



# LAGUNA CANYON CREEK RESTORATION PLAN

## Recommendations to Restore Laguna's Hidden Gem

SPRING 2015 | DRAFT LAGUNA CANYON CREEK RESTORATION PLAN | A Grassroots Initiative



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## FOREWARD:

The idea for this project came from Ron Chilcote, a colleague on the Laguna Greenbelt [LGB] Board of Directors. Ron knew of my love of Laguna Canyon and interest in creeks, and encouraged me to apply for a grant from the Foundation for Sustainability & Innovation to initiate a study of Laguna Canyon Creek. I wrote a Grant Request to FSI, submitted through the sponsorship of the Laguna Canyon Foundation. This “seed money” grant was awarded in June, 2013.

I then asked another fellow LGB colleague, Lance Vallery, to help me prepare the document. We have received encouragement and advice from Laguna Canyon Foundation Executive Directors Max Borella and Hallie Jones, Laguna Greenbelt President Elisabeth Brown and LGB Boardmembers, and many others in the community. To all, we express our sincere appreciation and gratitude.

Bob Borthwick  
January 2015

# PURPOSE + OBJECTIVES

- The purpose of this document is to foster a new appreciation and respect for Laguna Canyon Creek and corridor. Although much (most) of the creek has been channelized, piped, and otherwise manipulated by man-made development, at its essence it is still a natural watercourse. It is not too late to restore its beauty by planting native trees and eliminating invasive species and other eyesores. Much of the creek is forlorn, but it is not the creek’s fault. . . it is our lack of action.
- This document is limited to recommendations regarding Laguna Canyon Creek, its immediate adjacent properties, and the undeveloped northern reach. The following larger planning issues are considered separate topics and are not addressed: utility undergrounding, vehicular circulation, bike lane improvements, and larger flood control measures (i.e. detention basins). Although such issues are important to Canyon planning, we want to keep this document simple and its goals compact. Without the weight of larger decisions and related funding constraints, progress can be made sooner rather than later.
- The term “creek restoration” is not used literally. It is understood that the piped and channelized portions of the creek will likely remain intact. Beautification in the channelized sections may include tree plantings and landscaping, fencing, and other aesthetic improvements. The non-channelized creek upstream sections will offer additional opportunities for native plantings and wildlife enhancement.
- No private property will be affected by trails or landscaping except on a voluntary basis if mutually beneficial. This applies to Sun Valley residences, Anneliese’s School, and related creek-adjacent properties.
- Sections herein regarding the natural features and characteristics, settlement patterns, and the history of “Save Laguna Canyon” populism are included as introductory chapters. As the decades pass, it is important to understand the preservation background of this unique and special place.
- The project has been divided into three (3) sections, the northern, central, and southern reaches. Recommendations are provided for each section.
- The recommendations need not be considered as “a package,” and therefore the question: “how much will all this cost?” Any individual recommendations can be undertaken (after necessary approvals) by environmental organizations, service clubs, individual donors, or public agencies. Every piece of the puzzle helps. We believe that there are the energy and resources to accomplish many of these goals within our community. If we can Save the Canyon, we can Save the Creek.





*"Old Laguna," Joseph Kleitsch, circa 1923-24*

## 1.0 ABOUT LAGUNA CANYON & CREEK

### 1.1 Overview

In the early twentieth century when Laguna was founded by settlers and artists, Laguna Canyon Creek gracefully meandered the 5.5 miles from the spring-fed Laguna Lakes to the ocean. Native sycamores and willows were natural indicators of this riparian habitat, and were favored subjects of early plein air painters. Since then, decades of development have left Laguna Canyon Creek in a condition of neglect, disrepair, and urban sterility. From the ocean to the Dog Park, the creek is enclosed in a concrete channel. This channel is open to the sky in some sections, and in other locations the creek is covered and buried underground. The reach from the Dog Park to El Toro Road is earthen and unpaved, and goes through mostly private properties. Portions of this section are rustic and attractive, other portions have been narrowed and urbanized by property owners. In the upstream section, from the Laguna Canyon Road / El Toro Road intersection to Laguna Lakes, the creek is open and natural but has been affected by grading and roadwork which have compromised its visual identity. In short, a once-beautiful natural watercourse has been reduced to what many people refer to simply as a "ditch" or "the channel."

Cities and towns throughout the country have reclaimed and restored their creeks and rivers with native plantings, trails, and parks, so that long-neglected historic waterways have become sources of beauty, recreation, and community pride. Although there are constraints due to flood control measures, past development, and private ownership, Laguna Canyon Creek can be made much more beautiful and environmentally sustainable. We hope that the recommendations in this concept plan will foster respect for the creek and its adjacent land, so that we may again be inspired by the natural beauty that this tranquil creek once provided to the Canyon.

