chapter 4 Future Master Plan Project Opportunities

CHAPTER 4

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Notes: Figures 4-4 and 4-42 courtesy of California State Polytechnic University, Graduate Department of Landscape Architecture 606 Studio project, "San Gabriel Confluence Park," sponsored by the Sierra Club Los Angeles Chapter, San Gabriel Valley Task Force.

Figures 4-10, 4-13, 4-16, 4-17, 4-19, 4-20 and 4-43 by Dan Burden and Figure 4-11 by Paul Demaio (City of Alexandria), courtesy of The Image Library, Pedestrian and Bicycle Information Center (PBIC).

chapter 4 Future Master Plan Project Opportunities

4.1 OVERVIEW

In addition to the many river enhancement projects described in Chapter 3, there are opportunities for even more projects in the future. A critical examination of the continued, collective impact of all defined projects reveals even more possibilities for habitat, recreation and open space enhancement.

This section is based on a comprehensive analysis of existing conditions in the river corridor and a detailed assessment of the 134 Master Plan projects identified in Chapter 3. It lays the groundwork for future project development opportunities to be identified and defined as the first of several rounds of Master Plan projects move forward to completion. It includes ten categories of potential opportunity:

- Habitat restoration and linkages
- Trail enhancements
- Bridges and gateways
- Interpretive facilities
- Park development
- Open space
- Redevelopment and reclamation
- Flood channel enhancements
- Groundwater recharge
- Water quality improvement

4.2 HABITAT RESTORATION AND LINKAGES

The San Gabriel River once functioned as a terrestrial and aquatic wildlife corridor, linking the Puente-Chino Hills and Montebello Hills with the San Gabriel Mountains. Restoring this habitat linkage will improve biodiversity by increasing open space available for wildlife movement.

Existing Conditions

Habitats for native plants and animal species have been displaced by urban development. The remaining habitat areas are fragmented and isolated, making them less capable of supporting native birds, fish and other wildlife. Major pinch points and other physical barriers limit aerial, aquatic and terrestrial movement between these habitat islands. In particular, dams and flood control facilities and the water supply system have significantly altered water flow and other habitat conditions, terminating or altering historic migration patterns. For example, before dams were built, thousands of steelhead trout traveled up the river in the winter and spring to spawn. Mammals are now mainly confined to specific open space areas or wildlife refuges that are surrounded by vast areas of developed land.

Beyond habitat fragmentation, there are other conditions worth noting:

- Habitat conditions in the San Gabriel Mountains (Reaches 1 and 2) are of the highest quality, but are increasingly stressed by heavy recreational use and recent drought conditions. Other high-quality natural habitat areas providing large, natural open space areas include those in the Santa Fe Dam Recreational Area and Whittier Narrows.
- Exotic plants have reduced native species habitat areas along the river. Arundo, a particularly invasive giant reed, has significantly affected the river environment. Although major efforts to remove arundo are underway, current management practices generally favor non-native species habitat.
- A managed vegetation control system is in effect along the river, in compliance with permits issued by regulatory agencies. To balance flood control with habitat maintenance, the County of Los Angeles Department of Public Works (LADPW) and the U.S. Army Corps of Engineers (COE) are performing vegetation management—but in different ways. As a result, the appearance of the reaches under their respective control varies.
- While it is important to identify, protect and expand existing high quality habitat areas, insufficient habitat mapping presents a challenge to understanding the current status of habitat and hinders planning for future habitat restoration.

COURTESY OF GABI MCLEAN ©2003

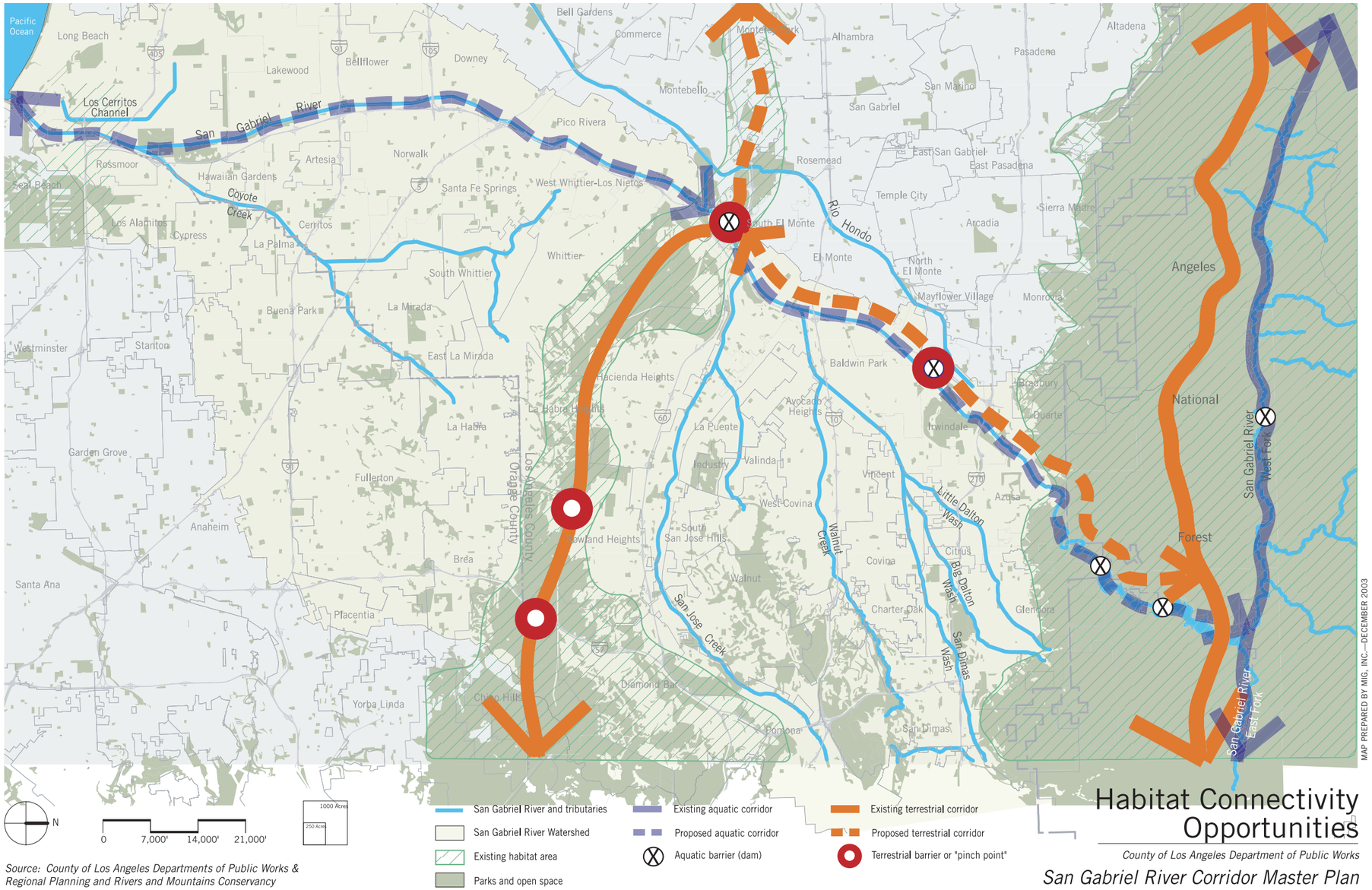
Figure 4-1. Analysis can reveal even more opportunities for future river corridor enhancements.

