





THE PARKLAND

Based on the first written descriptions of native California landscapes, the slopes of Elysian Park must have been clothed in chaparral, coastal sage scrub, and Coast Live Oak and Walnut woodlands. In 1796 their distribution was determined by combinations of slope aspect, elevation, topography, and soil type.

A century later the influences of grazing and resource extraction had left the landscape bare and denuded. In 1886, once Elysian Park was dedicated as a Park for public enjoyment, beautification began with tree planting and the introduction of several thousand Eucalyptus trees (see bibliography for listing of documents detailing the history of Elysian Park).

The Los Angeles Horticultural Society established the first botanical garden in Southern California in Elysian Park in 1893. Among the original plantings in the Chavez Ravine Arboretum were a magnificent cape chestnut, several expansive Tipu trees and a grove of exotic Rubber trees. The double row of Palms along what has become known as the Avenue of the Palms, were planted sometime between 1895-1900. A gift from a foreign country, the Palms have only recently been identified as *Phoenix canariensis*, Canary Island Palms.

Over subsequent decades an array of other exotic species was planted throughout the Park, including groves of Deodar Cedars, Pines, Olives and more Eucalyptus. Most recently, fire has transformed the historic bank of Deodar Cedars above the Golden State Freeway. In the wake of the fire, remnants of the native landscape have re-emerged — most notably the California Walnuts (*Juglans californica*)—characteristic of such north-facing slopes.

Also re-emerging around Elysian Park are new open spaces reclaimed from railyards, new State and City parklands, new trails, and plans for a Los Angeles

River corridor revitalization, developed in conjunction with the revitalization of adjacent communities. The sheer volume of park and open space planning surrounding Elysian Park necessitates that this Master Plan look at opportunities to connect Elysian Park to a greater regional context. This chapter addresses:

- PARK LANDSCAPES
- FLORA AND FAUNA, NATIVE PLANT COMMUNITIES AND RESTORATION
- LAND OUTSIDE ELYSIAN PARK
- CONNECTING PARK LANDS

ACTION PLAN

Some irony may be found in the fact that native vegetation has become more rare and desired in the Park than the exotic species imported there a century ago. The objective of the Plan is to establish a unified native plant parkland that will sustain itself over time, reducing maintenance costs while providing the context in which to show off the historic and iconic landscape features.







THE SILHOUETTE OF THE MEXICAN FAN PALMS AGAINST THE SKY ON GRAND VIEW DRIVE

Chavez Ravine Arboretum and the Avenue of the Palms constitute the most prominent and valuable historic vegetation resources in the Park. These resources are valuable not just for the impressive maturity of the trees, but for what they tell us about cultural perspectives at a time when the City of Los Angeles was emerging. Saving the best of exotic ornamentals and restoring and improving the native plant communities will strengthen the best of the Park's history.

ACTION ITEMS ARE:

- Enhance the biological value of the native plant communities in the Park.
- Include citizens in restoration knowledge and implementation.
- Create a self sustaining native landscape over time that supports habitat.
- Preserve and enhance historic groves of selected exotic trees.
- Link Elysian Park to other City parks and trails, and to the regional wildlife corridor of the Los Angeles River. Strengthen physical connections to Elysian Park from outside the Park.
- Support land acquisition to complete the Park function and aesthetic for optimum use and enjoyment.

PARK LANDSCAPES

Iconic Exotic Planting

Along with the vegetation resources of historic significance (see *Taking Care of the Park* for further discussion), other prominent vegetation features of the Park include the Mexican Fan Palms against the skyline; the century-old stands of Eucalyptus on the hillsides; and the forest of Deodar Cedar (*Cedrus deodar*) surrounding the Reservoir.

Straight lines of Mexican Fan Palms marking the grid of urban Los Angeles disappear when they enter the steep contours of the park—to re-emerge on the ridgeline as a whimsical, only-in-LA statement that triggers recognition of the Park. Unfortunately, the close proximity of the Park to the Los Angeles River renders it one of the nearest sources for invasive plant species such as the Fan Palms. If the tradition of Fan Palms is to be perpetuated, strategies must be developed to reduce their seeds from escaping from the Park.

