

Chapter 3:

Parks *along the LA River*

Introduction

Definition and Benefits

Parks, also referred to as open spaces, along the Los Angeles River serve a variety of purposes for many types of beneficiaries. This includes drawing local residents and regional visitors to the River while expanding opportunities for recreation, social interaction, and more. Many parks were also designed for ecological and environmental benefits, by providing native habitat for wildlife, green infrastructure, and ecological restoration. Park along the River fall in or between two main categories: 1) large, regionally significant parks with multiple components, such as recreational and educational facilities, nature trails, and native habitat, and 2) smaller, community-based pocket parks.

This chapter highlights parks that provide both social and environmental benefits by providing the following:

- **Community Space:** Picnic areas, outdoor auditoriums, and other venues accessible to the local neighborhood and the regional public, can promote community interaction and family activities. Special event programming can also be incorporated for local cultural activities and business interaction.

(INSERT Figure 3.1.1 [Caption: An event pavilion, walking trails, and dry creek bed in Marsh Park. Source: Meléndrez])

- **Recreational Amenities:** Fitness stations, walking trails, and other amenities surrounded by greenery can provide pleasant and safe places for health-promoting recreation for residents of all ages and interests, including at-risk youth and limited-mobility residents.

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(INSERT Figure 3.1.2 [Caption: Fitness stations at Marsh Park. Source: Meléndrez])

- **Educational and Interpretive Opportunities:** Parks can help introduce the public to their local environment and the rehabilitated River. Outdoor classrooms, signage, and special programs can provide learning opportunities for local schools, community groups, and those with environmental interests—regardless of age.

(INSERT Figure 3.1.3 [Caption: Interpretive signage, seating, and native plants in Sunnynook River Park. Source: Andy Pasillas])

- **Access to Nature:** Restoring or preserving natural habits and allowing the public to access these areas can provide mental health benefits while supporting the health of local ecosystems. Green space may be particularly needed in communities with few parks and/or many industrial areas.

(INSERT Figure 3.1.4 [Caption: Open fields, shade trees, and a dry creek bed in Maywood Riverfront Park. Source: Dore Burry])

- **Ecological Restoration and Green Infrastructure:** Native plants can provide habitat for wildlife and strengthen efforts to return the River to a vital natural resource. Natural channels, storm water infiltration areas, and other best management practices can

improve water quality and support other environmental outcomes for current and future use.

(INSERT Figure 3.1.5 [Caption: Restored native riparian and upland habitats in Sunnynook River Park. Source: Andy Pasillas])

Importance: Current Conditions along the Los Angeles River

Much of the development adjacent to the LA River includes industrial land uses as well as heavy rail, highway, and electricity utility infrastructure. After multiple decades of such private and industrial development, an alternative vision emerged which seeks to recognize the LA River as a natural habitat and recreational asset for the public.

Although there is still much work to be done, there are several notable park projects along the LA River. Most have been implemented in the upper section of the LA River, varying widely in size and amenities. The lower section has far fewer planned open spaces, although it is home to a handful of very successful projects. Los Angeles County's *Los Angeles River Master Plan*, the City of Los Angeles' *Los Angeles River Revitalization Master Plan*, and the City of Long Beach's *RiverLink* plan identifies underutilized spaces as potential park sites and makes recommendations about, for example, incorporating best management practices to improve environmental quality.

Strategically Prioritizing Open Space Projects

Parks include a particularly large menu of project types, forms, purposes, and beneficiaries. Having so many options for a park project requires careful consideration to establish priorities. The following basic questions may help to clarify planning objectives and establish priorities for future proposed projects:

- How and where can the benefits of open space be most significant?
- Where can open space be successfully developed?
- What are the desired main purposes/benefits of the proposed project?
- Who are the desired users/beneficiaries of the project, and how can the project address their needs?

(INSERT Figure 3.1.6 [Caption: Visitors and community members utilizing Marsh Park, Phase II. Source: Meléndrez])

In this chapter, we explore how four successfully implemented projects addressed these questions.

Our focus on individual projects is not an endorsement of a project-by-project approach to river revitalization, which can sometimes feel piecemeal. Instead, our aim is to accurately document what has happened in the past to help inform and inspire future efforts that over time may become ever more transformative. In addition, organizing our research and the Guide by four project archetypes provided a helpful, logical structure but we recognize that this organization requires a simplification of reality in which many projects involve a combination of improvements rather than merely one type of feature. For example, the parks featured in this chapter involve community access points and trails. We emphasize the importance of parks as part of a complete and comprehensive river greenway.

Learning from Case Study Projects

The project profiles are meant to inspire and inform future efforts to develop parks so that all communities along the 51 miles of the LA River have equitable access to public, open space. As such, the case studies involve transferrable lessons learned that relevant even as some political, financial, environmental, and social conditions may change over time. Cudahy River Park, presented as an abridged profile, represents a small budget, big impact project. We present Marsh Park Phase II, Sunnynook River Park, and Maywood Riverfront Park as full case studies of larger projects. These four examples represent a diverse range of project types with various forms, approaches, purposes, users, and locations along the River. We present the projects from smallest to largest in scale, which also tends to correspond to their cost and complexity.

Each case study describes the project's development process— including origins, goals, and timeline; project proponents and community collaborators; site selection and design; cost and funding; permitting and use agreements; as well as operations and maintenance. The chapter ends with guidance for pursuing similar projects, summarizing best practices and lessons learned from the case studies. A summary of the defining elements of each project is shown below:

Cudahy River Park

Location: City of Cudahy, corner of River Road and Clara Street
Form and Scale: Developed vacant residential lot into a small (0.25 acre) park
Key Benefits: Community access to the LA River; improved water quality and management of storm water runoff
Keywords: Small scale, low cost project located in an underserved residential community; innovative green infrastructure; model project for small organizations
Lead Proponents: City of Cudahy and North East Trees
Cost: \$378,000 for design and construction (site acquisition costs not available)
Completed: 2009

Marsh Park Phase II

Location: City of Los Angeles, Elysian Valley neighborhood
Form and Scale: Converted industrial land into a 3.1-acre park, part of a multi-phased open space project
Benefits Include: Active recreation; event and social gathering space; access to nature; green infrastructure; native habitat restoration
Keywords: Community-driven design; array of park amenities including fitness stations; educational programs; transformation of a former industrial site in an underserved community
Lead Proponents: Mountains Recreation and Conservation Authority, with noteworthy high levels of community involvement
Cost: \$8 million: \$3.6 million for site acquisition and \$4.4 million for design and construction
Completed: 2014

Sunnynook River Park

Location: City of Los Angeles, Atwater Village
Form and Scale: Connected the greenway along the River to Griffith Park with a 5-acre open space area complete with native habitat and trails
Benefits Include: Passive recreation; habitat restoration; water quality improvement; outdoor education
Keywords: Example of innovative and budget conscious design; complex site configuration, jurisdictional permitting and negotiation
Lead Proponent: City of Los Angeles, Bureau of Engineering Architectural Division
Cost: \$1.7 million for design and construction (no site acquisition costs required)
Completed: 2013

Maywood Riverfront Park

Location: City of Maywood, south of Slauson Avenue Bridge
Form and Scale: Brownfield and Superfund sites cleanup and transformation into a 7.4-acre park
Benefits Include: Designed for many types of uses and users; doubled the amount of park space in the dense, underserved community of Maywood
Keywords: Example of complex site acquisition and remediation of industrial land; particularly large numbers of partners and coordinating agencies involved; also involved community engagement in an underserved city
Lead Proponents: City of Maywood and multiple project partners, including the Trust for Public Land and the U.S. Environmental Protection Agency
Cost: \$50.5 million: \$5.9 million for site acquisition, \$4.6 million for design and construction, and \$40 million for site remediation
Completed: 2008, some remediation is ongoing

Small Project, Big Impact Example

Cudahy River Park

Cudahy River Park serves as a model for open space development along the lower portion of the Los Angeles River in southeastern Los Angeles County. The project illustrates how a small-scale and relatively low cost park can revitalize the River, address local needs for open space, and improve storm water management and water quality.

(INSERT Figure 3.2.1.1 [Caption: Cudahy River Park provides the community with open space, serves as a rest area along the River bike path, and improves local water quality. Source: North East Trees])

The City of Cudahy has a land area of 1.226 square miles, but it has the one of the highest population densities of any incorporated city in the U.S. The majority of the residents are first-generation Latino immigrants and nearly 30% of the population lives below the poverty line. This park-poor, underserved community is adjacent to the River, making it a prime location for revitalization. In 2006, the nonprofit organization North East Trees and the City of Cudahy partnered to do just that. They transformed a narrow, vacant corner lot along the east bank of the River into a small pocket park with open green space, a nature trail, native vegetation, decorative gates, shaded seating, storm water management features, and improved access to the River and bike path.

(INSERT Figure 3.2.1.2 [Caption: The entrance to Cudahy River Park today. Source: Henry McCann])

Origins, Goals, and Timeline

North East Trees partnered with the City of Cudahy in 2006 to begin developing Cudahy River Park. The mission of North East Trees is to restore nature's services in resource challenged communities, through a collaborative resource development, implementation, and stewardship process. The goal of the project was to revitalize the River greenway and to provide the underserved community with multiple benefits. North East Trees managed the design, development, and implementation of the project. The City also played an important role in facilitating the project's development. They acquired the property, financed part of the project, secured construction permits, and managed long-term operations and maintenance.

(INSERT Figure 3.2.1.3 [Caption: Riparian habitats and native landscaping act as storm water capture and infiltration zones in Cudahy River Park. Source: Henry McCann])

By following the environmental improvement standards set by Los Angeles County's Enhanced Watershed Management Plan,¹ North East Trees developed Cudahy River Park to increase park space for local residents and to meet the County's storm water mitigation goals of water quality improvement, reduced runoff, and ground water recharge.

¹ Los Angeles County Stormwater Program. (2015). Enhanced Watershed Management Plans. Accessed (August 12, 2015, <http://www.lastormwater.org/green-la/enhanced-watershed-management-plans/>)

(INSERT Figure 3.2.1.4 [Caption: The site’s original storm drains emptying untreated rainwater into the River. Source: North East Trees])

Timeline	
Date	Milestone
August 2006	North East Trees proposes project to the City of Cudahy
January 2007	Conceptual development begins
June 2007	Rivers and Mountains Conservancy awards North East Trees with Proposition 50 funding
July 2007	LA County Parks and Open Space District awards the City with Proposition A funding
July 2008	Construction drawings submitted by North East Trees and approved by the City of Cudahy; Construction begins
February 2009	Major construction complete; Park unveiled with community stakeholders
April 2009	Park officially opened to the public

Table 3.2.1.A: Cudahy River Park development timeline

(INSERT Figure 3.2.1.5 [Caption: Cudahy River Park development timeline. Source: North East Trees])

Siting and Design

Cudahy River Park was developed on a vacant residential lot adjacent to the LA River. Before the Park’s development, rainwater would flow—down streets collecting contaminants and debris—into the site’s catch basin which would then send the water through a pipe directly to the River. By siting the Park next to the River and by identifying the importance of the site’s existing catch basin, the project was designed to redirect storm water to three new infiltration areas.

