridor—notably the establishment of the Los Angeles State Historic Park at the Cornfields and the Rió de Los Angeles State Park at Taylor Yard.

In June, 2002, the City Council established the Los Angeles River Ad Hoc Committee to coordinate the various revitalization efforts, including promoting linkages between projects with education, litter removal, job creation, community development, tourism, civic pride, and improved water quality. In March, 2006, the Department of City Planning established the River Unit in its Citywide Division to work with the existing Los Angeles River interagency task force in drafting the Los Angeles River Revitalization Master Plan (LARRMP).

The task force, led by the Bureau of Engineering and directed by the City Council's Ad Hoc River Committee, coordinated the efforts of River stakeholders and government agencies in outlining a vision for revitalizing the concrete-lined river and the areas surrounding it. The LARRMP was adopted by City Council in May 2007 along with 25 directives to City, County, and Federal agencies to begin its implementation. The U.S. Army Corps of Engineers participated with the City in drafting the LARRMP and is now engaged in several studies to explore opportunities for channel modification that will support ecosystem restoration within selected areas of the River.

With the adoption of the LARRMP, the Department of City Planning was directed by the City Council to create a River Improvement Overlay District for the Los Angeles River (LA-RIO). The LA-RIO

provides guidelines and standards for all new development and significant rehabilitation projects located within its boundaries to enhance the watershed, urban design, and mobility options within the area. The LA-RIO does not propose a specific built project, change or restrict existing zoning, land use, or intensity of land use, nor does it grant new rights to land not zoned for development. While the LA-RIO does not alter any zoning, it is intended to refine the manner in which buildings are sited and designed such that they are more sensitive to the River and the surrounding neighborhood context as defined in the LARRMP.

LA-RIO

The LA-RIO (Appendix A) parallels the Los Angeles River, which flows 32 miles through the City from its origin in Canoga Park to the boundary with Vernon City. The LA-RIO intersects ten Council Districts (Districts 3, 12, 6, 2, 5, 4, 13, 1, 9, and 14, respectively from northwest to southeast), 20 Certified Neighborhood Councils, and 10 Community Plan Areas as follows (in geographic order from northwest to southeast): Canoga Park-Winnetka-Woodland Hills-West Hills; Reseda-West Van Nuys; Encino-Tarzana; Van Nuys-North Sherman Oaks; Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass; Hollywood; Northeast Los Angeles; Silver Lake-Echo Park; Central City North; and Boyle Heights. Due to the geographical extent of the River, the properties within the boundaries of the LA-RIO include single-family neighborhoods, multiple-family neighborhoods, commercial corridors, industrial zones, and recreational areas.

The LA-RIO establishes Property Improvement Guidelines (Property Guidelines), Complete Green Street Standards (Street Standards) and Complete Green Street Guidelines (Street Guidelines). Proposed projects in the LA-RIO will incur a fee of no more than $300 for compliance reviews on the requisite number of points from the Property Guidelines, and the satisfaction of appropriate standards from the Street Standards. The fee for the compliance review for Single Family Projects will be no more than $200. Relief from these requirements can be sought through a Director's Determination.

Property Improvement Guidelines

The Property Improvement Guidelines (Property Guidelines) (Section 5 of Appendix A) will require the incorporation of appropriate river-related features into all ministerial and discretionary new construction and/or major renovation projects. Given the enormity of land area and the wide variety of land uses contained within the proposed LA-RIO boundaries, a universal approach to design guidelines is not possible. Instead, these projects must be designed to address a wide variety of goals by achieving a minimum number of points by selecting from a list of design options, each of which carries a point value. The provision of a flexible point system enables the LA-RIO to address a wide variety of goals while allowing developers to select the points best suited to their project and specific site conditions. The point system provides a maximum of 99 points from which projects are required to comply with 10-20 of the points depending upon the nature of the project.

Points are divided into the three subcategories: Watershed, Urban Design, and Mobility. Single family homes must achieve a minimum of 10 points and are required to obtain points from the Watershed category only. All other projects are required to achieve 20 points. Each category provides many options for achieving the requisite number of points, so that there is maximum flexibility for compliance throughout the 32 miles.

The point system has three components: Watershed, Urban Design and Mobility Alternatives. The Watershed category provides a total of 50 point options, the Urban Design category provides for 26 point options and the Mobility category provides for a total of 23 point options.

Watershed

Watershed protection is critical to improving the quality of the water in the River and ultimately the Pacific Ocean, as well as becoming more self reliant for water sources. Each new project

within the LA-RIO will be required to obtain 10 points within the Watershed category. The Watershed category is divided into seven subcategories, which include: Stormwater Management, Stream Enhancement, Landscaping, Water Conservation, Hardscape, Landscape/Hardscape Maintenance, and Open Space. There are a total of 50 point options available from these seven subcategories.

Stormwater Management

The intent is to reduce the velocities, quantities, and pollutant loads of stormwater runoff entering the stormdrain system and ultimately the Pacific Ocean, and to increase opportunities for stormwater runoff to infiltrate into the groundsoils. Points are achieved for permeable pavement and raingardens, which permit the stormwater to drain into the earth where natural filtration can occur.

Stream Enhancement

The intent is to improve surface and ground water quality and increase groundwater recharge, and to support vegetation, wildlife, and the transport of sedimentation. Points are achieved for daylighting a portion of a stream that runs through a property or removing concrete from a portion of a channel.

Landscaping

The intent is to increase the percentage of native and drought tolerant plant species located within the vicinity of the Los Angeles River, which ultimately increases the availability of native and locally adaptive habitats to support the migration of local species. Points are achieved by implementing graywater systems and the use of high-efficiency irrigation systems.

Water Conservation

The intent is to reduce the use of potable water for irrigation purposes. Points are achieved by employing the use of a graywater system or a high-efficiency irrigation system.

Hardscape

The intent is to reduce the overall ambient temperature and increase the percentage of pervious materials. A project earns points for minimizing the percentage of hardscape area and for the incorporation of permeable materials.

Landscape/Hardscape Maintenance

The intent is to encourage maintenance practices that reduce the use of chemicals, nuisance plants, and potable water. A project earns points for eliminating the need for chemical fertilizers and pesticides and for keeping surfaces clean of chemical residues and debris.

Open Space

The intent is to increase the availability of publicly accessible area adjacent to the River Greenway (the River right of way). Projects earn points by granting an easement for public access that is coterminous with the River.

Urban Design

The incorporation of basic urban design tenets will improve the appearance of properties within the vicinity of the River, ultimately improving and promoting pedestrian mobility and safety throughout the River Corridor and neighborhoods. Each new project, with the exception of single family homes, will be required to obtain five points within the Urban Design category. The Urban Design category is divided into four subcategories, which include Vehicle Parking, Transparency, Site Lighting, and Visual Clutter. There are a total of 26 point options available

from these 4 subcategories.

Vehicle Parking

The intent is to reduce visibility and prominence of vehicles in and around the River Greenway area. A project earns points by screening surface parking that would otherwise be visible from the River Greenway.

Transparency

The intent is to promote visibility between occupants of Greenway/street adjacent uses and the River Greenway and/or streets to increase safety, and comfort, of area. Points are earned by keeping a percentage of building walls transparent.

Site Lighting

The intent is to reduce nighttime light pollution, conserve energy and improve nighttime safety and visibility. Projects earn points by installing lighting fixtures that prevent upward light pollution and/or offsite glare.

Visual Clutter

The intent is to reduce visual pollution in and around the River Greenway. Projects earn points by screening mechanical equipment and trash/recyclables areas from public view.

Mobility

By increasing the mobility options of the areas near the River, residents will be able to access more local destinations, including the River, without a vehicle. Each new project, with the exception of single family homes, will be required to obtain five points within the Mobility category. The Mobility category is divided into four subcategories, which include Connectivity, Pedestrian, Transit, Bicycle, and Vehicular. There are a total of 23 point options available from these 4 subcategories.

Connectivity

The intent is to enable the River to become another "front-door," and to facilitate pedestrian access from the street and/or River Greenway to the building. A project would earn a point, for example, by providing a public entrance to the building that is accessible from the River Greenway.

Pedestrian

The intent is to increase pedestrian access to and from the buildings and neighborhoods adjoining the River Greenway. Points are available for projects that, for example, build and maintain a public pedestrian paseo that connects to the River, or provide access to and from the River Greenway for pedestrians and bicyclists.

Transit

The intent is to encourage public transportation as a form of travel to, from and around the River and adjoining neighborhoods. Points are achieved for posting information on local public transportation options.

Bicycle

The intent is to promote and support bicycling and other forms of two-wheeled transportation through improved amenities. A project earns points by providing on-site bicycle storage facilities and/or changing/showering facilities.

Vehicular

The intent is to accommodate means of transportation other than conventional, single occupancy automobiles. Projects that designate parking spots for car-share programs or provide electrical charging stations earn points.

Complete Green Street Standards

The Complete Green Street Standards (Street Standards) (Section 6 of Appendix A) provide for a series of public right-of-way improvements between the property line and the edge of the curb and will apply to all new projects within the LA-RIO with the exception of single family homes.

The Street Standards address the LARRMP recommendation to introduce "green streets" features into areas near the River, improve pedestrian and bicycle connectivity to the communities around the River, and improve the overall watershed management of the area.

The term Complete Green Streets blends two street design typologies; the Complete Street and the Green Street. Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street. Green Streets are designed to infiltrate and treat stormwater by cleansing it through gravel, soil and plants. Green Streets are also designed to increase the tree canopy and to support native habitat through landscaping in the parkways and medians.

The Street Standards are designed to enhance the experience of pedestrians and bicyclists, and will require all Projects, with the exception of Single Family Projects, to install pedestrian street lights, bicycle racks, street trees, and native landscaping within existing parkways.

Pedestrian Street Lights

A project shall install a number of pedestrian street lights proportionate to the project's street frontage.

Bicycle Racks

A project shall install bicycle racks in suitable locations.

Trees

A project shall plant a number of trees proportionate to the project's street frontage.

Landscaping

Where a parkway exists, a project shall plant native landscaping.

Complete Green Street Guidelines

The Complete Green Street Guidelines (Street Guidelines) (Section 7 of Appendix A) also support the LARRMP recommendation to introduce "green streets" features by proposing environmental impact mitigation measures that improve pedestrian and bicycle connectivity to the communities around the River, and improving the overall watershed management of the area.

The Street Guidelines provide direction for future public right-of-way improvements that are undertaken as a result of or in conjunction with capital improvements. They are also intended to provide decision makers with potential options for mitigating the environmental impacts of specific projects when identified through the California Environmental Quality Act. The Street Guidelines are divided into five subcategories: Pedestrian Scale Improvement, Water Conservation, Street Calming, Bike Lanes, and Transit Amenity Improvement.

Pedestrian Scale Improvement

These measures focus on enhancing the pedestrian experience in order to facilitate non-vehicular traffic near and across the river. Examples include providing pedestrian street crossings and increasing the parkway and/or sidewalk width.

Water Conservation

These measures promote infiltration of stormwater and dry-weather run off. Examples include redesigning cul-de-sacs and vacated streets into pocket parks that are designed to infiltrate stormwater, or designing the parkway to assist in the treatment and infiltration of stormwater and dry-weather run off from the sidewalk and street.

Street Calming

These measures focus on managing traffic in ways that encourage multi-modal means of transportation. Such techniques include slowing vehicular traffic with traffic circles, and permitting on-street parking in active pedestrian zones.

Bike Lanes

These measures enhance bicycle safety and accessibility. Examples include developing bikeways on streets and developing a portion of the River bikeway.

Transit Amenity Improvement

These measures seek to improve transit stop amenities in order to promote safer and more comfortable travel by public transportation. Examples include installing a bus shelter and increasing the sidewalk width.

OUTREACH

The LA-RIO is the direct result of a series of meetings and workshops that took place during and after the development of the LARRMP. The meetings and workshops included discussions with numerous stakeholders which included representatives from all of the neighborhood councils that are within close proximity to the River, environmentalists, equestrian advocates, homeowners, industrial property owners, multi-family residential developers, as well as business organizations. The discussions included topics such as the width of the LA-RIO, the relevance of including tributaries within the LA-RIO boundaries, and the types of design guidelines that future projects should need to comply with in order to meet some of the goals and objectives of the LARRMP. Workshop participants were asked to draw suggested boundaries on maps and were asked to prioritize potential guidelines. Following these initial meetings and workshops, and the adoption of the LARRMP a draft LA-RIO was developed.

This first draft of the LA-RIO was presented to the public in eight separate workshops during the Summer of 2007. The workshops were held on four Saturdays during July and August within distinct geographical sections of the River. On each of the four Saturdays, one workshop was held within the Valley area (east-west) and a second workshop was held in parallel within the Elysian Valley/Downtown (north-south) stretch of the River. A total of 131 persons participated in the eight workshops and their verbal and written comments are reflected in the proposed draft of the LA-RIO. Additional comments were received following the distribution of the Mitigated Negative Declaration (MND) and many of those comments were also incorporated into the current draft.

PUBLIC HEARINGS

The Planning Department held two joint public hearings on the RIO district and the LA-RIO on December 12, 2008 in the San Fernando Valley and on December 15, 2008 in Downtown Los Angeles. There were a total of seven speakers. The general comments concerned procedural

matters with regard to the LA-RIO, statements of vision about the Los Angeles River, and overall support for the RIO concept and the LA-RIO in particular.

Outreach for the public hearings was far-reaching. An advertisement for the hearing was published in 13 newspapers serving communities by the River. A Community Notice was sent to all Neighborhood Councils, and notices were distributed at the quarterly public River Update Meeting hosted by the Los Angeles River interagency task force, posted on the lariver.org website, and sent to newspapers across the City as a request for posting in the Community Calendar (or similar) section. Notification of the public hearings was also sent to a list of over 1,000 individuals who were either participants at past LA-RIO workshops, LARRMP stakeholders, and/or interested parties.

CONCLUSION

At a time of renewed urban investment and environmental awareness, many cities throughout the country have been restoring their deteriorated urban waterways into recaptured oases. The LA-RIO, along with other LARRMP strategies, brings Los Angeles to the forefront of this movement.

Since the middle of the last century the primary function of the Los Angeles River has been to serve the City's stormwater drainage system, and the streets have been largely relegated to the movement of private vehicles. As a result, river adjacent neighborhoods have been physically and psychologically disconnected from the River and their neighboring streets. While the River and the streets will continue to provide these functions, they hold tremendous potential as active public places that can support multiple modes of transportation and meet multiple goals. River amphitheatres and major boulevards can also be the stage for public events and celebrations. Our streets and our River can convey pedestrians and bicyclists on errands to neighborhood shops, the library, school, museums, parks and the grocery store. They can be places to stroll, jog, bicycle, skateboard or gather and chat alongside developments that nurture a River-friendly environment. The LA-RIO will facilitate the transformation of our River as a civic asset and streets as public places, incorporating the neighborhood qualities and amenities that will elevate the quality of life for both the residents of, and visitors to, Los Angeles.

ATTACHMENT 1 – FINDINGS

The City Planning Department recommends that the City Planning Commission, find:

1. In accordance with Charter Section 556, the proposed ordinance (Appendix A) is in substantial conformance with the purposes, intent and provisions of the General Plan. The proposed ordinance will positively contribute to the improvement of water quality and supply and the provision of ecological corridors for birds and wildlife as defined in Chapter 6 of the Open Space and Conservation Element; and will promote effective and efficient approaches to reducing stormwater runoff and protecting water quality as defined in Objective 9.6 of Chapter 9 of the Framework Element of the General Plan; and

2. in accordance with Charter Section 558 (b)(2), the proposed ordinance (Appendix A) will be in conformity with the public necessity, convenience, general welfare, and good zoning practice in that it will contribute toward protecting the City's natural settings from the effects of the encroachment of urban development as defined in Objective 6.1 of Chapter 6 of the Framework Element of the General Plan; and will protect and enhance the diversity and sustainability of the natural ecologies of the Santa Monica and San Pedro bays by requiring that future development near and along the Los Angeles River provide watershed protection and revitalization measures in accordance with the City's Conservation Element of the General Plan; and

3. in accordance with Charter Section 558 (b)(2) and the City's General Plan Framework Objective 6.2, the proposed ordinance (Appendix A) will maximize the use of the City's existing open space network and recreation facilities by providing connections to them. The LA-RIO will provide a variety of urban design measures that promote safe pedestrian and bicycle access to the Los Angeles River; and

4. in accordance with Charter Section 558 (b)(2) and the City's General Plan Framework Objective 6.4, the proposed ordinance (Appendix A) will ensure that the City's open spaces contribute positively to the stability and identity of the communities and neighborhoods in which they are located or through which they pass by encouraging a positive interface between the Los Angeles River and its adjacent properties. The LA-RIO will encourage developments to include entryways that face the River to increase visibility and the safety of River Greenway users; and

5. in accordance with Charter Section 558 (b)(2), the proposed ordinance (Appendix A) will have no adverse effect upon the General Plan, specific plans, or any other plans being created by the Department of City Planning because the proposed ordinance is consistent with the General Plan and carries out the General Plan goals, policies and objectives discussed above.

ENVIRONMENTAL FINDING

A Mitigated Negative Declaration (ENV-2007-3037-MND) was prepared for the proposed project. On the basis of the whole of the record before the lead agency including any comments received, the lead agency finds that, with imposition of the mitigation measures described in the MND, there is no substantial evidence that the proposed project will have a significant effect on the environment.

However, the following mitigation measures shall not be imposed as they were included in error in the MND. The LA-RIO does not build a specific project. Therefore, no construction is associated with this project. Therefore, the following mitigation measures shall not be imposed:

- Noise Mitigation Measures

Upon further analysis, the Department of City Planning has determined that there is no conflict between the LA-RIO and cultural Resources. Therefore, the following category of the Initial Checklist should be amended as follows:

- The removal of the comment "Project plans may conflict with cultural resources." The finding of "Less Than Significant with Mitigation" remains the same.

The attached Mitigated Negative Declaration (Appendix B) reflects the lead agency's independent judgment and analysis. For the reasons set forth in the attached Mitigated Negative Declaration, the project will not have a significant effect on the environment. Staff hereby recommends adoption of the Mitigated Negative Declaration, with the revisions stated above.

Appendix A

Section 1 **Establishment & Purpose**
Section 2 **General Requirements**
Section 3 **Definitions**
Section 4 **Maps**
Section 5 **Property Improvement Guidelines**
Section 6 **Complete Green Street Standards**
Section 7 **Complete Green Street Guidelines**

Los Angeles River Improvement Overlay

LA-RIO DRAFT

Tentatively Effective July 1, 2009

Section 1

Establishment & Purpose

View of the Los Angeles River and farming area from Elysian Park, looking north. Cypress Park and Glassell Park are in the distance. Year 1900.

Photo courtesy of the Los Angeles Public Library

Section: 1.0 ESTABLISHMENT & PURPOSE

An ordinance establishing the Los Angeles River Improvement Overlay District, pursuant to Sections 12.04, 12.32 and 13.12 of the Los Angeles Municipal C ode for portions of the ten community plan areas through which the Los Angeles River flows as identified in Section 4.0. This ordinance is effective July 1, 2009.

WHEREAS, the Director of City Planning has conducted a study and has found that the areas identified in this Ordinance have a variety of uses and activities which if enhanced would lead to watershed improvements, promote sustainable habitats and strengthen pedestrian, bicycle and transit mobility along the River Greenway and the surrounding neighborhoods.

NOW THEREFORE, THE PEOPLE OF THE CITY OF LOS ANGELES DO ORDAIN AS FOLLOWS:

Section: 1.1 Establishment of the Los Angeles River Improvement Overlay District

The City Council hereby establishes the Los Angeles River Improvement Overlay (LA-RIO) District. The provisions of this Ordinance shall apply to any lot located in whole or in part within the shaded area on the maps in Section 4.0. The LA-RIO extends from Topanga Canyon Boulevard, (just west of the headwaters of the Los Angeles River), east and then south to the point at which the River flows out of the City of Los Angeles at 26th Street in the Boyle Heights area.

Section: 1.2 Property Improvement Guidelines, Complete Green Street Standards and Complete Green Street Guidelines

The Property Improvement Guidelines (Section 5), the Complete Green Street Standards (Section 6) and the Complete Green Street Guidelines (Section 7) are hereby established as part of the LA-RIO District. These elements serve to guide private property development as well as public improvements within the LA-RIO with respect to watershed, urban design, and mobility improvements.

LA River, Downtown. View of 4th Street and 1st Street bridges

Section: 1.2.1 Property Improvement Guidelines

Prior to obtaining a building permit, Projects must receive clearance from the Department of City Planning by meeting a required threshold of points. Points are assigned in each of three design categories: watershed, urban design and mobility.

Information below the symbol "  " are Guidelines established by the Director and may be revised as necessary. Details are outlined in Section 5.

Section: 1.2.2 Complete Green Street Standards

The Complete Green Street Standards shall be applied to all new Projects with the exception of single family dwellings. Information below the symbol "  " are Guidelines established by the Director and may be revised as necessary. Details are outlined in Section 6.

Section: 1.2.3 Complete Green Street Guidelines

These guidelines may serve as mitigation measures to mitigate the environmental impact of a Project as well as guide design of street improvements undertaken as a result of publicly financed Projects. The Complete Green Street Guidelines may be implemented by the decision maker as conditions of approval. The decision maker may consult the Street Standards Committee for specific direction. Information below the symbol "  " are Guidelines established by the Director and may be revised as necessary. Details are outlined in Section 7.

Project: The erection, construction, addition to, or exterior structural alteration of any building located within the LA-RIO boundaries. A project does not include construction that consists solely of (1) interior remodeling, interior rehabilitation or repair work (2) alterations of, including structural repairs, or additions to, any existing building in which the aggregate value of the work, in any one 24-month period, is less than 50 percent (50%) of the building's replacement cost before the alterations or additions as determined by the Department of Building and Safety (DBS). Construction costs are based on a valuation table available on the DBS website (www.ladbs.org). The table lists the cost of construction per square foot.

Section: 1.3 Purposes

The Los Angeles River Improvement Overlay (LA-RIO) is established to implement the urban design goals and principles established in the Los Angeles River Revitalization Master Plan (LARRMP) adopted by the City Council on May 9, 2007. Additionally, it builds upon the previous Los Angeles River Master Plan adopted by the County of Los Angeles in 1996.

The City's vision for the Los Angeles River and its adjacent Greenway emphasizes a livable, walkable, and sustainable community that is oriented to the River and the surrounding streets. The LA-RIO is intended to support this vision through the enhancement of environmental and urban design.

The Los Angeles River Greenway is intended to become a public thoroughfare that promotes increased levels of activity and an increased awareness of the relationship between the urban and natural environments.

The street network within the LA-RIO will enhance and support pedestrian, bicycle and vehicular mobility as a means of connecting the City to the Greenway and vice versa. Therefore, a Project's street and/or greenway facade(s) will ensure an active street and greenway network and thus enhance the public realm.

The following principles, goals and objectives support the vision of the River and have been developed in coordination with citizens' groups and prior planning efforts related to the Los Angeles River:

Section: 1.4 Principles

Acknowledge the River and the surrounding flood plain as an important ecological system and natural resource deserving protection for future generations.

Promote the sustainability of the River, the Greenway, and the surrounding neighborhoods.

Establish a positive interface with the River and the Greenway thereby integrating the River into the daily life of the City.

Promote pedestrian and other multi-modal connections to the River and thereby extend the City to and across the River.

Section: 1.5 Goals and Objectives

Section: 1.5.1 Promote sustainability of the Los Angeles River, the Greenway, the City of Los Angeles and the Region

Contribute to the overall environmental and ecological health of the River and its ecosystem.

Conserve water by encouraging use of climate-appropriate plants and landscaping practices.

Control stormwater at the source wherever possible to avoid large end of pipe solutions.

Encourage natural drainage functions: allow water to percolate underground to replenish aquifers, filter out suspended solids, remove pollutants and slow down flows through vegetation.

Allow for the biofiltration of sediments and pollutants.

Reduce the amount of untreated runoff entering the River and tributaries.

Increase the presence of nature within the community.

Increase the ecological value of open space.

Sepulveda Basin

Section: 1.5.2 Establish a positive interface between Greenway adjacent property and the River Greenway

Provide new and enhance existing public connections to the Greenway from the street.

Create Greenway adjacent open spaces that enhance the natural qualities and open space character of the River.

Provide adequate lighting to ensure a safe and enjoyable nighttime environment for the public while minimizing local light spillover.

Protect and enhance the aesthetic of the improved Greenway.

Section: 1.5.3 Create active pedestrian streets leading to the River

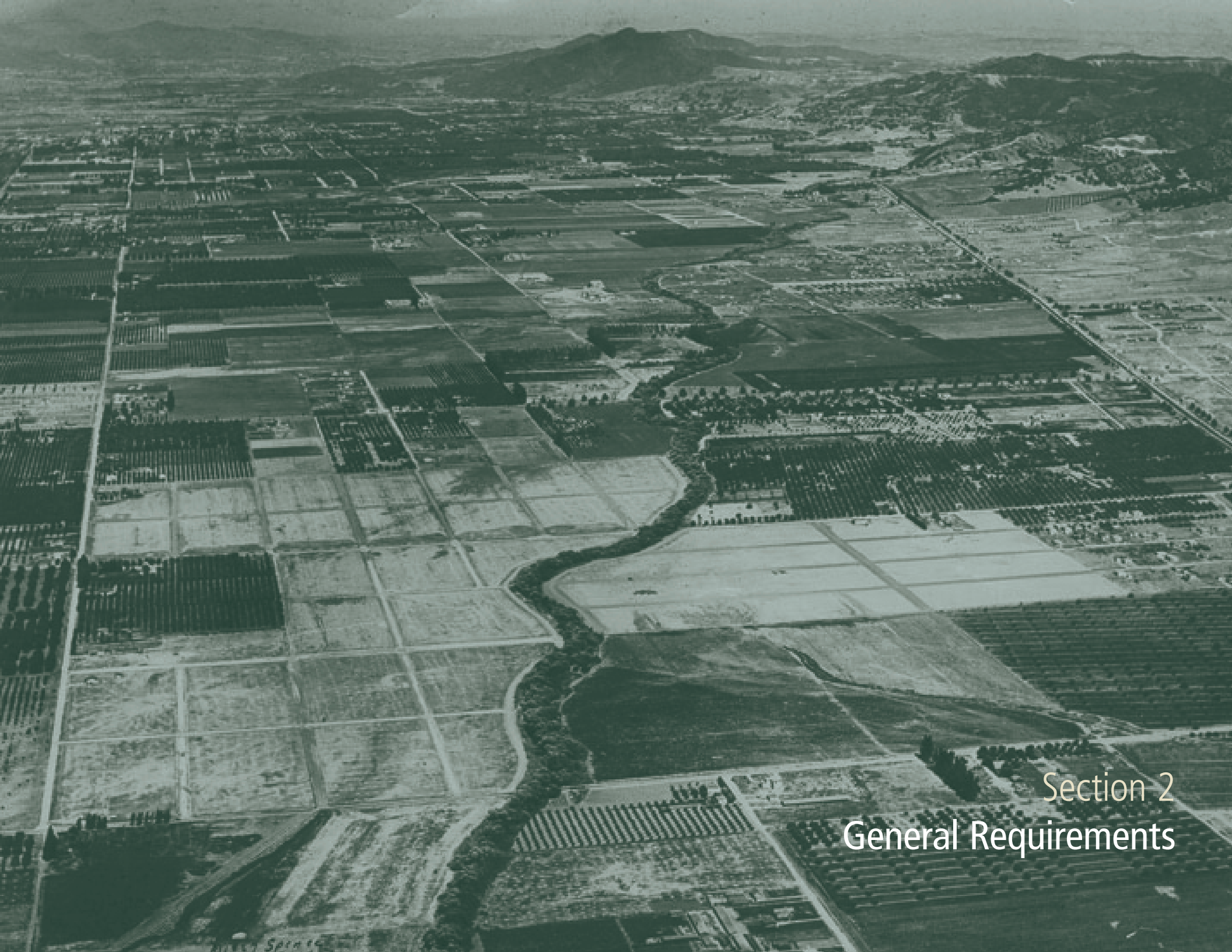
Provide public connections between the street and primary entrance ways.

Encourage multiple means of transportation to reach the River.

Provide adequate site lighting.

Riverfront access

Active street front



Section 2

General Requirements

Aerial view of the San Fernando Valley, east of Sepulveda Boulevard. Tujunga Wash cuts through the center of the photo and connects with the Los
Angeles River. Small clusters of houses and agricultural buildings are interspersed among rectangular fields and citrus groves.
Year 1927

Photo courtesy of the Los Angeles Public Library

Section: 2.0 GENERAL REQUIREMENTS

Section: 2.1 Relationship to Los Angeles Municipal Code

The regulations of the LA-RIO are in addition to those set forth in the planning and zoning provisions of Chapter 1 of the Los Angeles Municipal Code (LAMC) and do not convey any rights not otherwise granted under such provisions, except as specifically provided here.

Section: 2.1.1 Relationship to other Plans

Within the boundaries of the LA-RIO there are presently two Specific Plans, two Community Design Overlay Districts (CDOs), two Streetscape Plans, one Pedestrian Oriented District, and four Community Redevelopment Agency of Los Angeles (CRA/LA) Redevelopment Project Areas. The Specific Plans are for Warner Center and the Ventura/Cahuenga Boulevard Corridor. The CDOs are Downtown Canoga Park and Commercial Corridor Canoga Park. The Streetscape Plans include Sherman Oaks and Studio City - Cahuenga Pass. The CRA/LA Project Areas are Reseda/Canoga Park, Chinatown, Central Industrial, and Adelante Eastside.

The LA-RIO is designed to be compatible with the goals and principles of these existing plans. The LA-RIO does not change, restrict, encourage or discourage existing zoning, land use, or intensity of land use.

Other plans may apply to projects within the LA-RIO boundaries. Projects are required to stay consistent with all applicable plans and meet the strictest requirement in the case of multiple guidelines and/or standards.

As future plans are adopted, they may supersede any or all of the

Watershed, Urban Design and Mobility sections set forth in Section 5 and/or the entirety of Section 6 if the plan makes the findings that it:

1. Meets the intent of the principles, goals and objectives of the LA-RIO
2. Employs strategies comparable to those in the LA-RIO

Section: 2.2 Approvals

No building permit shall be issued within the LA-RIO boundaries for a new building or the alteration or rehabilitation of an existing building for which construction costs exceed 50% of the existing building's replacement cost unless it has demonstrated compliance with the LA-RIO Property Improvement Guidelines and Complete Green Street Standards.

LA River, Downtown. Looking North

Arroyo Seco and LA River confluence

Section: 2.3 Procedures

2.3.1 Prior to the issuance of a building permit, the Department shall review all Projects for LA-RIO compliance with the Property Improvement Guidelines and Complete Green Street Standards established by this ordinance and revised as necessary by the Director.

2.3.2 The Department shall have the authority to issue a clearance for all Projects subject to the provisions of the LA-RIO. In order to obtain clearance, the applicant shall provide:

a. The Property Improvement Guidelines checklist provided in Section 5 of this ordinance which demonstrates that the Project has satisfied all prerequisites and has the threshold amount of points or more necessary for clearance within each applicable category.

b. A signed declaration from the licensed architect or engineer stating that the plans and plan details have been reviewed and that the Project satisfies the Property Improvement Guidelines and Complete Green Streets Standards.

c. A complete set of plans stamped and signed by a licensed architect or engineer (where required) that includes a copy of the signed declaration identified in Paragraph (b) of this subdivision and identifies the measures being provided to meet the applicable requirements of the LA-RIO.

Section: 2.4 Exemptions

2.4.1 Any Project whose plans were accepted by the Department of Building and Safety for plan check prior to the effective date of this ordinance, provided no changes were made to the Project which increase the floor area by more than five percent, shall be exempt from the LA-RIO.

This exception shall no longer be valid if construction has not commenced within one year of the date of permit issuance.

OR

Any Project that has been filed and deemed complete (with the exception of CEQA review) by the Department of City Planning prior to the effective date of this ordinance shall be exempt from the LA-RIO.This exception shall no longer be valid if construction is not commenced within one year of the date of permit issuance.

LA River near Glendale Narrows

Section: 2.5 Fee

A fee persuant to Section 19.01Z of the L.A.M.C. will be assessed per each LA-RIO clearance request.

Section: 2.6 Director's Determination

Pursuant to Section 13.10 of the L.A.M.C., if a proposed Project fails to meet the development standards in Sections 5 and 6 of this document, the applicant may apply to the Director for a Director's Determination. Such application shall be filed in the public office of the Department of City Planning upon a form prescribed for that purpose.

The filing fee shall be equivalent to that established for "Approval of plan required for Supplemental Use District", set forth in Section 19.01A of the Los Angeles Municipal Code. The application shall be accompanied by architectural, landscape and structural plans for the Project, or other information, to the satisfaction of the Director of Planning.

Section 3
Definitions

The force of floodwaters from a rainstorm shifted one of the bridge supports, causing
the steel girders to twist and fall into the river.
Year 1941

Photo courtesy of Los Angeles Public Library

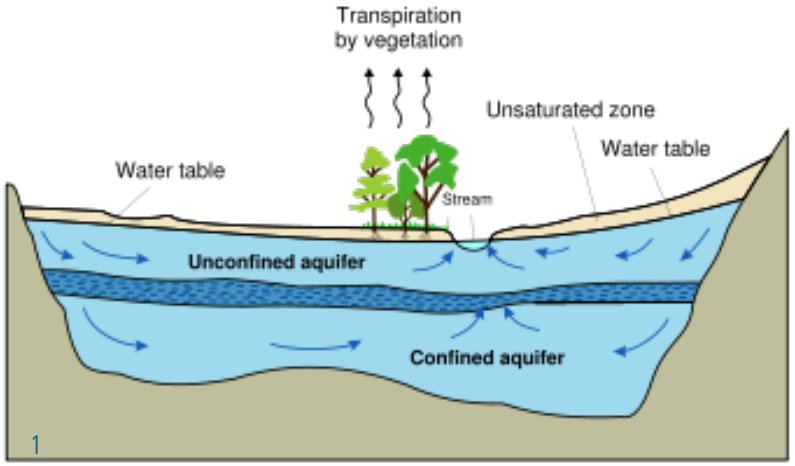
Section: 3.0 DEFINITIONS

Ad Hoc River Committee

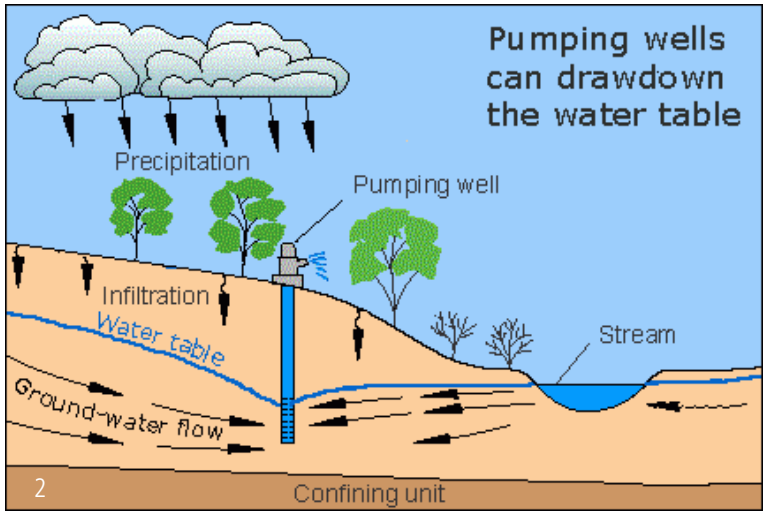
On June 19, 2002, the City Council established the Ad Hoc River Committee to create an opportunity to advance a long-term vision for the Los Angeles River and the adjacent neighborhoods.