The Eucalyptus have deteriorated under the combined stress of drought, fire and disease. A few stands still remain in good health, but in many instances, the dead and dying trees have created a fire hazard in the Park. Maintenance crews have focused their efforts primarily in the 200' wide corridor at the edge of the Park adjacent to residential properties.



Like the Eucalyptus, the Deodar Cedars forming a near monoculture around the Reservoir have suffered as access to irrigation water has been removed from the steeper slopes of the Park. "Dim" was the apt word used to describe the light quality in the Deodar plantings in a 1965 Sunset magazine article on the park. This dark, uniform planting loses impact in mass. Its proximity to the precious water in the reservoir represents a missed opportunity in terms of wildlife habitat, although it nevertheless hosts a diversity of resident and migratory bird species.

The failure of past plantings that now comprise the parklands landscape is that assumptions were made about the feasibility of long-term irrigation. As these plantings have matured, and in certain cases expanded, a few more drought-tolerant species have come to dominate the landscape in ways likely never intended, compromising public safety and aesthetic appeal.

Recommendations:

- Adopt an overall policy of gradually replacing declining tree plantings with more sustainable native plant associations that will eventually become self-sustaining. Begin establishing replacement trees long before the original tree plantings have succumbed.
- Maintain and replace dead and dying Mexican Fan Palms only on the ridgelines.
- Coordinate with City to provide stormwater filtration systems that will screen invasive Mexican Fan Palm seeds from entering the Los Angeles River. Retrofit storm drain catch basins to screen out not only large trash, but fine materials such as exotic plant seeds, using sand filters or other mechanisms to separate out fine-scale trash.
- Thin and remove declining Deodar Cedars, develop native Oak/Walnut woodland restoration and implementation plan that will ensure the sustainability of the existing California Quail population (see page 42 for specific restoration recommendations for the Elysian Reservoir slopes).
- Develop Elysian Park Landscaping Guidelines and Best Management Practices for the park maintenance staff that addresses Park specifics.

FLORA AND FAUNA, NATIVE PLANT COMMUNITIES AND RESTORATION

Existing Conditions

The most prominent native vegetation in the Park today is the re-emerging California Walnut woodlands on the burned northern slopes. Mexican Elderberries, Toyon, Sticky Monkeyflower, Fiesta Flower, wild Honeysuckle, Giant Wildrye and other native species occur only sporadically, with the majority of the understory dominated by non-native annual grasses, punctuated by an assortment of exotic trees and shrubs.

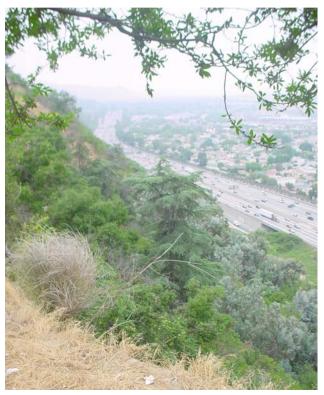
Elsewhere, native shrub species may be observed here and there, often poking out through the veil of exotic shrubs like the South American Shrub Pepper (*Schinus polygamus*) that has come to dominate many areas of the Park. The handsomely mature Coast Live Oaks on Buena Vista Point lose some visual prominence in proximity to an assemblage of exotic trees. But, with the exception of a couple of recent native plantings, few natives appear outside the north slope woodlands.

The Park supports an array of native mammal species, some not observed in recent years including coyote, gray fox, red fox, racoon, opossum, skunk, squirrels and rabbits. Resident and migratory bird species include red-tail hawks, coopers hawk, great horned owls, raven, annas and black chinned hummingbirds, black headed phoebes, phaenopeplas, american robin, cedar waxwing, bullocks and hooded orioles, brown towhees, scrub jays, and California quail. The quail's presence here is remarkable in that this species will disappear early following habitat fragmentation.

Ecological Restoration Approach

Ecological restoration is an important strategy that can render many areas of the park more self-sustaining over time. Additionally, restoration of indigenous wildlife habitats can enhance park visitors' recreational experience, while supporting regional and global ecosystems.