***The streams, creeks and rivers on this planet are our gifts from Nature, and connect the sky-to-earth, and the earth-to-sea. Waterways are part of our fragile ecosystem. It is our duty, as Earth stewards, to keep them clean, healthy, and beautiful.***



## 1.2 Natural Features

Laguna Canyon is approximately 8 miles long and 1 mile wide at the widest points, cutting through the San Joaquin Hills in southern Orange County. The drainage divide north of Laguna Lakes separates Laguna Canyon Creek from the San Diego Creek watershed. The San Joaquin Hills are a defining feature of Laguna Beach, and Laguna Canyon in particular.

In Laguna Canyon, the exposed rock faces and caves reveal the underlying Topanga Sandstone geological structure. The hillsides have fairly shallow soils on top of the sandstone bedrock, and thus support mostly shallow-rooted coastal sage brush vegetation. The flat canyon bottoms have somewhat deeper soils and provide habitat for California sycamores and coast live oak trees, along with larger native shrubs such as toyon.

Laguna Canyon Creek begins slightly north of Laguna Lakes, and soon receives the drainage from Little Sycamore Canyon from the west. Further downstream the tributaries of Camarillo Canyon, El Toro Creek, Willow Canyon and Laurel Canyon (which includes a 100 ft. seasonal waterfall) join the main watercourse in Laguna Canyon.

Laguna Beach is one of 26 globally significant locations identified by its diversity of plant habitats and species that are adapted to its Mediterranean climate. The canyon is one of the last remaining sanctuaries for many plants native to southern California. Approximately one hundred species of plants are found in Laurel and Willow Canyons alone.

The native chaparral plants give the hills a dark green hue. These include large evergreen woody shrubs such as scrub oak, toyon, laurel sumac, and lemonade berry, as well as smaller shrubs that grow alongside the summer-deciduous sages and sagebrush. An endemic succulent, Laguna Beach dudleya, occupies niches in the rocky cliffs.

Laguna Canyon Creek, with its high water table, supports arroyo willow, California sycamore, and coast live oaks, creating areas of shaded forest within the coastal sage scrub setting.

The Laguna Canyon area supports a variety of native southern California wildlife, including large mammals such as mountain lions, bobcats, coyotes and mule deer. In addition, the canyon is home to over 100 species of birds. Sensitive species in the area include California gnatcatcher, cactus wren, orange-throated whiptail, and the coast horned lizard.



*Laguna Canyon Creek & Road looking southwest toward downtown Laguna & Pacific Ocean in the distance.*



*Slightly urbanized natural creek setting. Laguna Canyon Creek, parking lot of Canyon Club.*



*Natural creek setting in Laurel Canyon.*



*One of the small tributary streams that feed into Laguna Canyon Creek.*

**“ The Canyon cradles our community, surrounding us, protecting us from development and in part defining us. The Canyon and the Creek are our neighbor, our friend, our character.”**

*Penelope Milne, Laguna Canyon resident*



1.3 Cultural History

Settlement Patterns

The Acjachemen tribe of Native Californians were the original inhabitants of Laguna Canyon. They lived in villages of approximately 50-100 people, in homes made from willow branches and tules, and used the sandstone caves along the side canyon as temporary or special use camp. As the Laguna lakes provided year-round fresh water, villages were located nearby. A pathway ran through the canyon, along the creek, to the ocean. The Acjachemen fished and collected abalone and mussels along the coast, and harvested acorns from the abundant native oak trees. Some Native American sites are known to have been occupied intermittently for thousands of years.

When Spanish settlers arrived late-18th century, they named the canyon “Canada de las Lagunas,” referring to the lakes. Much of the large-scale land ownership in southern Orange County resulted from Spanish [up to 1822] and Mexican [1822 to 1848] land grants. These land grants often used creeks as geographical boundaries. For instance, the land west of Laguna Canyon Creek was a land grant that was purchased in 1864 by James Irvine. He was an Irishman who came to California during the Gold Rush and made his fortune as a merchant. In 1878 he formed the Irvine Ranch, which later became The Irvine Company. The land south of El Niguel Creek [aka El Toro Creek] was not included in any land grant, and therefore was available to settlers and Homesteaders, beginning in the 1870’s.



The Laguna Lakes, date unknown, with Laguna Canyon Road bisecting the two lakes.  
Photo Courtesy: Laguna Beach Historical Society.



Intersection of El Toro Road [right] and Laguna Canyon Road [left], Mormon settlement in foreground, looking north. Fisher Ranch in background. Circa 1889 Photo Courtesy: Laguna Beach Historical Society.

This land became the future city of Laguna Beach, and is the reason that the town is so eclectic: small plots of homesteaded land were individually subdivided, patchwork-style, and often did not match with street patterns of adjacent parcels...the opposite of overall master-planning. This effect is evident in Laguna Canyon, on the east side, from downtown to El Toro Road.