Future Opportunities

The most important habitat restoration opportunity is in Reach 4, the area between Whittier Narrows and the Santa Fe Dam. It provides the best opportunity to reconnect critical habitat between the Puente-Chino Hills and the San Gabriel Mountains. This would complement and reinforce benefits that will come from completing the Puente Hills Western Wildlife Corridor project (R4.23).

After successfully re-establishing the habitat linkage between the Puente Hills and Whittier Narrows, the program to extend this connection further north along Reach 4 and beyond could include:

- Soft-bottom habitat restoration in areas of the river exceeding the 100-year flood channel capacity



Source: County of Los Angeles Departments of Public Works & Regional Planning and Rivers and Mountains Conservancy

Map 4-1. Habitat connectivity opportunities.

- A habitat restoration element in future gravel quarry land reclamation projects
- Potential use of open space in utility right-of-way as a habitat easement, which will require pursuing essential institutional arrangements such as "safe harbor agreements"
- A habitat linkage or passage enabling wildlife to get around the barrier created by the Santa Fe Dam at the north end of Reach 4 (R3.26)

All future projects should incorporate habitat restoration. Examples among current Master Plan projects include:

- San Jose Creek Habitat and Trails Restoration Project (R4.19)
- Puente Hills Western Wildlife Corridor (R4.23)
- Whitter Narrows Nature Center Ecosystem Restoration (R4.27)

Habitat restoration efforts such as soft bottom vegetative management and exotic plant removal in Reach 3 (a key linkage from the Santa Fe Dam to canyon mountain habitats in Reach 2) would further strengthen efforts to re-establish the San Gabriel River as a habitat linkage. Examples among current Master Plan projects in Reach 3 include:

- Robert's Creek Restoration (R3.04)
- Fish Creek Restoration and Public Access (R3.12)
- Santa Fe Dam Recreation Area and Habitat Enhancements (R3.21)

Fish Creek restoration provides a model for other similar restoration efforts that may occur in the future. Vulcan recently restored the upper third of Fish Creek in the area that it owns. The restoration was very extensive and brought the creek back to its estimated original location before mining began. Vulcan is now working with the City of Azusa to create new mining and reclamation efforts at the Azusa Rock Quarry that will incorporate restoring the remaining portions of Fish Creek on Vulcan's site. The ultimate restoration of Fish Creek will be incorporated into the reclamation plan phasing.

In addition to the habitat corridor, there are other significant habitat restoration opportunities that should be pursued. In the San Gabriel Mountains, Reaches 1 and 2, programs and facilities to mitigate the impacts of recreational activities will be a priority. In Reach 2, minimum flow requirements—duration, quantity and timing—are critical considerations for habitat improvement. Findings from the flow study below Morris Dam (R2.07) will contribute to that effort. However, an agreement allowing the diversion of any water to support habitat or other benefits would have to be arranged with water rights holders.

Habitat restoration opportunities south of the Whittier Narrows Dam are more limited, especially in Reaches 5 and 6, where they are mainly confined to specific sites such as parks and open space. However, improving and restoring upstream river functions may provide future flexibility in downstream sections. In Reach 7, reclamation of oil fields and industrial properties can restore tidal basin wetlands, restoring critical habitat for birds and other native wildlife. Two current examples among the Master Plan projects include:

- Los Cerritos Wetlands Restoration (R7.07)
- Hellman Ranch Wetlands Freshwater Marsh Restoration (R7.10)

Nine proposed habitat restoration projects will contribute to the overall goal of expanding and linking existing habitat areas. Two restore the linkage between Puente-Chino Hills and the San Gabriel Mountains, and seven target individual habitat-restoration opportunities. Even more encouraging, more than one-third of all Master Plan projects include either a habitat enhancement element or a public education component designed to increase habitat awareness.

COURTESY OF BONTERRA CONSULTING

Figure 4-2. Stream and floodplain restoration projects will enhance the region's biodiversity.