THE BRIGHT GREEN LEAVES OF THE WALNUT TREE STAND OUT ON THE NORTH SLOPE OF THE PARK.

Since so much of the Park's native biodiversity was eradicated over the past two centuries, it will need help to regain ecological stability. Along with targeting the major invasive plant species, the most challenging restoration issue will be the non-native annual grassland that has become the understory in open woodland areas.

In the case of the steep northern slopes above the Golden State Freeway (I-5), shallow-rooted, non-native annual grasses have rendered the slopes more susceptible to erosion and land slippage in those areas where they have supplanted the indigenous understory. In addition to posing safety issues for the freeway below, the safety of park users on the trail is acutely compromised. Furthermore, parklands are being incrementally lost to erosion.

A self-sustaining native woodland understory will reduce maintenance costs over time, while reducing dead fuel loads and re-establishing an ecosystem that will better support native and migratory wildlife.

Recommendations:

General Restoration Concepts

- A map of parkland soils is needed in order to complete a general restoration prescription for the entire Park.
- Commission certified arborists to re-evaluate the health of parkland trees at regular intervals, calling for removal of trees posing fire or other hazards, while maintaining snags in appropriate locations.
- Site replacement tree plantings to emulate natural tree distribution patterns. For example, the only trees that appear natural and, in fact, are sustainable along the ridgelines are Coast Live Oaks and California Walnuts. California Sycamores emerge down-slope from sun-soaked drainages in Coastal Sage Scrub.
- Initiate and house a collection of photos, color photocopies and/or pressed specimens of focal plants and animals found in the Park. Identify invasive pest plants as well as incipient natives to ensure that weed efforts are successful.
- Initiate and house log books and/or electronic logs for community members to record their observations of wildlife, transitioning park landscapes, repairs needed along trails or at picnic areas, etc. (see *Taking Care of the Park*).
- Control invasive plant species on parklands, beginning with those recognized as most invasive by inclusion on the California Invasive Plant Council (CalIPC), formerly known as the California Exotic Pest Plant Council (CalEPPC) or similar weed alert lists.

Recommendations:

Northern Slope Aspect Walnut/Oak Woodland
The goal is to establish a California Walnut/Coast
Live Oak woodland with an understory of deeprooted native shrubs and grasses. Develop and
implement a restoration program for these areas
including the following objectives:

■ Inventory and stabilize acutely eroding slope faces and drainages with appropriate native species, using biotechnical stabilization measures where appropriate. Strategically implemented hydroseeding can address problem areas.



- Use bio-technical stabilization, in concert with engineered solutions to repair and stabilize Park trails. Implement water bars and other drainage devices to reduce erosion potential.
- Where access permits, initiate restoration of deeprooted native understory species to reclaim the slopes from the exotic annual grasses and mustard. It is anticipated that once these natives become reestablished in accessible areas they will eventually spread to other areas of the slopes (see *Appendix A* for plant lists).
- Strategic use of herbicides will be necessary to limit the effect on regenerating native species.
- Mycorrhizal (naturally occurring beneficial soil fungal species) inoculation will likely hasten the transformation from annual grassland to woodland understory. Inoculation will be less important in zones surrounding existing native shrub species.
- Document the locations of existing mature or young Coast Live Oaks in GIS. California Walnuts may be mapped as patches of vegetation, rather than individual trees.
- Initiate Coast Live Oak acorn planting in suitable locations that can be safely accessed, as discussed in the following section. California Walnuts are typically well distributed and planted by squirrels without additional effort. Mexican Elderberry are currently important colonizers of these slopes, but more can be planted.

Recommendations:

Coast Live Oak Woodland

The goal is to establish a Coast Live Oak woodland with an understory of native shrubs, herbs and grasses; with Oak density and topographic position dependant on slope aspect. Develop and implement a restoration program to transition suitable areas of the parkland matrix toward self-sustaining Oak woodlands, rich with native understory species.