Aquifer

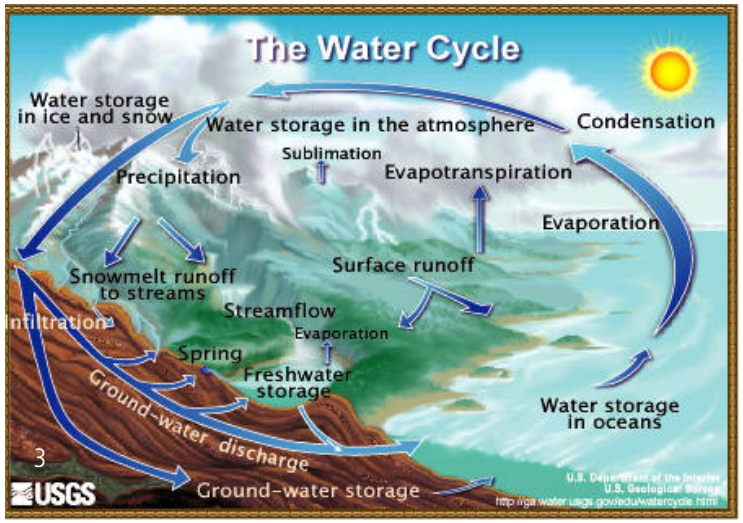
Also called ground water, most of this water in the ground comes from precipitation that infiltrates downward from the land surface. It is comprised of permeable layer of underground rock, clay, gravel, sand or silt that bears water much like a kitchen sponge holds water. An aquitard is an impermeable layer of earth that separates aquifers, leaving the top aquifer unconfined and the bottom aquifer confined. Unconfined aquifers are typically replenished directly from rain, rivers, streams or lakes. The upper most level of the unconfined aquifer is known as the water table.



Aquifer



Water Cycle



Water Cycle

Best Management Practices (BMPs)

Best Management Practices (BMPs) are structural and nonstructural stormwater management control measures taken to mitigate changes to both quantity and quality of runoff caused through changes to land use. In general, BMPs focus on reducing impervious surfaces. BMPs are designed to reduce volume, peak flows, and/ or non-point source pollution through infiltration, detention, retention and filtration or biological and chemical actions. Examples of structural BMPs include permeable concrete and porous asphalt, infiltration trenches, and green roofs. These practices are generally used in Low Impact Development (LID) applications.

Be Water Wise

Be Water Wise is an education and resource program developed by the Metropolitan Water District and the Family of Southern California Water Agencies to provide the community with information about water conservation and low water plant communities. Information about classes, rebates, retailers, and events can be found at: www.bewaterwise.com.

Bio-retention Pond

Bio-retention ponds are commonly referred to as rain gardens. A rain garden is a planted depression that is designed to absorb surface runoff from impervious urban areas like roofs, driveways, walkways, and compacted lawn areas. Rain gardens reduce rain runoff by allowing stormwater to soak into the ground (as opposed to flowing into storm drains and surface waters which causes erosion, water pollution, flooding, and diminished ground water supply).

Bio-retention Pond - Marsh Park

Bio-retention Pond

Bioswale

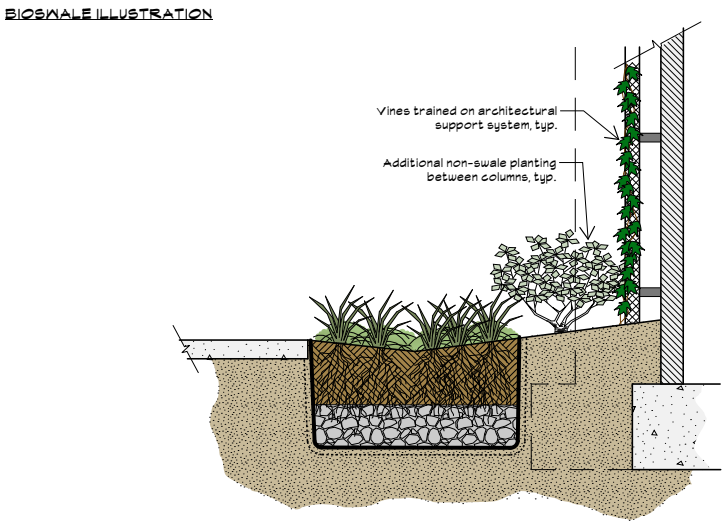
Bioswales are landscape elements designed to remove silt and pollution from surface runoff water. They consist of a swaled drainage course with gently sloped sides and are filled with vegetation, compost and/or riprap. The water's flow path, along with the wide and shallow ditch, are designed to maximize the time water spends in the swale, which aids the trapping of pollutants and silt. Depending upon land, a bioswale may have a meandering or almost straight channel alignment. Biological factors also contribute to the breakdown of certain pollutants.

A common application is around parking lots, where automotive pollution is collected by the paving and then flushed by rain. The bioswale wraps around the parking lot and treats the runoff before releasing it into the watershed or storm drain system.

Bureau of Sanitation-Watershed Protection Division

This division is responsible for the development and implementation of stormwater pollution abatement projects within the City of Los Angeles.

Detailed information about stormwater BMPs and the City's storm drain system is available at www.lastormwater.org.



7
Bioswale cross-section

6
Bioswale - Portland street

8
Bioswale - under construction (foreground), completed (background)

California Friendly

California Friendly is a term branded by the Metropolitan Water District to define plant communities that are compatible with the southern California Mediterranean Climate. A complete list of California Friendly plants and information about where to find these plantsis available at www.bewaterwise.com.

Cistern

A cistern is a receptacle for holding liquids, usually water. Often cisterns are built to catch and store stormwater. They range in capacity from a few litres to thousands of cubic metres (effectively covered reservoirs). Cisterns are commonly used in areas where water is scarce, either because it is rare or because it has been depleted due to heavy use. Present day cisterns are often only used for irrigation due to concerns over water quality.

In the Los Angeles area, cisterns may be a suitable BMP in locations where infiltration is not feasible due to topographical, geographical, and other conditions.

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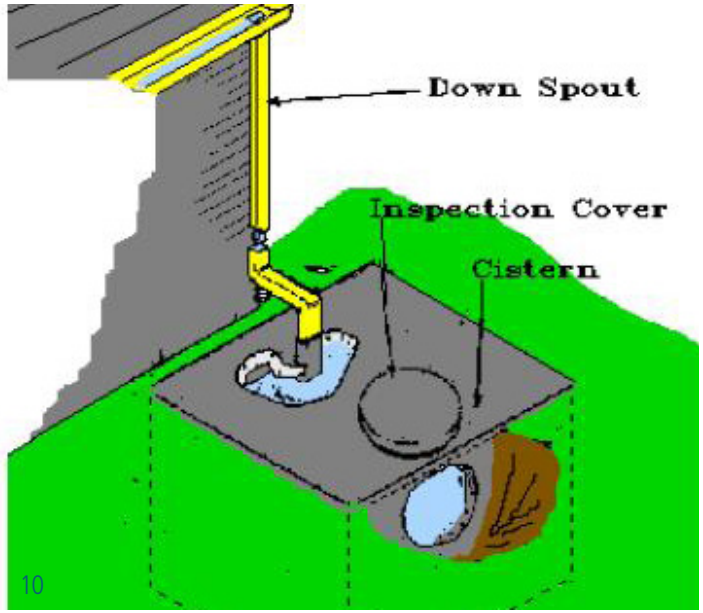
Cistern under construction



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Cistern diagram

Complete Green Streets

The term "Complete" Green Streets blends two street design typologies; the Complete Street and the Green Street.

Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street.

Green Streets are designed to infiltrate and treat stormwater by cleaning it through gravel, soil and plants. Green streets are also designed to increase the tree canopy and to support native habitat through landscaping in the parkways and medians.

Parkway infiltration

Curbless parkway infiltration

Complete green street

Conservation Movement

The conservation movement is a political and social movement that seeks to protect natural resources including plant and animal species as well as their habitat for the future. Conservation differs from environmentalism in that it aims to preserve natural resources expressly for their continued sustainable use by humans.

The early conservation movement included fisheries and wildlife management, water, soil conservation and sustainable forestry. The contemporary conservation movement has broadened from the early movement's emphasis on use of sustainable yield of natural resources and preservation of wilderness areas to include preservation of biodiversity.

Covenant

A covenant is an agreement that a landowner do something or to refrain from doing something with relation to the land. Such an agreement "runs with the land" which means that subsequent owners or successors are bound by the terms of the covenant.

Curb Extension

A curb extension (or also kerb extension, bulb-out, nib, elephant ear, curb bulge and blister) is a traffic calming measure, intended to slow the speed of traffic and increase driver awareness, particularly in built-up and residential neighborhoods. They also allow pedestrians and vehicle drivers to see each other when vehicles parked in a parking lane would otherwise block visibility.

Curb extension

Daylight Hours

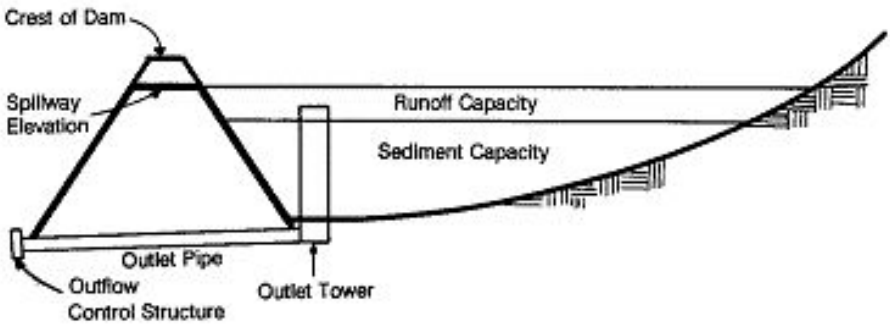
Daylight or the light of day is the combination of all direct and indirect sunlight outdoors during the daytime. Daytime is the period of time each day when daylight occurs.

Daylighting Streams

The redirection of a stream into an above-ground channel for the purpose of restoring a stream of water to a more natural state. Daylighting is intended to improve the riparian environment for a stream which had been previously diverted into a culvert, pipe, or a drainage system.

Detention Basin

A Detention basin is an artificial flow control structure that is used to contain flood water for a limited period of a time, thereby providing protection for areas downstream. This is opposed to a retention basin that holds water for an extended period of time. These basins are generally a part of a larger engineered flood water management system.



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Detention basin diagram

16

Detention basin

Dual Pipe

Dual piping is a system of plumbing installations used to supply both potable and reclaimed water to a home or business through separate pipes. Under this system, two completely separate water piping systems are used to deliver water to the user. The reclaimed water, distributed in a purple pipe to alert users that the pipe contains non-potable water, supplies outlets such as a toilet. The potable water, contained in a different pipe, supplies outlets such as a kitchen sink. This system prevents mixing of the two water supplies, which is undesirable, since reclaimed water is usually not intended for human consumption.

The City of Los Angeles has a dual pipe infrastructure in place and in 2006 the City approved the Integrated Resources Plan (IRP) which included a strategy to expand the network of purple pipes. Current maps of the system and information about future infrastructure are available at www.lacity.org/san/irp.

Purple pipe supplying reclaimed water

Ecology

Ecology is the scientific study of systems of living organisms and the interactions among organisms and between the organisms and their environment. The environment of an organism includes both physical properties, which can be described as the sum of local abiotic factors such as insolation (sunlight), climate, and geology, and biotic factors, which are other organisms that share its habitat.

Energy Conservation

Energy conservation is the practice of decreasing the quantity of energy used while achieving a similar outcome. Individuals and organizations that are direct consumers of energy may want to conserve energy in order to reduce energy costs and promote economic, political and environmental sustainability. Industrial and commercial users may want to increase efficiency and thus maximize profit.

By reducing emissions, energy conservation is an important part of lessening climate change. Energy conservation facilitates the replacement of non-renewable resources with renewable energy. Energy conservation is often the most economical solution to energy shortages, and is a more environmentally benign alternative to increased energy production.

Energy Efficient

The energy efficiency of a consumer item is generally defined as the relative amount of power used by an item in satisfying its purpose. For example, a washing machine is designed to wash clothes. The more energy efficient the washing machine, the less electricity that is consumed in performing this task.

Energy Star

Energy Star is an energy label system that allows buyers to easily make comparisons between the power consumption statistics of similar electrical appliances.

Compact flourescent lightbulb

Floodplain

A floodplain, or flood plain, is flat or nearly flat land adjacent to a stream or river that experiences occasional or periodic flooding. It includes the floodway, which consists of the stream channel and adjacent areas that carry flood flows, and the flood fringe, which are areas covered by the flood, but which do not experience a strong current.

French Drain

A French drain or land drain is a ditch filled with gravel and/or rock that redirects surface and ground water away from an area. French drains are common drainage systems, primarily used to prevent ground and surface water from penetrating or damaging building foundations. Alternatively, the French drain technique may be used to distribute water, such as that which flows from the outlet of a typical septic tank sewage treatment system. French drains are also used behind retaining walls to relieve ground water pressure.

Floodplain

French drain under construction

French drain in sideyard

Gray Water

Graywater, sometimes spelled greywater, grey water or gray water and also known as sullage, is non-industrial wastewater generated from domestic processes such as washing dishes, laundry and bathing. Graywater comprises 50-80% of residential wastewater. Use of biodegradable detergents and soaps mitigates the amount of chemicals that pollute the water. Graywater is distinct from blackwater in the amount and composition of its chemical and biological contaminants (from feces or toxic chemicals). Graywater gets its name from its cloudy appearance and from its status as being neither fresh (white water from ground water or potable water), nor heavily polluted (blackwater). According to this definition wastewater containing significant food residues or high concentrations of toxic chemicals from substances such as household cleaners may be considered "dark grey" or blackwater.

Green Roof

A green roof is a roof of a building that is partially or completely covered with vegetation and soil, or a growing medium, planted over a waterproofing membrane. This does not refer to roofs which are merely colored green, as with green shingles. It may also include additional layers such as a root barrier and drainage and irrigation systems. Container gardens on roofs, where plants are maintained in pots, are not generally considered to be true green roofs, although this is an area of debate. Green roofs are also referred to as eco-roofs, vegetated roofs, living roofs, and greenroofs.

Greenway

See River Greenway

Green roof

Industrial Wastewater Treament

Industrial wastewater treatment covers the mechanisms and processes used to treat waters that have been contaminated in some way by man's industrial or commercial activities prior to its release into the environment or its re-use.

Infiltration

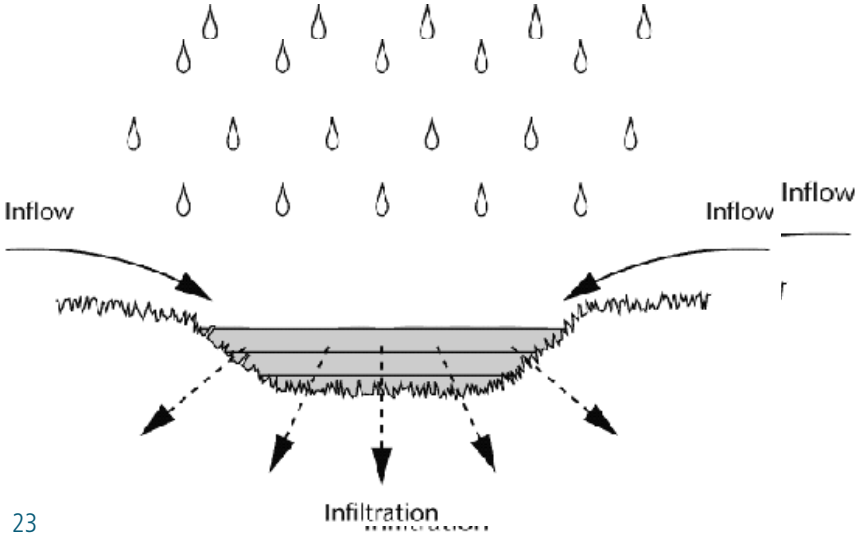
Infiltration is the process by which water on the ground surface enters the soil.

Infiltration Rate

Infiltration rate in soil science is a measure of the rate at which a particular soil is able to absorb rainfall or irrigation. It is measured in inches per hour or millimeters per hour. The rate decreases as the soil becomes saturated. If the precipitation rate exceeds the infiltration rate, runoff will usually occur unless there is some physical barrier. It is related to the saturated hydraulic conductivity of the near-surface soil. The rate of infiltration can be measured using an infiltrometer.

Intermittent Stream

An intermittent stream is one that only flows for part of the year.



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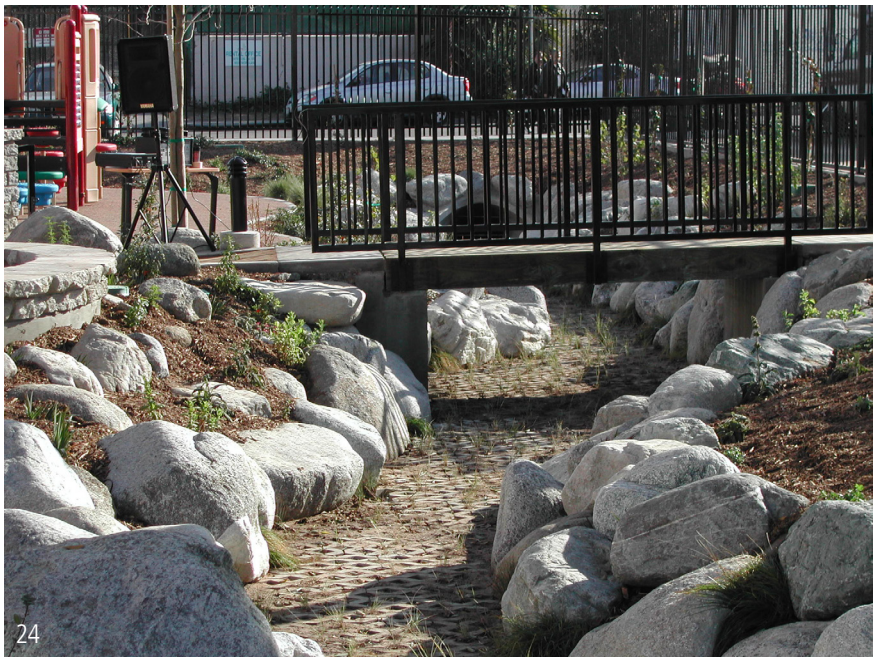
Infiltration cross-section



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Intermittent stream

Irrigation

Irrigation is the artificial application of water to the soil usually for assisting in growing plants and crops.

Drip irrigation, also known as trickle irrigation or microirrigation is an irrigation method that minimizes the use of water by allowing water to drip slowly to the roots of plants, either onto the soil surface or directly onto the root zone, through a network of valves, pipes, tubing, and emitters.

A High Efficiency/Smart Irrigation Controller is a device used to operate automatic irrigation systems such as lawn sprinkler systems and drip irrigation systems. Most controllers have a means of setting the frequency of irrigation, the start time, and the duration of watering. Some controllers have additional features such as multiple programs to allow different watering frequencies for different types of plants, rain delay settings, input terminals for sensors such as rain and freeze sensors, soil moisture sensors, weather data, and remote operation.

25
Smart irrigation device

26
Drip irrigation

Los Angeles River Master Plan

The plan developed by the Los Angeles County Department of Public Works that provides for the optimization and enhancement of aesthetic, recreational, flood control and environmental values by creating a community resource, enriching the quality of life for residents, and recognizing the river's primary purpose for flood control. More information is available at:

http://ladpw.org/wmd/watershed/LA/LA_River_Plan.cfm.

LARMP-Landscape Guidelines and Plant Palettes
http://ladpw.org/wmd/watershed/LA/LAR-Planting- guidelines webversion.pdf

LARMP-Maintenance Guidelines

http://ladpw.org/wmd/watershed/LA/Larmp/

Los Angeles River Revitalization Master Plan

Approved in May 2007 by the Los Angeles City Council, the LARRMP identifes a vision for the revitalization of the Los Angeles River. Updates on the LARRMP are available at www.lariver.org.

Low Impact Design (LID)

LID is a land planning and engineering design approach with a goal of replicating the pre-development hydrologic regime of urban and developing watersheds. The primary goal of LID is to mimic a site's predevelopment hydrology, infiltrate, filter, store, evaporate, and detain runoff close to its source. Examples of LID site design include diverting runoff from impervious surfaces such as parking lots to bioretention areas, such as a rain garden or capturing rain water on a green roof.

Low impact design - permable surfaces and California friendly plants

Low impact design

Metropolitan Water District (MWD)

MWD is a consortium of cities and water districts that provides drinking water to nearly 10 million customers in parts of Los Angeles, Orange, San Diego, Riverside, San Bernadino and Ventura Counties.

The mission of the District is to provide its service area with adequate and reliable supplies of high quality water to meet present and future needs in an envioronmentally and economically responsible way. For more information please visit: www.mwdh2o.com.

Native Plant

A native plant is one that occurs naturally in a given geographic area. These can be trees, flowers, grasses or any other plants. Some of them may have adapted to a very limited range. They may have adjusted to living in unusual environments or under very harsh climates or exceptional soil conditions. Although some types of plants for these reasons exist only within a very limited range, others can live in diverse areas or by adaptation to different surroundings.

California native plants

California native plants

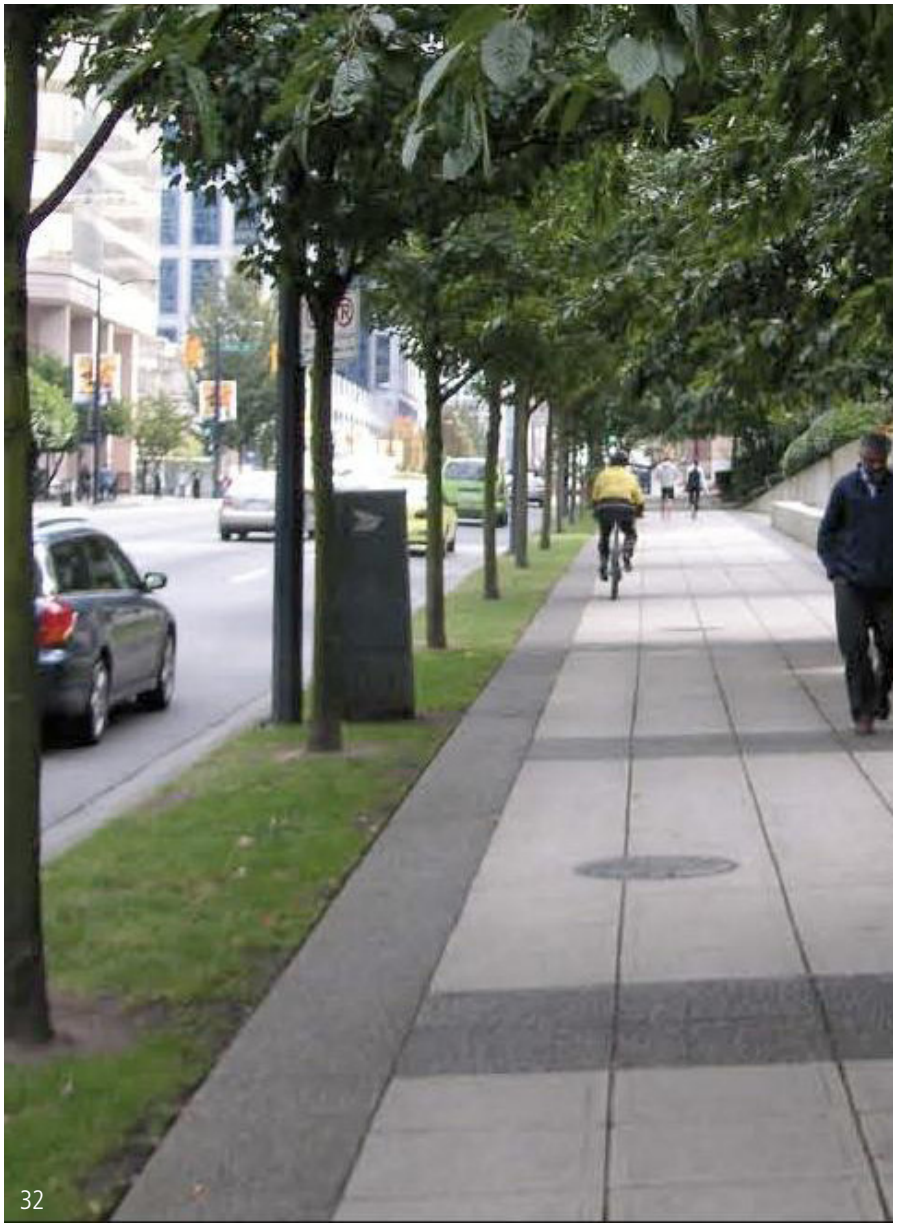
Other

Other refers to all zones identified in the LAMC with the exception of those defined as Single Family in this definitions section.

Parkway

The City of Los Angeles holds two meanings for parkway. The primary definition is the area between the curb and the sidewalk that is landscaped. A second interpretation is a roadway with significant landscaping, usually in the median.

Median parkway



Sidewalk parkway

Pedestrian Oriented

Many communities have embraced pedestrian mobility as an alternative to past street design and building orientation that favor automobiles. Reasons for this shift include a recognition that dependency on automobiles leads to an unsustainable future or that automobile-oriented environments engender dangerous conditions to both motorists and pedestrians and are generally bereft of aesthetics.

In urban design, walkability is the measure of the overall walking conditions in an area. Factors which are commonly part of walkability indices include land use mix, street connectivity, residential density (residential units per area of residential use), and retail floor area ratio. Other factors which are also believed to affect walkability include access to mass transit, presence and quality of sidewalks and pedestrian crossings, aesthetics, nearby local destinations, air quality, street furniture, and traffic flow.

Pedestrian-scale storefronts in San Diego

Small streets and outdoor dinning

Perennial Stream

A perennial stream or perennial river is a stream or river that flows continuously all year round.

Permeable Paving

Permeable paving, also called pervious paving or porous pavement, is a term used to describe paving methods for roads, parking lots and walkways that allow the movement of water and air through the paving material. Although some porous paving materials appear nearly indistinguishable from nonporous materials, their environmental effects are qualitatively different. Their effects are important because pavements are two-thirds of the potentially impervious surface cover in urban areas.

Permeability

Permeability is a measure of the ability of a material (typically, a rock or unconsolidated material) to allow fluids to pass through it.

Project: The erection, construction, addition to, or exterior structural alteration of any building, located within the LA-RIO. A project does not include construction that consists solely of (1) interior remodeling, interior rehabilitation or repair work: (2) alterations of, including structural repairs, or additions to, any existing building in which the aggregate value of the work, in any one 24-month period, is less than 50 percent (50%) of the building's replacement cost before the alterations or additions as determined by the Department of Building and Safety (DBS). Construction costs are based on a valuation table available on the DBS website (www.ladbs.org). The table lists the cost of construction per square foot.

Purple Pipe

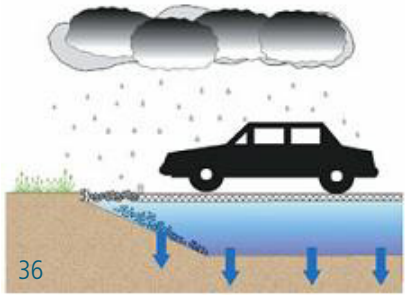
See Dual Pipe

Public Right of Way (ROW)

A parcel of land over which the public can legally traverse. Usually a street, road, sidewalk or footpath.

35

Perennial stream

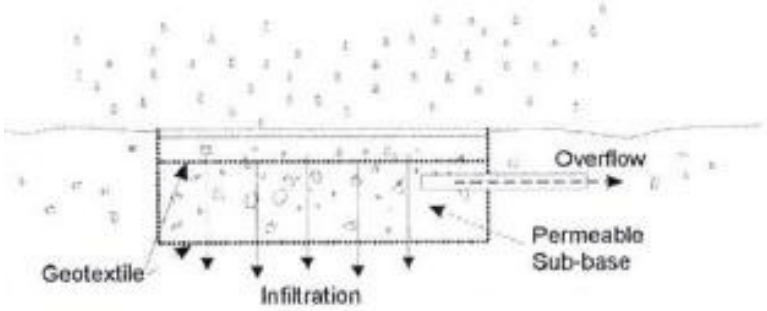


36

Permeability diagram

37

Permeable and impermeable asphalt



38

Permeability cross-section

Rain Garden

See Bio-retention Pond

Recycled Stormwater

See Low Impact Design (LID)

Retention Basin

A retention basin, sometimes called a retention pond, is a type of constructed wetland that is used to contain stormwater or surface runoff. A retention basin provides an area to hold water from a small surrounding drainage area that would otherwise flow into other areas. The water remains in the local area that it was deposited in. This is opposed to a detention basin that holds water for a limited period of time from a larger basin area to prevent flooding and releases all the water contained in a short period of time.

Detention basin

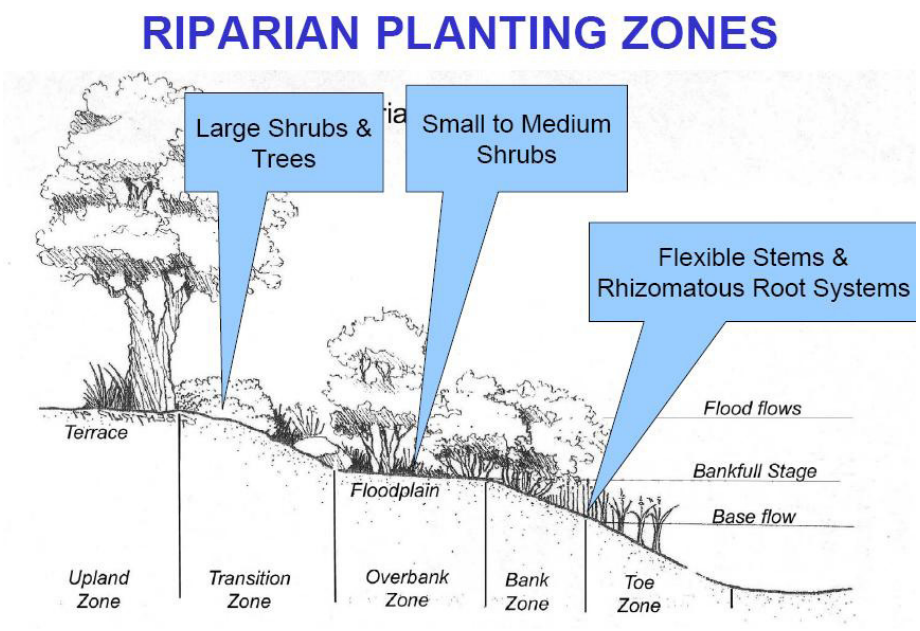
Right of Way

See Public Right of Way

Riparian

A riparian zone is the interface between land and a flowing surface water body. Plant communities along the river margins are called riparian vegetation, characterized by hydrophilic plants. Riparian zones are significant in ecology, environmental management, and civil engineering due to their role in soil conservation, their biodiversity, and the influence they have on aquatic ecosystems. Riparian zones occur in many forms including grassland, woodland, wetland or even non-vegetative. In some regions the terms riparian woodland, riparian forest, riparian buffer zone or riparian strip are used to characterize a riparian zone.

Riparian zone - Sepulveda basin



41

Riparian planting zones

Riparian zone - LA River

River Project Office

The Los Angeles River Project Office was created within the Department of Public Works' Bureau of Engineering to oversee and coordinate public improvements to watercourses, streets, bridges, and parks within the river corridor as defined in the Los Angeles River Revitalization Master Plan (LARRMP)

Riprap

Riprap is an interlocking structure of rocks of varying sizes that are intended to protect the bank or bottom of a river, stream, or ocean. Riprap is graded by size. A specified diameter will have fifty percent of the rock (by weight) larger and fifty percent smaller. The velocity of water flow is generally the determining factor for size of stone. Riprap varies in size from the multi-centimeter range to cast concrete shapes several meters across. Jetty stone is larger than riprap and can have individual pieces that are also several meters in diameter. The size and material will be specified by a civil engineer or local building code.

River Unit

The River Unit was created within the Department of City Planning's Citywide Division to participate in interdepartmental activities related to improvements to the Los Angeles River, the Greenway, and the surrounding communities. In addition the Unit oversees and coordinates planning efforts on-going within the River corridor.

River Greenway

The County's Los Angeles River Master Plan and thte City's Los Angeles River Revitalization Master Plan both call for the establishment of a continuous river greenway that would provide opportunities for extended open space, bike paths, and multi-use trails.

Riprap

Single Family

Those zones identified in the LAMC as either One-Family Dwelling Units which includes the range of zones from RE40-RW1, and those Two Family zones which include zones R2, RD1.5 and RD2.

Soil Type

In terms of soil texture, soil type usually refers to the different sizes of mineral particles in a particular sample. Soil is made up in part of finely ground rock particles, grouped according to size as sand, silt, and clay. Each size plays a significantly different role.

For example, the largest particles, sand, determine aeration and drainage characteristics, while the tiniest, sub-microscopic clay particles, are chemically active, binding with water and plant nutrients. The ratio of these sizes determines soil type: clay, loam, clay-loam, silt-loam, and so on.

Stewardship

Environmental stewardship is an ethic whereby citizens participate in the responsibile management of our natural resources (air, land, water and biodiversity) to ensure that they are sustainably managed for current and future generations. Stewardship of the environment can include recycling, conservation, regeneration, and restoration.

Soil types

Stormwater

Water that originates during precipitation events. It may also be used to apply to water that originates with snowmelt or runoff water from overwatering that enters the stormwater system. Stormwater that does not soak into the ground becomes surface runoff, which either flows into surface waterways or is channeled into storm drains.

Stormwater is of concern for two main issues - one related to the volume and timing of runoff water (flood control and water supplies) and the other related to potential contaminants that the water is carrying (water pollution).

Stream

A stream, brook, beck, burn, creek, crick, kill, rill, syke, bayou, or run is a body of water with a current, confined within a bed and banks. Streams are important as conduits in the water cycle, instruments in aquifer recharge, and corridors for fish and wildlife migration. The biological habitat in the immediate vicinity of a stream is called a riparian zone. Stream is also an umbrella term used in the scientific community for all flowing natural waters, regardless of size. The study of streams and waterways in general is known as surface hydrology and is a core element of environmental geography.

Streets Standards Committee

The Street Standards Committee was established in Section 17.05 of the L.A.M.C to recommend to the City Planning Commission minimum width and improvement standards for all classes of public and private streets and alleys. The Committee is chaired by the Director of City Planning and includes the City Engineer and the General Manager of the Department of Transportation.

Storm water

Stream

Surface Runoff

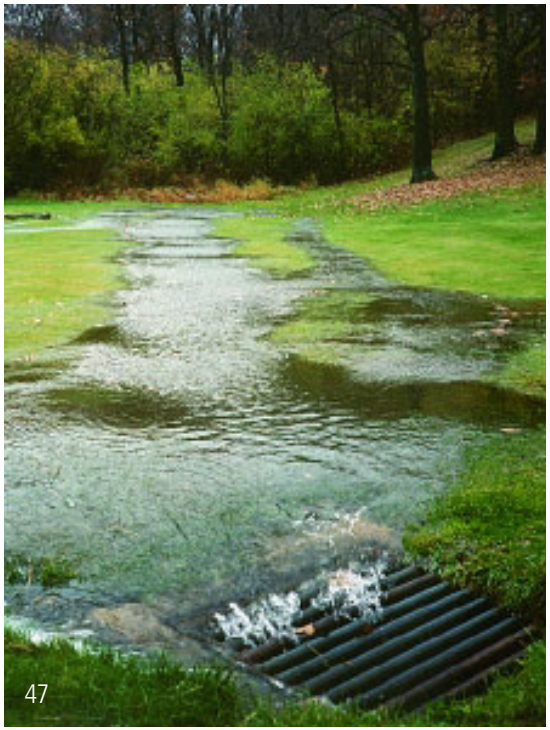
The flow of water, from rain, snowmelt, or other sources, over the land surface, which is a major component of the water cycle. Runoff that occurs on surfaces before reaching a channel is also called a nonpoint source. If a nonpoint source contains man-made contaminants, the runoff is called nonpoint source pollution. When runoff flows along the ground, it can pick up soil contaminants such as petroleum, pesticides (in particular herbicides and insecticides), or fertilizers that become discharge or nonpoint source pollution.