One of the first groups to homestead in Laguna Canyon were Mormons. They established a small settlement in the Sun Valley area in 1876, and built a schoolhouse near the intersection of present day Laguna Canyon Road and El Toro Road. In the 1890’s, this community dispersed to more populated areas such as El Toro, Canyon Acres, and downtown Laguna, and moved their small wooden structures with them.

This same section of road, on the east side of Laguna Canyon Road from downtown to El Toro Road, began to develop slowly in the early 20th century. Due to multiple property ownerships, the character of this area included a mixture of residential, agricultural, commercial, and industrial uses. In contrast, the west side of Laguna Canyon Road remained in single [Irvine] ownership and was undeveloped cattle range. That side was eventually purchased from The Irvine Company, and combined with land purchases and gifts in the upper canyon [north of El Toro Road], these open areas are now commonly referred to as the Laguna Greenbelt. Exceptions on the west side of Laguna Canyon Road are the City’s ACT V Maintenance Yard, and the Laguna College of Art and Design [LCAD]. Both of these sites were purchased from The Irvine Company.



### Laguna Canyon Road

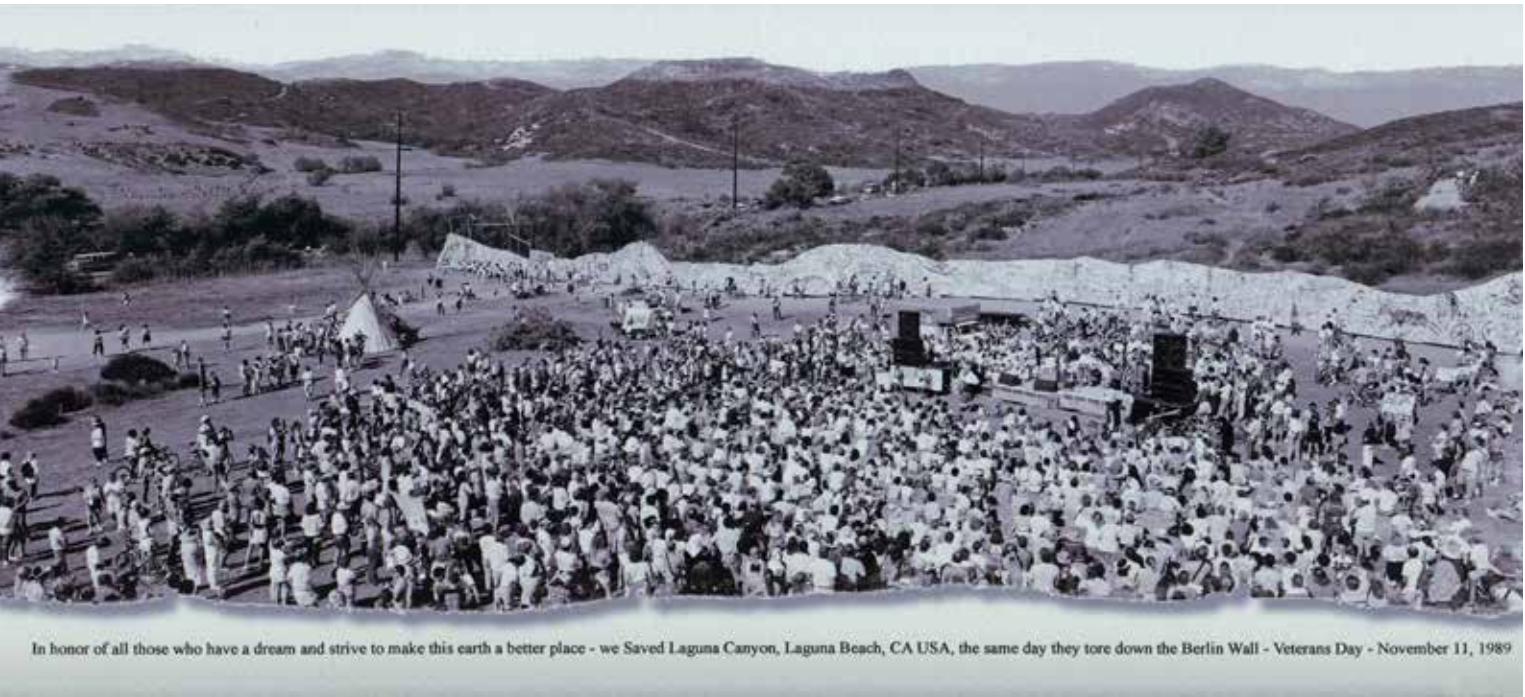
Laguna Canyon Road [SR 133] is a state highway. The Laguna Canyon portion connects Coast Highway in downtown Laguna Beach to the 405 Freeway in Irvine, a distance of approximately eight miles. The original dirt trail used by Native Americans was later used by settlers. William Brooks established a stagecoach line along this route in the 1880’s to connect Laguna Beach to Santa Ana. Since this road cut through private [Irvine] property, James Irvine attempted to block off the road. William Brooks prevailed in court, and the route became public. Laguna Canyon Road was paved by the County in 1917, and was added to the state highway system in 1933.