Coast Live Oaks naturally occur on all slope aspects but reach their greatest density on northern exposures, where true Oak forests may develop in response to greater moisture. The spaces among the Oaks where an assortment of other trees, shrubs and grasses may access light and grow, enhance biodiversity. Nature spaces Oaks to ensure optimal soil water relations. Moving toward drier locations with southern and western exposures, the density of Oaks will decrease as shrub species dominate.

Growing Oaks from acorns is the most sustainable method, as it requires no irrigation.

■ In the interest of restoring self-sustaining Oak woodlands, develop a general plan for Oak woodland restoration emulating natural Oak distribution patterns. Using GIS, define potential Oak woodland restoration areas, including the declining Eucalyptus woodlands. Determine naturalistic density and distribution patterns of Coast Live Oaks based on slope aspect, using the Guidelines for Planting Oaks in Los Angeles County.

REGENERATING OAK ON THE SOUTH EDGE OF BUENA VISTA MEADOWS





- Engage community stewards and school groups in the planting of Coast Live Oak acorns in suitable locations according to the general plan. Collect acorns from trees in the Santa Monica mountains including Griffith Park. Distribute the acorn plantings over space and time to avoid the appearance of a plantation. Protect the young oaks from encroachment by exotic annual grasses, mustard and other weeds. Ideally, stewards will monitor the success of the plantings over time, using GIS. The California Oak Foundation publishes the brochure, How to Collect, Store and Plant Acorns that may be downloaded at http://www.californiaoaks.org/html/oak_tree_care.html.
- Plant suitable native plant associates to act as nurse crops for the young Oaks and help thwart weeds (see *Appendix A* for plant lists).
- Using a nucleus or island approach, convert patches of the exotic annual grass understory to native woodland understory. Work outward from these "secured" locations, which should coincide with areas where acorns have been planted.
- Utilize strategic use of herbicides and mycorrhizal inoculation.
- Erect temporary fencing in key locations as may be necessary to prevent trampling of young plants by people or dogs.
- Document the locations of any existing mature or young Coast Live Oaks in GIS.
- Continue to remove diseased and dead Eucalyptus as needed for fuel modification, but leave some dead trees/snags standing to serve as nesting habitat for cavity nesters like the Red-shafted Flicker. Site designated snags in locations where they will not impinge on public safety and buffer them with barrier plantings.
- As the Oak woodlands are maturing in areas now dominated by Eucalyptus, affect a gradual transition by maintaining some living and/or dead Eucalyptus trees to serve as roosting (possibly nesting) sites for hawks and owls. The transition will allow enough light to favor the incoming native species and a continuity of habitat for raptors through the transitional period.

Elysian Reservoir and Surroundings

The 1971 Master Plan called for thinning the Deodar Cedars. It appears this was never done. And while the ultimate disposition of the reservoir remains uncertain, it is appropriate for the current Park Master Plan to outline a vision for this area. If the Reservoir becomes covered it will allow opportunities for park visitors to access lands currently off-limits, as well as potential creation of functional wetlands to enhance wildlife habitat diversity.

The goal for the Reservoir area is to enhance the structural and biological diversity of vegetation to better support native and migratory wildlife, while providing opportunities for human visitors to view and access water features in an aesthetically pleasing environment that will become primarily self-sustaining over time.

- Employ certified arborists to evaluate the Deodars; select the best to conserve that will serve as habitat while the Oak and Walnut woodlands and Coastal Sage Scrub regenerate.
- Plan and implement phasing that will ensure the sustainability of existing California Quail populations through the thinning and restoration process. Quail require patches of brush/scrub and daily access to fresh water through the dry summer season.
- Conserve select Deodars in groups, within which some trees should be girdled to serve as snags for wildlife and help admit light into the transitioning understory. Conserve Deodar patches on each of the slope aspects around the Reservoir, allowing for trees to remain at stratified elevations. Establish fenced buffers around the root zones of the trees to ensure minimal disturbance during land management activities.
- Recycle the harvested Deodars for construction of park benches, fences, art and other amenities, as well as for mulch to be used throughout the Park.