Sustainable

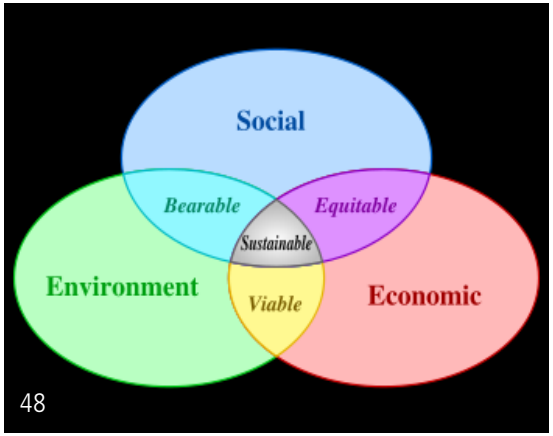
The term, in its environmental usage, refers to the potential longevity of vital human ecological support systems, such as the planet's climatic system, systems of agriculture, industry, forestry, and fisheries, and human communities in general and the various systems on which they depend.

Sustainable Community

A sustainable community is one that can equitably meet the economic and social needs of its population while both protecting the resources of the natural environment.



Surface runoff



Sustainability diagram

Standard Urban Stormwater Mitigation Plan (SUSMP)

The National Pollutant Discharge Elimination System (NPDES) permit No. CAS004001 issued to the County and City of Los Angeles by the Regional Water Quality Control Board requires new development and redevelopment projects to incorporate SUSMP to mitigate storm water pollution.

Depending on the type of project, either a Standard Urban Stormwater Mitigation Plan (SUSMP) or a Site Specific Mitigation Plan is required to reduce the quantity and improve the quality of stormwater runoff that leaves the site. Developers are encouraged to begin work on complying with these regulations by visiting the City's Bureau of Sanitation's Watershed Protection Division in the design phase of their projects. Additional information is available at www.lacity.org/SAN/index.htm.

Swale

A swale is a low tract of land, especially when moist or marshy. The term can refer to a natural landscape feature or a human-created one. When created by humans, this open drain system is designed to manage surface runoff.

Swale

Tree Canopy

The extent of the outer layer of a tree's leaves. Shade trees normally have a dense canopy blocking out the light from lower growing plants. The Leaf Area Index can be used to measure the density of the canopy.

Turf

Turf may refer to a lawn (an area of grass maintained for decorative andor recreational use), or it may refer to sod (the surface layer of ground consisting of a matt of grass and grass roots.)

Tree canopy lining a street

Tree canopy

Urban Design

Urban design concerns the arrangement, appearance and functionality of towns and cities, and in particular the shaping and uses of urban public space. It has traditionally been regarded as a disciplinary subset of urban planning, landscape architecture, or architecture and more contemporary design linked to emergent disciplines such as Landscape Urbanism. However, with its increasing prominence in the activities of these disciplines, it is better conceptualised as a design practice that operates at the intersection of all three, and requires a good understanding of a range of fields, such as urban economics, political economy and social theory.

3rd Street Promenade, Santa Monica

Del Mar Metro Station, Pasadena

Urban Ecosystem

Urban areas that are part of a broader ecological system. Scientists are beginning to investigate how urban landscapes function and how they affect other landscapes with which they interact. In this context, urban environments are affected by their surrounding environment but also impact on that environment. Knowing this may provide clues as to which alternative development options will lead to the best overall environmental outcome.

Playa Vista and Ballona Creek

Playa Vista and Ballona Creek

Urban ecosystem

Vacated Streets

The abandonment or termination of the public right to use a street.

Water Conservation

Reducing the use of fresh water, through technological or social methods. The goals of water conservation efforts include:

Sustainability-To ensure availability for future generations, the withdrawal of fresh water from an ecosystem should not exceed its natural replacement rate.

Energy conservation - Water pumping, delivery and wastewater treatment facilities consume a significant amount of energy. In California over 15% of total electricity consumption is devoted to water management.

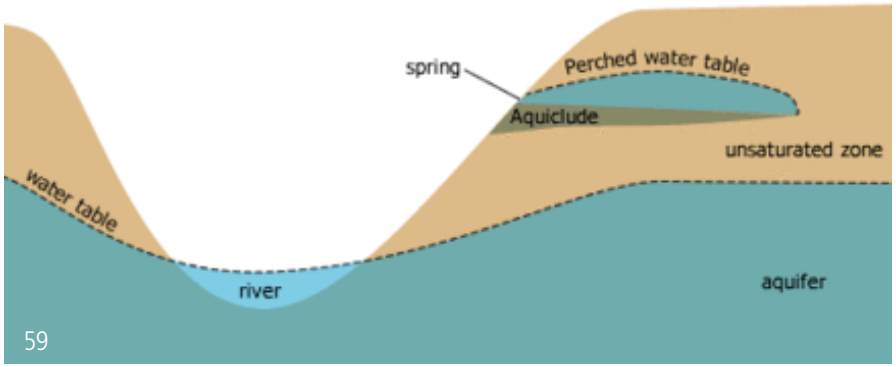
Habitat conservation - Minimizing human water use helps to preserve fresh water habitats for local wildlife and migrating waterfowl, as well as reducing the need to build new dams and other water diversion infrastructure.

Watershed

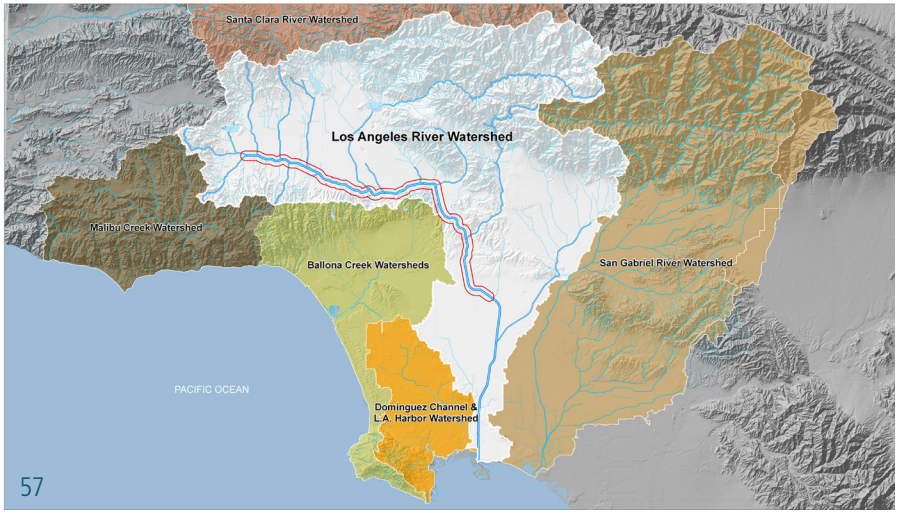
A drainage basin or river catchment, meaning the region of land whose water drains into a particular watercourse.

Water Table

The upper boundary of water below ground, which is the top of the aquifer. The level rises and falls with increases and decreases in infiltration.



Water Table



Los Angeles County Watersheds

The San Gabriel Mountains - A border of the Los Angeles River Watershed

Wetland

Transitional areas between terrestrial lands and aquatic systems. Wetlands support plant species adapted to wet conditions, and wetlands soils develop particular characteristics caused by flooding or saturations. Wetlands may also be supported by high ground water levels rather than bordering on a water body. Common wetland types include marshes, swamps, bogs and wet meadows. Wetlands offer opportunity to explore nature, provide habitat for animals, improve water quality, and reduce flooding and erosion.

Ballona Wetlands

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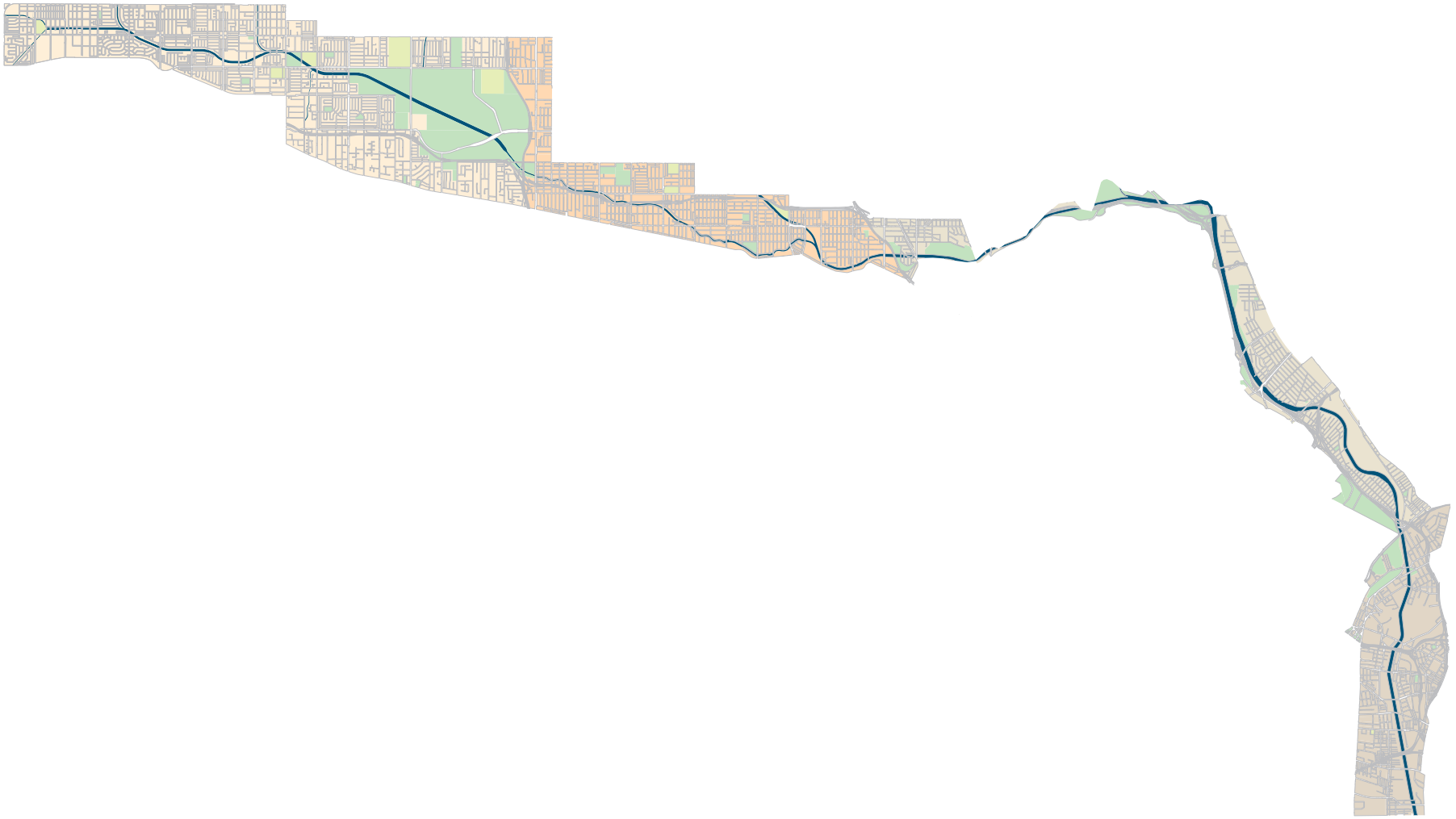
Section 4

Maps

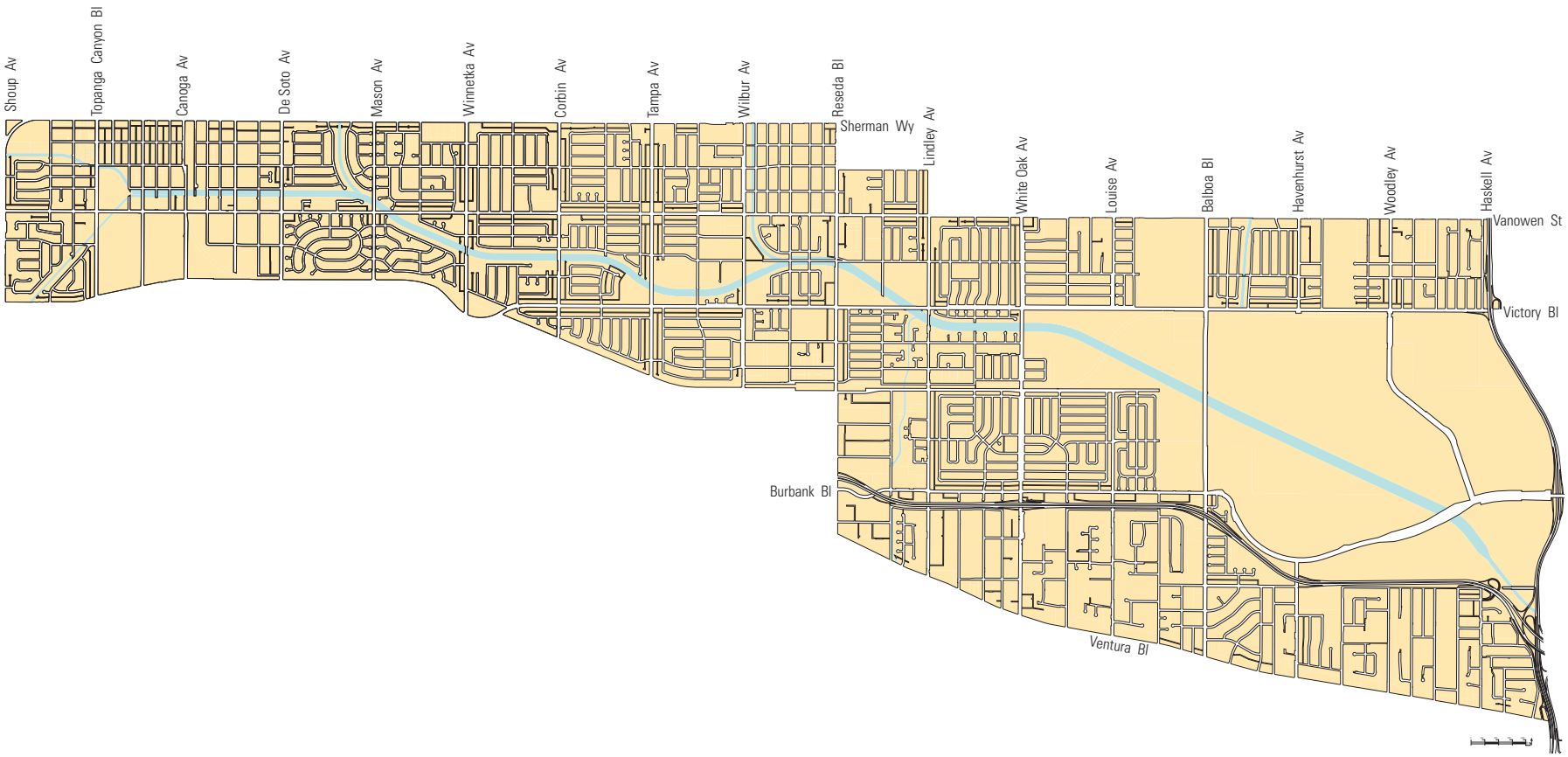
To lighten up the misery caused by the heaviest rainfall in Southern Californian history, a photographer and reporter attempt a boat expedition from Hyperion Avenue to Long Beach.
Year 1938

Photo courtesy of Los Angeles Public Library

Section: 4.1 BOUNDARIES OF THE LA-RIO



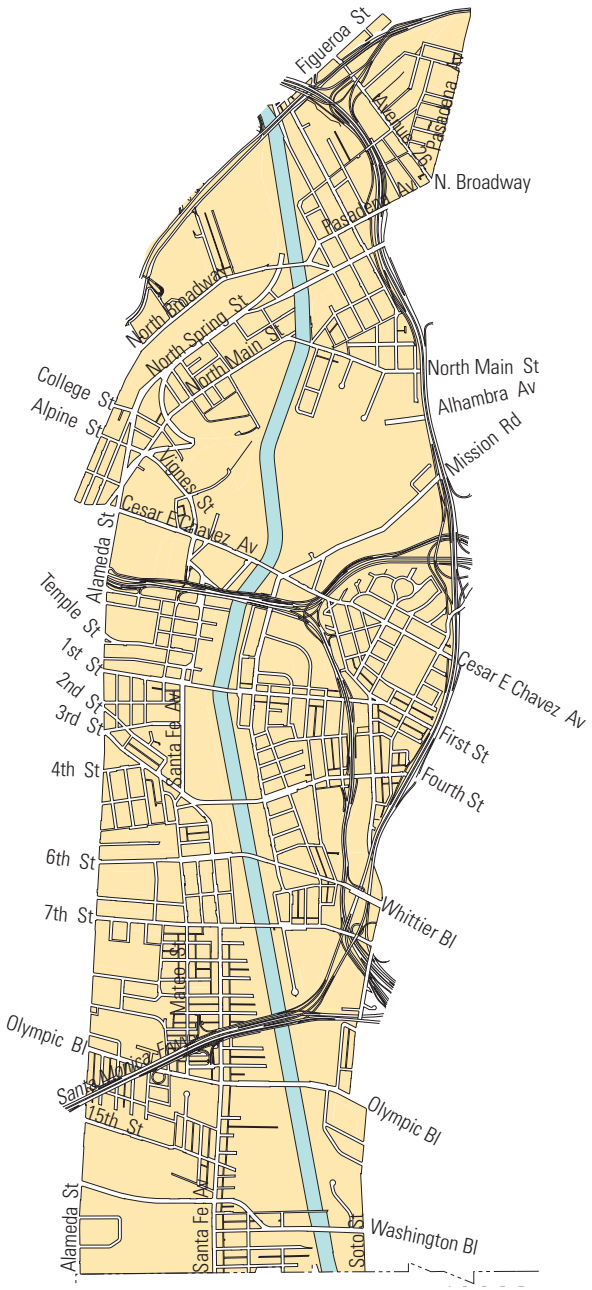
Section: 4.2 WEST VALLEY AREA



Section: 4.3 EAST VALLEY AREA

Section: 4.4 GLENDALE NARROWS AREA

Section: 4.5 METRO AREA



Section 5

Property Improvement Guidelines

Construction of the channel walls in the Los Angeles River at Laurel Canyon.
Year 1949

Photo courtesy of Los Angeles Public Library

Section: 5.0 PROPERTY IMPROVEMENT GUIDELINES

All Projects, with the exception of single family homes, are required to achieve a combined total of 20 points from three cateogories: 10 in Watershed, 5 in Urban Design, and 5 in Mobility. Single family home Projects must achieve a minimum of 10 points from the Watershed category only. Points may be selected from a total of 99 points. There are 50 points available in the Watershed category, 22-26 in the Urban Design category and 23 points that may be selected in the Mobility category.

Prior to obtaining a building permit from the Department of Building and Safety, all Projects shall be referred to City Planning for sign off from the LA-RIO clearance item. In order to obtain a sign off, the applicant shall provide a completed copy of the worksheets in this Section (5) signed by the owner and architect of record, where applicable, as well as supporting documentation (drawings and specifications) that demonstrate the project has complied with the Property Improvement Guidelines described below. Information as to where the supporting documention is located should be noted under the Annotation heading located on each worksheet page.

Information below the symbol " " are Guidelines established by the Director and may be revised as necessary. These Guidelines provide general information on pursuing specific points, and also provide guidance on calculations, plans and information an applicant would submit for LA-RIO clearance.

It is possible to earn points from several categories by using one strategy. These point options do not substitute for SUSMP or Landscape Ordinance requirements that a project may be subject to. However, the same strategies that satisfy the LA-RIO may also apply towards the requirements of SUSMP or the Landscape Ordinance.

Project: The erection, construction, addition to, or exterior structural alteration of any building, located within the LA-RIO. A project does not include construction that consists solely of (1) interior remodeling, interior rehabilitation or repair work: (2) alterations of, including structural repairs, or additions to, any existing building in which the aggregate value of the work, in any one 24-month period, is less than 50 percent (50%) of the building's replacement cost before the alterations or additions as determined by the Department of Building and Safety (DBS). Construction costs are based on a valuation table available on the DBS website (www.ladbs.org). The table lists the cost of construction per square foot.

Single family home Projects are defined as those located in zones ranging from RE40 to RD2.

LA River, near Griffith Park

Case No(s): _____

Project Address: _____

Project Description: _____

Owner: _____

Client Contact Name/Phone: _____

Architect: _____

Landscape Architect: _____

	Single Family	Other
Watershed	10	10
Urban Design	NA	5
Mobility	NA	5
Points Needed	**10**	**20**
Total Project Points Earned		

Section: 5.1 WATERSHED

	Single Family	Other	Annotation
Section: 5.1.1 Watershed: Stormwater Management Intent: Reduce the velocities, quantities, and pollutant loads of stormwater runoff entering the stormdrain system. Increase opportunities for stormwater runoff to infiltrate into the groundsoils.			
Treat 100% of the 85th percentile storm and have detention capacity to retain a rainfall intensity of 0.5 inches/hour.	3	3	
Design and install a green roof that treats 100% of the 85th percentile storm (either alone or in conjunction with other site improvements).	3	3	

GENERAL INFORMATION

In order to maintain flood protection and assess the optimum best management practices for a particular site and soil conditions, applicants should meet with the Bureau of Sanitation for guidance as early as possible. Projects subject to SUSMP can be assisted at the Bureau of Sanitation, Watershed Protection Division's Public Counter, located on the 3rd floor of 201 N. Figueroa (213-482-7066). If the project is not subject to SUSMP, applicants may visit the 10th floor of 1249 S. Broadway (213-485-3996) for guidance. Both offices require appointments. A variety of BMPs can be used to achieve these points, including french drains, raingardens, cisterns and swales.

Note that water that is infiltrated on-site is assumed to be 100% treated for the purposes of this credit.

SUBMITTAL DOCUMENTATION

Site Plan

Landscape and/or Roof Plan that includes identification of the various BMPs

Calculations

Calculate the required volume of stormwater to be treated (Stormwater Runoff Quantity Volume (ft^3) = WQV)

Determine the size of the infiltration area using the equations from the City of Los Angeles SUSMP Infiltration Requirements & Guidelines (www.lastormwater.org/Siteorg/download/pdfs/tech_docs/SUSMP_Infiltration_Req.pdf)

Describe how the soils and/or equipment have the capacity to infiltrate water at a rate and quantity sufficient to absorb at least 100% of the 85th percentile storm

Section: 5.1.2 Watershed: Stream Enhancement

Intent: Improve surface and ground water quality and increase groundwater recharge. Support vegetation, wildlife, and the transport of sedimentation.

	Single Family	Other	Annotation
Daylight the portion of a stream that flows through the property.	5	5	
Remove the concrete from sides and/or bottom of a stream that flows through the property.	5	5	

GENERAL INFORMATION

Please consult with the Bureau of Sanitation's Watershed Division for guidance with these point options. These options are only feasible if flood protection is maintained. Additional permits may be required.

SUBMITTAL DOCUMENTATION

Site Plan and/or Landscape Plan that ilustrates the location and identification of the proposed project stream improvements.

Demolition Plan

Section: 5.1.3 Watershed: Landscaping

Intent: Increase the percentage of native and/or drought tolerant plant species located within the vicinity of the Los Angeles River.

Increase the availability of native and locally adaptive habitats to support the migration of local species.

	Single Family	Other	Annotation
Select and install plants identified as California Friendly by the Metropolitan Water District's Be Water Wise program for at least half of the plant palette.	1	1	
Select and install a percentage of indigenous plants per the County's Los Angeles River Master Plan (LARMP) Landscaping Guidelines and Plant Palettes.	1 per 25%	1 per 25%	
Contract with a licensed landscape architect, a landscape or garden designer to design and install a landscape of native plants.	2	2	
Remove all existing exotic and invasive species as identified by the California Invasive Plant Council (CAL-IPC).	2	2	
Complete a class related to native plant gardening at a local nursery or college.	2	1	

GENERAL INFORMATION

Refer to a licensed landscape horticulture or soils professional to assess soils, topography, hydrology and microclimate in order to develop the planting patterns for each site.

For plants identified as California Friendly by the Metropolitan Water District's Be Water Wise program, visit: www.bewaterwise.com

The County's Los Angeles River Master Plan Landscaping Guidelines and Plant Palettes can be found at http://ladpw.org/wmd/watershed/LA/

LAR_Planting_guidelines_webversion.pdf. Consult pages 28-29 for a list of indegnous native plants.

More resources on native landscaping include: The California Invasive Plant Council, www.cal-ipc.org; The American Society of Landscape Architects, www.asla.org; The California Native Plant Society (CNPS) www.cnps.org; The Theodore Payne Foundation, www.theodorepayne.org.

SUBMITTAL DOCUMENTATION

Site Plan

Landscape Plan which denotes location of each species

Demolition Plan which illustrates location and type of invasive species to be removed

Describe the proposed means of plant establishment (irrigation) and identify the landscape professional with whom a contract has been made

Provide evidence in the way of a letter, invoice, or certificate, that the applicant has completed a class on native plant gardening at a local nursery or college

Plant species planting list

Calculations

- Provide square footage of total planting area
- Provide square footage of the percentage of planting area designated for California Friendly and/or native plant species

Section: 5.1.4 Watershed: Water Conservation

Intent: Reduce the use of potable water for irrigation purposes.

	Single Family	Other	Annotation
Install a high-efficiency "smart" irrigation system.	2	1	
Utilize graywater or recycled stormwater for at least 50% of irrigation needs.	2	2	
Utilize graywater or recycled stormwater for 100% of irrigation needs.	3	3	

SUBMITTAL DOCUMENTATION

Site Plan

Landscape Plan

Calculations

- Determine the annual demand for on-site irrigated water
- Determine the annual demand for 50% of irrigated water

Describe type of irrigation system(s), and the quantity of water supplied by the system annually

Describe methodology for collecting and/or harvesting graywater and/or recycled stormwater

Section: 5.1.5 Watershed: Hardscape

Intent: Reduce overall ambient temperature. Increase the percentage of pervious materials. Increase the use of locally available materials.

	Single Family	Other	Annotation
Use hardscape materials (impervious or pervious) on no more than 50% of the site area exclusive of building footprint. The balance of the area shall be planted with native and/or drought tolerant species.	2	2	
Use permeable hardscaped material instead of impervious materials for at least 75% of all hardscape areas.	2	2	
Select and install at least 50% of hardscape materials as defined and recommended by the LARMP Landscaping Guidelines	1	1	

GENERAL INFORMATION

The LARMP Landscaping guidelines are available at http://ladpworg/wmd/watershed/LA/LAR_Planting_guidelines_webversion.pdf on pages 40-41 of Part II-LAR Planting Guidelines. River rock and decomposed granite are especially recommended.

SUBMITTAL DOCUMENTATION

Site Plan

Landscape Plan that identifies the location and extent of each of the hardscape materials Calculations

- Determine the square footage of the site exclusive of the building footprint
- Determine the square footage of either 50-75% of the overall square footage of the site, or hardscape areas as defined above

Provide a specification list that includes product/material information about each of the hardscape materials if pervious and/or selected from the LARMP Landscaping Guidelines

Section: 5.1.6 Watershed: Landscape/Hardscape

Maintenance

Intent: Encourage maintenance practices that reduce the use of chemicals, nuisance plants, and potable water.

	Single Family	Other	Annotation
Prepare and implement a maintenance manual and/or program that follows the Landscaping Maintenance Guidelines as defined in the LARMP.	1	1	
Prepare and implement a maintenance manual and/or program for parking lots and structures that establishes ongoing procedures to maintain the surfaces free of chemical residues and debris.	1	1	
Prepare and implement a maintenance manual and/or landscape program that uses best management practices to provide sustainable organic horticulture, making chemical fertilizers and pesticides unnecessary.	2	2	
Install landscaping that does not require irrigation once established.	2	2	

GENERAL INFORMATION

The guidelines are available at http://ladpworg/wmd/watershed/LA/LAR_Planting_guidelines_webversion.pdf on page 48 of Part II-LAR Planting Guidelines. This includes information about supplemental irrigation, extended maintenance, pruning, weeding and mulching.

SUBMITTAL DOCUMENTATION

Site Plan
Landscaping Plan
Describe the maintenance manual and/or program
Describe temporary irrigation program
Identify the person(s) or organization that will be responsible for maintenance
Plant Species List

Section: 5.1.7 Watershed: Open Space

Intent: Increase availability of publicly accessible area adjacent to the River Greenway.

	Single Family	Other	Annotation
Provide a permanent rear and/or or side-yard easement adjacent to the River Greenway through a recorded covenant. The easement area shall be used to maximize open space for native landscaping, create active plazas or courtyards and/or provide additional pedestrian amenities visible and accessible from the River. One-half point will be accrued for every 1% of easement relative to the overall lot square footage. For example a 1000 sq ft easement on a 10,000 sq ft lot equals a 1% easement and earns 5 points.	0.5 per 1%	0.5 per 1%	

SUBMITTAL DOCUMENTATION

Site Plan with easement area identified and quantified

Calculations

- Determine overall lot square footage (including building footprint)
- Determine square footage of easement area
- Determine percentage of overall square footage that easement represents

Recorded covenant that provides for the maintenance of and public access to the easement area in perpetuity on file with the County Registrar-Recorder.

Section: 5.2 URBAN DESIGN

Section: 5.2.1 Urban Design: Vehicle Parking

Intent: Reduce visibility and prominence of vehicles in and around the River Greenway area.

	Single Family	Other	Annotation
Screen surface parking that is visible from the Greenway and/or street with a landscaped barrier and/or green screen.	NA	1	
Site parking such that no parking is located between the building(s) and the street.	NA	2	
Site parking such that no parking is located between the building(s) and the River Greenway.	NA	2	
Screen ground floor parking behind active uses/services that are accessible from the street and/or Greenway.	NA	2	

SUBMITTAL DOCUMENTATION

Site Plan that illustrates the location of parking and the "screening"

Describe screening material or uses

Illustrate dimensions of screen or uses

Section: 5.2.2 Urban Design: Transparency

Intent: Promote visibility between occupants of Greenway/street adjacent uses and the River Greenway and/or streets to increase safety, and comfort, of area.

	Single Family	Other	Annotation
Design any fence or screen in the setback area(s) adjacent to the Greenway to be no greater than 42 inches in height.	NA	1	

Design facades visible from the Greenway and/or street such that a percentage of surface area incorporates transparent features. Points can be obtained by meeting the requisite amount of transparency for each building type and/or use noted below.

Ground level retail: at least 50%	NA	2	
Multi-family residential, industrial, commercial and public facility uses: at least 25%	NA	2	
Upper floors: at least 20%	NA	1	

SUBMITTAL DOCUMENTATION

Site Plan that illustrates Greenway and/or street adjacent facades

Landscaping Plan that illustrates the location of any ences or screens adjacent to the Greenway

Calculations

- Determine ground floor square footage of Greenway and/or street adjacent facades
- Determine square footage of upper floors of Greenway and/or street adjacent facades
- Determine the needed square footage of the transparent area of both the ground level and upper floor levels
- Determine the resulting percentage of transparency area at both the ground level and upper floor levels

Elevations of each Greenway and/or street adjacent façade that illustrate the required transparent percentage

Section: 5.2.3 Urban Design: Site Lighting

Intent: Reduce nighttime light pollution, conserve energy and improve nighttime safety and visibility.

	Single Family	Other	Annotation
Include permanent attachments to site lighting so that any off-site glare is prevented.	NA	1	
Provide site lighting that distributes light evenly and avoids harsh shadows and glare.	NA	1	
Provide site lighting that is integrated into the architecture.	NA	1	
Install all exterior lighting fixtures such that no upward light pollution occurs.	NA	1	

SUBMITTAL DOCUMENTATION

Site Plan and/or Exterior Lighting Plan that illustrates the locations of all exterior light fixtures

Identify name/manufacture of each light exterior light fixture referenced on the Plan

Provide cut sheets of each fixture that illustrates light distribution, extent of light shielding, and fixture lamp type

Section: 5.2.4 Urban Design: Visual Clutter

Intent: Reduce visual pollution in and around River Greenway.

	Single Family	Other	Annotation
Design trash/recycling enclosures so that dumpsters and trash bins are not visible to the general public from either the Greenway or the street.	NA	1	
Screen from public view from the street all exterior rooftop and ground-level mechanical equipment, which includes HVAC equipment, exhaust fans, wireless telecommunication facility equipment cabinet enclosures and antennas, and satellite dishes.	NA	1	
Design security grills so that they are recessed completely into pockets that conceal the grill when they are retracted. Design the pockets so that they are integrated into the design of the building.	NA	1	
Underground the utility lines leading to the project site. One point will be accrued for every 100 feet of lines that are undergrounded.	NA	1 per 100'	

SUBMITTAL DOCUMENTATION

Site Plan that identifies the dimensions and location of services areas, mechanical equipment, signage, security features, and/or utility lines

Calculations

- Determine distance of underground utility lines
- Divide distance by 100'

Exterior Elevation(s) that illustrates the location, dimensions, and design of service enclosures, mechanical equipment, building or site signage, and/or security features

Section: 5.3 MOBILITY

Section: 5.3.1 Mobility: Connectivity

Intent: Enable the River to become another "front-door." Facilitate pedestrian access from the street and/or Greenway to the building.

	Single Family	Other	Annotation
Provide an entrance for employees, visitors, customers and/or clients that fronts on and is visible from the street and is open and easily accessible during business hours.	NA	1	
Provide an entrance for employees, visitors, customers and/or clients that fronts on and is visible from the River Greenway and is open and easily accessible during business hours.	NA	1	

SUBMITTAL DOCUMENTATION

Site Plan that illustrates the entrances of buildings and/or facilities where applicable

Describe availability (hours/days) of entranceway to employees, visitors, customers, and/or clients

Section: 5.3.2 Mobility: Pedestrian

Intent: Increase pedestrian access to and from the buildings and neighborhoods adjoining the River Greenway.

	Single Family	Other	Annotation
Design, build, and provide for the on-going maintenance of a permanent pedestrian easement (paseo) to the Greenway that is publicly accessible during daylight hours and is open to the sky.	NA	3	
Design the paseo to include amenities such as: outdoor dining and seating areas; tables for board and card games; sun and shade; landscaping; sculptures and fountains.	NA	1	
Create convenient access between the River Greenway and the property that is available for public and/or private use, where a property line is coterminous with the River Greenway.	NA	2	
Provide access to the River Greenway for pedestrians and bicyclists.	NA	2	

GENERAL INFORMATION

The easement should be a minimum 7' in width and provide visible connections between the street and the River Greenway.

When creating access to the River Greenway, local concerns such as maintenance and safety must be addressed.

SUBMITTAL DOCUMENTATION

Site Plan that illustrates ADA accessible path of travel for building occupants to access the River Greenway as either a pedestrian and/or bicyclist

Site Plan that illustrates the location and dimensions of pedestrian easement or paseo

Describe availability (hours/days) of entranceway to employees, visitors, customers etc

Describe design, amenities, and access of paseo or pedestrian easement

Recorded covenant that provides for the maintenance and public accessibility of easement area in perpetuity

	Single Family	Other	Annotation
Section: 5.3.3 Mobility: Transit			
Intent: Encourage public transportation as a form of travel to, from and around the River and adjoining neighborhood.			
Provide transit passes for residents and/or employees for the first year of the building's operation.	NA	3	
Allocate a location, accessible and visible to the users of the building, for the posting of local transit and bicycling information (times, routes, rates) and nearby points of interest. The information provided shall be maintained current and up to date.	NA	1	

SUBMITTAL DOCUMENTATION

Agreement/contract with transit provider or a copy of the invoice indicating purchase of passes.