COURTESY OF DAN SLATER

Figure 4-3. Great blue herons nest in tall tree tops and rocky cliffs, away from human activity.

Habitat Restoration Considerations

Planners should consider the following opportunities and/or challenges in all reaches of the river:

- Cross-sections of the river should be developed to map habitat restoration zones that vary by reach, according to current conditions and future possibilities. This will aid future planning and design efforts, by identifying appropriate locations outside these zones for non-habitat lakes and "natural" appearing facilities that are geared for recreation and other non-habitat functions. It will also help ensure that future bike, equestrian and hiking trails are designed along perimeters rather than through these habitat zones.
- Individual habitat-enhancement projects should follow system-improvement guidelines and similar resources. This includes adopting the Los Angeles River Landscape Guidelines and using the suggested native plant palettes that are appropriate to each habitat zone.
- Vegetation management practices must protect native habitats, remove exotic species and arrest the spread of ruderal species. Some needed institutional and regulatory changes have already occurred but more are needed. COE's mission now includes habitat restoration in addition to flood control.

Figure 4-4. In-river vegetation provides valuable habitat for birds and other wildlife.

- LADPW and utility easement holders, such as Southern California Edison (SCE), can benefit from safe harbor agreements that encourage programs to expand native species habitat on lands they own or control. Under these agreements, these agencies would not be penalized or fined if normal or emergency operations have an impact on the new habitats. Safe harbor agreements are available under Section 10 of the Endangered Species Act (ESA). But, public entities with activities in waters of the United States or US-owned property (National Forest- or COE-owned rights-of-way) are subject to Section 7 of the ESA, which may not allow safe harbor agreements. Further research is recommended. Legislative action may be needed to make these agreements an option.
- Increasing habitat connections will encourage wildlife in densely developed urban areas. Regional corridor enhancement projects should incorporate measures to reduce human-wildlife interactions because many species (wild birds, opossums, skunks, wild and commensal rodents, raccoons, coyotes and the fleas and ticks they carry) can transmit diseases of public health concern. Safeguards include encouraging (or mandating) "wildlife-proof" trash receptacles in parks and surrounding communities, creating buffer zones (via plantings or design) around corridors to discourage wildlife from leaving the created habitat zone, and developing educational outreach materials for local residents and park visitors. Littering, unkempt picnic areas, and dogs off-leash all have the potential to generate unfortunate human-wildife interactions.

A number of studies recently completed or now underway will help target other future habitat restoration opportunities.

- The South Coast Wildlands Project identified the San Gabriel River as one of 60 missing habitat linkages in the south coast ecoregion, because it can connect the Puente-Chino Hills with the San Gabriel Mountains.
- The Los Angeles and San Gabriel Rivers Watershed Council is undertaking a vegetation-mapping project of all soft-bottom rivers in Los Angeles County, including the San Gabriel. Digital data will be available in late 2004.
- San Gabriel Mountains Regional Conservancy (SGMRC) is conducting a habitat study of San Gabriel River Watershed, funded by Proposition 13 (State Water Resources Control Board) and Proposition 40 (Rivers and Mountains Conservancy). This will build on the foundation provided by SGRMC's "Reconnecting the San Gabriel Valley."
- The Watershed Council has developed a native plant list appropriate for the Los Angeles River. As there are many similar species between both the Los Angeles and San Gabriel River corridors, the Los Angeles River plant list is being used as a resource for development of the San Gabriel River plant list. However, because the San Gabriel River is much less "hardscaped" than the Los Angeles River, additional resources have also been used to develop the plant list specific to the San Gabriel River.

COURTESY OF LARRY MOATS, USFWS

Figure 4-5. Mountain lions hide during the day and emerge after dark to hunt for food.

4.3 TRAIL ENHANCEMENTS

The ideal trail system is continuous, providing connections to and from useful destinations for recreational bike riders, pedestrians and other trail users. Trail systems should not be limited to any one corridor or sub-region, but should instead provide extensive trail connections throughout the region. A successful trail system also integrates design elements (such as signage and fencing) to create a cohesive, navigable, safe and enjoyable trail experience.

Existing Conditions

The current trail network serves a variety of users. In the mountains, there are over 50 miles of hiking trails, many of which connect to the San Gabriel River Bike Trail (Bike Trail). The river trails are multi-use for hiking and biking. The standard width trail is paved for maintenance and emergency vehicle access and is accompanied by a parallel dirt track for equestrians.

The 39-mile class I Bike Trail runs parallel to the San Gabriel River from the edge of the San Gabriel Mountains in Azusa to the Pacific coast in Seal Beach. This trail can serve as the central spine for an extensive regional trail network, but limitations in the layout of the current trail system will have to be addressed before it can fully expand. At present, the trail is only on one side or the other of the river, making access more difficult. In addition, the current trail network is disjointed, with few east-west connections to and from the trail. The best current examples of bike trail connections include:

- The Rio Hondo via Lario Creek/Zone 1 Ditch
- Along San Jose Creek, ending on the east side of the San Gabriel River (however, it lacks a connection to the Bike Trail on the west side)
- Along Coyote Creek, crossing Coyote Creek to join the Bike Trail just before the confluence.

Local, city-maintained trails may fill some trail connection gaps, but the overall bike trail network is incomplete.

There are approximately 38 access points to the Bike Trail, usually via street intersections, bridge crossings and local parks. The majority of the river is reachable through these access points, except above Irwindale. In this stretch, industrial land uses sometimes lie between residential areas and the river/trail system. Even where access points exist, however, the lack of a cohesive wayfinding system makes it difficult to find them. Many access points do not include signage.