- A restoration ecologist should consider testing soils on representative slope aspects to determine how their character may have been affected by the tenure of the overgrown Deodars.
- A restoration ecologist should examine and potentially test the duff left by the Deodars to help determine its potential role in the restoration process. Cedars foster endomycorrhizal fungi, which may help facilitate the establishment of many native shrub and grass species. The duff may play an important restoration role in ensuring the mycorrhiza are there.
- Inoculation of the soil with ectomycorrhizal fungi may help support regenerating Coast Live Oaks.
- Establish barrier plantings around conserved Deodar patches containing snags to keep the public excluded.



A NATIVE TOYON WOODLAND IS DEVELOPING UNDERNEATH THE THINNING STANDS OF EXOTIC DEODAR CEDARS ON THE SOUTH SIDE OF THE RESERVOIR.

- Develop a general plan for re-establishing Oak and Walnut woodlands, including native understory species, according to slope aspect around the Reservoir. Plant Walnut/Oak woodlands on the most protected north-to-east-facing slopes. Oak woodland should transition to scrub on east-to-west-facing slopes. California Sycamore riparian woodland should emerge mid-slope from the drainage at the north end of the reservoir.
- Plant Coast Live Oak acorns and California Walnut seeds at suitable locations around the slopes of the Reservoir, as indicated in the previous section.

 Plant some container-grown Coast Live Oaks in focal areas. Remove staking as soon as feasible to allow the trunks to develop stronger structures.
- Plant suitable woodland understory species to serve as nurse crops for the young Oaks and as habitat for existing and desired wildlife species.
- If the Reservoir is to be capped and retrofitted to allow other uses, design and construct a system of cells that will alternately hold wetland soils or circulating treated water that can be partially self-sustaining, suitable for public enjoyment. Design and establish complementary cells that will allow visitors access to treated water. The design team should include expertise in engineering, restoration ecology and landscape architecture.
- Include in the design, areas of wetland removed and buffered from public interface to serve as optimal wildlife habitats. Provide opportunities for birdwatching and general enjoyment of views from key areas on the slopes, with trails established accordingly.
- Extend the drainage flanked by California Sycamores into a Willow-riparian woodland that will continue around the edge of the covered Reservoir as drainage concerns and visitor features permit.



Scrub Associations

Native scrub associations can provide valuable understory for re-establishing woodlands, but can also stand alone on the sunnier, drier southern and especially western exposures. Native scrub areas can attract an array of native scrub birds that may not currently reside in the Park. The goal is to establish self-sustaining, drought-tolerant native scrub associations in suitable locations of the park to help stabilize slopes and support native scrub wildlife species.

- Hydroseeding and incorporation of mycorrhizal inoculum are recommended to facilitate an efficient restoration process.
- Include a diversity of appropriate herbaceous species—wildflowers and native grasses—typical of Coastal Sage Scrub.

Turf and Landscape Relationships

While certain areas of the Park have received landscape treatments to enhance their usability by Park visitors, these stand out as individual elements, separate from the surrounding jumble of wild vegetation. And while the surrounding vegetation has gone wild, most of it is dominated by well-adapted non-native species that have apparently spread from their original plantings, as well as other invasive weedy species. Probably the best example of this disharmony is the broad lawn area at the head of Chavez Ravine, where the manicured landscape bumps uneasily into a wall of wild shrubs.

Recommendations:

Well-designed transition zones will enhance the character of the manicured spaces, as well as park visitors' sense of safety while using those areas.

- Establish native plant landscape transition zones.
- Remove non-native understory shrubs and replace them with low-growing sustainable native plant species. Drought tolerant native trees should be planted adjacent to open lawns, transitioning to native riparian trees within the irrigated turf.

- Apply this same strategy to fuel modification zones, favoring low-growing plant species beneath raised canopies of drought tolerant native trees.
- The landscape transition zones are an appropriate place to use California native plant cultivars, in addition to wild genotypes. Contingent upon increased staffing levels, these transition zones should receive regular maintenance.