Site and/or ground floor building plan that illustrates location of transit and bicycle information

Provide list of information that shall be included, and routinely updated, about local transit and bicycle services

Section: 5.3.4 Mobility: Bicycle

Intent: Promote and support bicycling and other forms of two-wheeled transportation through improved amenities

	Single Family	Other	Annotation
Provide facilities for securing bicycles for 5% of the regular building occupants. For each additional 5% accommodated, one point is awarded, for a maximum of 3 total points.	NA	1	
Provide designated stalls for scooters, mopeds and motorcycles.	NA	1	
Provide on-site locker facilities.	NA	1	
Provide on-site changing/shower facilities for employees.	NA	2	

SUBMITTAL DOCUMENTATION

Site and/or building floor plan that illustrates the location(s) of locker facilities and/or changing/ shower facilities

Site and/or parking plan that illustrates location and quantity of bicycle, scooter, moped and /or motorcycle parking spaces

Calculations

- Determine the number of full-time building occupants (residents, staff, faculty etc.). Multiply number by 8.
- Determine the number of part-time building occupants. Multiply number by 2.
- Sum total of above calculations.
- Divide total by 8 to determine total occupant number.
- Determine needed percentage to satisfy requirement.

Section: 5.3.5 Mobility: Vehicular

Intent: Accommodate means of transportation other than conventional, single occupancy automobiles

	Single Family	Other	Annotation
Allocate at least 2% of parking spaces on-site for a shared car program.	NA	1	
Allocate at least 5% of parking spaces as designated electrical charging outlets for electric-run autos, bicycles, scooters and/or motorcycles.	NA	2	

SUBMITTAL DOCUMENTATION

Parking Plan that illustrates number and location of stalls designated for a shared car program

Parking Plan that illustrates location and quantity of electrical charging outlets for electric vehicles

Calculations

- Determine total number of parking spaces
- Determine 2% of total parking spaces
- Determine 5% of total parking spaces

Section 6

Complete Green Street Standards

Residential homes between the channelized River and the Golden State Freeway.
Glassell Park and Cypress Park are in the background.
Year 1990.

Photo courtesy of Los Angeles Public Library

Section: 6.0 COMPLETE GREEN STREET STANDARDS

These standards apply to all new Projects with the exception of single family dwellings. These standards apply to the area between the property line and the edge of the curb.

Section: 6.1 Pedestrian Street Lights

Install one pedestrian street light for every approximate 50' of street frontage, unless already existing. Light fixtures shall be adapted for solar power where feasible.

If the project is within the boundaries of a Streetscape Plan or an area with a light style previously approved by the Bureau of Street Lighting, they may defer to that style. Otherwise, the light shall be the Aluminum Selux Pole of 14' or a subsequent successor.

Aluminum Selux Pedestrian Street Light

Section: 6.2 Bicycle Racks

Install inverted U bicycle racks.

In the case that a building fronts the property line and a bicycle rack is installed near the building's façade, there shall be at least 2' clearance between the rack and the building.

Bicycle racks shall be no more than 50' from the building's main entrance, and shall be located in areas that are well lit at night. If possible, bicycle racks should be covered to provide protection from the elements.

Guidance, including the number and placement of racks, is available from the Los Angeles Department of Transportation Bicycle Program. Visit BicycleLA.org

Inverted U Bicycle Racks

Section: 6.3 Trees

Plant one tree in the parkway for approximately every 30' of street frontage, unless already existing.

If it is physically infeasible to plant this number trees, the maximum number possible shall be planted and the balance of trees shall be planted in a public area within a one-half mile radius of the Project site.

If the project is within the boundaries of a Streetscape Plan, they shall refer to the Plan for guidance on the tree type. Otherwise, native and/or drought tolerant species shall be planted.

Street Trees

Section: 6.4 Landscaping

Plant native and/or drought tolerant plants per the Metropolitan Water District's Be Waterwise Program, or the LARMP Landscaping Guidelines, where parkways exists.

Information on the Be Waterwise Program is available at http://www.bewaterwise.com. The LARMP Landscaping Guidelines are available at http://ladpw.org/wmd/watershed/la/larmp.

Parkway landscape must meet certain standards, including but not limited to the following: Plants and shrubs installed within the parkway area need to be less than 30" in height at full maturity. Plants or non-vegetative groundcover installed within the 18" of the back of the curb need to be walkable to allow for the ingress/egress of parked vehicles. Any plant material installed in the parkway other than turf or a walkable groundcover is considered non-standard, requiring a Revocable Permit from the Bureau of Engineering.

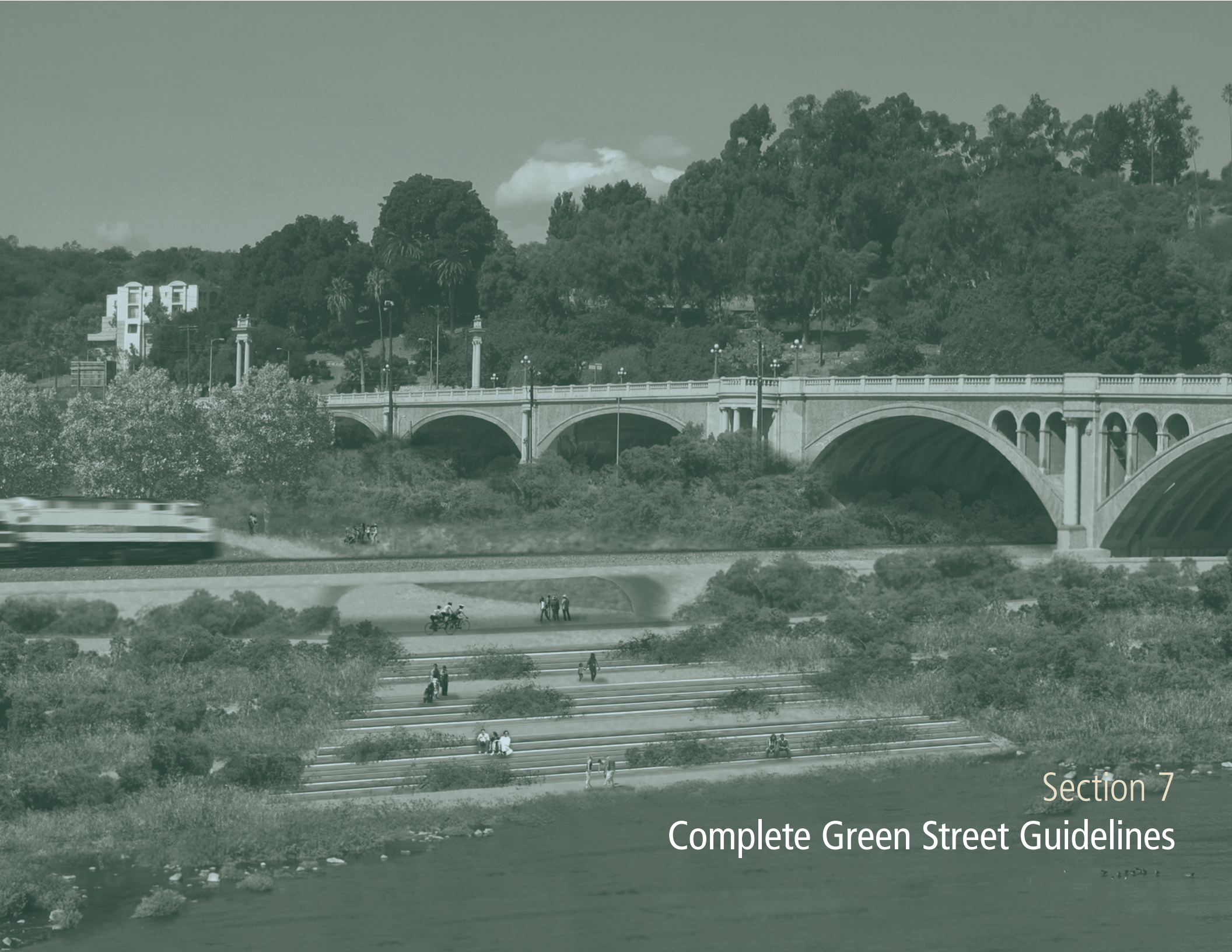
A Project's specific issues must be taken into consideration such as pedestrian/vehicle visibility near driveways and street corners and maintaining a 45' visibility triangle at non-controlled intersections/corners. Plant materials must be substantially lower growing (i.e. low ground covers versus shrubs) within 6' of driveways and alley entrances.

In cases in which an irrigation system is necessary, a smart irrigation system shall be installed. To install an irrigation system within the parkway, the property owner is required to obtain a Revocable Permit from the Bureau of Engineering.

Landscaped Parkway

Section: 6.5 Covenant

The property owner(s) shall file a covenant, running with the land, that the property owner(s) will, in perpetuity, maintain landscaping and any irrigation system(s) in the parkway area that directly abuts the property.



Section 7
Complete Green Street Guidelines

A conceptual vision for the Los Angeles River near the Los Angeles State Historic Park.
Photo courtesy of the LARRMP

Section: 7.0 COMPLETE GREEN STREET GUIDELINES

These guidelines serve as options to mitigate the environmental impact of a project as well as guide the design of street improvements undertaken as a result of publicly financed projects.

The decision maker shall implement appropriate measure(s) to provide maintenance of the pedestrian scale improvement(s) in perpetuity. Such means may include a covenant running with the land or the local Business Improvement District assuming responsibility. Consultation with other departments may be necessary.

Section: 7.1 Pedestrian Scale Improvement

Provide pedestrian street crossings that are zebra striped, unless a unique community style of pedestrian crossings has been established.

Provide pedestrian street crossings that create the shortest possible crossing distance. This could include curb extensions. In some cases it may require a crossing island if it is determined that the roadway is too wide to cross at once.

Provide street crossings that offer pedestrian safety and comfort within the crossing area. This could include the following features: an advance stop bar; pedestrian signals indicating when to cross; sidewalk ramps that are wholly contained within the crossing; signalized crossings that automatically provide ample time to cross safely; and curbs that maintain a smaller turning radius.

Increase the parkway and/or sidewalk width to provide improved pedestrian circulation that is appropriate for the area. This may require the granting of an easement.

Pedestrian Crossing

Section: 7.2 Water Conservation

Redesign cul-de-sacs, street ends and vacated streets to provide pocket parks which can serve as gateways to the Greenway and can reduce stormwater runoff. Design shall be sensitive to community safety and character.

Install dual/purple pipe (recycled water) lines whenever feasible due to proximity to the existing system and/or planned expansions.

Design the parkway to assist in the treatment and infiltration of stormwater as well as dry-weather run off from the abutting sidewalk and the adjacent street area. The adjacent street area shall be defined as that portion of the street adjacent to the project's street frontage that extends from the centerline of the street to the curb face.

When infiltrating stormwater through the parkway, proper design measures must be taken to protect adjacent properties, existing street trees, and the adjacent roadway from possible adversarial affects of introducing water sub-grade. Reference and training for design procedures is available in the Bureau of Engineering's Storm Drain Design Manual (http://eng.lacity.org/techdocs/) as well as in the Los Angeles County Hydrology Manual (http://ladpw.org/wrd/publication/).

Section: 7.3 Street Calming

Where appropriate, provide traffic circles on Collector or Local streets to encourage reduced traffic speeds. Traffic circles should include, where feasible:
native plants and landscaping to support local habitat,
the treatment and infiltration of stormwater runoff, and
incorporation of river-themed art.

Provide on-street parking where an active pedestrian zone is encouraged.

Provide bump outs/chokers as needed to slow traffic.

Traffic Circle

Section: 7.4 Bicycle Lanes

Incorporate Class II and/or Class III bicycle lanes into street improvements in accordance with the City's Bicycle Plan.

Design and develop multi-use lanes for bicyclists and pedestrians as part of the River Greenway in coordination with the Department of Transportation, the Bueau of Engineering, the Department of City Planning, and other apporpriate agencies.

Section: 7.5 Transit Amenity Improvement

Design and install a bus stop garden.

Provide an increased parkway and/or sidewalk width that is sized appropriately for the area. This may require the granting of an easement.

Install a bus shelter and receptacle bins if a bus stop exists within the property's street frontage. The applicant shall consult the City contract to determine the appropriate site dimensions.

Bicycle Lanes

Bus Stop Shelter

CITY OF LOS ANGELES
CALIFORNIA ENVIRONMENTAL QUALITY ACT

INITIAL STUDY

(Article I - City CEQA Guidelines)

Council District: 1,2,3,4,5,6,9,12,13,14 Date: 10/31/2008

Lead City Agency: Department of City Planning

Project Title: The enactment of the Los Angeles River Improvement Overlay (LA-RIO) CPC-2007-3036-CA, the first River Improvement Overlay District (RIO) pending adoption of CPC 2008-3125-CA

I. PROJECT DESCRIPTION

An ordinance establishing the Los Angeles River Improvement Overlay (LA-RIO), adjacent to both sides of, but not including, the Los Angeles River. The LA-RIO provides guidelines and standards for all new development and significant rehabilitation projects located within its boundaries to enhance the watershed, urban design, and mobility options within the area. The plan does not change or restrict existing zoning, land use, or intensity of land use, nor does it grant new rights to land not zoned for development.

A. Location

The LA-RIO, spanning approximately 32 miles and encompassing approximately one-half mile on each side of the Los Angeles River, includes portions of ten community plan areas. It extends from Topanga Canyon Boulevard (just west of the headwaters of the Los Angeles River), east and then south to the point at which the River flows out of the City of Los Angeles at 26th Street in the Boyle Heights area.

B. Purpose

The LA-RIO has its origins in the urban design goals and principles established in the Los Angeles River Revitalization Master Plan (LARRMP) adopted by the City Council on May 9, 2007, after certification of the Final EIR for the LARRMP. It also builds upon the previous Los Angeles River Master Plan adopted by the County of Los Angeles in 1996, for which a mitigated negative declaration was prepared and adopted by the County. LA-RIO is intended to support the vision of the LA River and its adjacent Greenway as a livable, walkable, and sustainable community that is oriented to the River and the surrounding streets—as envisioned in the aforementioned City and County documents.

C. Description

The LA-RIO intends to establish requirements that are in addition to those set forth in the planning and zoning provisions of Chapter 1 of the Los Angeles Municipal Code (LAMC) and do not convey any rights not otherwise granted under such provisions. The LA-RIO plan does not grant development rights on land that is currently not zoned for development. Further, the LA-RIO does not change or restrict existing zoning, land use, or intensity of land use. Additionally, the LA-RIO plan area is adjacent to, but does not include, the Los Angeles River.

Within the boundaries of the LA-RIO there are presently two Specific Plans, two Community Design Overlay Districts (CDOs), two Streetscape Plans, one Pedestrian Oriented District (POD), and four Community Redevelopment Agency of Los Angeles (CRA/LA) Redevelopment Project Areas. The Specific Plans are Warner Center and the Ventura/Cahuenga Boulevard Corridor. The CDOs are Downtown Canoga Park and Commercial Corridor Canoga Park. The Streetscape Plans include Sherman Oaks and Studio City – Cahuenga Pass. The POD is the Atwater Village POD. The CRA/LA project areas are Reseda/Canoga Park, Chinatown, Central Industrial, and Adelante Eastside.

Other plans may apply to projects within the LA-RIO boundaries. Projects are required to stay consistent with all applicable plans and meet the strictest requirement in the case of multiple guidelines and/or standards.

No building permit shall be issued within the LA-RIO boundaries for a building or a structure or the alteration or rehabilitation of an existing building for which construction costs exceed 50% of the replacement cost of the existing building unless it has demonstrated compliance with the LA-RIO Guidelines and Street Standards.

All projects, prior to obtaining a building permit from the Department of Building and Safety, shall be referred to City Planning for sign off from the LA-RIO clearance item. Typically, this will require that projects demonstrate compliance with Sections 5.0 and 6.0 of the LA-RIO and in circumstances where additional street mitigations have been imposed as conditions of approval, Section 7.0. The compliance requirements for the three sections are described below.

In order to obtain approval for the Property Improvement Guidelines, the applicant shall provide a complete copy of Section 5.0 of the Ordinance signed by the owner and architect of record, along with supporting documentation that demonstrates that the project has complied with the point system established in the LA-RIO Ordinance. Compliance shall be met by demonstrating how the project will achieve the minimum number of points required for the building type as defined in Sections 2.0 and 5.0 of the LA-RIO. With the exception of single family homes, projects are required to achieve a minimum of 20 points. Single family homes must achieve a minimum of 10 points from the Watershed category only. The categories and their corresponding point requirements for all other project types are as follows: Watershed (10); Urban Design (5); Mobility (5).

In addition, projects, with the exception of single family homes, will be required to demonstrate compliance with the Complete Green Street Standards defined in Section 6.0 of the LA-RIO. The project's site drawings shall need to identify and illustrate each of the Standards with which the project has complied.

Lastly, projects may have imposed upon them individual Complete Green Street Guidelines as defined in Section 7.0 of the LA-RIO. These Guidelines may be required of projects as a condition of discretionary approval.

II. EXISTING ENVIRONMENT

Please refer to the Environmental Impact Report (State Clearinghouse No. 2006041050) certified by the City of Los Angeles on May 9, 2007, for the Los Angeles River Revitalization Master Plan for a thorough discussion of the existing environment. Additional CEQA documents incorporated by reference include the City's Integrated Resource Plan EIR certified in December 2007, and the LA County's Los Angeles River Master Plan adopted in 1996.

III. ENVIRONMENTAL EFFECTS

A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources cited in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

Sources of information that adequately support findings of no significant impact are referenced either by the number in parentheses following each question or are discussed below each numbered section. All sources referenced are cited at the end of this document and are available by appointment for review at the offices of the Bureau of Engineering, 650 South Spring Street, Suite 500, Los Angeles.

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
1. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista? Reference: (20) Sections L1 and L2 Comment: No impacts are anticipated. For a discussion of the current environmental setting and possible impacts, please refer to the attached Environmental Analysis. The region of influence for visual resources includes the Los Angeles River, a half-mile on either side of the river and surrounding areas. The LA-RIO area traverses the Los Angeles Basin, from the San Fernando Valley and eastern Los Angeles County, through Central Los Angeles. It passes through a highly urbanized area of the Los Angeles County. Residential neighborhoods, commercial and industrial districts, office buildings, and transportation corridors, such as Interstates 5 and 710 and railways, are included in the district. Open spaces, where development is limited and vegetation dominates the landscape, are limited.	☐	☐	☐	☒
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? Reference: (20) Sections L1 & L2 Comment: There are no roadways within the region of influence that are part of California's Scenic Highway Program (Caltrans 2006).	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings? Reference: (12) Sections L1 and L3 Comment: See discussion in the LA-RIO Environmental Analysis attached.	☐	☐	☐	☒
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area? Reference: (20) Section L4 Comment: Light associated with the urban infrastructure illuminates the sky throughout the entire metropolitan area (City of Los Angeles 2005). Most areas throughout are fully developed with street lighting or commercial/industrial lighting.	☐	☐	☒	☐
2. AGRICULTURE RESOURCES – Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? Reference: (5)	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
Comment: No impacts are anticipated. The Los Angeles County Important Farmland information indicates that the River Corridor is primarily classified as Urban and Built-Up Land (DLRP 2004b). GIS data for 2004-2005 from the California Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program (FMMP) indicates that Prime and Unique Farmlands exist on the grounds of Pierce College, to the southeast of the Canoga Park in the Woodland Hills area. The same source information identifies Prime Farmlands to the south and the northeast of the Sepulveda Basin in the Encino area. Agriculture was at one time a major activity in the San Fernando Valley, both upstream and downstream of Sepulveda Reservoir, but it declined sharply between 1946 and the early 1970s, as urban growth in the valley displaced the existing farmland. In its 1989 Water Control Manual for Sepulveda Basin, the U.S. Army Corps of Engineers (Corps) stated that it leased about 340 acres of Sepulveda Reservoir Land to commercial agriculture for production of corn, alfalfa, and other truck crops (Corps 1989). Current GIS data of FMMA indicates that there are now approximately 170 acres of prime farmlands around Sepulveda Basin (DLRP 2005a). No other lands designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance exist within the LA-RIO.				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? Reference: (5) Comment: None	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland, to non-agricultural use? Reference: (5) Comment: None	☐	☐	☐	☒
3. AIR QUALITY would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan? Reference: (19) Comment: No impacts are anticipated.	☐	☐	☐	☒
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? Reference: (20) Sections E1, E2, and E3; (13) Comment: None	☐	☐	☐	☒
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? Reference: (19) Comment: None	☐	☐	☐	☒
d) Expose sensitive receptors to substantial pollutant concentrations? Reference: (20) Sections E1, E2 and E3 Comment: None	☐	☐	☐	☒
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
Reference: (20) Section E2 Comment: None				
4. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Reference: (20) Section G; (5) Comment: None.	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or US Fish and Wildlife Service? Reference: (20) Section G; (15); (16) Comment: No.	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? Reference: (20) Section G; (16) Comment: No impacts are anticipated.	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? Reference: (20) Section G Comment: None	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? Reference: (20) Section G; (5) Comment: None	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? Reference: (20) Section G; (10) Conservation Element Comment: No significant impacts are anticipated.	☐	☐	☐	☒
5. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5? Reference: (7, 20) Comment: Impacts are less than significant because changes to the project require discretionary action and the case will be individually analyzed by the Decision Maker.	☐	☐	☒	☐
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations Section 15064.5? Reference: See the attached Environmental Analysis.	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
Comment: None				
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? Reference: (20) Section 6-3.2 Comment: None	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries? Reference: Comment: None	☐	☐	☐	☒
6. GEOLOGY AND SOILS – Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? References: (17) Comment: No impacts are anticipated.	☐	☐	☐	☒
ii) Strong seismic ground shaking? Reference: (20) Section C1 Comment: None	☐	☐	☐	☒
iii) Seismic-related ground failure, including liquefaction? Reference: (20) Section C1; (3); (17) Comment: Of the 32 miles the LA River traverses through the City of LA, approximately 28 are within liquefiable or potentially liquefiable areas and all new construction within these areas must conform to current seismic and geologic construction standards.	☐	☐	☒	☐
iv) Landslides? Reference: (12) Section C1 Comment: None	☐	☐	☐	☒
b) Result in substantial soil erosion or the loss of topsoil? Reference: (20) Section C2 Comment: None	☐	☐	☐	☒
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? Reference: (20) Section C2, (14) Comment: None	☐	☐	☐	☒
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? Reference: (1) Comment: None	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? Reference: (17, 21) Comment: None.	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
7. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? Reference: (20) Section H1 Comment: See discussion in the attached. Project may bring increased number of people to additional recreational areas within LA-RIO district. However, the project would also decrease, through more intense land use review, the possibility of exposure to hazardous materials.	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? Reference: (20) Section H1 Comment: LA-RIO advocates creation of safe streets where a clear demarcation of public and private space exists. Additionally, by orienting buildings to the street equips it with the ability to insure the safety of both residents and strangers. By having more "eyes on the street" the safety of the area is increased.	☐	☐	☐	☒
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? Reference: (20) Section H1; (15) Comment: None	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? Reference: (17, 18, 20) Comment: See discussion in the attached. Checked databases (see the EDR reference in the attached Environmental Analysis) indicate little possibility of impacts despite existence of sites of concern within the LA-RIO area.	☐	☐	☒	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? Reference: (20) (23) Comment: None	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? Reference: (17, 18, 20) Comment: None	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? Reference: (20) Section H1 Comment: No	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? Reference: (20) Section J2 Comment: No	☐	☐	☐	☒
8. HYDROLOGY AND WATER QUALITY -- Would the project:				

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
a) Violate any water quality standards or waste discharge requirements? Reference: (20) Section D2. See the attached Environmental Analysis. Comment: None	☐	☐	☐	☒
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? Reference: (20) Section D3 Comment: See discussion of groundwater in the attached.	☐	☐	☐	☒
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? Reference: (20) Section D1; (15) Comment: No	☐	☐	☐	☒
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site? Reference: (15); (20) Section D1; (15); (17) Comment: No.	☐	☐	☐	☒
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? Reference: Comment: No. The LA-RIO encourages the minimization of stormwater runoff and does not create or contribute a degree of runoff or polluted runoff than is otherwise anticipated within that zone.	☐	☐	☐	☒
f) Otherwise substantially degrade water quality? Reference: (20) Section D2; (15) Comment: No.	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? Reference: (20) Section D1; (7) Comment: No	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows? Reference: (20) Section D1; (7) Comment: No.	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? Reference: (20) Section D1; (7) Comment: The LA-RIO plan does not grant development rights on land that is currently not zoned for development. Further, the LA-RIO does not change or restrict existing zoning, land use, or intensity of land use. Additionally, the LA-RIO plan area is adjacent to, but does not include, the Los Angeles River.	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
Reference: (20) Section C1 Comment: No.				
9. LAND USE AND PLANNING -- Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
Reference: (20) Section A2 Comment: the attachment contains a discussion of existing land uses within the LA-RIO area. Impact of this project is only positive in reference to land use impacts.				
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? Reference: (20) Section A1; (10) (20) (21) Comment: Within the boundaries of the LA-RIO there are presently two Specific Plans, two Community Design Overlay Districts (CDOs), two Streetscape Plans, one Pedestrian Oriented District (POD), and four Community Redevelopment Agency of Los Angeles (CRA/LA) Redevelopment Project Areas. The Specific Plans are Warner Center and the Ventura/Cahuenga Boulevard Corridor. The CDOs are Downtown Canoga Park and Commercial Corridor Canoga Park. The Streetscape Plans include Sherman Oaks and Studio City – Cahuenga Pass. The POD is the Atwater Village POD. The CRA/LA project areas are Reseda/Canoga Park, Chinatown, Central Industrial, and Adelante Eastside. Other plans may apply to projects within the LA-RIO boundaries. Projects are required to stay consistent with all applicable plans and meet the strictest requirement in the case of multiple guidelines and/or standards.	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan? Reference: (14) (16) (20) Comment: None	☐	☐	☐	☒
10. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? Reference: (20) Section C4 Comment: None.	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? Reference: See the attached discussion. Comment: No. See the attached Environmental Analysis.	☐	☐	☐	☒
11. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? Reference: (20) Sections I1, I2, I3, and I4. Discussion of noise related issues is included in the attachment.	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
Comment: No impacts are anticipated.				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? Reference: (20) Sections I1, I2, I3, and I4 Comment: No impacts are anticipated.	☐	☐	☐	☒
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Reference: (20) Sections I1, I2, I3, and I4 Comment: No impacts are anticipated.	☐	☐	☐	☒
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? Reference: Although more people may be drawn to activities within the LA-RIO districts, their presence will be regulated and subject to future project specific requirements of both CEQA and LA-RIO Ordinance. Comment: Noise created during construction will be temporary and in compliance with the municipal code, which restricts the hours during which construction can occur.	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? Reference: (20) Section I4 Comment: No	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? Reference: (23) Comment: No private airstrips are located within the immediate vicinity of the project area.	☐	☐	☐	☒
12. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? Reference: (20) Section B2 Comment: See the discussion of population and housing in the attached Environmental Analysis. The LA-RIO ordinance will not have any deleterious impact on population and housing.	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? Reference: (20) Section B2 Comment: None	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? Reference: (20) Section B2 Comment: None	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
13. PUBLIC SERVICES --				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i) Fire protection?	☐	☐	☐	☒
Reference: (20) Section J2. See the attached Environmental Analysis. Comment: No deleterious impacts are anticipated.				
ii) Police protection?	☐	☐	☐	☒
Reference: (20) Section J1 Comment: See discussion in the attached. Police services are adequate to cover services required.				
iii) Schools?	☐	☐	☐	☒
Reference: (20) Section J3 Comment: See impacts on schools in the attached. No impact is anticipated.				
iv) Parks?	☐	☐	☐	☒
Reference: (20) Section J4 Comment: Project will enhance public recreation in the LA-RIO district.				
v) Other public facilities?	☐	☐	☐	☒
Reference: (20) Section J5 Comment: No impacts are anticipated.				
14. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? Reference: (20) Section J4 Comment: No significant impacts are anticipated with implementation of mitigation measures discussed in the attached Environmental Analysis.	☐	☒	☐	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? Reference: See discussion in the attached. Comment: No significant impacts are anticipated with implementation of mitigation measures discussed in the attached environmental analysis.	☐	☒	☐	☐
15. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? Reference: (20) Sections F1, F2, F3, F4, and F8 Comment: See discussion in the attached Environmental Analysis. No impacts anticipated.	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways? Reference: (20) Section F1, F2, F3 & F4 Comment: See discussion in the attached. With mitigation, there will be less than significant impact.	☐	☐	☒	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks? Reference: Same as above. Comment: Same as above.	☐	☐	☒	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? Reference: (20) Section F5 Comment: No.	☐	☐	☐	☒
e) Result in inadequate emergency access? Reference: (20) Sections F5, F8, and J2 Comment: No impacts are anticipated.	☐	☐	☐	☒
f) Result in inadequate parking capacity? Reference: (20) Sections F5 and F7 Comment: See discussion in the attached. Note mitigation measures.	☐	☒	☐	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)? Reference: See discussion in the attached Environmental Analysis. Comment: No significant impacts are anticipated with implementation of mitigation measures discussed in the attached environmental analysis.	☐	☐	☐	☒
16. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? Reference: (20) Section K2 Comment: No impacts are anticipated.	☐	☐	☐	☒
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? Reference: (20) Sections K1 and K2 Comment: No impacts are anticipated.	☐	☐	☐	☒
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? Reference: (20) Section D1 Comment: No impacts are anticipated.	☐	☐	☐	☒
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? Reference: (20) Section K1 Comment: No impacts are anticipated.	☐	☐	☐	☒
e) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? Reference: (20) Section K2 Comment: No impacts are anticipated.	☐	☐	☐	☒

Issues	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant	No Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? Reference: (20) Section K3 Comment: No impacts are anticipated.	☐	☐	☐	☒
g) Comply with federal, state, and local statutes and regulations related to solid waste? Reference: (20) Section K3 Comment: No impacts are anticipated.	☐	☐	☐	☒
17. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? Reference: See attached environmental analysis. Comment: See attached environmental analysis.	☐	☐	☐	☒
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? Reference: See the attached Environmental Analysis. Comment: With the adoption of mitigation measures, no significant impacts are anticipated.	☐	☐	☒	☐
c) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals? Reference: Attachment Comment: None	☐	☐	☐	☒
d) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? Reference: Attachment Comment: With the adoption of the mitigation measures specified below, no significant impacts are anticipated.	☐	☐	☒	☐
e) The project has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals. Reference: Comment: No impacts are anticipated	☐	☐	☐	☒

IV. ENVIRONMENTAL IMPACT EVALUATION

See the attached Environmental Analysis.

V. MITIGATION MEASURES

Mitigation actions to reduce impacts on recreational resources

Appropriate mitigation actions would vary, depending on the type of resource impacted and the extent of the impact. Generally, mitigation measures will be identified to accomplish the following:

- Avoid recreation resource impacts altogether by not taking a certain action or parts of an action;
- Minimize recreation resource impacts by limiting the degree or magnitude of the action and its implementation;
- Rectify the recreation resource impact by repairing, rehabilitating, or restoring the impacted land use (for example, providing on-site recreational amenities where impacts occur);
- Reduce or eliminate the land use impact over time by preservation and maintenance operations;
- Compensate for the land use impact by replacing or providing substitute resources;
- Provide direct support to the LARRMP approved River management entities;
- Review all future bikeway proposals for the River Corridor for consistency with guidelines specified for the development of Class I Bikeways;
- Review all future landscaping proposals for the River Corridor for consistency with the Los Angeles River Master Plan Landscaping Guidelines and Plant Palettes;
- Review all future signage proposals for the River Corridor for consistency with the Los Angeles River Master Plan Sign guidelines; and
- Review all future proposals for the River Corridor that involve enhancing access for disabled persons for consistency with guidelines developed through the Americans with Disabilities Act.

Transportation Mitigation Measure

- For each construction site other than single family residence or projects deemed exempt from the requirements of the California Environmental Quality Act (CEQA), a construction traffic management plan may be prepared and submitted to LADOT for review and approval before any construction work began. This plan should include
  - the designation of haul routes for construction-related trucks,
  - the location of access to the construction site,
  - any driveway turning movement restrictions,
  - temporary traffic control devices or flagmen,
  - travel time restrictions for construction-related traffic to avoid peak travel periods on selected roadways, and
  - designated staging and parking areas for workers and equipment;
- Where construction would occur within a public street ROW, the following mitigation measures would also be applied:
  - A traffic control plan would be prepared for each construction site for projects--other than single family residence or projects deemed exempt from the requirements of the California Environmental Quality Act (CEQA)--and submitted to LADOT for review and

approval prior to the start of any construction work. This plan would include the location of any lane closures, restricted hours during which lane closures would not be allowed, local traffic detours (where reasonable alternate routes exist), protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, temporary left-turn restrictions, temporary traffic signals, warning signs), access to abutting properties, and provisions to maintain emergency access through construction work areas,

- Available street space would be fully used to minimize lane reductions on affected streets, including eliminating on-street parking where necessary,
- Left-turn restrictions would be implemented as appropriate on restriped street segments to facilitate the movement of through traffic,
- Travel lanes would be eliminated only when absolutely necessary,
- Alternative pedestrian and bicycle access routes would be provided where sidewalks, crosswalks, or bike lanes would be affected,
- Advance notice would be provided to any affected residents and businesses and property owners in the vicinity of each construction site, and, where existing property access would be reduced, alternative means of access should be identified,
- Emergency service providers (police, fire, ambulance, and paramedic services) would be notified of any lane closures, construction hours, or changes to local access and to identify alternative routes where appropriate, and
- Public transit providers (MTA, LADOT Commuter Express, and Glendale Bee Line) would be notified of any lane closures and construction hours, and temporary bus stops should be established within a reasonable walking distance of any displaced bus stops;

Employing the mitigation actions described above would reduce any temporary adverse impacts from implementation of the LA-RIO ordinance.

VI. COMPATIBILITY WITH EXISTING ZONING AND PLANS

Project is compatible with the Los Angeles River Revitalization Master Plan adopted in May 2007. It is also compatible with the Integrated Resource Plan EIR recertified in December 2007, and the LA County's Los Angeles River Master Plan adopted in 1996. The project is also in conformity with the City's General Plan.

VII. NAME OF PREPARER

Ara J Kasparian, Ph.D.

VIII. DETERMINATION - RECOMMENDED ENVIRONMENTAL DOCUMENTATION

A. Summary

With the adoption of the mitigation measures cited above, the project would not have a significant impact on the environment. Consequently, a mitigated negative declaration\ must be prepared.

B. Recommended Environmental Documentation

On the basis of this initial evaluation, I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described in Section V have been added to the project. A Mitigated Negative Declaration should be prepared.

Reviewed By:

Approved By:

ATTACHMENTS:

1. LA-RIO ENVIRONMENTAL ANALYSIS
2. LA-RIO DRAFT ORDINANCE

REFERENCES:

Sources of information that adequately support findings of no significant impact are referenced by number in parentheses following each question in Section III. All sources so referenced are cited below and are available by appointment for review at the offices of the Bureau of Engineering, 650 South Spring Street, Suite 500, Los Angeles. Answers to other questions are discussed below each numbered section.

1. American Public Works Assoc. S. California Chpt. Standard Specifications for Public Works Construction.

2. American Public Works Assoc. S. California Chpt. Work Area Traffic Control Handbook.

3. California Building Standards Commission , 1994. Uniform Building Code, [California Code of Regulations, Title 24, Part 2]. Table 18-1-B.

4. California Code of Regulations, Section 15064.5 “Determining the Significance of Impacts to Archeological and Historical Resources.”

5. California Dept. of Conservation, 1997. California Agricultural Land Evaluation and Site Assessment Model.

6. California Dept. of Conservation, Div. of Mines and Geology. Official Map of Seismic

Hazard Zones.

7. City of Los Angeles, Dept. of Public Works, Bur. Engineering. Historic Resources Inventory. Electronic data base.

8. City of Los Angeles, Dept. of Public Works. Standard Plan S-610.

9. City of Los Angeles, Dept. of Public Works. Standard Plans.

10. City of Los Angeles. Municipal Code.

11. City of Los Angeles. Policies for the Installation and Preservation of Landscaping and Trees on Public Property. Adopted by the City Council on September 21, 1971.