The appearance, usability and security of the river trail network can be enhanced through trail amenities and other improvements:

- The many different styles of fencing along the river create a disjointed look and feel. Chain link is the most prevalent style, often in poor condition and posted with warning signs. The river is usually "fenced in," with no physical access allowed. These fences and signs portray the river as a piece of infrastructure rather than as a living asset.
- Landscaping along much of the river is often non-native and water intensive.
- The asphalt-paved Bike Trail doubles as a maintenance access road and needs repair. It provides only two official staging areas.
- Safety lighting along the river is sporadic.
- There are few site amenities, such as restrooms or drinking fountains, and no signage to indicate where they are.
- There are few shade trees along the river.

COURTESY OF DAN SLATER

Figure 4-6. Graffiti along the bike trail in Reach 6 reflects its urban location.

Future Opportunities

There are many opportunities to expand on existing trails and create an integrated network with the river as a key component. The Bike Trail can be enhanced by building parallel trails along the entire length of both sides of the river, increasing its functionality for trail users and possibly reducing the need for additional bridges. Current stakeholder-proposed examples include:

- Westside Trail in Azusa (R3.05)
- Woodland Duck Farm (R4.15)
- West San Gabriel River Open Space Area in Lakewood (R6.18)

More east-west bike trail connections to the SGR Bike Trail are needed, at least once in each reach. East-west connections will help establish a more complete regional trail grid, linking the two most significant north-south trails running along both the Los Angeles and San Gabriel Rivers. Trails along river tributaries, such as San Jose Creek and the Rio Hondo, can also play a key role. Current Master Plan project examples include:

- Pacific Electric Rails-With-Trails (R3.15), providing a linkage to the SGR Bike Trail in the Upper San Gabriel Valley via the future Gold Line light rail extension corridor
- San Jose Creek Bike Trail Bridge (R4.17) and Phase II (R4.18)
- Whittier Greenway Trail and Connection (R5.05)
- West Branch Greenway Rails-to-Trails Project (R6.11)
- Pacific Coast Highway Bike Trail Extension (R7.11)

Local trails should link directly to regional trails to create a truly comprehensive network. Developing and improving connections between the San Gabriel River Bike Trail and adjacent communities can help. Master Plan projects include:

- Azusa Bike Trail Network (R3.14)
- Caltrans ROW Open Space and Trail in Baldwin Park (R4.09)
- Thienes Avenue Gateway (R4.20)
- Mines Avenue Bike Trail Connection (R5.10)
- Bellflower High Bike Trail Connection (R6.06)
- Cerritos College Bike Link (R6.09)
- Trail Connection Between Wetlands in Seal Beach (R7.09)

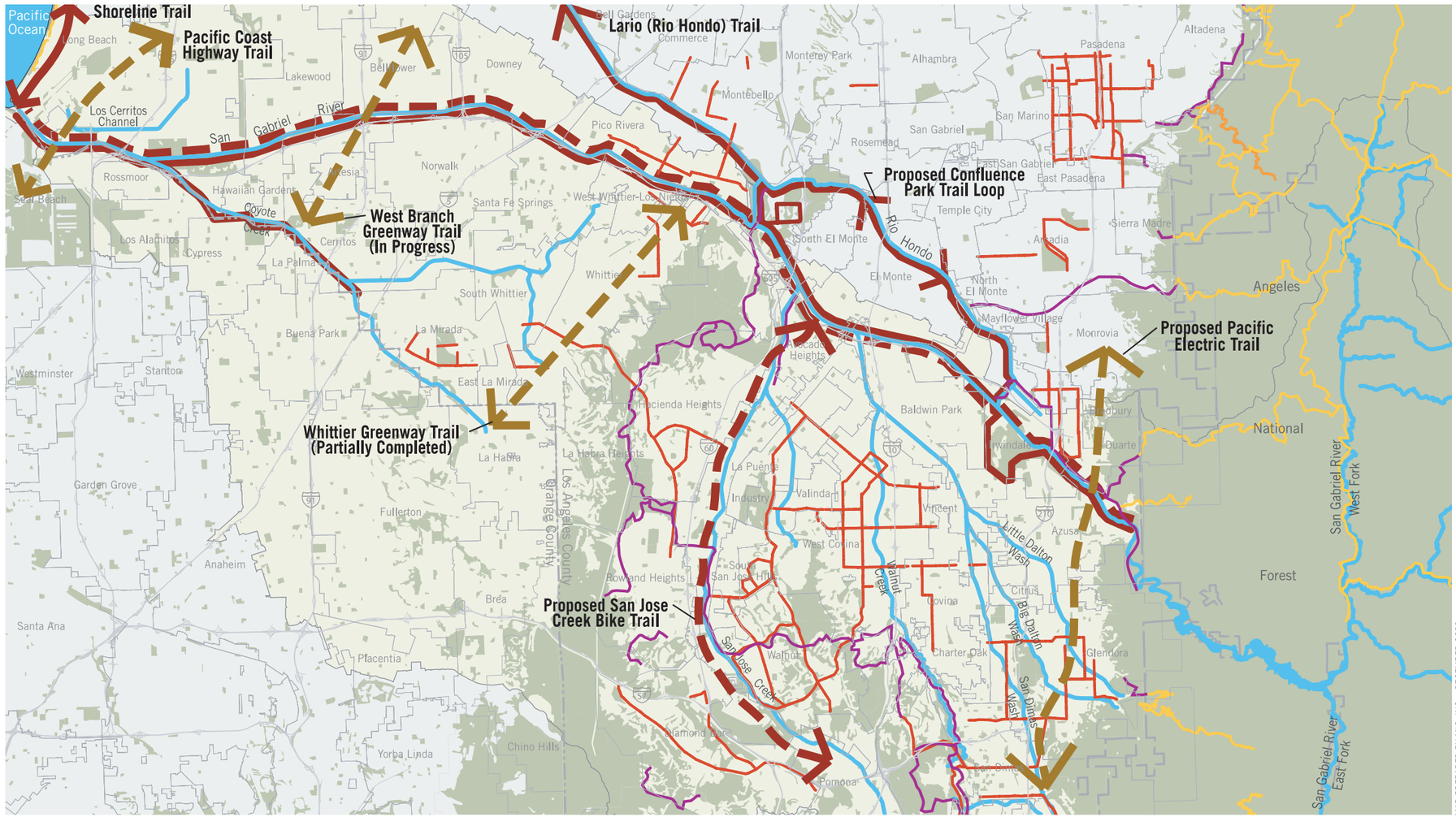
Figure 4-7. A former Union Pacific Railroad right-of-way will soon become the West Branch Greenway Trail in the City of Bellflower.