EUCALYPTUS AND NON-NATIVE GRASSES DOMINATE THE RIDGELINES AND SOUTH AND WEST FACING SLOPES

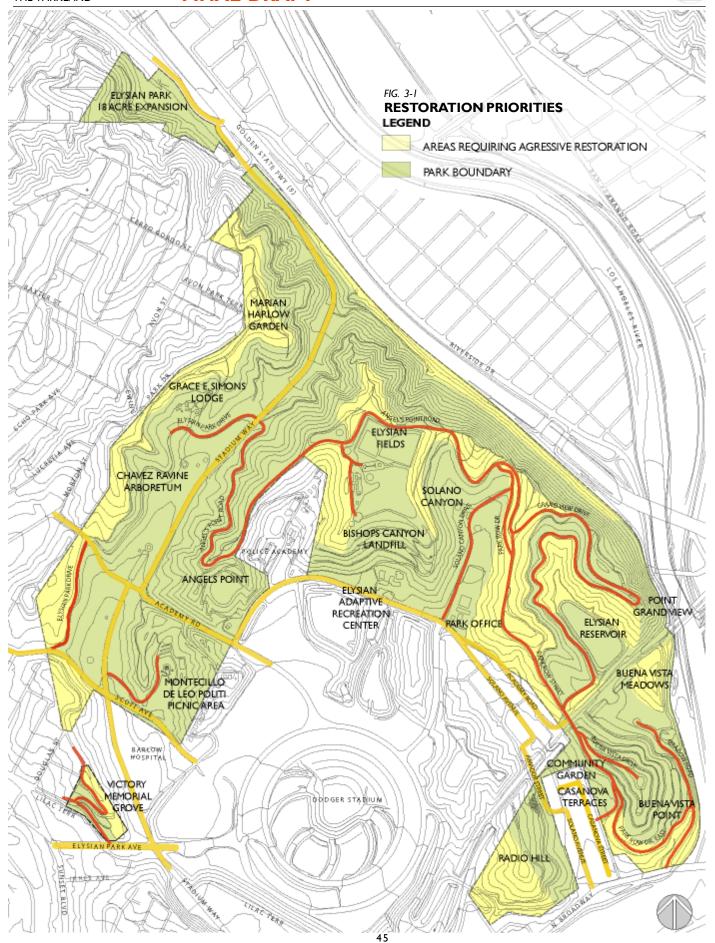
Restoration Priorities

Elysian Park is a mix of native trees and shrubs, ornamental plantings, and undesireable ornamental exotics that have established and spread throughout the Park. A visual assessment of the existing vegetation clearly reveals those areas of the Park where restoration and enhancement activities are needed. Fig. 3-1, Restoration Priorities, highlights the priority restoration areas currently dominated by non-native invasive species.

Parkland areas dominated by non-native species are considered high priority for restoration and enhancement activities as they provide little habitat, are seed sources for adjacent areas, and will require the most

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effort in time and resources. Typically these restoration priority areas are located on ridge lines and on south or west facing slopes. They are dominated by the Eucalyptus species, non-native grasses, and highly invasive non-natives. Removal of invasive plants along the Park ridgelines should take priority.

Areas that are dominated by native species may also have a non-native component but were not considered top priority for restoration and enhancement activities. These areas include north facing slopes of the Park and west facing slopes above Chavez Ravine Arboretum. In these areas fire has created places where natives are regenerating without assisted management. This does not imply that enhancement efforts should not be undertaken, since selective removal of invasive non-native species such as the Eucalyptus species would be beneficial.

THE MAINTENANCE SHED AT MIDWAY YARD IS SEEN AT THE LEFT EDGE OF THE PHOTO.

Additional areas that exhibit natural unassisted regeneration of native species are the Deodar plantings adjacent to the Reservoir which has a regenerated understory of native shrubs, primarily Toyon, the north facing slopes adjacent to the I-5 Freeway, and the south side of Buena Vista Meadows where Coast Live Oak seedlings are sprouting. Continuous monitoring of these areas is recommended to ensure that the regeneration process is successful.

LAND OUTSIDE ELYSIAN PARK

The purchase and development of new parks and open spaces by the State of California and by the City are occurring along the Los Angeles River and the Arroyo Seco. In addition, the proximity of the Park to the soft-bottom section of the Los Angeles River places it in a key position to enhance the function of this area as a stop on the Pacific Flyway.