(INSERT Figure 3.2.1.6 [Caption: Existing storm water runoff and the Park’s proposed storm water best management practices configuration. Source: North East Trees])

Limited by the long, thin shape of the site (approximately 330 by 35 feet), North East Trees utilized storm water capture techniques that could also serve as Park features. As such, planted areas act as both open space and a place to absorb excess water and replenish local groundwater reserves (also known as a bioswale). Some other storm water capture features include a dry streambed and a sub-grade catchment system, which collects and distributes water to infiltration basins planted with riparian vegetation.

(INSERT Figure 3.2.1.7 [Caption: Cudahy River Park construction plan. Call-outs indicate locations for hardscape elements such as seating and bike racks. Source: North East Trees])

(INSERT Figure 3.2.1.8 [Caption: Partial section drawing illustrating the Park’s storm water mitigation strategies. Source: North East Trees])

The Park’s initial concept was developed by North East Trees and presented to the public to solicit feedback. Based on the community’s response, the final Park design included decorative entry gates, new fencing, picnic tables, a bike rack, and walls with seating. Interpretive signage informs visitors about the City of Cudahy, the local environment, and how the Park improves conditions along the River.

(INSERT Figure 3.2.1.9 [Caption: Location of bio-infiltration basins at Cudahy River Park. Source: North East Trees])

Cost and Funding

The total cost to design and develop Cudahy River Park was approximately \$387,000, not including site acquisition.

Costs	
Amount	Purpose
unknown	Site acquisition
\$100,000	Project management, design, and permitting
\$160,000	Site preparation (e.g. grading) and park construction, including water quality infrastructure, curb cuts, irrigation, and labor
\$111,000	Amenities, surfacing, and finishes
\$9,000	Native vegetation establishment
\$7,000	Annual operations and maintenance

Table 3.2.1.B: Design and development costs for each project phase.

North East Trees applied for a \$150,000 grant from the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (Conservancy). The Conservancy provided the money under Proposition 50, the Water Quality, Supply, and Safe Drinking Water Projects Act of 2002. These funds are for public water infrastructure projects that improve water quality. As funders often do, the Conservancy mandated how the money could be used: for natural features only, not for man-made hardscape elements.

The City of Cudahy also applied for and received a \$363,000 LA River Access Grant from the LA County Parks and Open Space District. This money was available for LA County Supervisorial District 1 under Proposition A, the Safe Neighborhood Parks Act. The funds were given for site acquisition and to develop two rest areas along the bike path. The City of Cudahy also supplied some project funding, as well as in-kind administrative, design, and permitting support.

The development of Cudahy River Park was celebrated with residents, business owners, and elected officials, including LA County Supervisor Gloria Molina, at the Park's Opening Ceremony in February 2009. A 90-day establishment period was implemented to ensure the health of the native landscaping. The Park officially opened to the public on April 1, 2009.

(INSERT Figure 3.2.1.10 [Caption: Opening Ceremony for Cudahy River Park in February 2009. Source: North East Trees])

Park Case Study 1

Marsh Park Phase II

On a former industrial site in the City of Los Angeles's Elysian Valley, Marsh Park Phase II is a 3.1-acre park expansion project along the Los Angeles River. It features native habitat restoration, active and passive recreation opportunities, educational resources, access to the River, and green infrastructure. Led by the Mountains Recreation and Conservation Authority (MRCA), the project was completed in 2014 with the help of many public and private organizations, and developed using constructive dialogues with the local community. As part of an ambitious, long-term open space project, Marsh Park Phase II represents an important public investment in an underserved community, a shift away from industrial land-uses at the edge of the River, and a regionally significant contribution to revitalizing the River greenway.

(INSERT Figure 3.2.2.1 [Caption: Event pavilion, dry creek bed, and River bike path entrance at the north end of Marsh Park. Source: Cameron Robertson])

The Park's multiple amenities serve many different types of user groups. For instance, grassy meadows offer space for informal play, picnicking, and group activities, while the 200-person event pavilion draws in regional visitors for larger and more organized functions. Marsh Park's year-round educational programming and two outdoor classrooms allow for rich learning experiences for people of all ages. Programs such as the LA River Recreation Kayaking Program and Junior Rangers give teens an opportunity to interact with the River, and programs like camping "Along the River and Under the Stars" are designed for the entire family. As a gateway to the River, Marsh Park's interpretive and education programs introduce participants to the plants and animals in the riparian ecosystem and the importance of natural resources. Naturalists and rangers from MRCA lead classes and activities, such as bird watching, to help visitors better understand their environment.

Origins, Goals, and Timeline

In 2000, the Trust for Public Land (TPL) acquired the industrial parcel in the Elysian Valley neighborhood for \$3.5 million. Land ownership was then transferred to the Santa Monica Mountains Conservancy, which in turn transferred ownership to MRCA in 2001. Running along the west bank of the River, in the soft-bottom area of the Glendale Narrows and across the River from Rio De Los Angeles State Park, the site was identified as a key open space project early in River revitalization efforts because it had the potential to be a model for greenway development. To be completed in three phases, the Park was designed to provide a variety of community amenities, access to the bike path along the River, and to add 700 feet of River frontage to the greenway.

(INSERT Figure 3.2.2.2 [Caption: Industrial site, prior to the Park's development. Source: Mountains Recreation and Conservation Authority])

Phase I of Marsh Park was completed in June 2006. The half-acre Park along the bike path features open space with native plants, public art, picnic areas, and storm water infiltration areas. In 2007, MRCA partnered with the Los Angeles Neighborhood Land Trust to help the

community build Marsh Street Skate Park on a small portion of the site. The project was considered a major success and MRCA immediately asked the community what they envisioned for Phase II of Marsh Park's development. MRCA saw the Park as an opportunity to provide the underserved Elysian Valley with high quality park space, and to expand River access and amenities for the community.

Timeline for Marsh Park Phase II:

2000-2001: Site acquired
2006-2007: Phase I and Marsh Street Skate Park completed; MRCA begins Phase II
2006-2008: Community outreach conducted
2008: Concept design developed
2008-2009: Project halted for 18 months (Proposition 84, Bonds for Flood Control and Water Supply Improvements of 2006, funds were frozen)
2010: Demolition abatement plan finalized
2012: Environmental review approved; Construction documentation completed
2013, April: Plans approved by LA Department of Building and Safety; Public bid for construction contractor released
2013, June: Permitting completed; Bid awarded
2013, July: Construction began
2014, August: Grand opening
2015, June: MRCA assumes maintenance and operations responsibilities

Project Proponents and Community Collaborations

MRCA, a local government joint-powers public entity dedicated to the preservation and public use of wildlands and urban open space, was responsible for all stages of Marsh Park's development and management. This included securing government funding, directing development, and managing long-term operations and maintenance. Consultants were brought in to support key pieces of the project, including environmental reviews, park design, and community outreach.

Several community meetings were held during the preliminary project stage between 2006 and 2008. The landscape architecture firm, Meléndrez, guided community discussions and received input about the Park's concept design. As stakeholders, project participants, and clients, community members voiced their desire for the Park to serve many different users and age groups. They wanted areas for play and others for quiet reflection, as well as some natural spaces, outdoor education areas, and fitness stations.

(INSERT Figure 3.2.2.3 [Caption: Responding to the community's request for active recreation and fitness equipment, MRCA provided 13 fitness stations throughout the Park. Source: Andy Pasillas])

At the same time, local residents raised concerns about the project's potential impact on parking and traffic especially given the narrow surrounding residential streets and the unknown impacts of large events that would take place at the proposed 200-person pavilion. MRCA eased community concerns by communicating how many people they expected to accommodate, describing the applicable regulations on light and noise pollution, and how these impacts would be mitigated by the City of LA. For homes close to the Park, MRCA spent a significant amount

of time meeting with each property owner. The outreach process was important to reassure residents that sound abatement, privacy, security, and other issues were being addressed and Park amenities would properly serve visitors and neighbors.

(INSERT Figure 3.2.2.4 [Caption: MRCA sought feedback from all potential Park users on what amenities they wanted. Source: Andy Pasillas])

To assist MRCA in soliciting and responding to community feedback, they maintained good relationships and open communication with local leadership, including the Offices of Councilman Mitch O’Farrell and former Councilman Eric Garcetti.

(INSERT Figure 3.2.2.5 [Caption: Trails lead visitors to fitness stations, seating, and picnic areas; the open grass field is in the center of the Park. Source: Andy Pasillas])

Site Selection and Design

Marsh Park is located in an industrial zone of the Elysian Valley neighborhood, east of California State Route 2 (Glendale Freeway) and Interstate 5, north of residences, and southwest of the River. The site’s location allows the Park to create direct access to the River and provides connectivity to other communities and parks along the River’s bike path.

(INSERT Figure 3.2.2.6 [Caption: Proposed Park site on an industrial parcel adjacent to a residential neighborhood (outlined in red). Source: Mountains Recreation and Conservation Authority])

The project was conceived as a multi-benefit park that could appeal to a wide range of users and improve environmental quality. It was designed to be model for open space along the LA River greenway. Decisions about what elements to include in the Park were driven by both the lead agency’s goals and the community’s needs and requests for particular amenities.

(INSERT Figure 3.2.2.7 [Caption: Proposed Park design. Source: Meléndrez])

MRCA designated which parts of the 5.4-acre site to utilize for each phase of the project. Phase I and the skate park were planned to occupy 1.4-acres of the site. On the remaining four acres, there were three industrial buildings. Two of the buildings were vacant and the third was occupied by a local company. MRCA defined a 3.1-acre portion of the site to be developed into park space. They demolished two of the buildings and removed impervious asphalt surfaces along the River.

(INSERT Figure 3.2.2.8 [Caption: Final design for Marsh Park Phase II. Source: Meléndrez])

MRCA’s goal was to make the Park as natural as possible by including decomposed granite walking trails, native plants, an arroyo, and a marsh. These amenities were designed to connect visitors with their environment and to act as functional “green infrastructure” to continually improve that environment. Project engineers created various types of bioswales to capture and clean storm water from surrounding streets on-site. One type of bioswale, that was included in the final Park design, is dry streambeds, lined with River rocks and native plants. It slowly filters contaminated water through sand, rocks, and clay; drains into the River; and replenishes local groundwater. Over 100 native trees, such as sycamores and oaks, were planted for shade and

to encourage birds, mammals, and insects to re-inhabit the area. There are also picnic areas and outdoor classrooms for visitors to enjoy.

(INSERT Figure 3.2.2.9 [Caption: A technical drawing of the Park’s storm water bioswales system. Source: Meléndrez])

The Park’s final design reflected the community’s feedback and addressed their concerns. Along its loop trail, MRCA incorporated 13 health and fitness stations, as requested by residents. They are now the Park’s most popular amenity and draw visitors from a large area. Responding to the needs of Park visitors and bike path users, MRCA also developed a public restroom at the center of the Park—the first one along the LA River bikeway for nine miles.

(INSERT Figure 3.2.2.10 [Caption: The Park’s restroom is located in the center of the site, while a bioswale runs along the park’s edge. Source: Cameron Robertson])

At the west end of the Park, MRCA included a pavilion for large public events. Created by ERW Design, the open-air Spanish mission-style 200-person pavilion provides a venue for special events group gatherings, performances, and picnics. Special Events Permits are required for large and/or long events and the associated fees offer an important and creative revenue-generating element that helps to sustain the Park’s operations. To respect the community’s parking and traffic concerns, MRCA dedicated the southern portion of the site to vehicle access and included 43 new parking spaces and electric vehicle charging stations to accommodate visitors and large events.