A continuous bike trail loop could be formed by linking existing trails in the San Gabriel Valley: the San Gabriel River Bike Trail, connecting to the Rio Hondo Bike Trail via Lario Creek, heading north up along the Rio Hondo to Peck Park, east to the Santa Fe Dam Recreation Area, south through the Duck Farm and San Jose Creek, then back to Whittier Narrows.

Qualitative Improvements

In addition to extending and completing the trail network, other more qualitative improvements to the trail network would enhance usability. These include implementing a comprehensive wayfinding system for the Bike Trail. This wayfinding system would provide trail users with a hierarchy of signage to indicate river reach, city, major arterials, community gateways, connections to other bike trails, public transit stops, points of interest, comfort stations, and mile markers. A variety of other amenities are also required.

- **Fencing:** Public safety can be ensured while applying aesthetic considerations; materials should reflect the reach; visual access to the river should be maintained or enhanced.



Source: County of Los Angeles Department of Public Works and Rivers and Mountains Conservancy

Note: Trails in Los Angeles County only. Data derived from RMC database and County of Los Angeles Department of Parks and Recreation, "Los Angeles County Riding and Hiking Trails" map, 2001. Local trails per city.

Trail Enhancement Opportunities

County of Los Angeles Department of Public Works

San Gabriel River Corridor Master Plan

Map 4-2. Trail enhancement opportunities.

Figure 4-8. City streets can link with the river bike trail, such as this connection from Todd Street in Azusa.

Figure 4-9. Fences can be simple, yet attractive, such as this fence surrounding the Rio Hondo Coastal Basin Spreading Grounds.

- **Landscaping:** Native, water-wise plants should be used for each reach.
- **Lighting:** Lighting can be designed to improve safety without disturbing habitat or nearby residences.
- **Trees:** Shade trees will screen nearby residences and enhance user comfort.
- **Staging areas:** Additional bike staging areas with water fountains and public restrooms will improve trail function and convenience for all users.

COURTESY OF PBIC

Figure 4-10. Lighting can be customized to reflect local themes.

COURTESY OF PEDESTRIAN AND BICYCLE INFORMATION CENTER

Figure 4-11. Whimsical bicycle racks add an art element to staging areas, such as this one in Alexandria, Virginia.

Safety must be incorporated in the design and maintenance of all trail enhancement projects, along with aesthetic improvements. New trail fencing can enhance the aesthetic experience of the river system, even when dictated by safety and liability concerns.

COURTESY OF NORTH EAST TREES

Figure 4-12. Drinking fountains can incorporate local materials like river rock.

COURTESY OF PBIC

Figure 4-13. Universal design will improve river and trail access for people of all abilities.

Trail-road intersections are also a major safety consideration. The river trail intersects numerous bridges, overpasses and other obstacles (for example, the 60/605 Freeway interchange near Whittier Narrows).

Staging and parking areas are required at endpoints of all trails, but should also be placed at regular intervals along the trail. They should be designed to meet the needs of all trail users, especially hikers, bicyclists and equestrians.

Universal access and design should be incorporated at every stage in the planning, design and implementation of all trails.

COURTESY OF NORTH EAST TREES

Figure 4-14. The yoga fitness trail on the Los Angeles River is a creative alternative to standard fitness trails.

Other future opportunities for improving the river trails system can be identified through additional research:

- Catalog all access points to the Bike Trail, including connections with other regional and local trails.
- Conduct an on-site survey of the Bike Trail to document all physical barriers to bike and equestrian use (no equestrian trail map is currently available).
- Identify opportunities to improve visual and/or physical access from the Bike Trail to the river.
- Integrate the Bike Trail with the existing and proposed education centers (see section 4.5). Incorporate interpretive themes into the design of trails, trail signage and other wayfinding elements.

4.4 BRIDGES AND GATEWAYS

The tremendous recreational resource that is the San Gabriel River can only be fully realized if people have access to the river corrridor itself. For the most part, access comes in the form of existing bridges, gateways and trail segments.

A total of 61 bridges cross the San Gabriel River or lie within the river corridor, ensuring easy passage over what would otherwise be a natural barrier for nearby residents and visitors on both sides of the river. However, most of the bridges are designed to carry automobiles, trucks and trains—not people on foot, bikes or horses. And they were not designed to integrate with and provide entry to the river and its environs. As a result, not only is it difficult to get access to the river, but the river is also largely "invisible" to the casual observer nearby.

Existing Conditions

Although there are bike paths or sidewalks on many arterial bridge crossings, there are currently only five bridges exclusively for bicyclists and pedestrians. Four of these are in Reach 6 and the fifth, a rails-to-trails conversion in Reach 3, provides the only bike-pedestrian bridge connection north of Whittier Narrows Dam.