12. City of Los Angeles. Tree Removal Mitigation Agreement Between the Bureaus of Engineering and Street Maintenance. Adopted by the Board of Public Works October 15, 1990.

13. Diversity Database. California Dept. of Fish and Game, October 1995. California Natural Diversity Database. Internet version at www.dfg.ca.gov/whdab/cnddb.htm

14. Envir. Atlas. City of Los Angeles, Dept. of City Planning. Environmental Data Atlas.

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CITY OF LOS ANGELES
OFFICE OF THE CITY CLERK
ROOM 395, CITY HALL
LOS ANGELES, CALIFORNIA 90012
CALIFORNIA ENVIRONMENTAL QUALITY ACT

PROPOSED MITIGATED NEGATIVE DECLARATION
THE LOS ANGELES RIVER IMPROVEMENT OVERLAY (LA-RIO)

Lead City Agency	**Council Districts**
City of Los Angeles	1, 2, 3, 4, 5, 6, 9, 12, 13, 14

Project Title	**Case Number**
ENV-2007-3037	CPC-2007-3036-CA

Project Location
Approximately one-half mile on each side of the Los Angeles River.

Project Description
An ordinance establishing the Los Angeles River Improvement Overlay (LA-RIO), adjacent to both sides of, but not including, the Los Angeles River. The LA-RIO provides guidelines and standards for all new development and significant rehabilitation projects located within its boundaries to enhance the watershed, urban design, and mobility options within the area. The plan does not change or restrict existing zoning, land use, or intensity of land use, nor does it grant new rights to land not zoned for development.

Finding
The City Planning Department of the City of Los Angeles has proposed that a mitigated negative declaration be adopted for this project because the mitigation measure(s) outlined on the attached page(s) will reduce any potential significant adverse effects to a level of insignificance. See attached sheets for imposed mitigation measures.

Person Preparing this Form	**Title**	**Phone**
Deborah Kahen	Planning Assistant	(213) 978 – 1395

Address	**Signature**	**Date**
200 North Spring Street, 7th Floor Los Angeles, CA 90012		

The LA-RIO plan does not grant development rights on land that is currently not zoned for development. Further, the LA-RIO does not change or restrict existing zoning, land use, or intensity of land use. Additionally, the LA-RIO plan area is adjacent to, but does not include, the Los Angeles River. The intent of this ordinance is to facilitate development design within the LA-RIO boundaries that enhances the watershed, urban design and mobility of the area.

The enactment of the LA-RIO and this Mitigated Negative Declaration (MND) are not intended to grant rights to implement any specific development project, including those envisioned in the Los Angeles River Revitalization Master Plan (LARRMP). Projects within the proposed LA-RIO Supplemental Use District will be required to be evaluated on a project-by-project basis for CEQA compliance.

AESTHETICS

In the southern reaches, the areas covered under the LA-RIO district are bordered by mixed uses and thus have a varied visual character. Along Valleyheart Drive in the San Fernando Valley, the area meanders and is bordered by large shrubs that provide cool shaded walkways. In contrast, a wide, barren easement borders the Tujunga Wash, and in downtown Los Angeles there is only limited access to an intensely urban and industrial riverfront. In the San Fernando Valley, the river is concrete lined and linear. Trees next to buildings sparsely line the river where Bell Creek and Calabasas Creek meet. Light and glare in this area is primarily associated with outdoor lighting for buildings. There is outdoor lighting for parking lots and the high school sports field, as well as street lighting.

In downtown Los Angeles, a series of Art Deco and Classical Revival style bridges span the area covered within the LA-RIO district (County of Los Angeles 1996). Historic buildings and sites add to the unique landscape of the urban environment. Rail lines are found at various locations adjacent to the Los Angeles River and with the LA-RIO districts. Depending on location, the number of rail lines and the frequency of their use vary. The rail lines that are used infrequently or not at all are more likely to have a neglected appearance, which can diminish the attractiveness of an area. During most of the year, the cement channels have minimal water flows, various amounts and species of vegetation (including weeds and nonnative species), litter and debris, and, in many locations, graffiti.

CULTURAL AND PALEONTOLOGICAL RESOURCES

Cultural resources are locations of human activity, occupation, or use. They include expressions of human culture and history in the physical environment, such as archaeological sites, historic buildings and structures, or other culturally significant places. Cultural resources can also be natural features, plants, and animals or places that are considered to be important or sacred to a culture, subculture, or community. Resources may be important individually or as part of a grouping of complementary resources, such as a historic neighborhood.

Historic Buildings and Structures: Historic building and structures are typically identified through archival and library research, followed by field reconnaissance and recordation. Historic buildings and structures are architecturally, historically, or artistically important individual and groups of residential, commercial, industrial, and transportation properties. In the City of Los Angeles there are several types of historic designations:

- Historic-Cultural Monument designation by the city's Cultural Heritage Commission and approved by the City Council;
- Designation by the Community Redevelopment Agency (CRA) as being of cultural or historical significance within a designated redevelopment area;
- Inclusion by the City Council in an Historic Preservation Overlay Zone (HPOZ);
- Listed or eligible for listing on the California Register of Historical Resources (CRHR);
- California Point of Historical Interest;
- California Historical Landmark; or
- Listed or eligible for listing on the National Register of Historic Places (NRHP).

Traditional cultural properties are places associated with the cultural practices or beliefs of a living community. The significance of these places is derived from the role the property plays in a community's cultural identity, as defined by its beliefs, practices, history, and social institutions.

Identifying any traditional cultural property or sacred site requires direct consultations with potentially affected communities. For Native American communities, there is a consultation protocol that begins when the specific project locations are defined. The California Native American Heritage Commission (NAHC) maintains a confidential list of known and potential locations that may be of concern to contemporary Native American groups. The NAHC also provides planners with a list of tribes and current contacts to help identify Native American traditional cultural properties and to ensure that cultural concerns are taken into account.

The record search of the River Corridor includes a one-mile zone centered on the river. Some areas include the recorded resources within block parcels identified for possible revitalization measures and recorded resources adjacent to or near the LA-RIO.

The Pueblo of Los Angeles was founded in 1781 as a civilian settlement of eleven families along the west bank of the Los Angeles River near the location of a Tongva village called Yaanga. It was laid out as a walled plaza with adobe structures according to a standard plan that the Spanish required of its New World colonies. An irrigation and public water conveyance system was constructed from the river. The Zanja Madre (mother ditch) fed smaller ditches for irrigating fields.

The principal types of vertebrate fossils typically yielded by formations in the Los Angeles area are marine and terrestrial vertebrate fossils and marine invertebrate fossils. Discussion of the paleontological setting is drawn from the City of Los Angeles, Integrated Resources Plan Final

Environmental Impact Report (LADPW & LADWP 2008). As in all arid and semiarid lands, water sources and river systems are centers for settlement and food procurement.

Prior to channelization, there were wetlands and marshes associated with the changing course of the free-flowing river. Soils in the floodplain were constantly enriched by sediment deposition. There was an abundant variety of plant and game resources that were available to native populations throughout the River Corridor. The original Pueblo of Los Angeles was founded along the river by Spanish settlers who constructed a ditch system to irrigate their crops. Land grants were later made to soldiers and other settlers. In the San Fernando Valley, former mission lands, including the River Corridor, were distributed and used primarily for grazing sheep and cattle. In the latter half of the nineteenth century, the land grants in the San Fernando Valley were broken up, and large-scale agriculture for the domestic and international markets largely replaced ranching. Rail lines were constructed that paralleled the old river travel routes. Beginning in the 1880s, residential and industrial development in the River Corridor grew rapidly. This growth required a more reliable water supply than the river could provide and greater control of the river to protect life and property. In 1913 Owens River water was brought to Los Angeles via an aqueduct. After heavy storms that same year, the river flooded nearly twelve thousand acres of land and washed out roads, bridges, and rail facilities. Periodic devastating floods continued until 1959 when the river had been completely contained in a series of concrete channels, flood control reservoirs, and debris basins. Many Los Angeles River containment and flood control facilities are now historic.

One hundred and eighty-one cultural resource studies are confirmed to have been conducted in the River Corridor. An additional 105 studies may be relevant but are missing confirmation of mapping information. There are 65 records of confirmed prehistoric and historic archaeological sites and 212 records of properties that have been evaluated for historic significance. An additional 196 properties have been evaluated and may be within the LA-RIO but whose location needs further verification. There are 59 properties that are eligible for listing on the CRHR, 57 on the NRHP, and 29 are already designated as City of Los Angeles Historic-Cultural Monuments. There are no recorded California Points of Historical Interest resources within an HPOZ or resources considered historical by the CRA in the LA-RIO.

The area now known as Canoga Park was part of land granted to the San Fernando Mission and later acquired by Andrés Pico. He conveyed the land to his brother Pío, who sold it in 1869 to a group of Anglo investors, the San Fernando Farm Homestead Association. Originally the land was primarily used to graze sheep and cattle but soon was given over to raising wheat on a massive scale. In the 1880s the first of several real estate booms led to establishment of many new towns in the San Fernando Valley. The construction of an aqueduct to bring water from the Owens River to the city of Los Angeles furthered the growth of the San Fernando Valley and the annexation of valley towns into the city. The town of Owensmouth, a direct reference to the aqueduct, was founded in 1912, centered along Sherman Way. In 1917, the City of Los Angeles annexed Owensmouth, and in 1930 the community was renamed Canoga Park. Canoga Park High School has been located where the Arroyo Calabasas and Bell Creek converge.

Four cultural resource studies are confirmed to have been conducted in the vicinity of the LA-RIO. No archaeological sites have been recorded and fifteen properties have been evaluated for historic significance. There are no recorded California Points of Historical Interest resources within an HPOZ or resources considered historical by the CRA within the LA-RIO. There is one property, the Canoga Park High School Auditorium that is eligible for the CHL and the NRHP. There are two designated City of Los Angeles Historic-Cultural Monuments. Consultation was not conducted in this phase to ascertain if any traditional cultural properties are present. The

following table lists the cultural resources confirmed to be in the vicinity of the Canoga Park High School area that are designated under a federal, state, or local historic preservation law.

Designated Canoga Park Area Cultural Resources

Resource Designation	Resource Type	Listing or Status[1]	Notes
Canoga Park High School Auditorium	Historic building	SHL, NRHP	Completed in 1939
Owensmouth Railroad Station	Historic building	LAHCM	1915—Spanish revival (recently destroyed by fire)
Canoga Park Branch Library	Historic building	LAHCM	1950—Intact example of mid-century modern architecture

[1]NRHP = National Register of Historic Places - Eligible; CRHR = California Register of Historical Resources – Eligible; CHL = California Historic Landmark; LAHCM = Los Angeles Historical-Cultural Monument

The LACM reported three fossil localities in the general vicinity (LACM 1213, 5125, and 6021). LACM 1213 yielded horse (Equus occidentalis) and ground sloth (Paramylodon). LACM 5125 yielded lanternfish (Myctophidea) and an extinct leatherback turtle (Psephorus) were found at LACM 6021.

In the River Glen Area, the river marks the border between two pre-1800 Spanish land grants: Rancho Los Feliz on the west side and Rancho San Rafael on the east. Jose Vicente Feliz and José María Verdugo were military officers who had served Spain in the establishment of the colony in Alta California. A large portion of Rancho Los Feliz has remained intact and was donated to the city of Los Angeles in 1896 by Griffith W. Griffith and is now Griffith Park. Rancho San Rafael was broken up in 1869 and largely incorporates the city of Glendale. The Area is located where runoff from the Verdugo Wash joined the river. Los Angeles purchased surface water rights in this reach from Griffith in 1885, allowing the city to better control and to use this resource. The LA-RIO also includes the former location of the Griffith Park Aerodrome, an airport that operated from 1912 to 1939.

Five cultural resource studies are confirmed to have been conducted in the LA-RIO area. No archaeological sites have been recorded, and twenty-one properties have been evaluated for historic significance. There are no confirmed cultural resources in the vicinity of the River Glen area, which are designated under a federal, state, or local historic preservation law. There are many potentially historic buildings and structures in this area, including the San Fernando Road Bridge, built in 1939 over the Verdugo Wash.

The LACM reported that fossil locality LACM 1880 northeast of the Los Angeles River in this area yielded bony fish remains of hatchetfish (Argyropelecus bullockii), bristlemouth

(Cyclothone), herring (Etringus), rockfish (Scorpaenidae), extinct deep sea fish (Chauliodus), slickheads (Alepocephalidae), cod (Eclipes), and croaker (Lompoquia) from the Puente Formation at unrecorded depths.

The Taylor Yard area is on the nexus of three of the earliest Spanish land grants in California. The River Corridor in this area was always a natural transportation route. What became San Fernando Road was part of El Camino Real linking Los Angeles with Mission San Fernando and the northern coastal settlements through the Cahuenga Pass and to the San Joaquin and Central Valleys via the Tejon Pass. Later, the Butterfield Overland Mail line passed through the opportunity zone. With the arrival of the railroad in 1876 and a second transcontinental line in 1886, the old ranchos were broken up and new communities were laid out to accommodate the influx of people from the east. The ethnically diverse neighborhoods in the LA-RIO continue to accommodate both recent arrival and long-time residents.

Taylor Yard itself is the site of a former freight rail switching yard and maintenance facility whose origins date back to 1888. For most of that time it was the major rail hub in Los Angeles and supported the development of industrial properties and working class residential communities within the area. The completion of a modern freight yard in the city of Colton in 1973 reduced the importance of Taylor Yard as a rail center, but some maintenance operations remain.

Sixteen cultural resource studies are confirmed to have been conducted in the vicinity of the area. Three archaeological sites have been recorded and 53 properties have been evaluated for historical significance. There are three properties eligible for the CRHR and two of these are also eligible for listing on the NRHP. There are four designated City of Los Angeles Historic-Cultural Monuments. The Dorris Place Elementary School Administration Building has been recommended as eligible for the NRHP and CRHR, but there is incomplete documentation for this property.

Taylor Yard Area Cultural Resources

Resource Designation	Resource Type	Listing or Status[1]	Notes
Navy and Marine Corps Reserve Center, #972	Historic structure, historic association	CHL, CRHR	1938-1941 Art Deco; largest enclosed structure without walls; over 100,000 servicemen processed in this facility.
Olive Switching Station	Historic building	CRHR, NRHP	1916 railyard facility
Richard Henry Dana Branch Library #2502	Historic building	CRHR, NRHP, LACHM	Library
Glassell Park School	Historic building	LACHM	1923 Spanish Colonial Revival/Art Deco architecture
Dorris Place Elementary School Administration	Historic building	CRHR, NRHP (both pending)	1922 Romanesque Revival architecture

Building			
Fletcher Drive Bridge #322	Historic bridge	LACHM	1927 concrete bridge over the Los Angeles River
Van de Kamp's Holland Dutch Bakery # 569	Historic building	LACHM	1930 thematic architecture, 16th Century Dutch Revival

[1]CRHR = California Register of Historical Resources – Eligible; NRHP = National Register of Historic Places – Eligible; CHL = California Historic Landmark; LAHCM = Los Angeles Historical-Cultural Monument

Chinatown-Cornfields area is centered on the former location of the Southern Pacific River Station and freight yard. The River Station was the first Southern Pacific facility in Los Angeles and site of the first transcontinental railroad station and depot in the region from 1876 through 1888. It served as the center of railroad freight operations for the Southern Pacific, and thus all of Los Angeles in the first quarter of the twentieth century and continued to serve as a freight yard until its closing in 1992. The railroad facility included a two-story depot and hotel, a large freight house, round house, turntable, ice house, and maintenance shops. No standing structures remain, but extensive archaeological resources have been recorded. The area is immediately north of the site where Los Angeles was founded. Some of the earliest recorded agriculture (1805) in Los Angeles was conducted in the river floodplain in this area, and remnants of the original zanja madre have also been found. Much of the early industrial development of Los Angeles occurred here, and the area includes parts of some of the original ethnic neighborhoods in Los Angeles, such as Sonoratown, Solano Canyon, El Pueblo, Old Chinatown, and Lincoln Heights.

Forty-four cultural resource studies are confirmed to have been conducted in the vicinity of the area. Nine historic archaeological sites have been recorded and 43 properties have been evaluated for historical significance. There are 17 properties eligible for the CRHR and 13 properties eligible for the NRHP. Two properties are formally listed on the NRHP. There are five state historic landmarks and 15 designated City of Los Angeles Historic-Cultural Monuments. One additional bridge is a candidate for NRHP and Historic-Cultural Monument designations. The following table lists the cultural resources confirmed to be in the vicinity of the Chinatown-Cornfields area which are designated under a Federal state or local historic preservation law.

Designated Chinatown-Cornfields Area Cultural Resources

Resource Designation	Resource Type	Listing or Status[1]	Notes
Los Angeles Terminal Annex Post Office	Historic building	CRHR, NRHP, LAHCM	1938 public building
Buena Vista Viaduct Bridge 53C-545	Historic Bridge	CRHR, NRHP	1910 Beaux Arts Revival
Main Street Bridge Bridge 53C-1010	Historic Bridge	CRHR, NRHP	1910

Designated Chinatown-Cornfields Area Cultural Resources

Resource Designation	Resource Type	Listing or Status[1]	Notes
Plaza 19-167017	Historic Los Angeles Plaza and Park	CRHR, NRHP, LACHM	1815
Los Angeles Plaza Historic District #2310	Historic district, multiple properties	CRHR, NRHP, LACHM	1815+
Vickrey-Brunswig Building 19-171607	Historic building	CRHR, NRHP	1888
Plaza House 19-171608	Historic building	CRHR, NRHP	1883
Plaza Church 19-173140	Historic building	CRHR, NRHP, CHL, LACHM	1822
Sepulveda Block 19-167015	Historic buildings	CRHR, NRHP	1883
Department of Water and Power Buildings 19-175280, 19-175281, 19-175282, 19-175284, 19-176368, 19-176369, 19-176370	Historic buildings	CRHR, NRHP, LACHM	1923-1937 Art Deco and Moderne architecture
Capitol Mill 19-170957	Historic mill structure	CRHR, NRHP	1855
Union Station 19-171159	Historic building	NRHP-L, LACHM, CRHR	
Plaza Substation 19-167182	Historic building	NRHP-L, LAHCM, CRHR	
Pico House #1013	Historic building	CHL; CRHR	1869, first three-story hotel in Los Angeles
Merced Theatre #1012	Historic building	CHL, CRHR, LACHM	1870, first theater in Los Angeles
Portola Trail Campsite #1	Historic place, historic association, no physical remains	CHL, CRHR, LAHCM	1769, site where Portola camped and of first mass celebrated in Los Angeles
Plaza Firehouse #1014	Historic building	CHL, CRHR,	1884, first firehouse

Designated Chinatown-Cornfields Area Cultural Resources

Resource Designation	Resource Type	Listing or Status[1]	Notes
		LAHCM	
Plaza Church Cemetery #26	Historic site	LAHCM	1823-1844, cemetery
North Spring Street Bridge 53C0859	Historic bridge	NRHP, LAHCM – Candidate	1928
Bernard Street Residence #2448	Historic building	LAHCM	
River Station, #82	Historic archaeological sites	LAHCM	1875 Site of original train station, rail yard and associated properties
Bruno Street, Los Angeles-211	Historic street	LAHCM	Street paved with original hand-hewn granite blocks
Albion Cottages and Milagro Market, #442	Historic buildings	LAHCM	1870 residences and store

[1]CRHR = California Register of Historical Resources – Eligible; NRHP = National Register of Historic Places – Eligible; NRHP - L= National Register of Historic Places – Listed; CHL = California Historic Landmark; LAHCM = Los Angeles Historical-Cultural Monument

Downtown Industrial area includes some of the earliest industrialized and residential areas of the city. On the west side of the river, rail yards and industry have dominated the landscape since the 1880s. Le Grande Railway Station, since demolished, was constructed here in 1893. On the east side of the river, Boyle Heights was developed as an early suburb and has been home to workers ever since. Boyle Heights was the initial point of settlement for many European immigrants. In the 1930s and 1940s, Mexican labor was recruited and eventually succeeded the European immigrants of Boyle Heights. The area includes some of Los Angeles' first public institutions, public buildings, and older homes.

Twenty-three cultural resource studies are confirmed to have been conducted in the vicinity of the area. Nine historic archaeological sites have been recorded and 82 properties have been evaluated for historical significance. There are 25 properties eligible for the CRHR and the NRHP. Two properties are designated as City of Los Angeles Historic-Cultural Monuments. Four additional bridges over the Los Angeles River are candidates for NRHP and Historic-Cultural Monument designations.

The following table lists the cultural resources confirmed to be in the vicinity of the Downtown Industrial area that are designated under a federal, state, or local historic preservation law.

Designated Downtown Industrial Area Cultural Resources

Resource Designation	Resource Type	Listing or Status[1]	Notes
El Paseo Inn 19-171553	Historic building	CRHR, NRHP	1914
San Antonio Winery	Historic Building	LAHCM	
Los Angeles Soap Company 19-167029	Historic building	CRHR, NRHP	1898
J. R. Newberry Building	Historic building	CRHR, NRHP	1900
James K. Hill and Sons Pickle Works	Historic building	CRHR, NRHP	1888
Hollenbeck Masonic Temple	Historic building	CRHR, NRHP	1923
Atchison Topeka and Santa Fe Outbound 19-174977	Historic linear resource	CRHR, NRHP	1906
Hollenbeck Junior High School 19-175249	Historic building	CRHR, NRHP	1923
Hollenbeck Junior High School Administration 19-175832	Historic building	CRHR, NRHP	1936
Hollenbeck Junior High School East Building 19-175833	Historic building	CRHR, NRHP	1936
Hollenbeck Junior High School Girls Gymnasium 19-175828	Historic building	CRHR, NRHP	1923
Hollenbeck Junior High School West Building 19-175834	Historic building	CRHR, NRHP	1936
Hollenbeck Junior High School Auditorium 19-175836	Historic building	CRHR, NRHP	1936
Hollenbeck Junior High School Home Economics and Cafeteria 19-175830	Historic building	CRHR, NRHP	1931
Hollenbeck Junior High School Industrial Arts Building 19-175835	Historic building	CRHR, NRHP	1936
Francis S. Hutchins Residence 19-171809	Historic building	CRHR, NRHP	1894

Designated Downtown Industrial Area Cultural Resources

Resource Designation	Resource Type	Listing or Status[1]	Notes
International Institute 435 S. Boyle Avenue	Historic building	CRHR, NRHP, LACHM	1931
Elmer O. Simons Residence 19-171806	Historic building	CRHR, NRHP	1906
Frank L. Parriot Residence 19-171810	Historic building	CRHR, NRHP	1904
Hollenbeck Home for the Aged 19-171807	Historic building	CRHR, NRHP	1895
Charles Rhodes Residence 19-171813	Historic building	CRHR, NRHP, LACHM	1890
First Street Bridge 53C1166	Historic bridge	NRHP, LACHM - Candidate	1929
Fourth Street Bridge 53C0044	Historic bridge	NRHP, LACHM - Candidate	1931, Gothic Revival details
Sixth Street Viaduct 53 0595, 53C1880	Historic bridge	NRHP, LACHM - Candidate	1932, Moderne details
Seventh Street Viaduct 53C1321	Historic bridge	NRHP, LACHM - Candidate	1927

[1]NRHP = National Register of Historic Places - Eligible; CRHR = California Register of Historical Resources – Eligible; LAHCM = Los Angeles Historical-Cultural Monument

GEOLOGY

The Los Angeles basin lies between the Transverse and Peninsular Ranges. It includes the portion of Los Angeles County south of the Santa Monica Mountains and most of Orange County. The Los Angeles basin was formed during the Neogene period (23 to 1.8 million years ago). Marine and alluvial sediments were deposited in the center of the basin (Harvard University Structural Geology Research Program and Harvard University Seismology 2006). Los Angeles urban land soils are very deep, nearly level to moderately sloping, well-drained loams and clay loams on alluvial fans and plains. Soils are mainly formed in medium textured and moderately fine-textured, recent alluvium and also derived primarily from sedimentary rock. Most of the soils in the LA-RIO area have been disturbed due to grading and cut and fill practices. Fill was generally brought in and deposited along the major streams and river channels to fill in low lying areas and to “channelize” the river. Fill was also used in areas to raise the grade for the

construction of roads, bridges, and railroads. In general, fill soils are brownish and consist of silty sands with gravel. However, fill material in the area range from clayey silt and silty clay, to angular gravel with sand (City of Los Angeles 2005).

Southern California is in a very active zone, with about 30 earthquakes happening each day, most of which with a Richter magnitude below 2.0. The last appreciable earthquake in the Los Angeles area was in January 1994, the Northridge Earthquake of the San Fernando Valley, with a magnitude of 6.7. Earthquakes are considered a high priority hazard in the County of Los Angeles. Earthquakes can have devastating effects and include loss of life, fires, utilities and property damage, and economic impacts. The following table is a summary of historic earthquakes in the project vicinity.

Historic Earthquakes of Southern California (County of Los Angeles 2005)

Year	Date	Location	Time	Richter	Mercalli	Deaths & Property Damage
1769	Jul 28	LA Area	--	6.0	VIII	No information.
1812	Dec 8	LA Area	3:00 PM	7.0	VII	40 deaths, Mission San Juan Capistrano severely to moderately damaged. Mission San Gabriel moderately damaged.
1827	Sep 24	LA Area	4:00 AM	5.5	--	No information.
1855	Jul 11	LA Area	4:15 AM	6.0	VIII	Bells of Mission San Gabriel torn down. 26 buildings damaged in LA.
1857	Jan 9	Fort Tejon	4:24 PM	7.9	IX	2 deaths; heavy property damage and loss.
1916	Oct 23	Tejon Pass Region	2:44 PM	5.3	--	No information.
1933	Mar 10	Long Beach	5:54 PM	6.4	IX	120 deaths; $50 million.
1941	Oct 21	Torrance-Gardena	10:57 PM	4.8	VII	No deaths; $100,000.
1941	Nov 14	Torrance-Gardena	12:42 AM	4.8	VIII	No deaths; $1 million.
1951	Dec 25	San Clemente Island	4:46 PM	5.9	--	No deaths; no appreciable damage.
1971	Feb 9	San Fernando	6:01 AM	6.6	--	65 deaths; $505 million.
1979	Jan 1	Malibu	3:15 PM	5.2	--	No deaths; minor damage.
1987	Oct 1	Whittier-Narrows	7:42 AM	5.9	--	8 deaths; $358 million.
1988	Dec 3	Pasadena	11:38 PM	5.0	--	No deaths; no appreciable damage.
1989	Jan 19	Malibu	10:38 PM	5.0	--	No deaths; slight damage.
1989	Jun 12	Montebello	9:57 AM	4.6	--	No deaths; no appreciable damage.
1991	Jun 28	Sierra Madre	7:44 AM	5.8	--	2 deaths; $40 million.
1994	Jan 17	Northridge	4:31 AM	6.7	--	61 deaths; est. $20 billion.
2001	Sep 9	SE of West Hollywood	4:59 PM	4.2	--	No deaths; moderate damage.

The California Alquist-Priolo Earthquake Fault Zoning Act defines an active fault as one that has ruptured in the last 11,000 years. The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures with human occupancy (California Geologic Survey 2006).

The San Andreas Fault, which forms the boundary between the North America and Pacific Tectonic Plates, is the most significant fault in the area. The fault extends for about 800 miles from the northern tip of the Gulf of California to the Mendocino triple junction west of San Francisco.

In addition to the San Andreas Fault, the Los Angeles basin contains numerous active faults. The Elysian Park Fault is a blind reverse fault that extends approximately 12 miles through the Elysian Park-Repetto Hills from about Silverlake on the west to the Whittier Narrows on the east. Blind thrust faults are those that do not and never have extended upward to the surface of the earth. The Elysian Park anticline forms a segment of the southern boundary of the Transverse Ranges and has an estimated time-average rate of slip of 0.8 to 2.2 millimeters per year (mm/year) (Oskin et al. 2000).

The Raymond Fault is about 16 miles long, with a slip rate of between 0.10 and 0.22 mm/yr. Nearby communities include San Marino, Arcadia, and South Pasadena (Southern California Earthquake Data Center 2006). The Raymond Fault extends from western Hollywood east to Pasadena. The fault runs east-west across the Los Angeles Narrows (City of Los Angeles 2005).

The Hollywood Fault is about 9.3 miles long and has a slip rate of between 0.33 mm/yr and 0.75 mm/yr. Nearby communities include Hollywood, Beverly Hills, and Glendale. The eastern part of the Hollywood Fault zone extends along the base of the Santa Monica Mountains, near Los Feliz Boulevard. From there, the fault trends eastward across the alluvial deposits of the Los Angeles River in the Atwater area. It can be considered a westward extension of the Raymond Fault and runs parallel to the Santa Monica Fault (Southern California Earthquake Data Center 2006).

The San Fernando Fault is about 10.5 miles long and runs from the area of Big Tujunga Canyon north to the San Fernando Valley. The slip rate is not well known but is believed to be about 5 mm/yr. The last major rupture was February 9, 1971, and is known as the Sylmar or San Fernando Earthquake. The quake had a magnitude of 6.6. The rupture was roughly 12 miles long, with a maximum slip of six feet (Southern California Earthquake Data Center 2006).

Liquefaction is caused when the ground shakes wet granular soil and it changes to more of a liquid state and becomes unstable. Areas with high groundwater, saturated loose sands, and silty sands within 50 feet of the ground surface are most susceptible to liquefaction. Of the 32 miles the LA River traverses through the City of Los Angeles, approximately 28 miles are within liquefiable or potentially liquefiable areas. On a case by case basis, projects may be required to take appropriate measures to minimize damage from seismic-related ground failure per the Building Code. Typical requirements for projects in a liquefiable or potentially liquefiable area include:

- The project shall comply with the Uniform Building Code Chapter 18 Division1 Section 1804.5 Liquefaction Potential and Soil Strength Loss which requires the preparation of a geotechnical report. The geotechnical report shall assess potential consequences of any liquefaction and soil strength loss, estimation of settlement, lateral movement or reduction in foundation soil-bearing capacity, and discuss site-specific requirements that may include building design consideration.

- Building design considerations shall include, but are not limited to: ground stabilization, selection of appropriate foundation type and depths, selection of appropriate structural systems to accommodate anticipated displacements or any combination of these requirements.

Tsunamis are not considered a risk in the project area due to its distance from the coast.

Based on a review of the California Division of Mines and Geology Seismic Hazard Zones Maps, most of the River Corridor, from Canoga Park down to just south of where US Highway 101 (Hollywood Parkway) crosses the river, is in a liquefaction zone.
From Canoga Park west to I-405, the liquefaction zone is more extensive on the southern side of the river. From I-405 west to the Griffith Park bend at I-5, the liquefaction zone extends more to the north of the river. The liquefaction zone through the Glendale Narrows down through the Chinatown-Cornfields is rather narrow and confined.

Along the south side of the river, from I-405 around the bend at Griffith Park through the Glendale Narrows, is designated as an earthquake-induced landslide zone. The designation is "Areas where previous occurrence of landslide movement, or local topographic, geological, geotechnical and subsurface water conditions indicate a potential for permanent ground displacements such that mitigation as defined in Public Resources Code Section 2693 (c) would be required."

Based on a review of the Alquist-Priolo Earthquake Fault Zones Maps issued by the California Department of Conservation, Division of Mines and Geology, the nearest fault zone to the river in the study area is about two miles to the west of the Taylor Yard area at York Boulevard toward Highland Park.

HYDROLOGY AND WATER QUALITY

The amount of impervious area in the Los Angeles River Watershed is estimated to be 32 percent, based on assumptions of impervious areas in each land use type (LADPW 2005b). Due to the high amount of impervious surfaces in the city, water makes its way to the storm drains, creeks, and eventually to the river in a short time. Rainfall in the headwaters also makes its way to the Los Angeles River rather rapidly because the upper portions of the watershed and stream channels for the most part are relatively steep. Furthermore, most of the stream channels in the developed areas have been channelized and lined with concrete, increasing the speed on which water makes its way downstream and deterring the absorption of water into the ground.

Impermeable surfaces prevent the infiltration or passage of rainwater through it. This typically applies to streets, parking lots, rooftops, and sidewalks. A direct correlation exists between the degree of imperviousness in an area and the degradation of the receiving waters. Studies show that the diversity of aquatic insects and freshwater fish declines with 10 to 15 percent impervious cover. The primary impacts on stream hydrology from increases in impervious surfaces are increased runoff volume, increased peak discharge rates, increased magnitude, frequency and duration of flows. An increase in impervious surfaces can also result in decreased water quality since contaminants make their way to the streams without being naturally filtered by vegetation (Center for Watershed Protection 2003).

The Los Angeles region is the most densely populated and industrialized region of the state and as such, the quality of many of its waters continues to be degraded. Pollutants in stormwater runoff have impaired the water quality in the watershed, especially in the middle and lower portions. Unlike pollution from industry or sewage treatment facilities, stormwater pollution is caused by people's daily activities. Rainwater runs off streets, lawns, farms, and construction and industrial sites and picks up fertilizer, dirt, pesticides, oil and grease, and many other pollutants on its way to rivers, lakes, and coastal waters. Stormwater runoff is the most common cause of water pollution. Stormwater discharges are also generated by runoff from impervious areas during rainfall, and these discharges often contain pollutants in quantities that can adversely affect water quality (USEPA 2006a).

In addition, there are numerous permitted discharges in the watershed. As of October 2004, these consisted of the following:

- 144 National Pollutant Discharge Elimination System (NPDES) permitted discharges, seven major NPDES discharges, 23 minor individual permits, and 114 dischargers covered by general permits;
- Minor permits include groundwater dewatering, recreational lake overflow, swimming pool wastes, and groundwater seepage,
- Two municipal stormwater permits;
- 1,336 discharges under an industrial stormwater permit; and
- 456 discharges under a construction stormwater permit (California Regional Water Quality Control Board 2004).

The Clean Water Act, NPDES permit program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Industrial, municipal, and other facilities must be permitted if their discharges go directly to surface waters. Section 303(d) of the Clean Water Act requires states to develop lists of impaired waters that do not meet established water quality standards. The law also requires the states to establish priority rankings for waters on the lists and to develop total maximum daily loads (TMDLs) for these waters. A TMDL specifies the maximum amount of a pollutant that a water body can receive and still meet water quality standards and allocates pollutant loadings among point and nonpoint pollutant sources. By law, the USEPA must approve or disapprove lists and TMDLs.

Most of the tributaries of the Los Angeles River do not meet state water quality standards and as such are listed as impaired. Most of these impairments are due to high coliform counts (bacteria), algae, and trash.

The Los Angeles River itself is also listed as impaired for a number of pollutants: metals, ammonia, coliform, nutrients (algae), scum/foam unnatural, odors, and pesticides. Some of these constituents are of concern throughout the river, while others are of concern in only certain reaches.

For the Los Angeles River watershed, TMDLs have been developed for trash, metals, and nitrogen compounds. In addition to the impact of trash on aesthetics, it inhibits the growth of vegetation and it can be ingested by or entangle wildlife. The TMDL for trash was adopted by the regional board in September 2001. However, due to recent litigation, the California Court of Appeal declared the trash TMDL void and issued a writ of mandate that orders the California water boards to set aside and not implement the TMDL until it has been brought into compliance with CEQA. (California Regional Water Quality Board 2006).

In June 2005, the regional board adopted the TMDL for metals. Reaches of the Los Angeles River and its tributaries are listed as impaired for copper, cadmium, lead, zinc, aluminum, and selenium. The beneficial uses impaired by metals are those associated with aquatic life and water supply, including wildlife habitat, rare, threatened, and endangered species, warm freshwater habitat, wetlands, and groundwater recharge. Numeric water quality targets are based on the numeric water criteria established by the California Toxics Rule (California Regional Water Quality Board 2005).