To create an inviting entrance to Marsh Park from the high-traffic bike path, MRCA commissioned Brett Goldstone to create 160 feet of decorative fencing and a gate with artistic representations of the River environment. With the gate along the bike path as the primary entrance to the Park, Marsh Park invites visitors to spend time in the Elysian Valley and provides users with bike racks and stone benches.

(INSERT Figure 3.2.2.11 [Caption: The entrance of Marsh Park from the River bike trail; features cobblestone seating, bike parking, a sculptural gate, and picnic tables. Source: Cameron Robertson])

Cost and Funding

Marsh Park Phase II was designed and built for approximately \$4.4 million, not including site acquisition costs.

Cost Schedule for Marsh Park Phase II	
Project category	Cost
Administration	\$300,000
Planning, design, engineering, and environmental documentation	\$430,000
Construction and implementation	\$2.9 million
Environmental compliance, mitigation, and enhancement	\$30,000
Construction administration	\$335,000
Other costs	\$25,000
Contingency	\$400,000

Total	\$4.42 million
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Table 3.2.2.A: General development costs to develop Marsh Park Phase II

The State of California funded more than 90% of the project, including the money used to purchase the land. Like many park project leads, MRCA piecemealed funding through multiple sources. Much of the funding was made available through Assembly Bill 31, the Community and Neighborhood Park Revitalization Act of 2007 (authored by Senator Kevin de Leon). This bill created guidelines to provide funds for underserved park-poor communities. Two separate Proposition 84, Bonds for Flood Control and Water Supply Improvements (2006), grants were also awarded to MRCA. Phase II was a good candidate for this funding because it planned to provide public access to and protection of a natural resource (LA River), control flooding, and reduce water contamination.

(INSERT Figure 3.2.2.12 [Caption: An interpretive sign describes the design and function of bioswales for storm water management. Source: Cameron Robertson])

In the first step of MRCA’s multi-stage process to secure funding, they were first awarded \$150,000 under Proposition 84 from the Santa Monica Mountains Conservancy in 2008. This was used for the planning, design development, construction drawings, environmental analysis, and hazardous materials abatement. In order to comply with the California Environmental Quality Act and cover the costs of permitting and construction, MRCA applied for additional Proposition 84 funding. They were awarded an additional \$300,000 from Santa Monica Mountains Conservancy for project administration and to demolish two buildings (a 14,300 square-foot metal warehouse and a 3,000-square foot wood and stucco building) as well as \$2.7 million for the Park’s construction.

Other significant amounts of funding were awarded in the following ways: California State Parks provided \$725,000 under their Statewide Park Development and Community Revitalization Program; \$434,831 was awarded under Los Angeles County Proposition A Excess Funds, the Safe Neighborhood Parks Proposition of 1992; and an unknown amount was provided under California Proposition 13, the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Bond Act. The Los Angeles Conservation Corps also contributed \$110,712 to Marsh Park Phase II’s development through in-kind construction services.

MRCA was forced to put the project on hold in 2008 during the state budget crisis. The state asked their grantees to stop work, with the expectation they would not be reimbursed for project expenses during 2008 until late 2009. Work resumed at the end of 2009 and only got fully back on track in 2013.

Permitting and Use Agreements

To develop Marsh Park Phase II, MRCA and their consultants secured permits from the City of LA, the State Water Resources Control Board, and LA County. They also secured an easement from the Los Angeles River Lofts development to allow for a two-way entry and exit at the northwest corner of the Park.

Permits Required to Develop Marsh Park Phase II		
Permitting Agency	Required Permits	Cost

City of Los Angeles	<ul style="list-style-type: none"> • Grading Permit • Demolition Permit • Building Permit • Landscaping Permit • Green Building Plan Check • Haul route approval • Standard Urban Storm water Mitigation Plan (SUSUMP) or Low Impact Development approval • Sanitary Sewer Connection (S-Permit) approval 	\$4,950
	Approval of hydrants and site access (Los Angeles Fire Department)	0.111% of project value (min \$528) + additional fees
State Water Resources Control Board	Storm Water Pollution Prevention Plan (SWPPP) approval	\$1,650
Los Angeles County	Storm Drain Connection Permit	\$265 + additional fees

Table 3.2.2.B: Permits and associated costs required for Marsh Park Phase II development

Demolition permits were required to ensure that the two industrial structures were removed safely. Older buildings often have asbestos and lead paint which require hazardous materials analysis and abatement plans. Comprehensive testing was done on each of the buildings and soil on the site.

The project was subject to review under the California Environmental Quality Act. MRCA hired a consultant for the environmental documentation. Community concerns were incorporated into the document and either addressed directly or mitigated. For example, MRCA partnered with the City to install speed bumps to slow traffic on a nearby street. The final analysis and review of the Park's environmental impacts found that through revisions to the project plans, there would not be a significant effect on the environment or the community.

Construction

As a public works project, construction of Marsh Park Phase II was publicly bid on in April 2013. Out of 21 bids received, Newman Midland Corporation was awarded the job for just under \$3 million. They were to demolish two buildings, conduct site grading, and complete park construction, landscaping, and one year of vegetation maintenance.

With landscape architecture firm Meléndrez in charge of construction administration and Newman Midland Corporation building the Park, the experienced project teams worked closely to keep project schedules on-track. Construction began in July 2013 and was completed a year later. Building demolition took one month, grading and site preparation took two and a half months, infrastructure construction took seven months, and landscaping took one and a half months.

(INSERT Figure 3.2.2.13 [Caption: Open fields and native vegetation provide opportunities for visitors to access and enjoy the outdoors. Source: Andy Pasillas])

Although project implementation went smoothly and as scheduled, most large and complex projects encounter unexpected challenges that need to be addressed. For Marsh Park, site grading proved to be the biggest challenge. Neighbors had legitimate concerns over large trucks and machinery traveling through the community's narrow residential streets. Mitigating the traffic, noise, and dust for the grading and excavation phases was critical. To address these challenges, the design and contracting teams minimized soil exports, and therefore truck traffic, by evening out excavation and infill, and by utilizing resources on-site as much as possible.

Operations and Maintenance

MRCA is responsible for all operations, maintenance, and special programming for Marsh Park. These efforts are partially supported by revenues generated through permit fees for special events held at the new pavilion.

(INSERT Figure 3.2.2.14-15 [Caption: Signs in English and Spanish announce current programs put on by MRCA at Marsh Park. Source: Cameron Robertson])

Parks Case Study 2

Sunnynook River Park

The City of Los Angeles's Bureau of Engineering led the transformation of underutilized public property into a 5-acre, multi-benefit park with native habitat and walking trails along the Los Angeles River and its bike path. Opened in 2013, Sunnynook River Park's design is a model of how to integrate environmental improvement strategies while providing outdoor education areas. Located between Interstate 5, the Glendale-Hyperion Bridge, and the River, the project also serves as an example of how to overcome complex development requirements and connect the LA River to nearby amenities, such as Griffith Park.

(INSERT Figure 3.2.3.1 [Caption: The north entrance of Sunnynook River Park, with the Sunnynook Pedestrian Bridge in the background. Source: Andy Pasillas])

Origins, Goals, and Motivation

In 2007, the City's *Los Angeles River Revitalization Master Plan* (LARRMP) identified the creation of Sunnynook River Park as a priority River greenway project. It was envisioned to be a multi-benefit project complete with access to the bike path, habitat restoration, educational opportunities, park and recreational space, and storm water management features. It was also meant to serve many different users and achieve multiple objectives, such as transportation connectivity. For instance, its location was identified as an opportunity to connect the River greenway with one of the largest urban parks in the nation, Griffith Park. The Park and the connections it provides now benefits many highly urbanized communities including Atwater Village, Silverlake, Elysian Valley, and others.

(INSERT Figure 3.2.3.2 [Caption: Diagram of the proposed Park site, and its connection with local parks, bridges, and bike trails, to create the Sunnynook River Loop. Source: City of Los Angeles Bureau of Engineering])

Providing quality open space, recreation, and access to the outdoors in dense, diverse communities is a goal of LARRMP. Based on this goal, as well as funding and community considerations, the design of Sunnynook River Park needed to address three major priorities: opportunities for passive recreation, habitat restoration, and water quality improvement. Project proponents also wanted to rebuild ecological linkages and connect wildlife communities historically divided by Interstate 5 and other infrastructure projects.

(INSERT Figure 3.2.3.3 [Caption: The existing site, prior to the development of the Park. Source: City of Los Angeles Bureau of Engineering])

Project Proponents and Community Collaborations

The City of LA Bureau of Engineering Architectural Division (BOE) was the project lead. They oversaw the development process, including community outreach, securing use agreements, design, permitting, and construction. Portions of the project site were owned by the California Department of Transportation and the Los Angeles Department of Water and Power, which

required multi-agency coordination. Sunnynook River Park also required a great deal of cooperation with Los Angeles County, multiple state agencies, nonprofit organizations, and community members.

(INSERT Figure 3.2.3.4 [Caption: Sunnynook River Park's natural trails were dedicated to Lewis MacAdams, a major figure in the revitalization of the Los Angeles River. Source: Andy Pasillas])

<p>Partners: City of Los Angeles Bureau of Engineering Architectural Division (project lead) City of Los Angeles Bureau of Engineering River Project Office City of Los Angeles Department of Recreation and Parks – Operations and maintenance City of Los Angeles Department of Transportation – River bikeway and maintenance City of Los Angeles Bureau of Sanitation – Design of water quality best management practices National Park Service – De Anza National Trail signage County of Los Angeles</p>

Table 3.2.3.A Partners that supported the development of Sunnynook River Park

Other project stakeholders and beneficiaries included the:

- The communities of Atwater Village, Silver Lake, Los Feliz, Elysian Valley
- LA River bike path users
- Greater Griffith Park Neighborhood Council
- Atwater Village Neighborhood Council
- Friends of Atwater Village
- Friends of the Los Angeles River
- North East Trees

The BOE and Councilmember Tom LaBonge presented initial proposals for the Park's design and function to community stakeholders for their feedback. Neighbors opposed removing non-native trees from the site and were concerned that the site's semi-secluded location and occasional homeless population could increase the potential for vandalism and crime. BOE incorporated their feedback and refined the Park's design to address the community's safety concerns and to preserve the trees. This was a compromise because LARRMP calls to transition sites along the River to all-native vegetation and habitat. The final Park design plan involved the planting of new native trees as well as the preservation of 100 existing trees. The non-native trees saved are not invasive and cannot reseed.

(INSERT Figure 3.2.3.5 [Caption: Diagram indicating which trees were to be kept or removed, based on community feedback. Source: City of Los Angeles Bureau of Engineering])

Site Selection and Design

Located in the City of Los Angeles neighborhood of Atwater Village, the site was chosen as a way to utilize publicly-owned land and to connect local transportation networks. The 5-acre site has two property owners: the California Department of Transportation (Caltrans) owns four acres of an easement adjacent to Interstate 5 and the City of LA Department of Water and Power (LADWP) owns a one-acre transmission line corridor adjacent to the River.