Bike-pedestrian bridges are located at the following five locations:

- Puente-Largo Historic Rail Bridge, Azusa (Reach 3)
- Bridge at Foster Road, Downey and Norwalk (Reach 6)
- Bridge at Caruthers Park, Bellflower and Ironwood Golf Course, Cerritos (Reach 6)
- Bridge below Carson Street at Long Beach Towne Center, Long Beach (Reach 6)
- Bridge across Coyote Creek, just above San Gabriel River confluence, Long Beach (Reach 6)

Figure 4-15. Native vegetation grows on top of the Puente-Largo Historic Rail Bridge, alongside the bike trail.

TABLE 4-1. BRIDGE TYPES

Reach	Freeway Bridges	Street Bridges	Rail Bridges	Bike/Pedestrian Bridges
One	0	2	0	0
Two	0	0	0	0
Three	1	5	1	1
Four	5	8	1	0
Five	1	8	4	0
Six	2	11	1	4
Seven	2	4	0	0
Total	11	38	7	5

New bike-pedestrian bridges and new gateways on existing arterial bridges can substantially improve cross-river mobility. Gateways are entry points marked by street monuments or other design elements where city boundaries and the river intersect. They enhance the river's visibility and symbolically link it to the community in which it flows. Gateways can be designed to facilitate access to the river by pedestrians and bicyclists.

Table 4-1 lists the types and number of all 61 bridges found in each of the seven reaches.

Future Opportunities

The Master Plan proposes seven new or enhanced bike-pedestrian bridges and 21 gateways. Completing these bridges will be a major improvement over the current situation, but there will still be significant gaps along the river. For example, Reach 4 north of San Jose Creek and all of Reach 5 would still not have any bike-pedestrian crossings.

Reach 5 has the largest number of proposed gateways, suggesting that there are many arterial street bridges that could be modified for pedestrians and bicyclists.

The following is a summary of all proposed bike-pedestrian bridges and gateways and additional opportunities specific to each reach. (More detailed descriptions of these projects can be found in Section 3.5.)

COURTESY OF THE AZUSA HISTORICAL SOCIETY

Figure 4-16. Historic archives can inspire new gateway signage, for example this historic sign that once stood on Azusa Avenue.

Reaches One and Two

- None

Reach Three

BIKE-PEDESTRIAN BRIDGES

- Future Pedestrian Bridge (R3.09) at site of existing Vulcan Materials Conveyor Belt
- Foothill Boulevard Pedestrian Bridge, as part of Regional Rails to Trails Project (R3.15)
- Puente Largo Rail Bridge Enhancement, as part of Duarte Bike Trail Extension (R3.19)
- Bridge, Tunnel, or other connection around Santa Fe Dam, part of SGR Beautification and Environmental Enhancement (R3.28)

GATEWAY

- Route 66/Foothill Boulevard Gateway (R3.20)

The Vulcan Materials Conveyor Belt may be in operation for another four decades before it can be re-designed for use as a bike-pedestrian bridge (Project R3.09). Since this leaves a significant gap in pedestrian bridge crossings over the river, another site may need to be found that could be available for use much sooner. Project R3.28 would provide pedestrians and bicyclists with a more direct and secure connection around the Santa Fe Dam.

Reach 4

BIKE-PEDESTRIAN BRIDGES

- San Gabriel River Bike Trail Bridge (R4.16)
- San Jose Creek Bike Trail Bridge (R4.17)

GATEWAYS

- Ramona Boulevard Gateway (R4.08)
- Valley Boulevard Gateway (R4.13)
- Thienes Avenue Gateway (R4.20)

COURTESY OF PBIC

Figure 4-17. Local artists can create murals and other art work on bridges, reflecting local themes.

Completing the two proposed bike-pedestrian bridges will meet the needs of the southern portion of Reach 4, but the northern half of this reach may still need an additional bike-pedestrian crossing.