The Nitrogen TMDL became effective on March 23, 2004. Reaches of the Los Angeles River and its tributaries are listed as impaired for nitrogen compounds and related effects, such as algae, pH, odor, and scum. These reaches were listed because water quality objectives for nitrogen compounds and related effects were exceeded, thereby impairing freshwater, and wildlife habitats, and recreational uses. The principal source of nitrogen compounds is from POTWs. Discharges from the Donald C. Tillman Water Reclamation Plant (WRP), the Los Angeles-Glendale WRP, and the Burbank WRP are contributors to the Los Angeles River. During dry weather periods, these major POTWs contribute 84 percent of the total dry weather nitrogen load. Urban runoff, stormwater, and groundwater discharge may also contribute to the nitrogen loadings (City of Los Angeles 2006).

The LA-RIO encourages the minimization of stormwater runoff by encouraging a greater degree of onsite detention, retention and infiltration of stormwater.

Clean Water Act Section 303(d) List of Water Quality Limited Segments

Tributary	CALWATER Watershed	Pollutant/Stressor	Potential Sources	TMDL Priority	Estimated Size Affected
Bell Creek	40521000	High coliform count	Nonpoint/point Source	High	8.9 Miles
Aliso Canyon Wash	40521000	Selenium	Nonpoint source	High	10 Miles
Tujunga Wash (Los Angeles River to Hansen Dam)	40521000	• Ammonia • Copper • High coliform count • Odors • Scum/Foam-unnatural • Trash	Nonpoint source	• High • High • High • High • High • Low	9.7 miles
Burbank Western Channel	40521000	• Algae • Ammonia • Cadmium • Odors • Scum/Foam-unnatural • Trash	Nonpoint/point source	• High • High • Low • High • High • Low	1.3 Miles
Verdugo Wash Reaches I and II	40521000 40524000	• Algae • High coliform count • Trash	Nonpoint source	• High • High • Low	9.6 Miles
Arroyo Seco Reaches I and II	40515010 40515010	• Algae • High coliform count • Trash	Nonpoint source	• High • High • Low	9.6 Miles

Source: Los Angeles Regional Water Quality Control Board 2002

Clean Water Act Section 303(d) Listing of Los Angeles River Reaches

Reach	CALWATER	Pollutant/Stressor	Potential Sources	TMDL Priority	Estimated Size

	Watershed				Affected
Reach 1—Estuary to Carson Street	40512000	• Aluminum, total • Ammonia • Cadmium, dissolved • Copper, dissolved • High coliform count • Lead • Nutrients (algae) • pH • Scum/Foam-unnatural • Zinc, dissolved	Nonpoint/ point source	• Low • High • Low • High • High • High • High • High • High • High	3.4 miles
Reach 2—Carson Street to Figueroa Street	40515010	• Ammonia • High coliform count • Lead • Nutrients (algae) • Odors • Oil • Scum/foam-unnatural	Nonpoint/ point source	• High • High • High • High • High • Low • High	19 miles
Reach 3—Figueroa Street to Riverside Drive	4521000	• Ammonia • Nutrients (algae) • Odors • Scum/foam-unnatural	Nonpoint/ point source	• High • High • High • High	7.9 miles
Reach 4—Riverside Drive to Sepulveda Dam	40521000	• Ammonia • High coliform count • Lead • Nutrients (algae) • Odors • Scum/foam-unnatural	Nonpoint/ point source	• High • High • High • High • High • High	11 miles
Reach 5—within the Sepulveda	40521000	• Ammonia • Nutrients (algae)	Nonpoint/ point source	• High • High • High	5.4 miles

Basin		• Odors • Oil • Scum/foam-unnatural		• Low • High	
Reach 6—Above the Sepulveda Flood Control Basin	40521000	• Dichlorethylene / 1,1-DCE • High coliform count • Tetrachloroethylene/ PCE • Trichloroethylene/ TCE	Nonpoint source	• Low • High • Low • Low	7 miles

Source: Los Angeles Regional Water Quality Control Board 2002

Flooding: Both the LADPW and the Corps operate and maintain flood control facilities in the watershed. Within the county, the LADPW has 15 dams. The Corps operates four flood control projects that affect the Los Angeles River: Hansen, Whittier Narrows, Lopez, and Sepulveda Dams. Hansen Dam is near the northern edge of the San Fernando Valley on Tujunga Wash; Lopez Dam is on the Pacoima Wash in the north-central part of the San Fernando Valley. Whittier Narrows Dam, at Whittier Narrows, where the Rio Hondo and San Gabriel River converge, allows flows to be directed into either river.

Based on a review of the 100-year floodplain in the study area (obtained from the City of Los Angeles, Bureau of Engineering), most of the project area is outside the floodplain, except for the river channel itself. The following neighborhoods have portions of land within the 100-year floodplain and within the study area: Canoga Park, Reseda, Encino, Sherman Oaks, Studio City, and Naud Junction (north of Downtown). The greatest amount of the project area within the 100-year floodplain is on 200 acres just north of the San Bernardino Freeway (I-10) on the east side of the river.

Groundwater: Los Angeles sits above eight groundwater basins, as identified in the Los Angeles Region Water Quality Control Plan (California Regional Water Quality Control Board 1994). The Los Angeles Coastal Plain includes the West Coast Basin, the Central Basin, the Santa Monica Basin, and the Hollywood Basin. The San Fernando Valley overlies the San Fernando Basin and portions of the Eagle Rock, Verdugo, and Sylmar Basins. The Los Angeles Region Water Quality Control Plan identifies several beneficial uses common to all of these basins, including municipal and domestic supply, industrial process and industrial service supply, and agricultural supply (City of Los Angeles 1998c).

Groundwater is a major component of the water supply in the Los Angeles metropolitan area and is also used by private industries, as well as a limited number of private agricultural and domestic users. Local groundwater provides about 15 percent of the total water supply and has provided nearly 30 percent of the total supply in drought years. The remaining water for the city

comes from the Los Angeles Aqueduct system and supplemental water purchased from the Metropolitan Water District of Southern California (City of Los Angeles 2005).

Groundwater recharge is the process of increasing an aquifer's water content through percolation of surface water. Individual basins may be replenished by surface spreading of local runoff, imported water and reclaimed water, injection of imported water (for protection against saline intrusion), and subsurface inflow from other basins. The major spreading areas are generally on the higher portions of the valley floor near the mountain front or along major streams or channels (City of Los Angeles 1998c).
The Watermaster of City of Los Angeles (Department of Water & Power) makes judgments regarding the optimum water levels in the basin. The Central and West Coast Basins are within the jurisdiction of the State Department of Water Resources (LADPW 2006b).

As part of its regulatory compliance, the Los Angeles Department of Water and Power works with the Department of Health Services to test the water quality of its production wells. San Fernando Valley is an area of contaminated groundwater covering approximately four square miles beneath the North Hollywood section of Los Angeles and Burbank. This area is part of the San Fernando Valley Groundwater basin, an aquifer that, prior to the discovery of contamination, had provided drinking water to the cities of Los Angeles, Burbank, and Glendale and to La Crescenta Water District. Contaminants include trichloroethylene, perchloroethylene, and other volatile organic compounds (VOCs) (EPA 2006). These contaminants are from numerous companies improperly disposing of chemicals. In spite of the presence of these contaminants, the Department of Water and Power performs the necessary actions to ensure that the city's drinking water meets or exceeds water quality regulations. These actions include water quality monitoring of contaminant plumes, management of production well operations, operation of groundwater treatment facilities, and capital improvements (LADWP 2005).

As the Los Angeles River makes its way through the Glendale Narrows, there is riparian vegetation, most of which are nonnative invasive plants, and numerous gravel bars until about the southern crossing of the Golden State Freeway (I-5). The Arroyo Seco converges with the Los Angeles River just south of this crossing at the Pasadena Freeway (110) Bridge. Arroyo Seco is 22 miles long and begins in the mountainous terrain of the Angeles National Forest. The creek flows through the communities of La Canada Flintridge, Altadena, Pasadena, South Pasadena, and Northeast Los Angeles. The watershed is about 47 square miles. The upper watershed is in the Angeles National Forest and is managed for recreation, watershed protection, and wildlife conservation. Devil's Gate Dam, which was built in 1920, is located at Hahamongna-Watershed Park. The Los Angeles County Department of Public Works owns and operates the dam. Most of the stream is channelized from the dam down to its confluence with the Los Angeles River. The upper watershed is generally undeveloped, whereas the lower portion is highly urbanized, with a number of regional and local parks. The mean monthly flow of the Arroyo Seco at its confluence with the Los Angeles River is 85.9 cubic feet per second (cfs), with a mean monthly high flow of 251.8 cfs in February. The mean monthly low is 11.6 cfs in July (Corps 2005). Arroyo Seco is listed as impaired under the Clean Water Act 303(d) due to high coliform counts, algae, and trash.

LAND USE

Data presented is based on current GIS land use data, the Los Angeles General Plan, and the related Community Plans and their General Land Use Maps for those community planning areas relative to the LA-RIO zone. California State law (Government Code Section 65300) requires that each city prepare and adopt a comprehensive, long-term general plan for its future development. In the City of Los Angeles, the general plan contains citywide elements for all topics except land use for which community plans establish policy and standards for each of the 35 geographic areas. The general plans of the Cities of Glendale and Burbank also include land use elements. California State law requires that the day-to-day decisions of a city follow logically from and be consistent with the general plan. Additionally, specific plans implement but are not technically a part of the General Plan. Los Angeles has various specific plans throughout the city. A specific plan may not be adopted or amended unless the proposed plan or amendment is consistent with the general plan pursuant to State Code (65454). Zoning, subdivision, and public works projects must be consistent with the general plan and specific plan pursuant to §65455 (State of California 1998). Generalized land use within the River Corridor is comprised of open space, industrial, commercial and residential uses as approved in the City of Los Angles community plans and the land use elements of the general plans for the Cities of Glendale and Burbank.

To identify land-use goals for areas along the river, plans overlapping the proposed LA-RIO boundary were identified and reviewed. Within the boundaries of the LA-RIO there are presently two Specific Plans, two Community Design Overlay Districts (CDOs), two Streetscape Plans, one Pedestrian Oriented District (POD), and four Community Redevelopment Agency of Los Angeles (CRA/LA) Redevelopment Project Areas. The Specific Plans are Warner Center and the Ventura/Cahuenga Boulevard Corridor. The CDOs are Downtown Canoga Park and Commercial Corridor Canoga Park. The Streetscape Plans include Sherman Oaks and Studio City – Cahuenga Pass. The POD is the Atwater Village POD. The CRA/LA project areas are Reseda/Canoga Park, Chinatown, Central Industrial, and Eastside Adelante.

The LA-RIO is designed to be compatible with the goals and principles of these existing plans. Projects are therefore required to stay consistent with all applicable plans and meet the strictest requirement in the case of multiple guidelines or standards.

The LA-RIO plan does not grant development rights on land that is currently not zoned for development. Further, the LA-RIO does not change or restrict existing zoning, land use, or intensity of land use. Additionally, the LA-RIO plan area is adjacent to, but does not include, the Los Angeles River. The intent of this ordinance is to facilitate development design within the LA-RIO boundaries that enhances the watershed, urban design and mobility of the area.

To identify land use characteristics for each area of interest, community plans and associated specific plans in an adjacent to the LA-RIO were identified and reviewed. The following table lists the community planning areas included in the analysis.

Community Planning Areas in or Adjacent to the LA-RIO

Community Planning Area	Project Area
Canoga Park, Winnetka, Woodland Hills, West Hills	Canoga Park Area
Reseda, West Van Nuys	River Corridor
Encino, Tarzana	River Corridor

Community Planning Areas in or Adjacent to the LA-RIO

Community Planning Area	Project Area
Van Nuys, North Sherman Oaks	River Corridor
Sherman Oaks, Studio City, Toluca Lake, Cahuenga Pass	River Corridor
North Hollywood, Valley Village	River Corridor
Hollywood	River Glen Area
Northeast Los Angeles	River Glen Area, Taylor Yard Area
Silver Lake, Echo Park, Elysian Valley	Taylor Yard Area, Chinatown-Cornfields Area
Central City North	Chinatown-Cornfields Area, Downtown Industrial Area
Central City	Downtown Industrial Area
Boyle Heights	Downtown Industrial Area

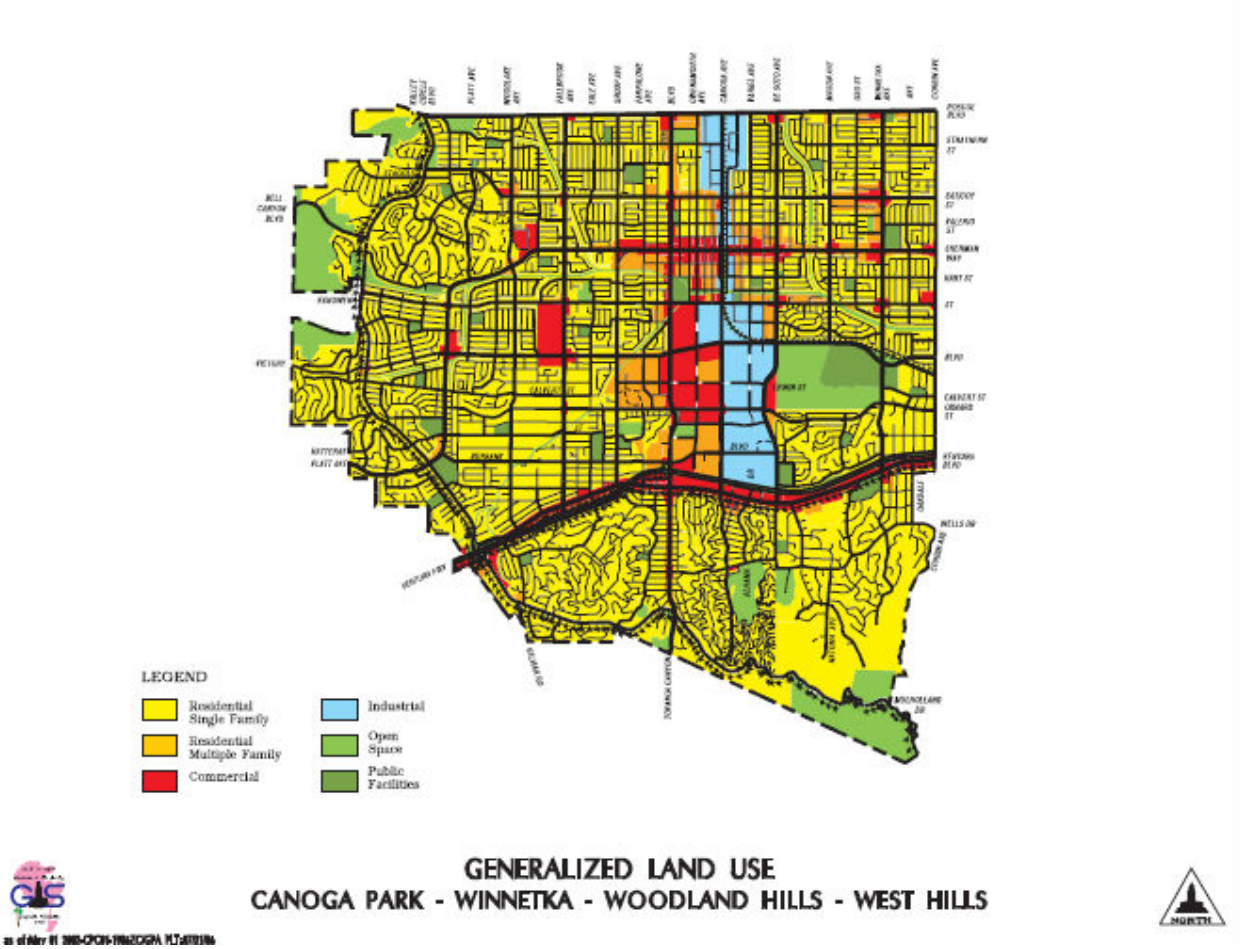
The River Corridor includes parts of the cities of Los Angeles, Burbank, and Glendale. The land use element of each city's general plan identifies the approved land uses within the River Corridor. The land use element of the City of Los Angeles is broken into distinct Community Planning Areas (CPAs). The River Corridor is within or adjacent to 12 CPAs of the City of Los Angeles. Land use within each CPA is specified in the general land use map for each area. In some cases there are additional specific plans to further guide land uses in defined areas to meet the goals of special city programs and initiatives.

Of the 15,570 acres within the River Corridor, the most prevalent land use is Open Space, Public, and Quasi-Public Lands, which accounts for approximately 40 percent of land use. The next largest land use category is for Low Density Housing, accounting for approximately 30 percent of land use in the River Corridor. Medium Density Housing and Heavy Industry each account for approximately 10 percent of land use in the area, and Light Industry and Neighborhood Commerce each account for approximately five percent. The general land uses within the River Corridor are summarized in following table.

Land Use	Area (Acres)	Percent of Total Area
Open Space/Public and Quasi-Public Lands including Publicly Owned Agriculture Lands (~340 acres at Sepulveda Basin)	6,183.7	39.7%
Low Density Housing	4,584.5	29.5%
Medium Density Housing	1,604.3	10.3%
Heavy Industry	1,402.4	9.0%
Light Industry	819.3	5.3%
Neighborhood Commerce	786.2	5.1%
Regional Commerce	173.3	1.1%
Other	10.8	0.1%
Parking	1.2	0.0%
High Density Housing	0.7	0.0%
TOTAL	15,566.3	100.0%

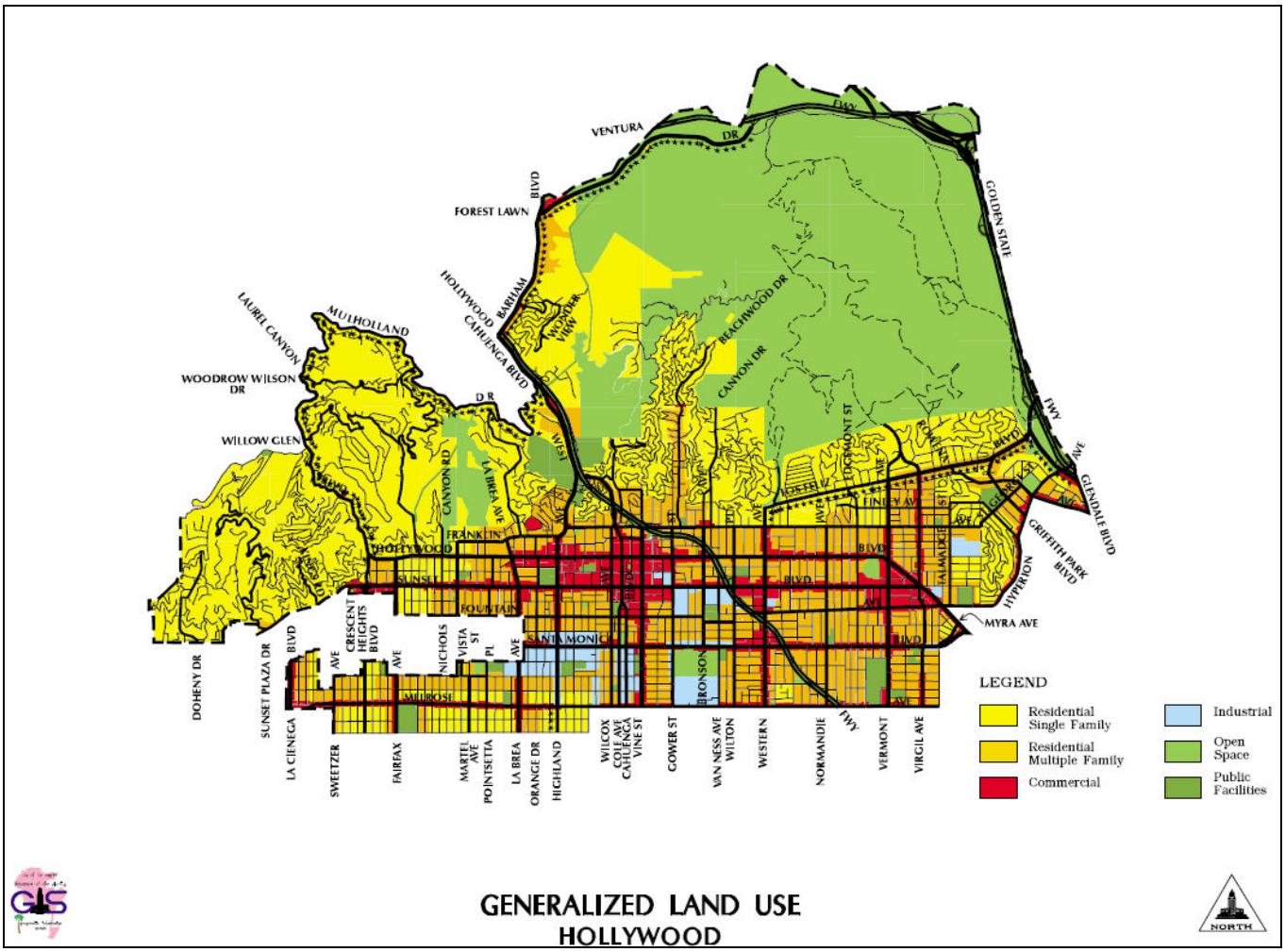
The Canoga Park area is composed of approximately 460 acres. The most prevalent land use in the area is Light Industry, which accounts for 31 percent of land use. Medium Density Housing is the next largest land use, accounting for approximately 19 percent of the total land use. The entire Canoga Park area falls within the Canoga Park-Winnetka-Woodland Hills Community Plan Area.

Canoga Park – Winnetka – Woodland Hills – West Hills Community Plan Generalized Land Use Map



The River Glen area is composed of approximately 261 acres. The most prevalent land use in the area is Open Space/Public and Quasi-Public Lands, which accounts for 50 percent of land use. Heavy Industry is the next largest land use, accounting for approximately 49 percent of the total in the area.

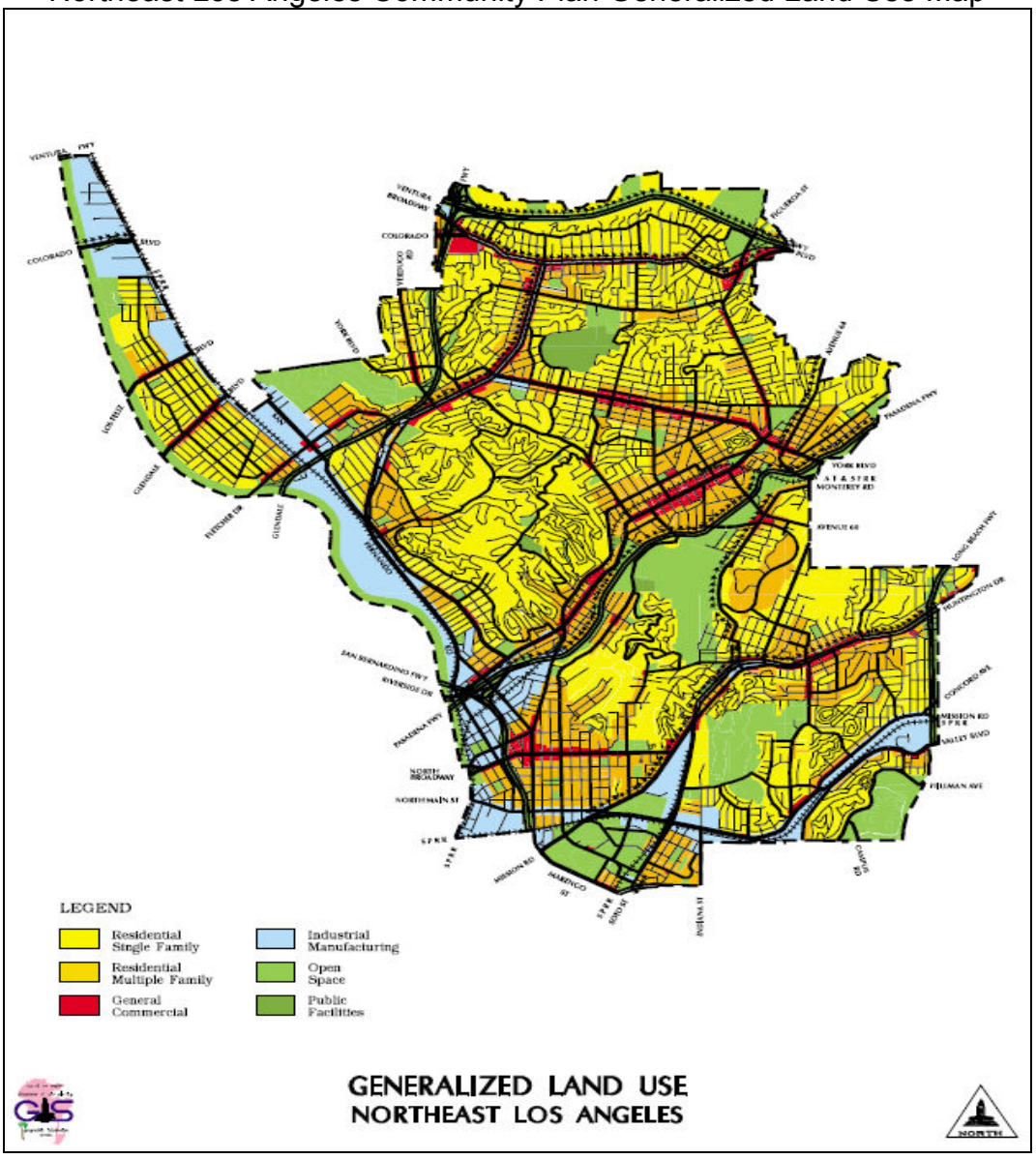
Hollywood Community Plan Generalized Land Use Map



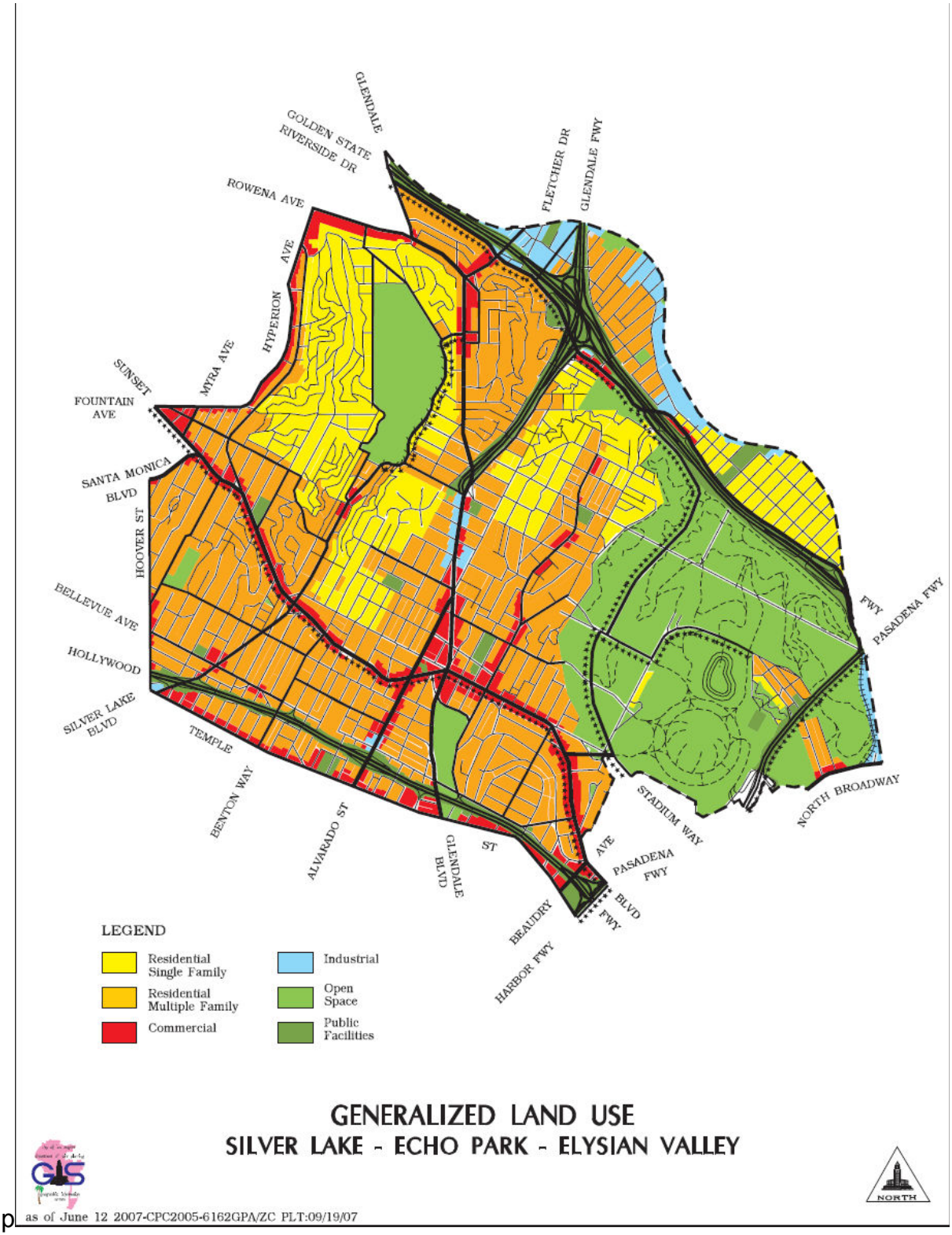
GENERALIZED LAND USE
HOLLYWOOD

The Taylor Yard area is composed of approximately 1,040 acres. The most prevalent land use in the area is Open Space/Public and Quasi-Public Lands, which accounts for 40 percent of land use. Heavy Industry is the next largest land use, accounting for approximately 23 percent.

Northeast Los Angeles Community Plan Generalized Land Use Map



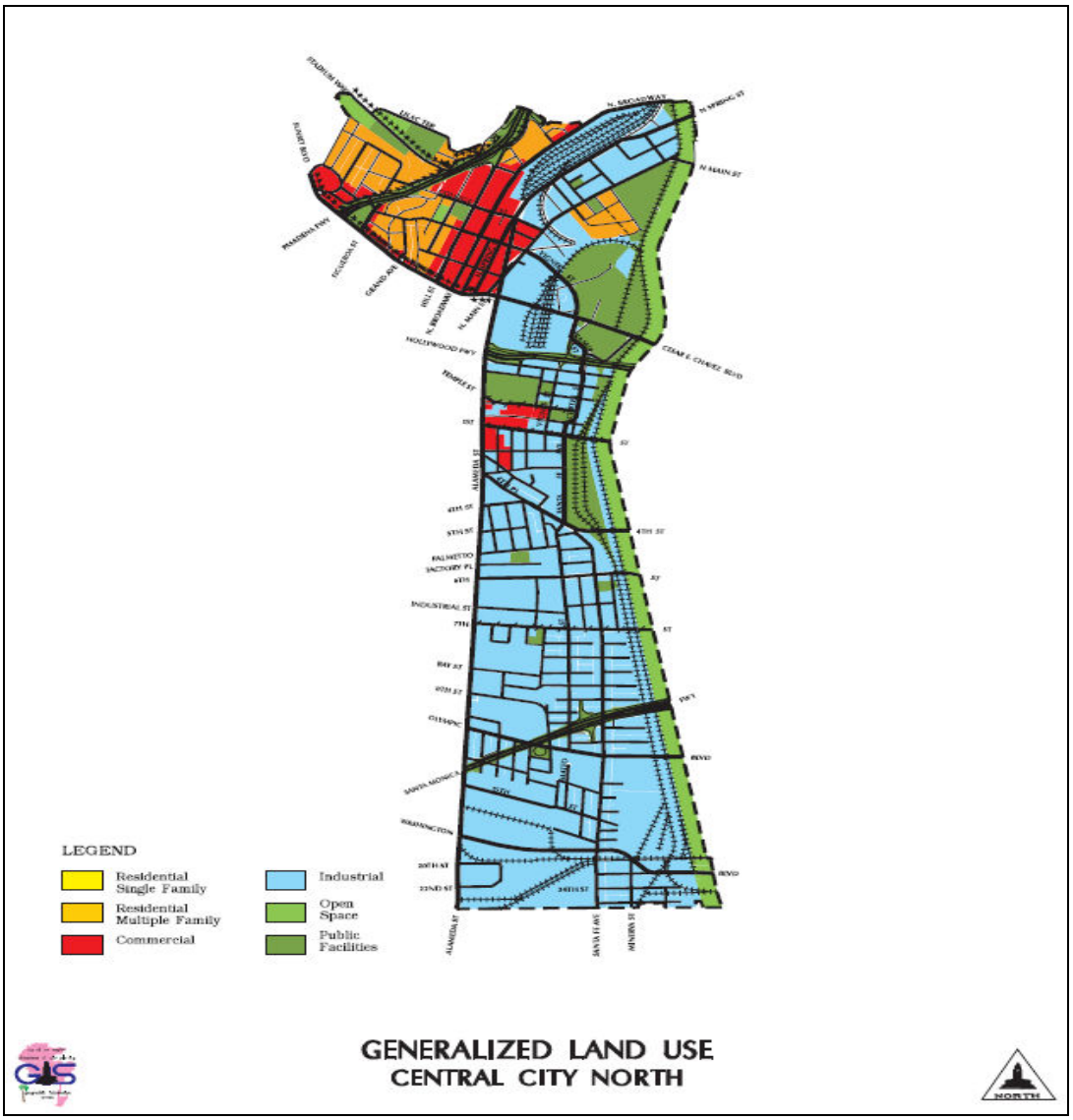
Silver Lake – Echo Park – Elysian Valley Community Plan Generalized Land Use



Map

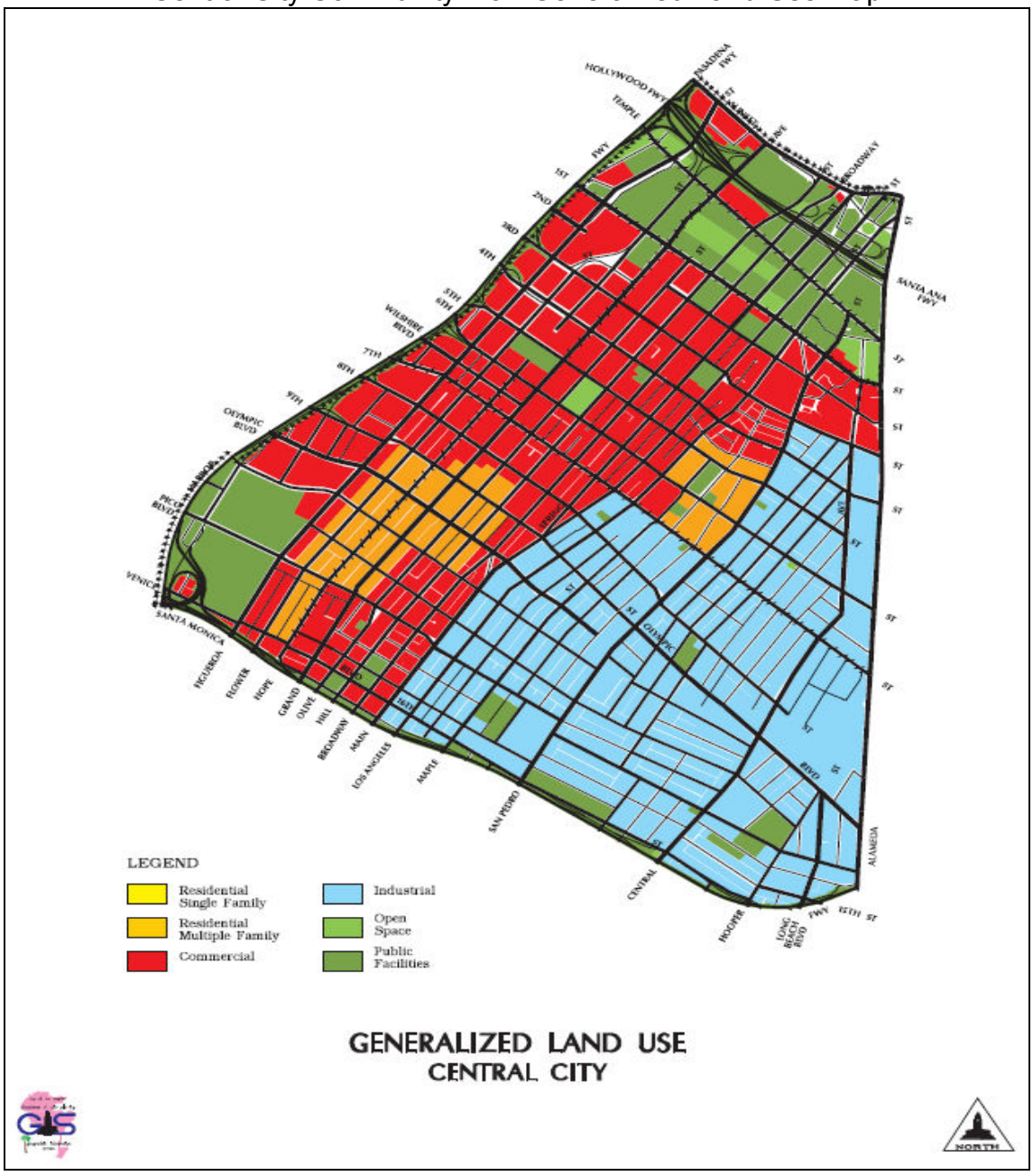
The Chinatown-Cornfields area is approximately 241 acres. The most prevalent land use in the area is Light Industry, which accounts for 50 percent of land use. Open Space/Public and Quasi-Public Lands is the next largest land use, accounting for approximately 28 percent of the total in the area.