(INSERT Figure 3.2.3.6 [Caption: Diagram of the site's ownership and jurisdictional boundaries. Source: City of Los Angeles Bureau of Engineering])

Sunnynook River Park was projected to serve up to 100,000 annual visitors. It was imagined to be an important connection between the River and Griffith Park, one of the largest municipal parks in the nation. Continuing in either direction along the River bike path, it also connects to several other parks, including Rio de Los Angeles State Park, North Atwater Park, Marsh Park (also featured in this Chapter), and the future Taylor Yards. With the improvements proposed for the Glendale-Hyperion Viaduct Complex, plans for Sunnynook also included complimentary development strategies, and improved bike and pedestrian connections to the Glendale-Hyperion Bridge. This demonstrates that River revitalization can support progressive multi-use transportation projects.

(INSERT Figure 3.2.3.7 [Caption: Sunnynook River Park's final design. Source: City of Los Angeles Bureau of Engineering])

As a park space, the primary objective was to create an attractive, useful area for passive recreation activities. Therefore, walking trails, picnic areas, seating and educational amenities, including an outdoor classroom and interpretive signage, were integrated into the narrow site. The Park's designers also considered how best to balance users' needs. For example, bicyclists and runners have varying speed and surface needs. In addition, the designers had to ensure clearance around electrical towers, as well as provide convenient Park entrances and protected zones for bike path rest areas with seating and bike racks. Because developments on LADWP property are subject to strict safety requirements, all above-ground construction, including hardscape improvements such as seat walls, irrigation equipment, and tall vegetation, were located on Caltrans property.

(INSERT Figure 3.2.3.8 [Caption: Interpretive signage and cobblestone seating overlook the River. Source: Andy Pasillas])

Located at trailheads, interpretive signage describes Park features, the evolution of the LA River, and the local ecology. Meandering over the length of the Park, trails move between different habitats and converge in the center. The outdoor classroom and picnic benches are located next to each other to draw in visitors and centralize the Park's social programming. With easy access to the bike path, these spaces represent the heart of the Park, promoting community gatherings and River-specific activities in a unique outdoor space.

(INSERT Figure 3.2.3.9 [Caption: The picnic and community gathering area provides seating and bike parking underneath large pine and native woodland trees. Source: Andy Pasillas])

The Park's designers used natural materials for built elements, such as decomposed granite walking trails, cobblestone masonry walls with seating, and large boulders for the outdoor classroom's seating. Landscape architects focused on preserving the existing mature native trees on-site while planting native vegetation that would self-perpetuate and restore the varied and complex woodland and riparian habitats along the River. Native plants, selected from the County's *Los Angeles River Master Plan's* Landscaping Guidelines and Plant Palettes, were incorporated into the design. They require less intensive maintenance and have little-to-no irrigation requirements.

(INSERT Figure 3.2.3.10 [Caption: Sunnynook's Outdoor Classroom provides large boulders for seating. Source: Andy Pasillas])

Sunnynook River Park also provides storm water management and mitigates the impact of

contaminated runoff from Interstate 5 through simple landscaping strategies. The BOE considered the shape, topography, and use of the site during the design process to ensure that there would be no future issues with irrigation or storm water runoff. With limited space and the prominent location of the bike path through the Park, there was a risk that unsafe surface conditions and storm water drainage infrastructure could negatively impact bicyclists. To address this, the site was contoured to collect storm water in shallow depressions, similar to bioswales. It directs flows away from the bike path, vegetation filters out debris and contaminants, and then the water infiltrates into the ground and River.

INSERT Figure 3.2.3.11 [Caption: Trails and rest areas blend seamlessly with the River bike path, while still providing a safe separation between the two. Source: Andy Pasillas]

Varying the topography and water collection at the site provided areas for different habitats and environmental mitigation. At the south end of the site, a wildflower meadow occupies what will become the future storm water treatment area for the Glendale-Hyperion Viaduct Complex. With heavy Interstate 5 traffic along the western edge of the site, the Park utilizes tree coverage and berms, or small hills, to improve air quality and mitigate sound pollution. Trees help to filter particulates out of the air and reduce and/or deflect noise pollution with its foliage. Noise is also deflected by berms at the other ends of the site. While avoiding densely vegetated and obscured areas for security reasons, the edge of the site was planted with Southern California Black Walnut and Coast Live Oak, maximizing the tree canopy to filter particulates.

(INSERT Figure 3.2.3.12 [Caption: Different spaces throughout the Park support native habitats and improve local environmental quality. Source: Andy Pasillas])

Cost and Funding

The total cost to develop Sunnynook River Park was \$1.7 million. Construction cost \$636,000 or \$4.30 per square foot. This was below BOE's estimated cost and \$18.70 to \$41.70 per square foot less than the typical unit cost for constructing "passive open space" as defined by LARRMP. The project demonstrates that by being resourceful, high-quality open space can be created for many user groups at a relatively low cost.

Typically, before a project can begin the financing process, site use must be secured with the proper title, lease, and/or use agreement. However, as a City-led project, funding for it was in place prior to the negotiation of use agreements. This happened because discussions were between government agencies, and the agreements drafted in-house. The City applied for and received funding from local entities and state agencies.

This included a \$1.35 million grant from the Santa Monica Mountains Conservancy and the Mountains Recreation and Conservation Authority to develop the Park under Proposition 84, Bonds for Flood Control and Water Supply Improvements (2006). It was eligible because it was consistent with LARRMP implementation guidelines, and would improve water quality through BOE's *Integrated Resources Plan* and *Water Quality Master Plan*.

The state grant funds were to be reimbursements, requiring that all project costs to be funded by the City upfront. BOE requested and were awarded a loan from the City of LA Public Works Trust Fund to address the cash flow issue. Without these initial funds, the project could not have moved forward. Project proponents developed timelines and implementation schedules, to ensure that major costs would be covered at the appropriate time.

In addition, the California State Resources Agency and California Transportation Commission awarded \$350,000 for the development under the Environmental Enhancement and Mitigation Program, which awards grants to projects that mitigate environmental impacts caused by new or renovated transportation facilities. The Park was eligible for those funds because it proposed to mitigate storm water coming from the proposed Glendale-Hyperion Bridge Improvement project as well as the environmental impacts of Interstate 5 by using an expanded tree canopy to buffer particulates, by capturing and infiltrating on-site storm water, by utilizing native trees, and by restoring native habitat.

Permitting and Use Agreements

Designed in-house by the City of LA, no formal outside review was necessary for Sunnynook River Park's construction. However, the project did require use agreements with the site's two landowners, Caltrans and LADWP. As with most River greenway development projects, this step was the most complex and difficult. A condition of the use agreements was the approval of all proposed design and construction plans by the owner of each site. All construction documents were submitted to both agencies for review and comment early in the process.

Although Caltrans enforces strict landscaping requirements for department-owned land, their restrictions were eventually waived in return for the City Department of Recreation and Parks' commitment to assume full responsibility for future maintenance, operations, security, and liability of the Park. In August 2009, after more than a year of negotiations, Caltrans approved a 30-Year Maintenance Agreement with the Department of Recreation and Parks, with no payment required. Two years later, LADWP Commissioners approved a 30-Year Lease Agreement with the Department for \$1 per year for the first five years. A fee for the following 25 years will be negotiated every five years.

(INSERT Figure 3.2.3.13 [Caption: Sunnynook River Park utilized publicly-owned land to create open space and improve local environmental quality. Source: Andy Pasillas])

Upon receiving LADWP's approval for use, the Park's design was finalized. As a public works project, the construction contract had to be competitively bid. The Request for Bids was released in early 2012, soliciting eight proposals ranging from \$548,000 to \$835,000. That year, the LA Board of Public Works awarded the contract to the lowest bidder, Pima Corporation.

Pima began construction in July 2012, and implementation went smoothly and quickly. The Park is relatively small and required no large-scale construction. To address issues with vandalism and theft, Pima and BOE secured the site by asking local residents to keep watch over the site when crews were not working. Construction was completed in six months. Trees and plants were established for an additional six months.

Operations and Maintenance

As per their agreements with Caltrans and LADWP, the City Department of Recreation and Parks assumed responsibility for operations and maintenance for Sunnynook River Park as a component of their 50 Parks Initiative—an effort to provide open space to diverse communities within the City. They are to properly maintain and secure the site, while ensuring that the Park and its irrigation equipment operate as intended.

No drinking water fountains were provided on-site to avoid costly upkeep, and to discourage long-term encampments in the Park—an issue on the site in the past. To ensure the use and enjoyment of all users, the Department of Recreation and Parks and BOE tried to reduce or modify areas prone to unintended use. They removed concealed spaces and dense brush to improve visibility, and used graffiti-resistant sign coverings.

By creating pockets for water collection, and by implementing a separate irrigation zone for more water-intensive riparian habitats, the Department of Recreation and Parks focuses its efforts on maintaining more sensitive areas of the Park and as-needed care for the drought-adapted areas. With the ability to manage irrigation for particular zones, water usage is tightly controlled and consumption dramatically lowered.

Park Case Study 3

Maywood Riverfront Park

Maywood Riverfront Park transformed six industrial sites into a 7.3 acre oasis in one of the most densely populated and park-poor portions of Southern California,² an area criss-crossed by railroad tracks and former brownfields. The development of Maywood Riverfront Park is an important example of how to transform post-industrial sites into multi-benefit parks for underserved, lower-income communities of color.

(INSERT Figure 3.2.4.1 [Caption: Community members picnicking in Maywood Riverfront Park. Source: Rich Reid, The Trust for Public Land])

Maywood Riverfront Park, which at the time doubled the City's amount of public open space, now offers walking paths, shaded picnic areas, restrooms, parking, lighting, public art, and a state-of-the-art playground. Bicyclists, joggers, and pedestrians can now access the bike path along the River. Extensive trees, native landscaping, and a riparian dry creek serve to improve water quality and other local environmental conditions.

(INSERT Figure 3.2.4.2 [Caption: Maywood Riverfront Park provides the community with vital park space. Source: Rich Reid, The Trust for Public Land])

Origins, Goals, and Timeline

In the late 1990s and early 2000s, many underutilized and vacant industrial sites existed in the small 1.13 square-mile City of Maywood. The city was also defined by the state as a “critically underserved community” because of a severe lack of public parkland.³

To address this need, The Trust for Public Land, in partnership with the City of Maywood, initiated the effort to transform six brownfield sites into a public park.⁴

(INSERT Figure 3.2.4.3 [Caption: Former industrial sites being cleared for the development of Maywood Riverfront Park. Source: The City of Maywood])

The complex development project started in 1997 and the Maywood Riverfront Park opened to the public in 2008. The timeline was significant in large part because of the extensive remediation of one of the six sites, under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 or Superfund. Another site was moderately contaminated; remediation was the responsibility of the previous land-owners. Some portions of the site are still being remediated to further improve local environmental quality and to increase park space.

The remediation of industrial sites along the River has not only improved local environmental health conditions, but has also given the local community a new park and access to the River and its bike path.