Reach 5

BIKE-PEDESTRIAN BRIDGES

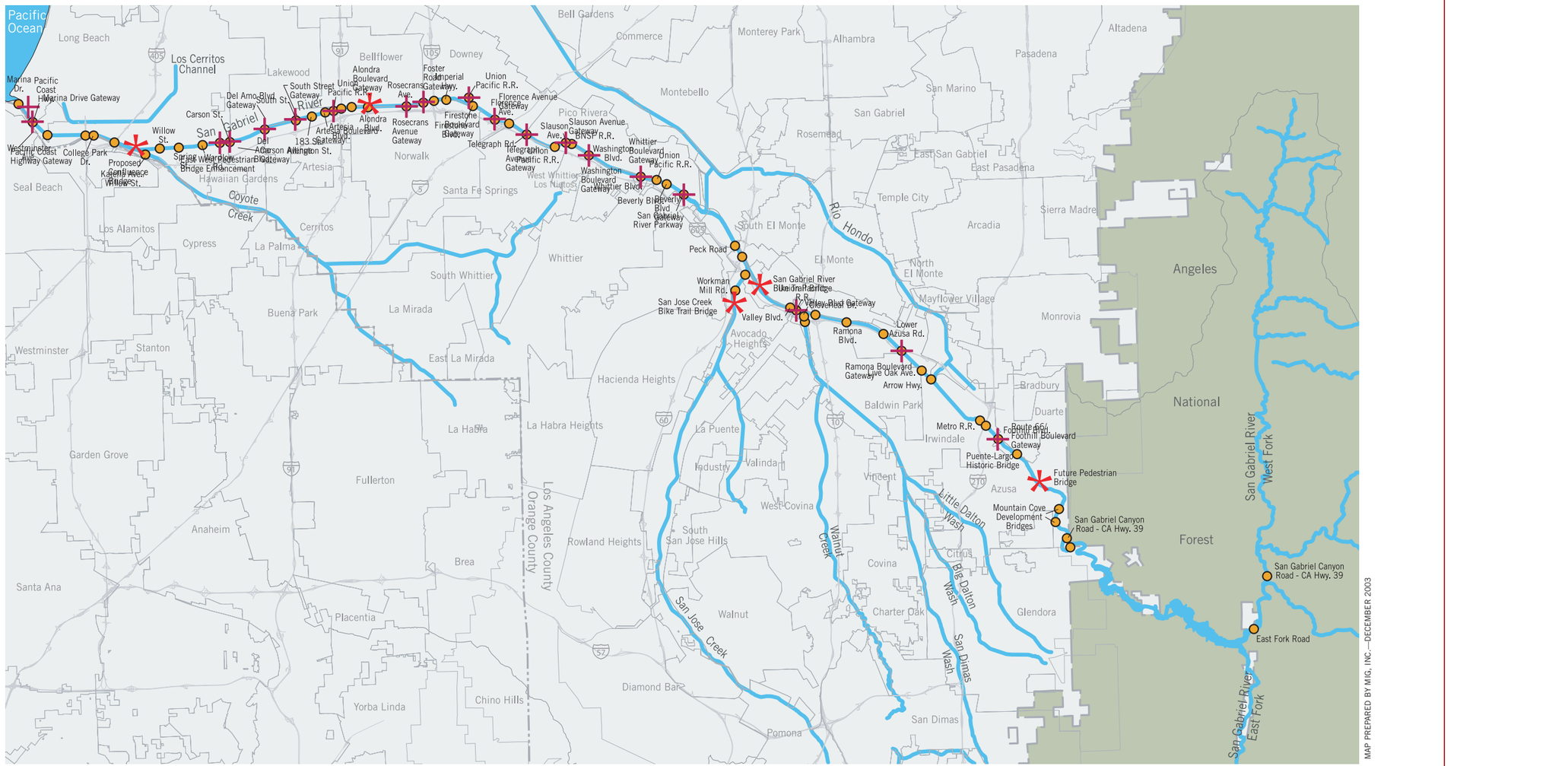
- None

GATEWAYS

- Beverly Boulevard Gateway (R5.03)
- Whittier Boulevard Gateway (R5.05)
- Washington Boulevard Gateway (R5.11)
- Slauson Avenue Gateway (R5.12)
- Telegraph Avenue Gateway (R5.13)
- Florence Avenue Gateway (R5.15)
- Firestone Boulevard Gateway (R5.18)

COURTESY OF NORTH EAST TREES

Figure 4-18. "Guardians of the River Gate" on the Los Angeles River, by artist Michael Amescua, incorporates folk art symbols and historic wildlife.



Source: County of Los Angeles Department of Public Works, Thomas Bros. Maps, and Rivers and Mountains Conservancy

Map 4-3. Bridge project opportunities.

Although there are no current or proposed bike-pedestrian bridges in Reach 5, the proposed gateway projects on existing arterial bridges may facilitate pedestrian and bike use.

Reach 6

BIKE-PEDESTRIAN BRIDGES

- East-West Pedestrian Bridge Enhancement (R6.20)

GATEWAYS

- Foster Road Gateway (R6.02)
- Rosecrans Avenue Gateway (R6.04)
- Excelsior Drive Gateway Park (R6.05)
- Alondra Boulevard Gateway (R6.08)
- Artesia Boulevard Gateway (R6.13)
- South Street Gateway (R6.14)
- Carson Avenue Gateway (R6.19)

This reach already has four bike-pedestrian bridges, the most of any reach.

COURTESY OF PBIC

Figure 4-19. Creative bike-pedestrian bridges, like this one in Spokane, Washington, can enliven trails.

Figure 4-20. The City of Cerritos placed this distinctive marker at the gateway to the City on Artesia Boulevard.

COURTESY OF DAN SLATER

Figure 4-21. The existing bridge at Coyote Creek could be expanded to cross the San Gabriel River near this point.

Reach 7

BIKE-PEDESTRIAN BRIDGES

- Proposed Confluence Bridge (R7.05)

GATEWAYS

- Pacific Coast Highway Gateway (R7.11)
- Marina Drive Gateway (R7.14)
- River's End Gateway (R7.17)

4.5 INTERPRETIVE FACILITIES

Educational centers provide a place to learn about the river and the watershed it serves. In a sense, these facilities speak for the river, telling its story to people who may be unaware of its history and significance. A series of strategically located educational centers will help the public perceive the river as an integrated system and rediscover it as the common thread linking communities from the mountains to the sea.

Existing Conditions

There are presently five individual educational centers located at various points within the San Gabriel River corridor:

- Rincon Station, managed by the Angeles National Forest, just below the confluence of the East Fork (Reach 1)
- The Peter Schabarum Nature Center, a Los Angeles County facility being operated by the San Gabriel Mountains Regional Conservancy, in the Santa Fe Reservoir Recreation Area (Reach 3)
- The Nature Center at Whittier Narrows, a County of Los Angeles Department of Parks and Recreation facility (Reach 4)
- Pio Pico State Historic Park (Reach 5)

COURTESY OF NORTH EAST TREES

Figure 4-22. A grizzly bear loses its grip on a tasty steelhead trout in this sculpture by Michael Amescua on the Los Angeles River.

COURTESY OF AZUSA HISTORICAL SOCIETY

Figure 4-23. Historic landmarks such as the Irwindale Church provide rich historical interpretive opportunities.

- The City of Long Beach's El Dorado Nature Center, just above the Coyote Creek confluence (Reach 6)

There are no interpretive centers in Reach 2 or Reach 7. There are outdoor interpretive exhibits and interpretive signage interspersed along the river, primarily in the mountains along Reaches 1 and 2.