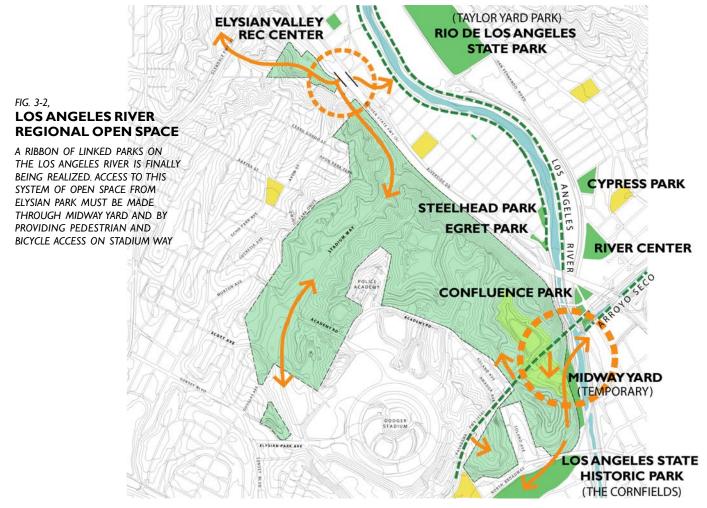
Recommendations:

- Provide a viable landscape linkage from Elysian Park out to the Los Angeles River. Restore wildlife habitats on parklands in close proximity to the river and confluence.
- Control invasive plant species.
- Establish a riparian drainage system linking the Elysian Reservoir vicinity to the Los Angeles River.
- Approve a Master Plan for Elysian Reservoir that includes wetland habitat to support the Pacific Flyway. Implement native plants and seasonal water flow to the Los Angeles River.
- Develop a site specific plan for Midway Yard that provides open green space linking Elysian Park to the Los Angeles River.
- Provide trail linkages to Griffith Park, the Los Angeles River, and the Arroyo Seco, as part of the Rim of the Valley Trail system.

CONNECTING PARK LANDS

Viable pedestrian, bicycle, trail, and shuttle connections must be planned and implemented to fully utilize the regional necklace of parks and open spaces underway in Los Angeles. Connections from Elysian Park to Griffith Park, Rio De Los Angeles State Park (Taylor Yard Park), Midway Yard, and the Los Angeles State Historic Park (Cornfields) are dependent on trails connecting to the Los Angeles River, and pedestrian activated crossings on arterial streets.

The community has consistently asked for more parkland. The City has responded accordingly by acquiring the parcel of land now called the Elysian Park 18-acre Riverside Drive Expansion which is currently in the planning stage of park development. As this parcel is not contiguous to the rest of Elysian





Park, land acquisition must continue as a priority in order to link fragmented pieces of the Park together. In addition, the City must exercise due diligence in investigating encroachments onto Elysian Park property.

Recommendations:

- Continue land acquisition to connect park fragments to expand recreational, natural environment and scenic opportunities.
- Return to the Park land that was once dedicated parkland when opportunity arises.
- Add those connective elements within Elysian Park such as trails, stairways, gateways, and crossings to support the regional parkland development.

TIMELINE FOR RECOMMENDATION IMPLEMENTATION

RECOMMENDATIONS IN ORDER OF PRIORITY

ONE TO FIVE YEARS

- Begin native tree planting in restoration areas.
- Establish annual acorn planting program.
- Initiate restoration efforts throughout the Park.
- Initiate volunteer stewardship.
- Continue coordination efforts with DWP regarding Elysian Reservoir.
- Acquire land to facilitate pedestrian, bicycle, equestrian and shuttle linkages with adjacent parklands and open space.
- Acquire parkland.

FIVE TO TEN YEARS

- Establish transition zones from turf to native.
- Eliminate invasives in restoration areas.
- Implement Elysian Reservoir Restoration in coordination with DWP plans.

TENTOTWENTY YEARS

- Complete restoration planting.
- Complete riparian habitat connections from Elysian Reservoir to the Los Angeles River.



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