² Santa Monica Mountains Conservancy. Maywood Riverfront Park. (Accessed March 18, 2016)
<http://www.lamountains.com/parks.asp?parkid=648>

³

⁴ Kjer, Tori, and Mark, Robin. The Trust for Public Land. Personal interview. July 15, 2015; August 3, 2015; September 25, 2015

The Park is vital green space which helps to reduce the area’s urban heat island effect and buffer the neighborhood from freeway sound and air pollution.

Maywood Riverfront Park Development Timeline:	
Date	Milestone
1997	The Trust for Public Land begins site acquisition.
1999	U.S. Environmental Protection Agency (EPA) places the Pemaco site on the Superfund National Priorities List.
2000	Maywood City Council approves development of the proposed Park. EPA conducts site analysis and begins remediation planning on Pemaco site.
2002	Human health risk assessment completed by T N & Associates, Inc. Remedial investigation completed by EPA, and Environmental Impact Report prepared by Willdan for City of Maywood.
2005	Final remedy for Pemaco remediation selected by EPA in consultation with community members. City of Maywood begins park construction.
2006	Construction complete. Park opening delayed for additional remediation.
2007-2008	EPA implements final site remediation and additional safety measures.
2008	Park grand opening.

Table 3.2.4.A: Maywood Riverfront Park Development Timeline

Project Proponents and Community Collaborations

The development of Maywood Riverfront Park was a multi-phased, multi-stakeholder project coordinated by the City of Maywood’s Planning Division. As the project lead, the City managed the development process and secured funding for land acquisition, construction, and long-term operations and maintenance. The City partnered with The Trust for Public Land (TPL), Mountains Recreation and Conservation Authority (MRCA), Center for Creative Land Recycling (formerly known as the California Center for Land Recycling), California Regional Water Quality Control Board (Regional Water Board), and U.S. Environmental Protection Agency (EPA) to jointly acquire, remediate, and develop the Park. With so many participating organizations, communication between partners was critical.

TPL, a nonprofit organization dedicated to preserving open space and creating parks nationally, initiated the project’s development and was the primary organization responsible for acquiring and assembling sites. After identifying the need for parks in the underserved industrial area, TPL identified funding opportunities for the City, conducted site inspections and assessments, acquired the land, and proposed that the Park be developed as an element of the broader River greenway effort.

(INSERT Figure 3.2.4.4 [Caption: The stretch of River and industrial land uses that run along Maywood Riverfront Park. Source: Rich Reid, The Trust for Public Land])

TPL partnered with the Center for Creative Land Recycling (CCLR) to strategize the best way to revitalize the brownfield sites and create park space along the River. CCLR provided financial and technical assistance to evaluate environmental conditions and the viability of the most contaminated sites. MRCA also served as a partner in acquisition, funding, and Park development.

The City began planning Maywood Riverfront Park in the year 2000. This involved working with the EPA to begin coordinating the long process of cleaning up the Pemaco site, under Superfund. Remediation occurred before, during, and after construction of the Park.

Community engagement was an important part of the Park development process. Building trust between project proponents and the community was necessary. All parties needed to provide the public with accurate information on a regular basis. Community discussions were especially important for this project because development involved a contaminated Superfund site and therefore, public health risks. The City

and EPA facilitated community dialogues to address public safety concerns and seek feedback through different approaches. For example, EPA held bilingual community meetings and provided regular updates to the community regarding site testing and construction. City planners conducted extensive outreach, knocking on the door of every residence near the sites and welcoming continued communication.⁵ This grassroots, personal outreach was important to build trust and community involvement, since many residents were not accustomed to speaking at large community meetings. It also demonstrated to community members the Park proponent's commitment to the project.

Site Selection, Remediation, and Design

The location of Maywood Riverfront Park', starting at the Slauson Avenue Bridge and extending south to East 60th Street, is an important local and regional cornerstone of Los Angeles River revitalization efforts. The sites that make up the Park were identified as priorities for public open space due to their location along the LA River, ability to provide access to the bike path, as well as the surrounding community's density and need for open space and recreation opportunities.

(INSERT Figure 3.2.4.5 [Caption: Gates designed by Brett Goldstone lead welcome visitors to and from the Los Angeles River. Source: Rich Reid, The Trust for Public Land])

Identifying suitable park sites was difficult because Maywood is a small city with limited suitable site options. In addition, the project size required piecing together multiple sites. The following six adjacent industrial sites with varying conditions, occupancies, and ownership statuses were ultimately identified: Pemaco, W.W. Henry, LA Junction Railroad Property, Precision Arrow, Lubrication and Oil Services, and Catellus.

(INSERT Figure 3.2.4.6 [Caption: Sites selected for Maywood Riverfront Park development. Source: The City of Maywood])

Securing these six sites for use as a public park was complicated for several reasons. To acquire the sites, TPL had to negotiate with many landowners, some of whom were not initially willing to sell (LA Junction Railroad Property) or had abandoned their property and were hard to find (Pemaco). Despite the challenges, TPL acquired five sites on behalf of the City; the City acquired the sixth property, LA Junction Railroad Property, at a later date.

Due to the sites' previous industrial uses and potential for contamination, TPL also worked with the City of Maywood, the EPA, and other regulatory agencies to obtain liability releases and ensure site remediation took place where necessary. Environmental consultants were employed to test for potential soil and water contamination at the sites. Remediation strategies were designed and implemented for the two sites found to be contaminated: Pemaco and W.W. Henry. Pemaco was a Superfund site and remediation was the responsibility of the EPA. The W.W. Henry site's remediation was the responsibility of the previous land owner.

EPA assumed responsibility for remediating the Pemaco site, a former chemical mixing facility abandoned in 1991. Due to public health concerns related to chemical drums and buried storage tanks, EPA conducted an emergency site clean-up in 1993 to remove materials that posed an immediate risk. In 1997, EPA conducted actions to determine the extent of the contamination, and placed the site on the Superfund National Priorities List in 1999. As a Superfund site, the EPA was responsible for remediating contaminants associated with the site. The EPA provided a Prospective Purchaser Agreement to protect both TPL and the City of Maywood against future liability of any migrated contamination. The W.W. Henry site was also determined to be contaminated and required groundwater remediation, for which the previous landowner was responsible in coordination with the Regional Water Board (for perched groundwater) and the EPA (for deep groundwater).

⁵ Gonzalez, Julia. Former City Planner for the City of Maywood. Personal interview. September 4, 2015.

Design

The design of the 7.3-acre Maywood Riverfront Park sought to accommodate a wide variety of users and maximize community benefit. Accordingly, it includes large open spaces and multiple recreational amenities, like trails and handball courts. Project proponents—including the design consultant, AAE Inc., and agencies responsible for site analysis and remediation—considered where and when aspects of the Park would be developed based on each site’s condition and the phased remediation efforts, especially for the Pemaco and W.W. Henry sites.

(INSERT Figure 3.2.4.7 [Caption: Preliminary design of Maywood Riverfront Park. Source: The City of Maywood])

The Park was built in several phases. Because developing Maywood Riverfront Park was going to take several years, representatives from MRCA and the City signed a Memorandum of Understanding to create a 0.67-acre interim park on the Catellus site while the other five sites were undergoing acquisition negotiations, environmental review, and clean-up. Completed in 2005, the small park was used extensively by residents and bike path users. This inspired a large show of support for the development of the larger park from elected officials and many other local stakeholders. Also, designers and project leads were able to verify who would use the future Park and reassess the value of proposed designs.

(INSERT Figure 3.2.4.8 [Caption: Aerial view showing the location of clean-up areas. Source: U.S. Environmental Protection Agency])

Meanwhile, the EPA and Regional Water Board regularly provided the development team with information on what type of clean-up was taking place or was planned on each site.⁶ This helped inform the design. For instance, the design team included walking paths and handball courts that allowed for remediation infrastructure, such as wells capped with concrete boxes, to be seamlessly incorporated into the design.

(INSERT Figure 3.2.4.9 [Caption: Final design for Maywood Riverfront Park. Source: The City of Maywood])

The final design for Maywood Riverfront Park includes trails, picnic areas, basketball courts, event spaces, restrooms, parking, lighting, and a state-of-the-art playground for local children. The community also requested, and project proponents delivered, a park with dozens of trees that serve as a visual, sound, and air quality screen from surrounding roadways. To improve local habitat and water quality, the park also includes native vegetation and a dry creek bed that captures storm water.

(INSERT Figure 3.2.4.10 [Caption: Walking paths winding between picnic benches and an open play field. Source: Dore Burry])

(INSERT Figure 3.2.4.11 [Caption: A pedestrian bridge extends over a dry creek bed, which collects storm water and filters it back into the River. Source: Rich Reid. The Trust for Public Land.]

Project proponents worked to include public art in the final design. At the northwest corner of the Park, a sculpture plaza now welcomes visitors. At the eastern edge, a stone and steel gate, designed by Brett Goldstone, invites the community, visitors, and bike path users to the River and the Park. Designed with the community’s concerns and interests in mind, Maywood Riverfront Park provides important local improvements as well as regional benefits.

(INSERT Figure 3.2.4.12 [Caption: The Park provides a safe and exciting playground for local children. Source: Dore Burry])

⁶ Caraway, Rose Marie. Environmental Protection Agency. Personal interview. September 16, 2015; September 25, 2015

Cost and Funding

Developing Maywood Riverfront Park cost approximately \$10.5 million, of which \$5.9 million was used for site acquisition. To acquire and develop the Park, the City applied for funding from county, state, and federal grant programs focused on creating park space for underserved, urban communities. This strategic grant focus helped direct staff's efforts and limited resources.

In 2000, the City applied for and received Proposition 12 and Proposition A funds to acquire the sites and begin the Park development process. This includes \$2.4 million under the Murray-Hayden Program and \$1.8 million from the LA County Regional Park and Open Space District. Proposition 12 (the Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Act of 2000) allocated \$100 million to the Murray-Hayden Program to distribute funds to public agencies and community-based organizations to acquire, develop, and rehabilitate areas located in underserved, park poor neighborhoods. Proposition A (the Safe Neighborhood Parks Act of 1992) provides funding for the acquisition and rehabilitation of land for parks and open spaces. These funds enabled project proponents to acquire the sites and complete an early design plan. This put them in a good position to apply for and receive greater financial support. In 2001, the LA County Regional Park and Open Space District awarded the City an additional \$1.6 million under Proposition A to acquire the sixth site (LA Junction Railroad).

As mentioned above, MRCA developed a small, interim park on the Catellus site. This attracted broad attention and helped justify the City's requests for more funds to develop the larger park. In 2005 and 2006, the LA County Regional Park and Open Space District awarded the City two more grants, in the amounts of \$2.15 million and \$350,000, to help complete the development of Maywood Riverfront Park.

In addition to the Park acquisition and development costs, site clean-up was a large, additional expense. The EPA estimates that they spent \$40 million between 1996 and 2011 on the Pemaco site remediation, operations, maintenance, sampling, and reporting. The total cost of the W.W. Henry site remediation, which was undertaken by the previous property owners, is unclear. The other four sites, which had negligible contamination, were cleaned up by the City using grant funding.

Permitting and Use Agreements

Obtaining the necessary permits and use agreements was a challenge because of the former industrial uses at each site, and contaminated groundwater at two of the sites. This required different levels of mitigation before the project could be permitted by the City of Maywood, Los Angeles County, and several federal agencies.