The five major educational centers are primarily stand-alone facilities not designed to relate to each other as part of a larger educational program or network. Although many are located near the San Gabriel River Bike Trail, some centers do not have directional signage to the nearby river. Many of these centers are planning enhancements or upgrades to their facilities and educational programs.

Future Opportunities

A comprehensive network of educational centers would consist of at least one major educational center in each of the seven reaches of the river. Each reach could also have smaller, more specialized educational centers that complement and reinforce the major centers.

Eight different interpretive themes are recommended for the river corridor (additional interpretive themes may emerge during the process of developing the network). Some of these themes may be appropriate for the river as a whole, while others are more specific to particular reaches:

- San Gabriel River Watershed (all reaches)
- Water Conservation (all reaches)
- Native Habitat (all reaches)
- Regional Culture/History (all reaches)
- Mountains and Forest (Reaches 1 and 2)
- Flood Control and Water Supply (Reaches 2, 3 or 4)
- Geology/Mining/Quarry Operations (Reaches 3 and 4)
- Wetlands (Reach 7)

These interpretive themes should be developed in partnership with existing public and private interests along the river. For example, the geology, mining, and quarry operations theme suggested for Reaches 3 and 4 could be developed in partnership with quarry operators, who are best qualified to promote an understanding of mining, its ancillary uses, history and contributions to the growth of Southern California.

Each educational center would be distinguished by its reach location and particular interpretive theme(s). Each center would provide visitors information about the other centers, including locations and specialized

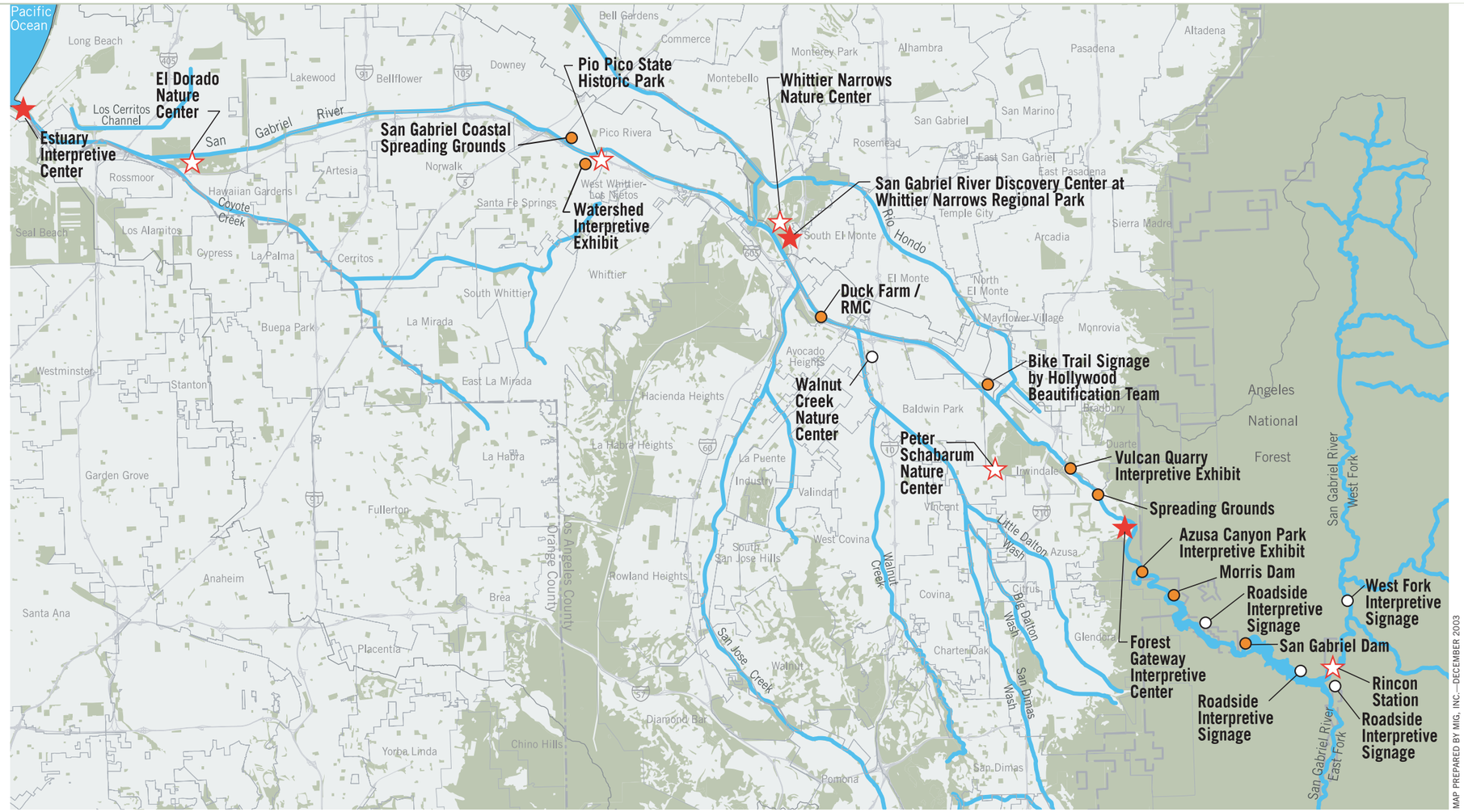
COURTESY OF ANNE DOVE, NPS

Figure 4-24. The San Gabriel Dam provides an interesting array of flood control and water conservation interpretive opportunities.

COURTESY OF VULCAN MATERIALS COMPANY

Figure 4-25. Children can learn about the importance of aggregate to Southern California through field trips to local mines.

Figure 4-26. El Dorado Nature Center is a model for regional education centers.



Source: County of Los Angeles Department of Public Works and Rivers and Mountains Conservancy

Map 4-4. Interpretive facility opportunities.