Central City North Community Plan Generalized Land Use Map

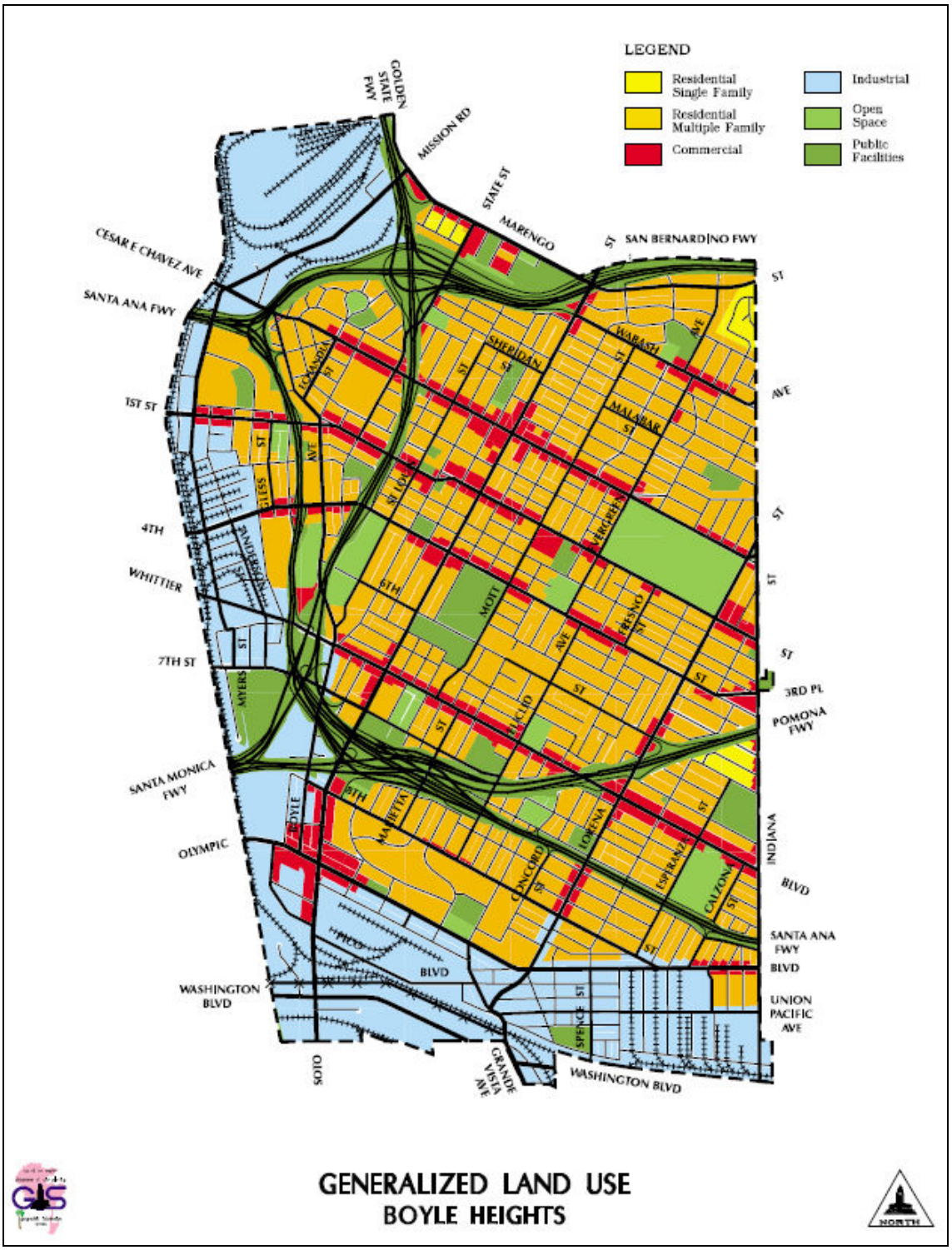


The Downtown Industrial area is approximately 658 acres. The most prevalent land use is Heavy Industry, which accounts for 32 percent of land use. Open Space/Public and Quasi-Public Lands is the next largest land use, accounting for approximately 27 percent.

Central City Community Plan Generalized Land Use Map



Boyle Heights Community Plan Generalized Land Use Map



MINERAL RESOURCES

The primary mineral resources within the project area are sand and gravel deposits and underground oil and gas fields. Aggregate mixes of sand and gravel are used locally to make concrete and for other construction purposes. Oil fields are scattered throughout the Los Angeles basin. “Seeps” can occur near oil and gas fields fed by the underground reservoirs of oil and gas. These seeps are mixtures of crude oil, tar, natural gas, and water. Future exploration and development is assumed to be limited, given the highly urbanized character of the area of the proposed project.

Sand and gravel deposits occur along the Los Angeles River floodplain, coastal plain, and other water bodies and courses (City of Los Angeles 2001) throughout the River Corridor and the LA-RIO. Substantial deposits have been identified by the state geologist along the river floodplain, from the San Fernando Valley through downtown Los Angeles. According to the Conservation Element of the City of Los Angeles General Plan, the Los Angeles River (downstream of the Mt. Sinai Memorial Park area) runs along the western boundary of a Mineral Resource Zone-2 (MRZ-2) area. Lands classified as MRZ-2 are areas of identified mineral resource significance. Many of the areas where these deposits are located have been developed and are inaccessible and unavailable for sand and gravel extraction.

NOISE

Noise is measured in decibels (dB). A frequency-dependent adjustment is applied because the human ear is not equally sensitive to sound at all frequencies; this is called A-weighting to achieve the A-weighted dB (dBA). Unless otherwise noted all references to noise levels in this section are A-weighted. Average noise exposure over 24 hours can be presented as a day-night average sound level (DNL). DNL values are calculated from 24-hour averages in which nighttime values (10 PM to 7 AM) are increased by 10 dB to account for the greater disturbance potential from nighttime noises.

Because noise levels decrease as the distance from the source increases, the area affected by noise issues is generally more limited than for other resources. Localized affected areas are generally within half a mile of the noise source.

When distance is the only factor considered, sound levels from an isolated noise source will typically decrease by about 6 dB for every doubling of distance away from the noise source. When the noise source is essentially continuous (for example, vehicle traffic on a highway), its levels decrease by about 3 dB for every doubling of distance.

The City of Los Angeles Noise Element defines noise-sensitive uses as single-family and multifamily dwellings, long-term care facilities, dormitories, motels, hotels, transient lodging, and other residential uses. Additionally, such public uses as hospitals, libraries, schools, auditoriums, concert halls, outdoor theaters, nature and wildlife preserves, and parks are also defined as noise-sensitive uses. The Noise Element includes three objectives:

- Reduce airport and harbor-related noise impacts;
- Reduce or eliminate non-airport-related intrusive noise, especially relative to noise sensitive uses; and

- Reduce or eliminate noise impact associated with proposed development of land and changes in land use (City of Los Angeles 1999).

In addition to the general land use compatibility guidelines in the county general plan, the City of Los Angeles has adopted a noise ordinance. Chapter IV, Article 1, Section 41.40 of the noise ordinance indicates that no construction or repair work shall be performed between the hours of 9:00 PM and 7:00 AM of the following day. Additionally, construction is prohibited before 8:00 AM or after 6:00 PM on any Saturday or national holiday, or at any time on Sunday, within 500 feet of a residential area. The ordinance sets a 50-dBA daytime standard for ambient noise in a residential area and notes that a significant increase would be 5 dBA over the ambient level (City of Los Angeles 1984).

The ordinance sets the maximum level of noise for construction equipment within a residential area at 75 dB. The ordinance also forbids loading and unloading vehicles between 10:00 PM and 7:00 AM within 200 feet of any residential building (City of Los Angeles 1991).

There are residential areas, open park spaces, hospitals, schools and libraries along the River Corridor. Residential areas are mostly concentrated at the first and last four-mile segments of the River Corridor. Several open spaces are along the river, mainly at the intersections of Interstate 405 and US Highway 101, and Interstate 5 and State Route 134. Hospitals, schools, and libraries are mostly located near the residential areas along the River Corridor.

Existing noise sources are mainly highways that pass through the River Corridor, namely the Golden State and Santa Ana (I-5), San Diego (I-405), Harbor (I-110), and Santa Monica (I-10) Freeways, US Highway 101, and State Routes 2, 27, 60, 134, and 170. Additionally, rail services run along the corridor and cross the river at several locations, especially in downtown Los Angeles.

The Canoga Park area is mostly surrounded by affordable housing areas and overcrowded residential areas. Hospitals are located at approximately one mile to the south, west, and north. Two schools and a library are within the area, and several other schools are within half a mile of the site. Sensitive receptors at the River Glen area are mostly residential areas that include low, medium, and high density housing and park and recreation areas. The Taylor Yard area is mainly industrial, it has low density and medium density housing, schools, and hospitals. Approximately nine percent of the Chinatown-Cornfields area is medium density housing. The Downtown Industrial area includes areas under the Housing and Urban Development Empowerment Zones, a hospital, and several schools.

RECREATION

Public recreation resources in the River Corridor are provided by federal, state, and local government agencies, whose guidelines and regulations are discussed below.

Federal Lands (the Corps, Sepulveda Basin Recreation Area)

The 2,097-acre Sepulveda Basin Recreation Area is a federally owned flood control area that includes the largest recreation area in the San Fernando Valley. The federal government leases 1,527 acres to the City of Los Angeles for recreational facilities. Recreation development policies are provided in the Corps of Engineers' Sepulveda Basin Recreation Area Master Plan.

California State Parks
There are two state parks within the River Corridor, the Rio De Los Angeles State Park in the Taylor Yard area and the Los Angeles State Historic Park in the Chinatown-Cornfields area.

City of Los Angeles Department of Recreation and Parks
Within the City of Los Angeles, the Department of Recreation and Parks operates over 16,000 acres of parkland, made up of some 150 recreation centers and over 350 park sites citywide.

City of Glendale Department of Parks, Recreation and Community Services
Parks in Glendale are operated and maintained by the City of Glendale Department of Parks, Recreation & Community Services.

City of Burbank Park, Recreation & Community Services Department
Parks in Burbank are operated and maintained by the City of Burbank Park, Recreation & Community Services Department.

Griffith Park Master Plan
In 1978, the City of Los Angeles prepared the Griffith Park Master Plan, which is currently under revision.

Significance Criteria
The Draft Los Angeles CEQA Thresholds Guide (City of Los Angeles 1998c) identifies measures that would have a significant impact on recreation as those that:

- Would result in a demand for recreation and park services that exceeds the available resources;
- Would reduce access to a recreational facility; and
- Would otherwise limit or prevent the use of a recreational facility.

Open Space Development Measures
Parks: Measures in this category include riverfront parks, linear parks, pocket parks, and recreation fields. The various park development measures would have direct beneficial recreational impacts by providing new recreation resources and capacity. Future implementation of these measures is not expected to reduce access to or limit the use of recreational resources in the River Corridor and vicinity.

Green Streets: Implementation of the green streets measures is not expected to result in new recreational demand for existing parks and recreation services. The measures would also not result in reduced access to, or limitations to the use of, existing recreational resources in the River Corridor and vicinity.

Paseos and Promenades: Implementation of paseos, promenades, or promenades in the River Corridor could result in additional recreational demand at existing recreational parks and facilities within the River Corridor and vicinity. Further study of the effects of the measures on demand for

recreation and park services in the River Corridor, including an assessment of the capacity of available resources, is recommended prior to implementation. These measures are not expected to result in any adverse recreational impacts by limiting access to, or use of, existing recreational facilities in the River Corridor.

Trails and Bikeways: Implementation of trails and bikeway measures in the River Corridor would result in direct beneficial recreational impacts by providing new recreation resources and capacity. Implementation of these measures is not expected to result in reduced access to or limitations to the use of recreational resources in the River Corridor and vicinity.

Water Quality and Habitat: Implementation of gateway measures in the River Corridor would not impact existing recreational resources.

Land Use and Planning Mitigation Measures:

Appropriate mitigation actions would vary, depending on the type of resource impacted and the extent of the impact. Generally mitigation measures will be identified to accomplish the following:

- Avoid recreation resource impacts altogether by not taking a certain action or parts of an action;
- Minimize recreation resource impacts by limiting the degree or magnitude of the action and its implementation;
- Rectify the recreation resource impact by repairing, rehabilitating, or restoring the impacted land use (for example, providing on-site recreational amenities where impacts occur);
- Reduce or eliminate the land use impact over time by preservation and maintenance operations;
- Compensate for the land use impact by replacing or providing substitute resources;
- Provide direct support to the Department of Recreation and Parks, such as land, equipment, and funding;
- Review all future bikeway proposals for the River Corridor for consistency with guidelines specified for the development of Class I Bikeways;
- Review all future landscaping proposals for the River Corridor for consistency with the Los Angeles River Master Plan Landscaping Guidelines and Plant Palettes;
- Review all future signage proposals for the River Corridor for consistency with the Los Angeles River Master Plan Sign guidelines; and
- Review all future proposals for the River Corridor that involve enhancing access for disabled persons for consistency with guidelines developed through the Americans with Disabilities Act.

The LA-RIO district and vicinity includes a mix of urbanized areas surrounded by the natural open space areas of the Santa Monica Mountains National Recreation Area to the southwest, Simi Hills to the west, the Santa Susana Mountains to the northwest, and the San Gabriel Mountains to the northeast. The watershed is entirely within Los Angeles County and the project area is entirely within the cities of Los Angeles, Burbank, and Glendale, with most of the project area falling within the city

of Los Angeles. The Los Angeles River watershed includes a variety of recreation areas, including many regional and local neighborhood parks (CRA 2001).

The City of Los Angeles Department of Recreation and Parks (DRP) is responsible for most of the parks and recreation facilities in the project area, providing the public with a variety of recreational opportunities. Typical city park facilities and outdoor recreational activities include playing sports, biking, concert going, fishing, hiking, boating, golfing, horseback riding, taking train rides, and enjoying universally accessible playgrounds. DRP also provides activity centers, youth activity programs, adult and youth sports programs, museums, senior centers, and other special venues (LADRP 2006). Similar parks and recreational services are provided in Glendale and Burbank. Parks in Glendale are operated and maintained by the City of Glendale Department of Parks, Recreation & Community Services; parks in Burbank are operated and maintained by the City of Burbank Park, Recreation & Community Services Department.

Affected Environment: The affected environment regarding potential effects on recreational resources in the project area evaluated in this document includes the River Corridor and the LA-RIO previously defined. Based on analysis guidance included in the Draft Los Angeles CEQA Thresholds Guide (City of Los Angeles 1998), recreational facilities within a two-mile radius of the project area are identified in this section.

In addition to the existing parks, several parks are at various stages of planning or construction in the project area. These include the Rio de Los Angeles State Park within the Taylor Yard area, the Los Angeles State Historic Park within the Chinatown-Cornfields area, and a proposed sports complex facility at the Sepulveda Basin.

Parks Within the River Corridor			River	CP	RGl	Tay	Chi	Dntwn	
1	6th and Gladys Park	6th and Gladys St., Los Angeles, CA 90021		2				2	2
2	Aliso Pico Recreation Center	370 South Clarence Street Los Angeles, CA 90033		1				2	1
3	Alpine Park and Recreation Center	817 Yale Street Los Angeles, CA 90012		2			2	2	2
4	Balboa Golf Course and Sports Center	16821 Burbank Boulevard Encino, CA 91436		1					
5	Boyle Heights Sports Center Park	933 South Mott Street Los Angeles, CA 90023		1					1
6	Canoga Park Sr. Citizen Center	7326 Jordan Avenue Canoga Park, CA 91303		1	1				
7	Carlin G. Smith Recreation Center	511 West Avenue 46 Los Angeles, CA 90065		2			2		

8	Chevy Chase Park	4165 Chevy Chase Drive Los Angeles, CA 90039	1		2	2		
9	Chevy Chase Recreation Center	4165 Chevy Chase Drive Los Angeles, CA 90039	1		2	2		
10	City Hall Park Center	200 North Main Street Los Angeles, CA 90012	1			2	2	2
11	Cleveland High School Pool	8120 Vanalden Avenue Reseda, CA 91335	2					
12	Cohasset Melba Park	On Cohasset Street and Melba Avenue West Hills, CA 91307	2	2				
13	Coldwater Canyon Park	12601 Mulholland Drive Los Angeles, CA 90210	2					
14	Costello Child Care	N/A	1					2
15	Costello Recreation Center	3141 East Olympic Boulevard Los Angeles, CA 90023	2					2
16	Costello Sr. Citizen Center	3121 East Olympic Boulevard Los Angeles, CA 90023	1					2
17	Cypress Park and Recreation Center	2630 Pepper Avenue Los Angeles, CA 90065	1			1	2	
18	Debs, Ernest E. Regional Park	4235 Monterey Road Los Angeles, CA 90032	2			2	2	
19	Downey Recreation Center and Playground	1772 North Spring Street, Los Angeles, CA 90031	1			2	1	2
20	East Los Angeles Park	2500 North Eastlake Avenue, Los Angeles, CA 90031	2			2	2	2
21	El Paseo De Cahuenga Park	3300 Cahuenga Boulevard, Los Angeles, CA 90068	2					
22	Elyria Canyon Park	1550 Bridgeport Drive, Los Angeles, CA, 90065	2			2	2	
23	Elysian Park	835 Academy Road Los Angeles, CA 90012	1			2	2	2

24	Elysian Park Therapeutic Recreation Center	929 Academy Road Los Angeles, CA 90012	1			1	2	2
25	Elysian Valley Recreation Center	1811 Ripple Street Los Angeles, CA 90039	1			1	2	
26	Encino Golf Course	16821 Burbank Boulevard Encino, CA 91436	1					
27	Ernest E. Debs Park Center	4235 Monterey Road Los Angeles, CA 90052	2			2		
28	Erwin Park	Erwin Street and Ethel Avenue Van Nuys, CA 91401	2					
29	Glassell Park and Recreation Center	3650 Verdugo Road Los Angeles, CA 90065	2			1		
30	Glenhurst Park	2932 Glenhurst Los Angeles, CA 90039	1			1		
31	Greaver Oak Park		2			2	2	
32	Griffith Park and Recreation Center	3401 Riverside Drive Los Angeles, CA 90027	1		1	2		
33	Harding Golf Course	4730 Crystal Springs Dr. Los Angeles, CA 90027	1		1			
34	Heritage Square		1			2	2	
35	Hjelte Sports Center	16200 Burbank Boulevard Encino, CA 91436	2					
36	Hollenbeck Park and Recreation Center	415 South Saint Louis Street Los Angeles, CA 90033	2				2	1
37	Hostetter Playground		1					2
38	Jesse Owens Park	7100 White Oak Reseda, CA 91335	1					
39	John Quimby Park	7008 De Soto Avenue Canoga Park, CA 91306	1	1				
40	Kittridge Mini Park	Kittridge / Greenbush Van Nuys, CA 91401	2					
41	Los Angeles Youth Athletic Club	401 North Avenue 19 Los Angeles, CA 90031	1			1	2	2

42	Lake Balboa Park	17015 Burbank Boulevard Encino, CA 91316	1					
43	Lanark Park and Recreation Center with Swimming Pool	21816 Lanark Street Canoga Park, CA 91304	2	2				
44	Libbit Park	5101 Libbit Avenue Encino, CA 91436	1					
45	Lincoln Heights Recreation Center	2303 Workman Street Los Angeles, CA 90031	1			2	2	2
46	Lincoln Heights Sr. Citizen Center	2323 Workman Street Los Angeles, CA 90031	2			2	2	2
47	Lincoln Park	3501 Valley Boulevard Los Angeles, CA 90031	2			2	2	2
48	Los Feliz Golf Course	3207 Los Feliz Boulevard Los Angeles, CA 90039	1		2	2		
49	Lummis Park		2			2	2	
50	Montecito Heights Recreation Center	4545 Homer Street Los Angeles, CA 90031	2			2	2	
51	Montecito Heights Sr. Citizen Center	4545 Homer Street Los Angeles, CA 90031	2			2	2	
52	Moorpark Park	12061 Moorpark Street Los Angeles, CA 91607	1					
53	Municipal Sports	2459 Motor Ave Los Angeles, CA 90064	1					
54	North Atwater Park	3900 West Chevy Chase Drive Los Angeles, CA 90039	1		2	2		
55	North Hollywood Park	5301 Tujunga Avenue North Hollywood, CA 91601	2					
56	North Weddington	10844 Acama Drive Los Angeles, CA 91602	1					
57	Parthenia Park	21444 Parthenia Street Canoga Park, CA 91304	2	2				

58	Pecan Park and Recreation Center and Playground	560 North Western Avenue Rancho Palos Verdes, CA 90732	1			2	2	1
59	Prospect Park	Echandia and Judson Los Angeles, CA 90033	2			2	2	2
60	Ramon Garcia Recreation Center	1016 South Fresno Street Los Angeles, CA 90023	2					2
61	Ramona Hall Community Center	4580 North Figueroa Street Los Angeles, CA 90042	2			2	2	
62	Reseda Park and Recreation Center with Swimming Pool	18411 Victory Boulevard Reseda, CA 91335	1					
63	Roosevelt Pool	456 South Mathews Street Los Angeles, CA 90033	1				2	1
64	Rose Hill Park and Recreation Center	3606 North Boundary Los Angeles, CA 90032	2			2	2	
65	Runnymede Recreation Center	20200 Runnymede Street Winnetka, CA 91306	2	2				
66	Santa Monica Mountains National Recreation Area	401 West Hillcrest Drive Thousand Oaks, CA	2					
67	Sepulveda Dam Recreation Area	17017 Burbank Boulevard Encino, CA 91316	1					
68	Sepulveda Garden Center	16633 Magnolia Boulevard Encino, CA 91316	2					
69	Shadow Ranch Park	22633 Vanowen Street West Hills, CA 91307	2	2				
70	Smith, Carlin Playground Park	511 West Avenue 46 Los Angeles, CA 90065	2			2	2	
71	State Street Child Care		2			2	2	2
72	State Street Recreation Center	716 North State Street Los Angeles, CA 90033	2			2	2	2

73	Studio City Recreation Center	12621 Rye Street Studio City, CA 91604	1					
74	Sycamore Grove Park	4702 North Figueroa Los Angeles, CA 90041	2			2	2	
75	Tarzana Recreation Center	5655 Vanalden Avenue Tarzana, CA 91356	2					
76	V.N.S.O.	14201 Huston Street Van Nuys, CA 91423	1					
77	Valley Plaza Park	12240 Archwood Street North Hollywood, CA 91606	2					
78	Van Nuys-Sherman Oaks Park and Recreation Center with Pool	14201 Huston Street Van Nuys, CA 91423	1					
79	Van Nuys-Sherman Oaks Sr. Citizen Center	5040 Van Nuys Blvd. Sherman Oaks, CA 91423	1					
80	Vest Pocket Park	1st and Chicago Streets Los Angeles, CA 90033	2				2	2
81	Warner Ranch Park	5800 Topanga Canyon Boulevard Woodland Hills, CA 91367	2	2				
82	Weddington Park South	10800 Valley Heart Drive Los Angeles, CA 91602	1					
83	West Valley Park	6731 Wilbur Avenue Reseda, CA 91335	1					
84	West Valley Sr. Citizen Center	18411 Victory Boulevard Reseda, CA 91335	1					
85	Wilacre Park	ADJ Coldwater Canyon Park Los Angeles, CA 90210	1					
86	Wilson Golf Course	4730 Crystal Springs Drive Los Angeles, CA 90027	1		1			

87	Winnetka Recreation Center	8401 Winnetka Avenue Winnetka, CA 91306	2	2				
88	Woodbridge Park	11240 Moorpark Street Los Angeles, CA 91602	1					
89	Woodland Hills Recreation Center	5858 Shoup Avenue Woodland Hills, CA 91367	2	2				
90	Woodley Avenue Park	6350 Woodley Avenue Van Nuys, CA 91436	1					
91	Woodley Lakes Golf Course	6331 Woodley Avenue Van Nuys, CA 91406	1					
City of Burbank								
B1	Joaquin Miller Park	720 E. Providencia Avenue Burbank, CA 91501	2					
B2	George Izay Park	1111 West Olive Ave., Burbank, CA	2					
B3	Pickwick Recreation Center	1001 Riverside Drive, Burbank CA 91505	1					
B4	Mountain View Park	751 S Griffith Park Dr., Burbank, CA 91505	1					
B5	Whitnall Highway Park South	610 N. Whitnall Hwy, Burbank, CA 91505	2					
B6	Verdugo Park	3201 W. Verdugo Ave., Burbank, CA 91505	2					
B7	Johnny Carson Park	400 S Bob Hope Drive, Burbank, CA 91505	1					
B8	Whitnall Highway Park North	1302 N. Whitnall Hwy., Burbank, CA 91505	2					
B9	Abraham Lincoln Buena Vista Park	300 N. Buena Vista St., Burbank, CA 91505	1					
City of Glendale								
G1	Palmer Park	610 E. Palmer, Glendale, CA 91205	2		2	2		

G2	Maple Park	820 E. Maple Ave., Glendale, CA 91205	2		2	2		
G3	Pacific Park	501 S. Pacific Ave., Glendale, CA 91204	2		2			
G4	Glendale Central Park	201 East Colorado, Glendale, CA 91205	2		2			
G5	Carr Park	1615 E. Colorado, Glendale, CA 91205	2		2			
G6	Wilson Mini Park	1101 E. Wilson Ave., Glendale, CA 91206	2		2			
G7	Piedmont Park	1145 E. Lexington Dr., Glendale, CA 91206	2		2			
G8	Milford Mini Park	601 W. Milford, Glendale, CA 91203	2		1			
G9	Fremont Park	600 Hahn Glendale, CA 91203	2		2			
G10	Pelanconi Park	1000 Grandview Ave., Glendale, CA 91201	2		2			
G11	Griffith Manor Park	1551 Flower St., Glendale, CA 91201	2		2			
G12	Nibley Park	1103 E. Mountain, Glendale, CA 91207	2		2			
G13	Brand Park	1601 W Mountain St., Glendale, CA 91201	2		2			

Key: 1 = Within the LA-RIO; 2. Within two miles of the River

River=River Corridor, CP=Canoga Park, RGl= River Glen, Tay=Taylor Yard,

Chi=Chinatown/Cornfields, Dntwn=Downtown Industrial

Rio de Los Angeles State Park, currently under development in northeast Los Angeles, is approximately 2.5 miles north of downtown. The park is being developed by the California State Department of Parks and Recreation in association with the City of Los Angeles Department of Parks and Recreation. The park is next to the former Union Pacific Rail Yard called the Taylor Yard complex, between the Elysian Park Hills on the southwest and the Repetto Hills on the northeast.

The Taylor Yard complex and park site is one of the largest undeveloped areas along the Los Angeles River.

The park and vicinity are part of the communities of northeast Los Angeles. The neighborhoods surrounding the park include Cypress Park, Glassell Park, Elysian Valley, Atwater Village, and Mount Washington. The 247-acre Taylor Yard complex was historically divided into ten parcels, some of which were further subdivided for sale purposes, and two of which—Parcels D and G-1—were purchased by the California State Parks for Rio de Los Angeles State Park. The 40-acre Parcel D, acquired in 2001, is between an active rail line and San Fernando Road; the 17-acre Parcel G-1, acquired in 2003, is between the river and an industrial development (California State Parks 2005).

Los Angeles State Historic Park (LASHP), most recently known as the Cornfield or Chinatown Yard property, is a 32-acre site linked to the long and varied history of the city and its diverse people. The California State Department of Parks and Recreation is developing the LASHP. The site has historical significance and associations at many levels of the Los Angeles story, including its very existence as a state park, due to the efforts of one of the most diverse coalitions of local citizens, activists, and environmental justice advocates ever assembled. At its northern end, the site is about 150 feet from the Los Angeles River. Surrounding the park are the historic and ethnically diverse communities of Lincoln Heights, Elysian Park, Solano Canyon, Chinatown, Chavez Ravine, and William Mead Homes (California State Parks 2004).

Bikeway Network

In addition to the parks described above, there exists a series of bikeways that run through or intersect with the River Corridor. The Los Angeles River Bikeway is planned to eventually run 52 miles from Canoga Park to Long Beach. It currently extends from Victory Boulevard (at the 134 Freeway) to Fletcher Drive in Elysian Valley. This stretch includes the Alex Baum Bicycle Bridge over Los Feliz Boulevard, completed in 2002. An extension from Fletcher to Riverside and the Arroyo Seco bikeway is in development. With funding from the California Coastal Conservancy, North East Trees and the Los Angeles County Bike Coalition undertook a study exploring alternatives to close the seven-mile bikeway gap between the Arroyo Seco and Vernon. The bikeway picks up again in Vernon along the west bank of the Los Angeles River for a four-mile stretch to Southgate. In Southgate, the bikeway becomes part of the LA-RIO Trail system and runs along the river's east bank downstream to Long Beach (River Project 2006b).

Two of the parks in are within or immediately adjacent to the Canoga Park Area. These facilities are described in following table.

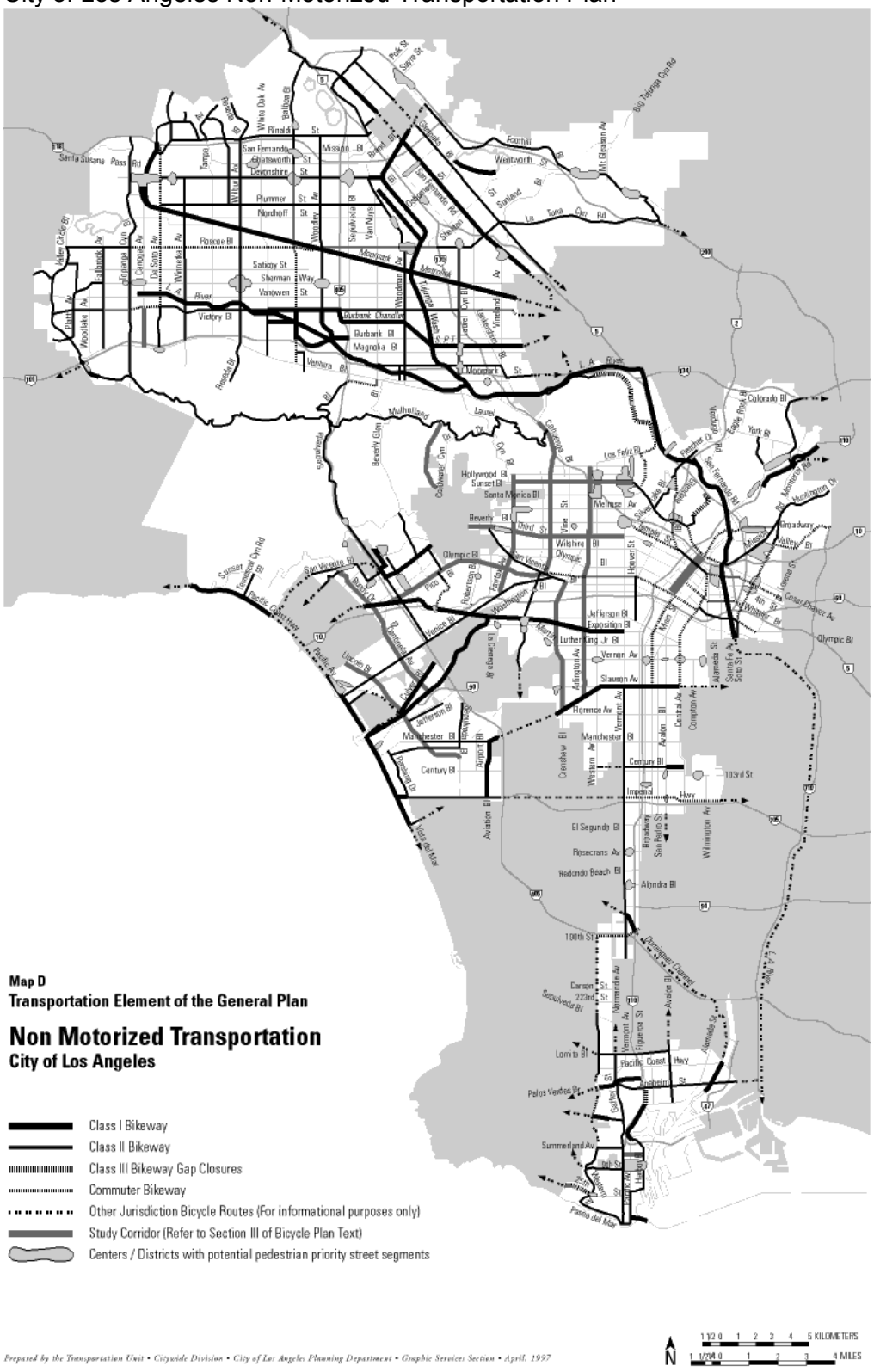
Parks within Canoga Park Area

Canoga Park Sr. Citizen Center	
Jurisdiction:	Region: Valley; District: West Valley; Council District: 3
Neighborhood Service Area:	South Valley
Public Information:	The auditorium is also used as a community room; the capacity is 285.
Facility Features:	Auditorium, community room
Sports Programs:	None
Other Programs:	Arts & crafts, blood pressure test (last Friday of month), dance-line/tap, exercise, movies, needlepoint, senior nutrition program trips
John Quimby Park	
Jurisdiction:	Region: Valley; District: West Valley ; Council District: 3
Neighborhood Service Area:	South Valley
Public Information:	This park is unstaffed and open from dawn to dusk. There are no restrooms.
Facility Features:	Unlighted outdoor basketball courts, children's play area, unlighted tennis courts

Eight additional parks are within a two-mile radius of the Canoga Park area:

- Cohasset Melba Park;
- Lanark Park and Recreation Center with Swimming Pool;
- Parthenia Park;
- Runnymede Recreation Center;
- Shadow Ranch Park;
- Warner Ranch Park;
- Winnetka Recreation Center; and
- Woodland Hills Recreation Center.