Some Requirements for Developing Maywood Riverfront Park	
Requirement	Agency
Environmental Remediation/Monitoring	U.S. Environmental Protection Agency
Public Health Assessment	California Dept. of Toxic Substances and Control
Environmental Impact Report – California Environmental Quality Act (CEQA)	Governor's Office of Planning and Research, California State Clearinghouse
S Permit - Storm Drain Connection	Los Angeles County Flood Control District
MS4 Permit - National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity, Water Quality Order 99-08-DWQ	Los Angeles County Flood Control District
Rule 1166 Permit for Volatile Organic Compound Emissions from Decontamination of Soil	South Coast Air Quality Management District

Rule 403 Permit for Fugitive Dust	South Coast Air Quality Management District
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Table 3.2.4.B: Some permits and assessments required to develop Maywood Riverfront Park.

After remediation, the EPA and the Regional Water Quality Control Board determined that the Pemaco and W.W. Henry sites were safe for public use. The City then released a public bid for construction. Pima Corporation was awarded the contract and broke ground in August of 2005. Some sites were still being remediated while others were being developed. This required extensive agency cooperation and communication. Pima Corporation continued to conduct health and safety checks, as well as monitor water, soil, and air quality to comply with permitting requirements.

In 2006, the Park was complete. However, community concerns about public health delayed its opening for another two years while EPA conducted additional remediation. Maywood Riverfront Park officially opened to the public on May 10, 2008. The celebration included mariachi music, food, and art.

(INSERT Figure 3.2.4.13-14 [Caption: Maywood Riverfront Park during and after construction. Source: The City of Maywood])

Operations and Maintenance

The City's Parks and Recreation Department is responsible for the operations and maintenance of the Maywood Riverfront Park. It is in charge of all general maintenance duties, including landscaping care, general upkeep, and trash collection, as well as ensuring the function and quality of the different amenities on site, such as the public restrooms and playground equipment.

(INSERT Figure 3.2.4.15 [Caption: East side of Maywood Riverfront Park, along the Los Angeles River. Source: Dore Burry])

Next Steps

The southern portion of the sites is still being remediated by EPA and may be developed into an additional 2.5 acres of park space. This would double Maywood's riverfront access to approximately 900 feet along the greenway. An end date for the clean-up process is not yet known.

Guidance: Lessons Learned and Best Practices

This section provides an overview of considerations and implementation strategies applicable to developing parks along the Los Angeles River greenway. The projects featured in this chapter represent a range of park scales and approaches to creating open space along the River. One commonality between them is that extensive coordination and collaboration with community members, organizations, and agencies were critical to success. No entity can do it alone, and no single goal can be realized without the input, help, and approval of many different parties.

(INSERT Figure 3.3.1 [Caption: A view of the Los Angeles River and bike path from Marsh Park. Source: Meléndrez])

Using these stories as models, this guidance section highlights important opportunities and challenges presented at each stage of project development, to help readers understand what to expect when trying to provide equitable park access for all.

Selected Case Studies				
	Cudahy River Park	Marsh Park Phase II	Sunnynook River Park	Maywood Riverfront Park
Summary	Converted a small, 0.25-acre vacant residential lot into native riparian habitat with an innovative water quality improvement system	Transformed former industrial site into a 3.4-acre multi-phase, multi-benefit park using community-driven designs	Connected the River greenway to Griffith Park by converting 5 acres of underutilized public space owned by multiple agencies into a park with native habitat and nature trails	Cleaned up and transformed brownfield and Superfund sites into a 7.4-acre multi-benefit park in a severely underserved community
Project Lead	North East Trees (nonprofit)	Mountains Recreation and Conservation Authority (local government)	City of LA Department of Public Works Bureau of Engineering Architectural Division (local government)	City of Maywood Planning Division (local government)
Partners	City of Cudahy	Meléndrez, Santa Monica Mountains Conservancy	LA Department of Recreation and Parks, City of LA Department of Public Works Bureau of Engineering River Project Office	The Trust for Public Land, Mountains Recreation and Conservation Authority, Center for Creative Land Recycling, CA Regional Water Quality Control Board, U.S. Environmental Protection Agency (EPA)
Location	City of Cudahy, corner of River Road and Clara Street	City of LA, Elysian Valley	City of LA, Atwater Village	City of Maywood, south of Slauson Avenue Bridge
Users	Local community, bike path users	Local and surrounding communities, bike path users	Bike path users, local community, regional park visitors	Local and surrounding communities, bike path users
Cost	\$378,000 for	\$8 million: \$3.6 million	\$1.7 million: \$636,000	\$10.5 million:

	design and construction ** will verify acquisition cost	for site acquisition and \$4.4 million for design and construction	for construction	\$5.9 million for site acquisition. EPA spent \$40 million for one site's remediation
Funding	Proposition A - SD1, Proposition 50, Rivers and Mountains Conservancy	Proposition 84, Proposition A, Proposition 13, Santa Monica Mountains Conservancy	State Environmental Enhancement and Mitigation Program, Proposition 84, Santa Monica Mountains Conservancy	Proposition A, Proposition 1, Environmental Protection Agency
Completed	2009	2014	2013	2008

Table 3.3.A: Potential challenges and solutions for each step of the development process.

Summary of Challenges and Strategies to Overcome Them

Developing Parks along the Los Angeles River		
Development Process	Challenge	Solutions
Motivation	<ul style="list-style-type: none"> Identifying multiple user groups and needs; not every neighborhood is outspoken about park needs Community, funding, and project goals may be different 	<ul style="list-style-type: none"> Be proactive in identifying areas that lack parks Spend time in the community, speaking to leaders and potential users to identify specific needs Talk with all stakeholders and project partners to understand and best integrate goals
Community Engagement	<ul style="list-style-type: none"> User groups can be hard to reach Sustaining outreach and engagement throughout the development process 	<ul style="list-style-type: none"> Tailor outreach and engagement to the community to include all interests Establish close and regular contact with stakeholders to solicit feedback Host, attend, and/or speak at local stakeholder events and meetings
Physical Siting	<ul style="list-style-type: none"> Sites available for River-adjacent park development may be limited Previous industrial use on brownfield sites may require clean up, remediation, and/or use limitations Acquiring and obtaining use agreements 	<ul style="list-style-type: none"> Be creative when considering potential park sites; small, narrow and unusually shaped lots can be good options Identify and meet with site owners early in the process to establish goals, expectations, and concerns Conduct due diligence and site assessments to determine suitability for park use
Design	<ul style="list-style-type: none"> Satisfying multiple user groups Design may be limited by 	<ul style="list-style-type: none"> Engage with community members to seek feedback on aesthetic preferences and

	<p>remediation, site conditions, and/or permitting</p> <ul style="list-style-type: none"> • Materials used may impact maintenance requirements and costs 	<p>amenities</p> <ul style="list-style-type: none"> • Establish realistic project goals with community members and other collaborators • Meet with permitting agencies to understand requirements early in the process • Use materials that reduce the need for maintenance (like anti-graffiti paint)
Cost	<ul style="list-style-type: none"> • Unforeseen site conditions (like utility connections) and permitting can increase costs • Site clean-up and remediation can significantly increase costs 	<ul style="list-style-type: none"> • Anticipate possible project delays by scheduling extra time and setting aside extra funds • Assess site conditions and potential clean-up needs as early as possible
Funding	<ul style="list-style-type: none"> • Securing funding • Project design, site acquisition, and use agreements may need to be secured before applying for grants • Funders often have strict guidelines and timelines 	<ul style="list-style-type: none"> • Consider funding possibilities when developing project goals and implementation strategies • Engage and seek to partner with potential funders early on • Coordinate closely between funding, design, and implementation plans
Permitting and Use Agreements	<ul style="list-style-type: none"> • Permitting process and agency requirements can be complex and difficult to navigate • Multiple jurisdictions and requirements require negotiation and potential changes in project design • Acquiring and obtaining use agreements 	<ul style="list-style-type: none"> • Meet with permitting agencies early in the process and ask questions • Partner with or seek advice from those with experience working with permitting agencies • Meet with property owners early in the process
Operations and Maintenance	<ul style="list-style-type: none"> • Identifying a responsible agency and sustainable funding • Site design and construction material can impact operations and maintenance 	<ul style="list-style-type: none"> • Consider operations and maintenance early in the project development process • Identify which entities have the experience and/or capacity for long-term maintenance • Identify funding sources for maintenance early in the process

Table 3.3.B. A review of some of the major challenges for each step of the development process.

How do I lay the foundation to successfully develop a park along the LA River?

Parks can be developed in many forms and serve many different purposes. Therefore, effort must be placed on defining achievable project goals and identifying development priorities and limitations. Park projects can be complex, multiple-stage processes requiring project teams to understand their organizational capacity, create strong partnerships, facilitate open communication among partners and stakeholders, and incorporate community feedback into the development process. Defined goals and implementation strategies should be focused, yet flexible in order to adapt to changing circumstances and requirements.

(INSERT Figure 3.3.2 [Caption: Children playing at Maywood Riverfront Park. Source: Rich Reid, The Trust for Public Land])

Goals, Motivation, and Timeline

The motivation to develop a park, small or large, most often comes from a community's need for open space and increased recreation. This is coupled with an opportunity to transform underutilized land into a public amenity. It is important that community members and other local stakeholders help drive the project goals. The intended users of a park are best able to know what will bring local residents to it. Stakeholders are those whom may be impacted by or benefit from a local park, including residents, adjacent property owners, students at nearby schools, regional bike path users, business owners and workers, LA River advocacy organizations, elected officials, and others.

Along with public feedback, future park projects should consider existing plans, such as the *Los Angeles River Revitalization Master Plan*, to direct project goals within both a local and regional context. All of our featured park projects were driven by the goal of providing new or revitalized parks for underserved, park-poor communities to recreate and access the LA River. Parks in highly urbanized communities with dense industrial use, heavy storm water runoff, and pollution should include environmental improvement and mitigation strategies.

(INSERT Figure 3.3.3 [Caption: Cudahy River Park was built on this vacant site where Clara Street and the River bike path meet. Source: North East Trees])

Communities with vacant or unused land, particularly brownfield sites and public right-of-ways, offer opportunities for park development. Developing small, multi-benefit "pocket" parks can be a good way to satisfy community goals when property and funding are limited. For example, Cudahy River Park demonstrates how developing a small park at low cost can significantly improve storm water management and provide local residents with the ability to interact with the natural world and specifically, the LA River.

Leadership and Collaboration

A high level of organizational capacity, including staff expertise and resources, is required to spearhead park development processes. Lead organizations should honestly assess their qualifications and collaborate with agencies, organizations, elected officials, and consultants that complement their expertise. For example, the development of Maywood Riverfront Park was coordinated by the City of Maywood's Planning Division and supported by many partners. The Trust for Public Land initiated the project's development and was the primary organization responsible for acquiring and assembling sites; the Center for Creative Land Recycling provided financial and technical assistance to evaluate environmental conditions and the viability of brownfield sites; the U.S. Environmental Protection Agency (EPA) led remediation efforts on the Superfund site; etc.

When there is a gap that a partner cannot fill, project leads can consider hiring consultants to do specific tasks. For instance, to develop Marsh Park Phase II, the Mountains Recreation and Conservation Authority (MRCA) hired consultants to assist with community outreach, park design, and the environmental review process. It is important to include professionals that have the applicable expertise and experience in working through these types of projects.

Collaboration is especially important when securing use agreements and permitting approvals. These processes rely heavily on technical documentation, include complex jurisdictional and legal negotiations, and require coordination between multiple agencies, departments, and individuals. While numerous partnerships can slow decision-making, it may also allow for the development of larger, more ambitious park projects and may increase the competitiveness of grant applications. All project partners should identify their responsibilities early in the process and create systems for exchanging information between themselves and with the public.

Community Engagement

Park projects serve as an opportunity for community empowerment through meaningful contributions to park visioning, design, development, and maintenance processes. Given the scope and scale of LA River park projects, most are coordinated by non-profits and/or government agencies with significant capacity and past experience in park development. But this does not mean that the project cannot be community driven. To maximize community benefit of the park, community members should have a significant role in shaping it. Local residents who know the area can also help avoid or address unintended consequences associated with the project.

Project leads should identify all stakeholders, user groups, and beneficiaries, and include them in the development process. To begin the process, consider potential project limitations, like budget, to direct engagement efforts and manage expectations. Presenting preliminary designs may facilitate constructive dialogue by giving community members something on which to build.

It is important to create an outreach and engagement strategy based on community characteristics. For example, to solicit public input on the development of Maywood Riverfront Park, EPA held numerous bilingual neighborhood meetings to discuss site remediation and City of Maywood staff knocked on the door of every residence within a couple of blocks of the site. This grassroots and personal outreach was important to build trust and community involvement because many residents were not accustomed to participating in public processes or speaking at large community meetings. Efforts to genuinely engage the community should be made at each stage of the process.

(INSERT Figure 3.3.4 [Caption: A community meeting flyer for the Pemaco Superfund Site, put on by the EPA. Source: U.S. Environmental Protection Agency])

The development of Marsh Park Phase II is a good example of community-driven park design. MRCA asked residents what amenities they would like included in the park. This resulted in a park that serves many users and age groups by providing different spaces for play, quiet reflection, outdoor education, and active recreation. Specifically, local residents requested fitness stations that have turned out to be popular among users. Locals and bike path users also pointed out that there were no public restrooms for nine miles along the bike path, and MRCA responded by including this amenity. Later in the Park's development process, neighbors raised concerns about increased parking, traffic, and pollution. MRCA eased their concerns—sometimes through personal meetings with Park-adjacent property owners—by communicating how many people the new event pavilion would accommodate, explaining light and noise pollution regulations, and how community impacts would be mitigated by the City of Los Angeles.

(INSERT Figure 3.3.5 [Caption: Fitness stations in Marsh Park were requested by the community and are used heavily by park visitors. Source: Meléndrez])

Project Timeline

Depending on the scale and scope of the projects, park development is often a long process. Accurately developing project timelines and reducing the likelihood of unexpected delays requires project leads to coordinate the design and implementation of multiple and overlapping phases of a project. The development of Maywood Riverfront Park illustrates how multiple project partners cooperated to plan and implement a shared and complex work plan and timeline for site cleanup and construction. Specifically, the team came together at the beginning of the project to set remediation, funding, and construction

timelines and to determine when and how each stage would be completed. Although the project experienced long permitting and use agreement delays, project proponents used the delays to reassess and expedite portions of their implementation plans.

(INSERT Figure 3.3.6 [Caption: Construction schedule for cleanup of the Pemaco Superfund site in Maywood. Source: U.S. Environmental Protection Agency])

Timelines play a critical role in funding because of grant requirements and availability. If projects are delayed, funding may be withdrawn as per grant agreements. Anticipating delays and setbacks will help to keep projects on track and budgets in check. Permitting processes can be especially time intensive and can cause long delays. Communicating with permitting agencies early in the project, before design plans are finalized, can avoid changes to a project timeline and budget.

What are important design considerations?

Site Selection

In addition to sites identified in planning documents, such as the *Los Angeles River Revitalization Master Plan*, potential areas to develop parks along the River include unused private parcels, former industrial sites, brownfields, public utility right-of-ways and easements, existing public spaces, as well as city or county-owned properties. Small, uniquely shaped lots in underserved communities can be especially promising places for pocket parks.

When selecting a site, project proponents should consider: community need, site and surrounding site usage (legal and informal), location, ownership, existing environmental assets and concerns, site access, the presence of public utilities, and applicable regulations. Site location should help support neighborhood goals, allow for regional connectivity, and potentially promote economic improvements. For example, Sunnynook River Park connects the River greenway with Griffith Park and serves many communities including Atwater Village, Silverlake, and the Elysian Valley.

(INSERT Figure 3.3.7 [Caption: Before Sunnynook River Park was developed, the site was unimproved public property. Source: City of Los Angeles Bureau of Engineering])

Sites along the River are likely to have a patchwork of owners and agency jurisdictions. It is necessary to clearly identify and hold preliminary meetings with those who own or have the rights to use potential project sites. Those meetings are the first step to pursuing site acquisition, use agreements, or leases to obtain control of the site. For example, project proponents had to acquire and negotiate use agreements with six site owners in order to develop Maywood Riverfront Park. Similarly, the two sites used to develop Sunnynook River Park are owned by two agencies. Each one has different standards for site use, design, and access.

Previous and current site use is important to consider both for acquisition and the suitability of using the site for public use. Project leads should take into account how surrounding residential, commercial, and industrial land uses can support or hinder park development. Sites nearby schools, commercial districts, and landmarks may warrant prioritization while sites with environmental contamination may require extra consideration on how to fully clean up a site for public use. Contamination and environmental risks should always be taken into account when considering use of brownfield sites. To move a project forward after site selection, potential risks must be identified and mitigated. To develop Maywood Riverfront Park, for example, some of the sites' previous industrial uses and contamination required The Trust for Public Land to negotiate with the former property owners: many government agencies were also involved to assess public health hazards and determine if sites were safe after clean up and remediation. Although extensive remediation may prolong the park development process, it is critical.

In each case study, environmental conditions affected project location and design, including where amenities could or should be located. For example, mature trees may already provide shaded areas where picnic seating can be located. Local sources of pollution such as runoff, vehicular exhaust, and noise may also affect site selection and use.

(INSERT Figure 3.3.8 [Caption: A bicyclist using the River bike path along Maywood Riverfront Park. Source: Rich Reid, The Trust for Public Land])

Access to the site also plays an important role when considering project locations. Site selection should prioritize locations that improve transportation corridors through examining the location of transit stops, sidewalks, bike lanes, roadways, and available parking.

The consideration of on-site utility infrastructure is also very important. Design requirements such as safe universal access, lighting, irrigation, and drinking water may require new infrastructure. However, if public utility infrastructure, such as power lines, exists on site, project leads may be required to relocate amenities or be subject to extensive regulations that limit use. This was the case for the City of Los Angeles when it was developing Sunnynook River Park. One of the sites used is owned by the LA Department of Water and Power: they require a certain amount of clearance around electrical towers and are subject to strict federal requirements to develop under transmission lines.

(INSERT Figure 3.3.9 [Caption: Clearances required around power lines are creatively used for bike rest areas. Source: Andy Pasillas])

Design Concepts

Park designs should be creative, flexible, and address community needs within the project budget and implementation timeline. This section underscores the importance of community involvement in the process and also highlights key considerations for site configuration, preexisting site use, user safety, environmental improvements, public art and education, and future maintenance requirements.

As mentioned above, successfully soliciting and incorporating public input requires continuous, robust, and open communication with community members. They often know of potential issues, like pollution and crime, as well as which amenities would be the most beneficial. The development of Marsh Park Phase II and Maywood Riverfront Park are both good examples of successfully incorporating valuable community feedback into park designs. Elysian Valley residents wanted fitness stations at Marsh Park which have turned out to be that Park's most popular amenity. Maywood residents wanted a safe place to play for small children and students at Heliotrope Elementary School. The City of Maywood responded by creating a state-of-the-art playground, basketball and handball courts, as well as grassy fields. Citizens were also concerned about pollution from surrounding roadways, so the Maywood Riverfront Park's final design includes dozens of trees in an attempt to provide a visual, sound, and air quality screen from streets.

(INSERT Figure 3.3.10 [Caption: Maywood Riverfront Park responded to community requests to provide a safe and exciting playground for local children. Source: Dore Burry])

Determining how and where to put amenities depends on site conditions, land use planning requirements, building codes, and other regulations. Existing assets may also define amenity placement and programming. These include native vegetation, shaded areas, utilities, connections to transportation networks, and topography. The development of Sunnynook River Park illustrates how existing access and community feedback can direct the design process. The community was strongly opposed to removing mature, non-native trees from the site. As a result, designers incorporated the trees into the final park plans, locating social and education spaces near large trees, which utilized their inherent shade and shelter.

Final park designs should also consider how best to provide opportunities for safe active and passive recreation. Opportunities to provide active recreation involve dedicated sports fields, equipment, and formal amenities that may require capital and maintenance costs. Opportunities for passive recreation include walking paths, open fields, and picnic areas, which often require less investment than large active recreation facilities. Project proponents must also consider user safety and security including industrial contamination, poorly lit areas, or nearby traffic. For example, Sunnynook River Park provides protected zones for bike path rest areas complete with seating and bike racks. Project designers were also careful about where they placed drainage infrastructure so it would not negatively impact bicyclists. The Park's irrigation systems and watering areas were specifically placed to operate in coordination with the site's storm water collection and infiltration areas. By localizing water distribution and drainage, rainwater is directed away from the well-traveled bike path. Each amenity should be considered for its ability to satisfy community needs, and provide safe enjoyment for all local residents, users, and beneficiaries.

Preexisting uses at the park development site, especially industrial ones, can significantly impact project design and development. For example, Maywood Riverfront Park's original design included soccer fields and rolling grass hills throughout the Park, but remediation infrastructure, including wells capped with concrete boxes, led the design team to reconsider their plan. In areas with many wells, they developed walking paths and handball courts so concrete surfaces would be seamlessly incorporated into the Park.

Environmental improvement strategies should also be considered to provide local and regional benefits. The goals of the projects profiled in this chapter include the ecological benefits of native habitat restoration and water quality benefits of managing storm water. Specifically, the case studies provide multiple examples of implementing storm water best management practices, including creating bioswales, catchment systems, filtration basins, dry streambeds, permeable surfaces, and using native plants. For example, the City of LA Bureau of Engineering contoured Sunnynook River Park so that it would collect runoff in shallow depressions to direct and slow flows, remove debris and contaminants, and allow water to infiltrate into the ground and the River. They also developed a wildflower meadow at the south end of the site to complement the storm water treatment area planned for the neighboring Glendale-Hyperion Viaduct Complex. Sunnynook River Park also addressed the City and the *Los Angeles River Revitalization Master Plan's* goal to restore the varied and complex local plant and animal habitats along the River. By creating native riparian and woodland habitats throughout the site, the Park created an opportunity to connect communities of wildlife historically divided by significant infrastructure developments such as Interstate 5. This will help gradually rebuild ecological linkages and support the LA River as an urban wildlife refuge.