City of Los Angeles Non-Motorized Transportation Plan



Parks within River Glen Area	
Griffith Park and Recreation Center	
Jurisdiction:	Region: Griffith/Metro; District: Griffith Council District: 4
Neighborhood Service Area:	Central
Public Information:	Griffith Park contains Autry Museum of Western Heritage, Bird Sanctuary, Crystal Springs Picnic Area, Ferraro Soccer Fields, Friendship Auditorium, Ferndell Nature Center (closed), Griffith Observatory (closed for renovations), Griffith Park Miniature Train Rides, Griffith Park Drive tennis courts, Griffith-Riverside pay tennis courts, Griffith-Vermont pay tennis courts, Greek Theatre, Harding Golf Course/Clubhouse, Los Angeles Live Steamers, Los Feliz Golf Course, merry-go-round, Mineral Wells Picnic Area, Old Zoo Picnic Area, Park Center Picnic Area, Pecan Grove Picnic Area, pony rides, Rangers Station Headquarters, Roosevelt Golf Course, Shane's Inspiration, Travel Town Museum, Wilson Golf Course. Soccer field available by permit only. Griffith Park does not have an advisory board but does have a Griffith Park Resource Board, which is co-chaired by Mark Mariscal and Tom Labonge.
Facility Features:	Children's play area, picnic tables, restrooms, lighted soccer field, lighted and unlighted tennis courts
Special Features:	Hiking trails, horseback riding trails, refreshment stands, restaurants
Harding and Wilson Municipal Golf Courses	
Jurisdiction:	Region: Griffith/Metro; District: Griffith Council District: 4
Neighborhood Service Area:	Central
Public Information:	Electrical golf carts are available for rent through concessions. Located within the facility is a pro shop where golf lessons are available. There is also a clubhouse with restaurant and banquet room.
Facility Hours of Operation:	Monday to Sunday: dawn to dusk
Special Features:	Two 18-hole championship courses, clubhouse, practice facility with driving range, pro shop, rentals, restaurant
Milford Mini Park (City of Glendale)	
Jurisdiction:	City of Glendale
Regional Service Area:	West Glendale
Size:	Approximately 0.3 acre
Amenities:	Children's play area and picnic areas

Sixteen additional parks are within a two-mile radius of the River Glen Area:

- Chevy Chase Park;
- Chevy Chase Recreation Center;
- Los Feliz Golf Course;
- North Atwater Park;
- Palmer Park (Glendale);
- Maple Park (Glendale);
- Pacific Park (Glendale);
- Glendale Central Park/Adult Rec Center (Glendale);
- Carr Park (Glendale);
- Wilson Mini-Park (Glendale);
- Piedmont Park (Glendale);
- Fremont Park (Glendale);
- Pelanconi Park (Glendale);
- Griffith Manor Park (Glendale);
- Nibley Park (Glendale); and
- Brand Park (Glendale).

Seven of the parks in following table are within or immediately adjacent to the Taylor Yard Area.

Parks within Taylor Yard Area	
Cypress Park and Recreation Center	
Jurisdiction:	Region: Griffith/Metro; District: Griffith; Council District: 1
Neighborhood Service Area:	East Los Angeles
Public Information:	This is a Los Angeles Police Department Stop-In Center.
Facility Features:	Auditorium, barbecue pits, children's play area, indoor gym (with weights), picnic tables
Special Features:	Indoor lighted basketball court and volleyball court, kitchen, multipurpose sports field with lighted ball diamond, stage
Sports Programs:	Baseball, basketball (men/women and boys/girls division), flag football, football (youth), Girls Play L.A. (ages 13-15), softball, volleyball
Other Programs:	Aerobics, after school program, arts & crafts, Ballet Folklorico, basic science class (ages 5-13), community service, day camp (Camp Go Bananas), field trips, L.A. Kids, year-round lunch program, music, pre-school (Head Start), teen program (class parks), tutoring, weight lifting, Youth Enrichment, Youth Plus
Elysian Park and Elysian Valley Recreation Center	
Jurisdiction:	Region: Metro; District: Elysian; Council District: 1
Neighborhood Service Area:	East Area
Public Information:	Elysian Park has a Friends of Elysian Park Group. It contains Angels Point, Avenue of the Palms, Bishop Canyon (picnic area/baseball fields), Buena Vista Meadow Picnic Area, Buena Vista Point, Carob Tree Grove Picnic Area, Chavez Ravine Arboretum, Elysian Maintenance Office, Elysian Therapeutic Center, Ficus Tree Grove Picnic Area, Grace E. Simons Lodge, Grace E. Simons Memorial Sculpture, Jones Memorial, Monticello De Leo Politti Picnic Area, Palm Hill, Point Grand View, Police Academy, Portola Trail Historical Monument, Radio Hill, Solano Canyon (picnic area/community garden), Victory Memorial Grove (WWI Memorial). This park is unstaffed, unlocked.
Special Features:	Chavez Ravine Arboretum, hiking trails, horseshoe pits, jogging paths, restrooms
Elysian Park Therapeutic Recreation Center	
Jurisdiction:	Region: Griffith/Metro; District: Community Services; Council District: 1
Neighborhood Service Area:	East Los Angeles
Public Information:	This facility has an amphitheater with outdoor seating that can accommodate 200 to 300 people. A therapeutic

Thirty-one additional parks are within a two-mile radius of the Taylor Yard area:

- Alpine Park and Recreation Center;
- Carlin G Smith Recreation Center;
- Chevy Chase Park;
- Chevy Chase Recreation Center;
- City Hall Park Center;
- Downey Recreation Center and Playground;
- East Los Angeles Park;
- Elyria Canyon Park;
- Ernest E. Debs Regional Park;
- Greaver Oak Park;
- Griffith Park and Recreation Center;
- Heritage Square;
- Lincoln Heights Recreation Center;
- Lincoln Heights Sr. Citizen Center;
- Lincoln Park;
- Los Feliz Golf Course;
- Lummis Park;
- Montecito Heights Recreation Center;
- Montecito Heights Sr. Citizen Center;
- North Atwater Park;
- Pecan Park and Recreation Center and Playground;
- Prospect Park;
- Ramona Hall Community Center;
- Rose Hill Park and Recreation Center;
- Carlin Smith Playground Park;
- State Street Child Care;
- State Street Recreation Center;
- Sycamore Grove Park;
- Palmer (City of Glendale); and
- Maple (City of Glendale).

Parks within Chinatown-Cornfields Area

Downey Recreation Center and Playground	
Jurisdiction:	Region: Metro; District: Lincoln; Council District: 1
Neighborhood Service Area:	East Area
Public Information:	The indoor gymnasium has a capacity of 300. Free summer lunch program.
Facility Features:	Auditorium, lighted baseball diamond, children's play area, picnic tables, seasonal pool (outdoor/unheated)
Special Features:	Two classrooms, club room, indoor gymnasium, kitchen, lighted multipurpose sports field, stage
Sports Programs:	Youth baseball, basketball, and soccer, co-ed adult softball, novice swim team, novice synchronized swim team, water polo
Other Programs:	After school program, day camp, L.A. Kids, junior lifeguard training, swim lessons (group, private, semiprivate, parent, child)

Thirty-one additional parks are within a two-mile radius of the Chinatown-Cornfields area:

- 6th and Gladys Park;
- Aliso Pico Recreation Center;
- Alpine Park and Recreation Center;
- City Hall Park Center;
- Cypress Park and Recreation Center;
- Ernest E. Debs Regional Park;
- Park Therapeutic Recreation Center;
- East Los Angeles Park;
- Elyria Canyon Park;
- Elysian Park;
- Elysian Valley Recreation Center;
- Greaver Oak Park;
- Heritage Square;
- Hollenbeck Park and Recreation Center;
- La Youth Athletic Club;
- Lincoln Heights Recreation Center;
- Lincoln Heights Sr. Citizen Center;
- Lincoln Park;
- Lummis Park;
- Montecito Heights Recreation Center;
- Montecito Heights Sr. Citizen Center;
- Pecan Park and Recreation Center and Playground;
- Prospect Park;
- Ramona Hall Community Center;
- Roosevelt Pool;
- Rose Hill Park and Recreation Center;
- Carlin Smith Playground Park;
- State Street Child Care;
- State Street Recreation Center;
- Sycamore Grove Park; and

- Vest Pocket Park

Parks within Downtown Industrial Area	
Aliso Pico Recreation Center	
Jurisdiction:	Region: Metro; District: Hollenbeck; Council District: 14
Neighborhood Service Area:	East Area
Public Information:	There are two indoor gymnasiums that are also used as community rooms, the capacity for each is 250. Free summer lunch program. This facility is a Los Angeles Police Department stop-in center.
Facility Features:	Auditorium, lighted baseball diamond, lighted indoor and outdoor basketball courts, children's play area, community room, indoor gym (without weights), lighted tennis and volleyball courts
Special Features:	Two computer labs, cultural educational facility, two kitchens, multipurpose sports field (with lighted, youth-sized ball diamond), music room
Sports Programs:	Girls Play L.A. (ages 13-15)
Other Programs:	Arts and crafts, cooking, dance, disease prevention, guitar, holiday banquets, L.A. Kids, piano, Prototypes (social service program), study hall, Sylvan Learning Center, tutoring, video night (summer only), violin, Youth Opportunities
Boyle Heights Sports Center Park	
Jurisdiction:	Region: Metro; District: Hollenbeck; Council District: 14
Neighborhood Service Area:	East Area
Public Information:	The community room has a capacity of 50. Free Summer lunch program.
Facility Features:	Barbeque pits, lighted and unlighted baseball diamonds, lighted outdoor basketball courts, children's play area, community room, picnic tables
Special Features:	Asphalt track around field, bike path, community room, jogging path, multipurpose sports field with small lighted baseball diamond
Sports Programs:	Baseball (youth), basketball, flag football, soccer (AYSO)
Pecan Park and Recreation Center and Playground	
Jurisdiction:	Region: Metro; District: Hollenbeck; Council District: 14
Neighborhood Service Area:	East Area
Public Information:	All sport programs are co-ed. The community room is only used for the after school programs. Free summer lunch program.

Twenty additional parks are within a two-mile radius of the Downtown Industrial area:

- 6th and Gladys Park;
- Alpine Park and Recreation Center;
- City Hall Park Center;
- Costello Child Care;
- Costello Recreation Center;
- Costello Sr. Citizen Center;
- Downey Recreation Center and Playground;
- East Los Angeles Park;
- Elysian Park;
- Elysian Park Therapeutic Recreation Center;
- Hollenbeck Park and Recreation Center;
- Hostetter Playground;
- Los Angeles Youth Athletic Club;
- Lincoln Heights Recreation Center;
- Lincoln Heights Sr. Citizen Center;
- Lincoln Park;
- Prospect Park;
- Ramon Garcia Recreation Center;
- State Street Child Care
- State Street Recreation Center; and
- Vest Pocket Park.

Mitigation Actions Related To Impacts on Recreational Resources:

Appropriate mitigation actions would vary, depending on the type of resource impacted and the extent of the impact. Generally mitigation measures will be identified to accomplish the following:

- Avoid recreation resource impacts altogether by not taking a certain action or parts of an action;
- Minimize recreation resource impacts by limiting the degree or magnitude of the action and its implementation;
- Rectify the recreation resource impact by repairing, rehabilitating, or restoring the impacted land use (for example, providing on-site recreational amenities where impacts occur);
- Reduce or eliminate the land use impact over time by preservation and maintenance operations;

- Compensate for the land use impact by replacing or providing substitute resources;
- Provide direct support to the Department of Recreation and Parks, such as land, equipment, and funding;
- Review all future bikeway proposals for the River Corridor for consistency with guidelines specified for the development of Class I Bikeways;
- Review all future signage proposals for the River Corridor for consistency with the Los Angeles River Master Plan Sign guidelines; and
- Review all future proposals for the River Corridor that involve enhancing access for disabled persons for consistency with guidelines developed through the Americans with Disabilities Act.

TRANSPORTATION

Transportation within Los Angeles and in the project vicinity is on a complex system of roads, highways, public transit, freight railroads, airports, seaport, and intermodal terminals. Local streets, arterial streets, freeways, and carpool lanes allow access to private autos, carpool vehicles, private and public buses, and trucks. The freeway and highway system is the primary means of regional transportation for people and goods, allowing direct access to places of employment, and commerce.

The City of Los Angeles General Plan Framework is a strategy for long-term growth, which sets a citywide context to guide the update of the community plan and citywide elements. The framework element transportation system includes proposals to improve the movement of goods and to provide greater access to major intermodal facilities, such as the ports and airports. There are 35 separate community planning areas, each of which sets its own goals, objectives, policies, and programs for the community. Several community planning areas fall within the project area and are discussed below.

The freeways and state highways passing through or near the project area are listed in following table.

Freeways and State Highways in the Project Vicinity

State Routes, Interstates, and US Highways	Freeway or Arterial
2	Glendale Boulevard, Glendale Freeway
5	Santa Ana Freeway, Golden State Freeway
10	Santa Monica Freeway, San Bernardino Freeway
27	Topanga Canyon Road
60	Pomona Freeway
101	Hollywood Freeway, Ventura Freeway
110	Pasadena Freeway, Harbor Freeway
134	Ventura Freeway
170	Highland Avenue, Hollywood Freeway
405	San Diego Freeway

Peak periods generally extend from 6:00 AM to 9:00 AM, and from 3:00 PM to 6:00 PM on weekdays. The remaining hours are considered “off peak” periods. The single hour of most intense traffic circulation is between 5:00 PM and 6:00 PM on weekdays. Many freeways experience heavy congestion in both directions during peak periods.

By 2010, a 38 percent increase in vehicle travel is projected. Due to right-of-way and construction costs, land constraints, and environmental impact concerns, focus has shifted from constructing additional freeways to making more efficient use of the existing system. This can be done by adding carpool lanes, also known as high occupancy vehicle (HOV) lanes. Local agencies are improving traffic flow by synchronizing traffic signals and adding new major roads.

The regional public transit system includes local shuttles, municipal and public bus service, rapid rail transit service, regional commuter rail service, and inter-regional passenger rail service. Transit usage in the city is almost three times higher than the rest of Los Angeles County. Transit authorities in the region include Los Angeles County Metropolitan Transit Authority (Metro), which is the largest provider of mass transit in the project area, and Los Angeles Department of Transportation (LADOT).

Metro is the regional transportation planner for all of Los Angeles County. Metro develops and oversees transportation plans, policies, funding programs, and short-term and long-term solutions that address the county’s increasing mobility, accessibility, and environmental needs. Metro operates 200 bus lines and 4 electric-powered or light rail lines, the Red, Blue, Green, and Gold Lines. Metro operates 62 stations and over 73 miles of track. During the heavy peak travel times, there are as many as 250 trains operating throughout the system.

LADOT’s transit services include DASH, Commuter Express, and CityRide. Their fleet consists of nearly 400 vehicles which accommodate approximately 30 million passenger boardings per year. DASH provides bus service seven days a week, while Commuter Express generally operates Monday through Friday during peak commute hours. CityRide accommodates citizens 65 years of age or older or those who have mobility impairments.

Union Pacific serves the Los Angeles metropolitan area with its two major ports at Los Angeles and Long Beach. The I-5 corridor offers north-south transportation service to freight customers, with a main east-west corridor in Los Angeles. Union Pacific trains carry extensive varieties of import-export traffic through its Intermodal Container Transfer Facility near the Los Angeles-Long Beach Harbors. The railroad also moves chemicals and manufactured goods, fruits, vegetables, and canned goods. Daily Amtrak passenger service and other commuter trains also use Union Pacific lines. In 2006, Union Pacific operated 110 trains per day in its “LA Service Unit”, which includes the following routes: Los Angeles - Arizona; Los Angeles - Nevada; and Los Angeles - Northern California.

The Burlington Northern-Santa Fe Railway (BNSF) operates rail lines in Los Angeles to transport intermodal containers, trailers, and other freight. On February 9, 2005, BNSF announced plans to build a new intermodal transfer facility near the Port of Los Angeles. The new facility, with direct rail

access to the recently constructed Alameda Corridor, would supplement the container transloading abilities of the Intermodal Container Transfer Facility built by Southern Pacific in the 1990s. The BNSF main line from Los Angeles to Chicago is a triple track and runs 100 trains per day.

Metrolink (Southern California Regional Rail Authority) is a premier regional rail system including commuter and other passenger services. Metrolink connects communities to employment and activity centers and covers the area from Oxnard to Lancaster, San Bernardino, and Oceanside. Metrolink operates 54 stations and 141 weekday trains and serves over 41,000 riders per day on weekdays.

Amtrak operates the following long-distance trains, which pass through Los Angeles Union Station: the Coast Starlight (daily Los Angeles to Oakland to Seattle), Southwest Chief (daily Los Angeles to Albuquerque to Chicago), and Sunset Limited (three times a week Los Angeles to New Orleans to Orlando). Amtrak also partners with the State of California to operate the Pacific Surfliner, which runs from San Diego to Los Angeles to Santa Barbara to San Luis Obispo with several daily round trips. In fiscal year 2006, Amtrak served 1,414,164 passengers in Los Angeles.

The proposed California High-Speed Rail System stretches from San Francisco, Oakland, and Sacramento in the north to Los Angeles and San Diego in the south and will connect California's major metropolitan areas. The proposed corridor alignment has been identified in the Los Angeles area, and it traverses LA-RIO. With the certification of the Statewide Final Program-Level Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) in November 2005, the Authority is poised to begin the implementation phase of the project. It will take from eight to 11 years to develop and begin operating on an initial segment. The system is forecast to carry up to 42 to 68 million passengers per year by 2020.

Union Station is the major regional hub for Metrolink, Amtrak, Metro rail lines, and the proposed high-speed rail service. The station currently has 10 train tracks, and approximately 80 train departures on weekdays (not counting the Gold and Red Lines). The attached Patsaouras Transit Plaza serves several bus lines, including Rapid and regular Metro lines, as well as downtown DASH shuttles.

Non-motorized transportation includes walking, facilitated by sidewalks and crosswalks, and biking, facilitated by a system of bikeways.

River Corridor: A number of major arterials pass through the Los Angeles River Corridor, including the Golden State and Santa Ana (I-5), San Diego (I-405), Harbor (I-110), and Santa Monica (I-10) freeways, US 101, and State Routes 2, 27, 60, 134, and 170.

The public transit system in the River Corridor includes local shuttles, municipal and public bus operations, rapid rail transit operations, regional commuter rail services, and interregional passenger rail service. Metro and LADOT provide mass transit. Union Pacific, BNSF, Metrolink, Amtrak, and the Metro all operate rail lines within the River Corridor. Metrolink, Amtrak and the Metro are commuter rails, while Union Pacific and BNSF transport goods.

Metro bus lines operate within the area, which is also serviced by LADOT's Commuter Express and DASH. The Metro Red Line subway provides service to North Hollywood, where it meets the Metro Orange Line. The new 14-mile Metro Orange Line starts in North Hollywood at Lankershim Boulevard and runs across the valley to Warner Center in Woodland Hills.

Union Pacific rail lines run along Canoga Avenue north of Victory Boulevard and turn east at Victory Boulevard.

The main areas of activity in the project vicinity are Canoga Park High School and Westfield Shopping Center. Pierce College is located just outside the area. Its parking lots are not free and require permits, and students and faculty also park on nearby city streets. No parking fees are charged during the summer. Near the plaza, there have been increasing concerns with speeding problems along Topanga Canyon Boulevard. A special parking subcommittee has met to discuss the possibility of adding signs to remind drivers to slow down. Street parking limitations have been implemented along Sherman Way during peak hours, as specified in the community plans.

Transportation issues listed in the Canoga Park-Winnetka-Woodland Hills-West Hills Community Plan include generalized congestion in much of the area. Also, traffic speed and volume compromise safety and quality of many residential neighborhoods and some commercial areas.

Regional access to the River Glen area is provided by SR-134 and the I-5 freeway. In the AM peak period in the eastbound direction, SR-134 experiences LOS F as it approaches the I-5 interchange and LOS D after the interchange. Traffic in the westbound direction experiences LOS F before and after the interchange. In the PM peak period in both directions, SR-134 experiences LOS D before the I-5 interchange and LOS F past the interchange. In the AM peak period, I-5 experiences LOS D in the northbound direction and LOS F in the southbound direction. In the PM peak period, I-5 experiences LOS E and F in the northbound direction and LOS D in the southbound direction.

Metro bus lines and LADOT's Commuter Express and DASH serve the area.

Metrolink, Amtrak, and Union Pacific operate rail lines along San Fernando Road. The proposed High Speed Rail also crosses the site.

The Glendale Galleria has a parking structure with almost 3,000-car capacity and free parking, but parking still presents a problem at the shopping mall. The Los Angeles Zoo, which is just outside the area, is owned and operated by the City of Los Angeles. There are no major parking concerns with the zoo, which has 34 acres of free parking and tram service.

Regional access to the Taylor Yard area is provided by SR-2, I-5, and SR-110. In the AM peak period, SR-2 experiences LOS D in the northbound direction and LOS F in the southbound direction. In the PM peak period, SR-2 experiences LOS D or better in both directions. In the AM peak period, I-5 experiences LOS D or better in the northbound direction and LOS F in the southbound direction. In the PM peak period, I-5 experiences LOS F in the northbound direction and LOS D or better in the southbound direction. In the AM peak period, SR-110 experiences LOS D or better in the northbound direction and LOS F in the southbound direction. In the PM peak period, SR-110 experiences LOS F

in the northbound direction and in the southbound direction LOS D or better before the I-5 interchange, and LOS after the interchange.

Commuter traffic coming off and onto SR-2 via Glendale Boulevard and Alvarado Street has contributed to congestion. Major boulevards and residential streets are used as thoroughfares by commuters to avoid freeway traffic. Residential streets also face truck traffic, particularly in Elysian Valley, and hillside streets are narrow and substandard.

Metro Bus lines and LADOT's Commuter Express and DASH serve the area, but mass transportation and multimodal transit options are limited, according to the Silver Lake-Echo Park-Elysian Valley Community Plan.

Metrolink, Amtrak, and Union Pacific rail lines run between San Fernando Road and the Los Angeles River, then follow the river after crossing the I-5 freeway. The Metro Gold Line starts out on an elevated rail line running between Union Station and Chinatown, and subsequently traverses the Los Angeles River (just north of Broadway) and the adjacent Golden State Freeway, before serving the hillside communities just north of downtown. Taylor Yard, owned by Union Pacific, is currently being used by Metrolink as a holding area for commuter trains. The 200-acre historic site is just north of downtown.

Dodger Stadium, which is in the project vicinity, faces unique parking challenges because on every opening day, the large number of fans creates long traffic gridlocks; however, during other games of the season, the spacious parking lot has no trouble accommodating the audience. The community plans call for expanded or new Park-and-Ride lots, peak hour parking restrictions on highways such as Sunset Boulevard to add travel lanes along commuter routes, and integrated commercial, residential, and parking facilities (such as mixed use parking structures with commercial/retail on the ground floor).

Main concerns listed in the Northeast Los Angeles Community Plan include traffic bottlenecks, rail/surface street conflicts, competition for priority between cross-community and local streets, poorly integrated systems of non-motorized traffic and impacts of major infrastructure projects. The Silver Lake-Echo Park-Elysian Valley Community Plan and Arroyo Seco Watershed Management and Restoration Plan also overlap portions of the opportunity site.

Regional access to Chinatown-Cornfields area is provided by I-5, US-101, and SR-110. Arterial roadways in the vicinity include Alameda Street, which would also be expected to carry project-related traffic. In the AM peak period, the I-5 experiences LOS F in both directions; US-101 experiences Los F in the westbound direction and LOS D or better in the eastbound direction; and SR-110 experiences LOS D or better in the northbound direction, and LOS F in the southbound direction. In the PM peak period, I-5 experiences LOS F in both directions; US-101 experiences LOS D or better in the westbound direction and LOS F in the eastbound direction; and SR-110 experiences LOS F in both directions. Metro bus lines and LADOT's Commuter Express and DASH serve the area. Limited bus services on weekends impact retail and business districts on Broadway. Metrolink, Amtrak, Union Pacific, and BNSF operate rail lines adjacent to the Los Angeles River. Metrolink, Amtrak, BNSF, and the MTA Gold Line all have termini at Union Station. The proposed High Speed Rail alignment also falls within this area. Union Pacific's Mission Yard is between the Los Angeles River and the I-5 freeway north of Mission Road. The area includes Union Station, the

Los Angeles County Central Jail, and the Twin Towers Correctional Facility. Parking issues are similar to ones mentioned for the Downtown Industrial Area and the Taylor Yard Area.

Transportation issues listed in the Central City Community Plan include inadequate and aging infrastructure, congestion resulting from the concentration of governmental and financial services, and limited bus service on weekends, which impacts retail and business districts. The Central City North Community Plan and Boyle Heights Community Plan also overlap portions of the area.

Regional access to this area is provided by US-101, I-5, SR-60, and I-110, and State Highway 72 (Whittier Boulevard). Arterial roadways in the vicinity, including Alameda Street, also would be expected to carry project-related traffic. In the AM peak period, the I-5 and I-10 experience LOS F in both directions; US-101 and SR-60 experience Los F in the westbound direction and LOS D or better in the eastbound direction; and the SR-110 experiences LOS D or better in the northbound direction and LOS F in the southbound direction north of the US-101 and LOS F in both directions south of the US-101. In the PM peak period, I-5 and I-10 experience LOS F in both directions; US-101 and SR-60 experience LOS D or better in the westbound direction and LOS F in the eastbound direction; and SR-110 experiences LOS F in both directions.

The area is served by El Monte Busway, Metro Red, Gold, and Blue lines, LADOT Commuter Express Routes, and DASH.

Metrolink, Amtrak, Union Pacific, Metro Gold Line, BNSF railways, and Union Pacific's Mission Yard are within the area. The proposed high-speed rail alignment also passes through this area.

Major attractions in the Chinatown/Cornfields area include Chinatown, Japantown, Union Station, USC Medical Center, and five parks. Within two miles, there is also the Staples Center, the Los Angeles Convention Center, and the Museum of Contemporary Art. Parking garages have been integrated into new buildings, such as the Staples Center, to help meet demand. In order to reserve street parking for residents, there is a residential parking permit program, the first parking permit zone in a low-income neighborhood. The Los Angeles Civic Center Shared Facilities and Enhancement Plan enables shared parking facilities. Parking is limited to 0.60 space per 1,000 square feet of office space in the Downtown Traffic Impact Zone and 0.40 space for remote or intercept locations.

Transportation issues listed in the Central City Community Plan include inadequate and aging infrastructure, congestion resulting from the concentration of governmental and financial services, and limited bus service on weekends, which impacts retail and business districts.

Transportation Mitigation Measures

Mitigation actions that can be applied include the following:

- For each construction site other than single family residence, a construction traffic management plan may be prepared and submitted to LADOT for review and approval before any construction work began. This plan should include
    - the designation of haul routes for construction-related trucks,
    - the location of access to the construction site,

  - any driveway turning movement restrictions,
  - temporary traffic control devices or flagmen,
  - travel time restrictions for construction-related traffic to avoid peak travel periods on selected roadways, and
  - designated staging and parking areas for workers and equipment;
- Where construction would occur within a public street ROW, the following mitigation measures may also be apply:
  - A traffic control plan may be prepared for each construction site and submitted to LADOT for review and approval prior to the start of any construction work. This plan should include the location of any lane closures, restricted hours during which lane closures would not be allowed, local traffic detours (where reasonable alternate routes exist), protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, temporary left-turn restrictions, temporary traffic signals, warning signs), access to abutting properties, and provisions to maintain emergency access through construction work areas,
  - Available street space may be fully used to minimize lane reductions on affected streets, including eliminating on-street parking where necessary,
  - Left-turn restrictions may be implemented as appropriate on re-striped street segments to facilitate the movement of through traffic,
  - Travel lanes may be eliminated only when absolutely necessary,
  - Alternative pedestrian and bicycle access routes may be provided where sidewalks, crosswalks, or bike lanes would be affected,
  - Advance notice may be provided to any affected residents and businesses and property owners in the vicinity of each construction site, and, where existing property access would be reduced, alternative means of access should be identified,
  - Emergency service providers (police, fire, ambulance, and paramedic services) may be notified of any lane closures, construction hours, or changes to local access and to identify alternative routes where appropriate, and
  - Public transit providers (MTA, LADOT Commuter Express, and Glendale Bee Line) may be notified of any lane closures and construction hours, and temporary bus stops should be established within a reasonable walking distance of any displaced bus stops;

  Employing the mitigation actions described above would reduce any temporary adverse impacts from implementation of the LA-RIO ordinance.

UTILITIES AND INFRASTRUCTURE

The Los Angeles Department of Water and Power holds power line easements and rights-of-way along the river within and outside of the city limits of Los Angeles. Easements sometimes coincide with county and Corps flood control easements (River Project 2006a). Electricity infrastructure within

the project area includes a complex extensive system of buried and aboveground power lines, substations, and service buildings. Aboveground power lines exist along either or both banks of the river throughout much of the project area, especially south of the intersection of I-5 and SR-134. There are several natural gas and oil pipelines that cross the Los Angeles River either above via bridges or beneath in tunnels.

Telephone lines in urban areas are typically located within street rights-of-way, aboveground on utility poles, and underground in newer areas. Other smaller utilities often share these underground trenches or duct banks. Several private companies maintain fiber optic cables or provide long distance/cable television and other telecommunications services in Los Angeles city and county.

The Donald C. Tillman Water Reclamation Plant is between a quarter and a half mile north of the Los Angeles River in Woodley Avenue Park. The plant, serving San Fernando Valley communities, has the capacity to process 64 million gallons per day (mgd) with proposals to increase to 100 mgd. Sewage sludge removed from wastewater at the Donald C. Tillman and Los Angeles-Glendale Water Reclamation Plants is returned to the sewer system and treated at the Hyperion Treatment Plant, the city's largest facility. There are two planned wastewater collection lines within a half mile of the Los Angeles River (the Glendale Burbank Interceptor Sewer and the Northeast Interceptor Sewer II). The Northeast Interceptor Sewer crosses beneath the river bed just north of the Glendale Freeway. These lines include service shafts within a half mile of the river.

Stormwater is absorbed into the ground or flows into the Los Angeles River. Stormwater collection paths, drains, and underground pipelines exist in the area that already convey water into the existing stormwater system. The plan encourages a greater degree of onsite detention, retention and infiltration of stormwater.

There are no high voltage power lines along the river at the Canoga Park area. There are no natural gas or oil supply pipelines along the river in this area. Telephone lines in urban areas are typically located within street rights-of-way, aboveground on utility poles, and underground in newer areas. Other smaller utilities often share these underground trenches or duct banks. Several private companies maintain fiber optic cables or provide long distance/cable television and other telecommunications services in the Los Angeles city and county area.

Aboveground power lines exist along either or both banks of the river throughout the River Glen area. There are no natural gas or oil supply pipelines here. Telephone lines in urban areas are typically located within street rights-of-way, aboveground on utility poles, and underground in newer areas. Other smaller utilities often share these underground trenches or duct banks. Several private companies maintain fiber optic cables or provide long distance/cable television and other telecommunications services in the Los Angeles city and county area.

The Los Angeles-Glendale Water Reclamation Plant is located at the southern edge of the area, on the southern side of Colorado Boulevard, just east of the Los Angeles River. The Los Angeles-Glendale Water Reclamation Plant serves eastern San Fernando Valley communities that are inside and outside of the Los Angeles city limits. It has the capacity to process 15 mgd with plans to increase to 30 mgd (City of Los Angeles 2006d). Stormwater is absorbed into the ground and flows into the Los Angeles River.

In the Taylor Yard area, aboveground power lines exist along the northeast bank of the river between the bank and the rail lines. A 10-inch natural gas pipeline runs along the railroad alignment in the southern part of the area. It is not currently being used. Five telecommunication lines run along the western rail line (California State Parks 2005).

A 24-inch-diameter cement pipe sewer line runs across the northern third of the area, along Eagle Rock Boulevard and Cypress Avenue, then crossing San Fernando Road. The line crosses the Los Angeles River in a coupled (21-inch and 15-inch) vitrified clay line, connecting to the sewer line on the west side of the river underneath Newhall Street (California State Parks 2005). The Northeast Interceptor Sewer runs adjacent to the east side of the area (California State Parks 2005).

The Pollock Wells Treatment Plant which treats groundwater contaminated with trichloroethylene and perchlorethylene and is located at the northern end of the area, just west of the intersection of I-2 and the Los Angeles River. After the contaminants are removed, the treated water enters an underground reservoir, where it is chlorinated and then pumped into DWP's distribution system (AGWA 1998).

The LADWP has utility easements along both sides of the river in the Chinatown-Cornfields area (City of Los Angeles 1996). Overhead power transmission lines run along the north levee of the Los Angeles River. There is an LADWP electrical distribution vault along the eastern side of the area (CDPR 2005b). There is a 20-inch pressurized oil pipeline located along the northern edge of the area (CDPR 2005b). There are underground fiber optic telecommunication easements along the northern perimeter of the area (CDPR 2005b).

The area is in the area served by the Hyperion Treatment Plant, located directly southwest of the Los Angeles International Airport. The Hyperion Treatment Plant treats wastewater from almost all of the city of Los Angeles. There is an existing sanitary sewer line along North Spring Street (CDPR 2005b).

The LADWP has utility easements along both sides of the river in the Downtown Industrial area (City of Los Angeles 1996). Aboveground power lines exist along both banks of the river throughout the area. There are no natural gas or oil supply pipelines along the river in the Downtown Industrial area. Telephone lines in urban areas are typically located within street rights-of-way, aboveground on utility poles, and underground in newer areas. Other smaller utilities often share these underground trenches or duct banks. Several private companies maintain fiber optic cables or provide long distance/cable television and other telecommunications services in the Los Angeles city and county area.

MITIGATION MEASURES

Mitigation Actions Related To Impacts on Recreational Resources:

Appropriate mitigation actions would vary, depending on the type of resource impacted and the extent of the impact. Generally mitigation measures will be identified to accomplish the following:

- Avoid recreation resource impacts altogether by not taking a certain action or parts of an action;
- Minimize recreation resource impacts by limiting the degree or magnitude of the action and its implementation;
- Rectify the recreation resource impact by repairing, rehabilitating, or restoring the impacted land use (for example, providing on-site recreational amenities where impacts occur);
- Reduce or eliminate the land use impact over time by preservation and maintenance operations;
- Compensate for the land use impact by replacing or providing substitute resources;
- Provide direct support to the Department of Recreation and Parks, such as land, equipment, and funding;
- Review all future bikeway proposals for the River Corridor for consistency with guidelines specified for the development of Class I Bikeways;
- Review all future signage proposals for the River Corridor for consistency with the Los Angeles River Master Plan Sign guidelines; and
- Review all future proposals for the River Corridor that involve enhancing access for disabled persons for consistency with guidelines developed through the Americans with Disabilities Act.

Transportation Mitigation Measures

Mitigation actions that can be applied include the following:

- For each construction site other than single family residence, a construction traffic management plan may be prepared and submitted to LADOT for review and approval before any construction work began. This plan should include
  - the designation of haul routes for construction-related trucks,
  - the location of access to the construction site,
  - any driveway turning movement restrictions,
  - temporary traffic control devices or flagmen,
  - travel time restrictions for construction-related traffic to avoid peak travel periods on selected roadways, and
  - designated staging and parking areas for workers and equipment;
- Where construction would occur within a public street ROW, the following mitigation measures may also be apply:
  - A traffic control plan may be prepared for each construction site and submitted to LADOT for review and approval prior to the start of any construction work. This plan should include the location of any lane closures, restricted hours during which lane closures would not be allowed, local traffic detours (where reasonable alternate routes exist), protective devices and traffic controls (such as barricades, cones, flagmen, lights, warning beacons, temporary left-turn restrictions, temporary traffic

signals, warning signs), access to abutting properties, and provisions to maintain emergency access through construction work areas,

- Available street space may be fully used to minimize lane reductions on affected streets, including eliminating on-street parking where necessary,
- Left-turn restrictions may be implemented as appropriate on re-striped street segments to facilitate the movement of through traffic,
- Travel lanes may be eliminated only when absolutely necessary,
- Alternative pedestrian and bicycle access routes may be provided where sidewalks, crosswalks, or bike lanes would be affected,
- Advance notice may be provided to any affected residents and businesses and property owners in the vicinity of each construction site, and, where existing property access would be reduced, alternative means of access should be identified,
- Emergency service providers (police, fire, ambulance, and paramedic services) may be notified of any lane closures, construction hours, or changes to local access and to identify alternative routes where appropriate, and
- Public transit providers (MTA, LADOT Commuter Express, and Glendale Bee Line) may be notified of any lane closures and construction hours, and temporary bus stops should be established within a reasonable walking distance of any displaced bus stops;