(INSERT Figure 3.3.11-12 [Caption: Each park features unique and effective strategies to capture, clean, and replenish storm water and street runoff along the LA River. Source: ((3.3.11. Marsh Park - Cameron Robertson), (3.3.12. Maywood Riverfront Park - Dore Burry))]

Many new parks and projects along the River include public art in their final design. Cudahy River Park features tall, custom decorative gates depicting agave plants along the Park's fence. For Marsh Park, MRCA commissioned artist Brett Goldstone to create 160 feet of decorative fencing with artistic representations of the River environment. At the northwest corner of the Maywood Riverfront Park, a sculpture plaza welcomes visitors.

(INSERT Figure 3.3.13 [Caption: Marsh Park Phase II entry gate, created by Brett Goldstone. Source: Andy Pasillas])

Project proponents should also consider how to incorporate educational opportunities, including interpretive signage, into new park designs. For example, education programming at Marsh Park Phase II introduces participants to the plants and animals in the LA River ecosystem and the importance of natural resources. Programs include classes taught by naturalists from MRCA, summer programs, a kayaking program, and others. There are organized activities for adults as well, such as bird watching and art and outdoor survival classes.

Maintenance and operations should also be considered during the design and budgeting phase of park development. To minimize maintenance and operation needs, Sunnynook River Park designers, for example, used graffiti-resistant sign coverings and efficient irrigation systems for native landscaping. With complex sites, multiple user interests, diverse local needs, park project proponents can incorporate the goals of all constituents by pursuing several design strategies.

What are important cost and funding considerations?

Costs

To create new parks along the River, project proponents must develop a realistic, yet flexible budget that considers both expected and unexpected costs. The park projects that are featured here ranged in cost from less than \$400,000 to more than \$10.5 million dollars. The high end of that range is not representative of typical park projects but instead exemplifies a complex remediation process required to safely reuse contaminated sites. It cost \$5.9 million to acquire six industrial sites to develop Maywood Riverfront Park. Design and construction cost about \$4.6 million. In addition, EPA spent about \$40 million to remediate industrial contamination on a Superfund site. In comparison, design and construction for Cudahy River Park cost \$378,000; Sunnynook totaled \$1.7 million, and Marsh Park Phase II was about \$4.4 million.

The *Los Angeles River Revitalization Master Plan* provides guidance regarding park development costs. For example, it states in Section 10.16, that the typical unit construction cost to develop passive recreation should range from \$1 to 2 million per acre, or \$23 to \$46 per square foot. Expected development costs include purchasing land, hiring consultants (to assist with community engagement, design, environmental reviews, etc.), permitting fees, and construction. Typically, before projects can begin the financing process, site use must be secured with the proper titles, leases, and/or use agreements. An operations and maintenance plan may need to be in place before project proponents can secure use agreements and grants. For example, in order to obtain use agreements from the California Department of Transportation and LA Department of Water and Power to build Sunnynook River Park, the Bureau Of Engineering completed design proposals and partnered with the Department of Recreations and Parks to demonstrate what was intended for the site and how it would be managed and maintained.

Funding

In most instances, park development projects must piece together multiple sources of grant funding. The following table summarizes the various funding sources obtained by the featured case study projects.

	Funders	Amount
Cudahy River Park	LA River Access Grant from LA County Parks and Open Space District, under Proposition A	\$363,000
	Rivers and Mountains Conservancy, under Proposition 50	\$150,000
Marsh Park Phase II	Santa Monica Mountains Conservancy, under Proposition 84	\$3.3 million
	California State Parks	\$725,000
	LA County Parks and Open Space District, under Proposition A	\$435,000
Sunnynook River Park	Santa Monica Mountains Conservancy and Mountains Recreation and Conservation Authority, under Proposition 84	\$1.35 million
	CA State Resources Agency and CA Transportation Commission, under State Environmental Enhancement and Mitigation Program	\$350,000
Maywood Riverfront	Environmental Protection Agency	\$40 million
	LA County Regional Park and Open Space District, under Proposition A	\$5.9 million

Park	Murray-Hayden Program, under Proposition 12	\$2.4 million
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Table 3.3.C: Major funding awarded to case study park projects for development along the River.

Applying for and then receiving grant money can be a lengthy, complex, and demanding process, often requiring time consuming proposals as well as extensive planning. We recommend considering funding possibilities when developing project goals and implementation strategies. Usually, the project’s initial planning and design processes must be completed before applying for grants from cities, counties, state, or federal programs. Funding can be difficult to secure especially at the start of projects when site control, acquisition or use agreements, or extensive design-development plans are still in flux. Therefore, it is important to complete as much early project planning as possible before applying for grants. Project proponents should expect to piecemeal funding and implement the project in different phases. In addition, it may be more strategic to partner with potential funders early in the development process rather than approaching them for the first time through a proposal.

(INSERT Figure 3.3.14 [Caption: Alternative proposals for Cudahy River Park. Source: North East Trees])

Funders have their own rules, and therefore project leads should be very clear and aware of the requirements, limitations, and timelines of each grant. Advanced planning and detailed scheduling is often necessary to ensure that funds are available for implementation and expenditures. Some grants are to reimburse project costs requiring all expenses to be paid up front. This was the case for the development of Sunnynook River Park, so the City of LA secured loan from its Public Works Trust Fund. Without these initial funds, the project could not have moved forward. Understanding the funding structure was crucial for scheduling when costs would be covered and reimbursed. Funding had to be available in the right amount at the right time, often requiring changes in the project timeline. Project leads should anticipate delays and cost overruns and consider budgeting more money for contingencies. In every case study profiled, project proponents accounted for contingencies and increased their budgets by 10-15%. Maintaining clear, consistent communication with funders is also critical to provide progress updates and to manage expectations.

Some of the projects presented in this chapter were part of larger, multi-phase efforts in which initial park developments or features could be used to demonstrate the lead organization’s ability as well as community interest in the larger project. For example, MRCA used Marsh Park Phase I as a platform in which to solicit support and funding for Phase II. That agency used a similar approach to develop Maywood Riverfront Park. With one site secured and a long wait for the other five parcels to be ready for construction, MRCA developed a small, interim park with grass and benches. They used the attention from the small park to secure considerable additional funding to continue the larger Park’s development.

Project proponents should be creative when considering how to cover project and long term park management costs. For example, MRCA uses the permitting fees collected from public use of the events pavilion at Marsh Park to fund some of the Park’s operations and maintenance.

(INSERT Figure 3.3.15 [Caption: The open-air Spanish mission-style pavilion at Marsh Park provides a venue for special events for up to 200 people. Source: Cameron Robertson])

What are the important planning and permitting considerations?

Permitting

Obtaining permits to develop parks along the LA River is often the most complex part of development. Permitting fees can be expensive and the procedure to secure them can be labor intensive. Often highly technical documentation must be completed and provided to permitting agencies. Permitting

requirements may also limit, change, or delay project design and implementation and therefore, should be considered as part of the planning process. We recommend that project proponents meet with technical experts to determine requirements before the project begins as well as partner with entities with experience navigating the permitting process with multiple agencies. Consultants can be especially helpful in this area, as demonstrated by MRCA's work with landscape architecture firm, Meléndrez, for the community outreach, design, and permitting of Marsh Park Phase II.

Permitting requirements are affected by site conditions and project scope. If buildings exist on the site, demolition permits must be obtained to manage exposure to hazardous materials such as asbestos and lead. Grading, hauling, and landscaping each require separate permits. These permits may be obtained through municipal building and safety departments and ensure that project implementation is in accordance with the applicable municipal, building, health, and safety codes.

(INSERT Figure 3.3.16 [Caption: North East Trees design and construction team working on Cudahy River Park. Source: North East Trees])

Environmental impact assessments, in accordance with the California Environmental Quality Act, may be required for park projects. Expert consultants can help with this process, but project proponents should be prepared for a lengthy and expensive procedure. Should environmental assessments identify project impacts, additional permits and/or mitigation may be required. Local green building codes, as well as other environmental standards may require specific permits. For example, many projects along the River require a LA County Municipal Separate Storm Sewer System (MS4) Permit to account for the impacts of surface drainage and storm water drainage and retention during construction. MS4 Permits outline Low Impact Development strategies and best management practices for watershed improvements that must be implemented on site. These include dry wells and vegetated swales to manage storm water and to improve local environmental quality. Many of these strategies are tailored to local environmental needs, and can be found in watershed-specific plans.

Use Agreements

As mentioned above, it is essential to clearly identify and hold preliminary meetings with those who own or have the rights to use potential project sites. Those meetings are the first step to pursuing site acquisition, use agreements, or leases to obtain control of the site. We recommend that project proponents also establish how communication will be maintained throughout the process. Many funders require written confirmation of use agreements, lease contracts, and property titles before applications are accepted.

It is important to keep in mind that there may be multiple agencies with jurisdiction over the proposed project site and various regulations on use. In particular, it is important to communicate with the LA County Department of Public Works (LACDPW). Flood control easements administered by LADPW cover the entire River corridor, up to 25 feet beyond the top of the River bank. Any proposed development within this easement, regardless of parcel ownership, must accommodate flood control and be reviewed by the LA County Board of Supervisors. The lands extending immediately beyond the riverbank contain a diverse array of restrictive easements, including utility, heavy and light rail, streets, and highways that will involve other agencies and property owners. Local planning departments can help to identify parcel ownership and easements.

From the case studies featured in this chapter, we learned that the process to secure site use may prove to be the most complex and costly aspect of the entire project. In both Sunnynook and Maywood park projects, for example, negotiation over site acquisition and use agreements required extensive, long-term discussions between numerous parties. Even though the City of LA was leading the development of Sunnynook River Park, owned the site, and would manage its operations and maintenance, negotiating a use agreement between all of the agencies that were involved took almost a year. Project leads should consider seeking expert advice or partnering with experienced organizations to help negotiate use.

(INSERT Figure 3.3.17 [Caption: Use agreements were negotiated with both Caltrans and LADWP before Sunnynook River Park could be built. Source: City of Los Angeles, Bureau of Engineering])

What are important project maintenance considerations?

Long term operations and maintenance should be considered during all steps of park development and may be a requirement for securing use agreements and/or funding. For example, during the development of Sunnynook River Park, the City of LA's Department of Recreation and Parks agreed to operate and maintain the Park and it was that agency, not the project lead, which entered into 30-year use agreements with landowners.

Project leads, along with the entity responsible for operations and maintenance, should ensure a feasible and sustainable program. If any landscaping or vegetation is incorporated into the project, managers should plan on a plant establishment period, as the project proponents did for each case study featured in this chapter. Each projects' construction and landscaping teams remained working on site for six months to a year, to ensure that vegetation was established and all systems were in working order.

It is important to have experienced contractors manage the costs and schedules of maintenance. In addition, there may be opportunities to develop community partnerships. For fiscal reasons and to empower park users, community volunteers are sometimes involved in park maintenance, landscaping, and operations. For example, LandSkate Crew, a community group in Elysian Valley, has maintained and operated the popular Marsh Street Skate Park since 2007.

(INSERT Figure 3.3.18 [Caption: Families can picnic while local youth spend their afternoons at the Marsh Street Skate Park. Source: Andy Pasillas])

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