For most of the twentieth century, Laguna Canyon Road was a bucolic two-lane country road, often bordered by oaks or Eucalyptus trees. In 1993, the San Joaquin Hills Toll Road [SR 73] was constructed across the canyon at the approximate mid-point between the 405 Freeway and Coast Highway. This roadway required massive grading of the hillsides and forever changed the canyon. In 2006, the portion of Laguna Canyon Road between the 405 Freeway and the 73 Toll Road was re-routed in the canyon and expanded to a 4-lane divided highway, with adjacent Class II bicycle paths.

### The Creek - Development History

At the turn of the 20th century, Laguna Canyon Creek was a continuous natural watercourse. In 1926, the creek was channelized under Coast Highway and upstream to Beach Street in the downtown area. Prior to that time, the creek extended down the current location of Broadway and created a small freshwater marsh. That is why the original historic downtown was built on Forest Avenue, which avoided the creek and was on dry land. Decade-by-decade, channelizing enclosed the creek...in both open concrete culverts and underground storm drain pipes. The last section of concrete channel, extending to the Dog Park, was built in 1983. The concrete channelized portions of Laguna Canyon Creek comprise a total of approximately 2.5 miles (see map of creek on page 9.)

From the Dog Park and extending upstream to Laguna Lakes, the remaining 3.0 miles of the creek is earthen with a soft bottom. However, straightening, filling and retaining measures installed by some property owners have compromised its natural beauty. The El Toro Creek tributary merges with Laguna Canyon Creek north of Anneliese’s School, and from that point Laguna Canyon Creek extends northward under El Toro Road in four-foot wide pipes. After passing under El Toro Road, the creek angles northwest and crosses under Laguna Canyon Road in similar fashion. From that point, the creek extends northward to the Toll Road. At the southern Toll Road offramp, the creek is again piped under the offramp and contained until it emerges on the east side of Laguna Canyon Road at the Dilley Preserve entrance, and then continues in a natural condition through the Dilley Preserve to Laguna Lakes. This final upstream section of the creek has been modified to accomodate the Laguna Canyon Road widening project in 2006. As such, the creek lacks visual definition and is practically invisible from the roadway.



*“The Tell,” a temporary art installation location in present day James Dilley Preserve, Mark Chamberlain & Jerry Burchfield , 1989  
Courtesy: Laguna Beach Historical Society.*

### Environmental Activism

The decade of the 1960’s was a period of social change: civil rights, women’s rights, and environmental rights, among others. Rachel Carson’s powerful environmental alert “Silent Spring” in 1962 set the stage early in the decade, and landscape architect Ian McHarg’s “Design With Nature” in 1969 furthered the public awakening to save the earth. In the postwar boom years of 1946 to 1966, the United States [and especially southern California] had undergone massive growth. Rivers and creeks were filled and lined with concrete, agricultural lands became shopping centers and subdivisions, and [generally] the government’s position was that development should expand into open spaces without restraint. McHarg, whose ecological-based planning principles were in direct opposition to unbridled development, argued eloquently against what he termed the arrogant and destructive heritage of urban-industrial modernity...a style he described as “Dominate and Destroy”.

Statewide, nationally, and around the world, preserving the environment became a powerful cause that was embraced not only by youthful activists, but also by politicians and people of all ages. As results, the first national “Earth Day” was established by the Federal government in 1970, along with the creation of the United States Environmental Protection Agency [signed by President Nixon] that same year. Statewide, the California Environmental Quality Act [CEQA] was enacted in 1970 and the California Coastal Act [forming the Coastal Commission] was enacted in 1972. This period in our history was truly an unprecedented environmental revolution, which provides protection to this day.



Locally, there were newly-minted environmental coalitions everywhere. In 1970, a volunteer group formed to stop a proposed high-rise development on Main Beach, and was successful in enacting a city-wide building height ordinance. In 1971 this group organized as the non-profit Village Laguna. Also in 1971, Fred Lang and the South Laguna Civic Association began to prepare the South Laguna General Plan, and in 1972 the Temple Hills Community Association was formed to protect and preserve their hillside neighborhood. The Aliso Creek Study Team was formed in 1973 to prevent further channelization of the 19-mile creek and to create a regional trail system. All of these groups, among others, were volunteer and most used ecological planning criteria based on McHarg principles.

For Laguna Canyon, the leader was local bookstore owner James Dilley. He had traveled to England and admired the open countryside surrounding compact English villages. In 1968 he formed a group of like-minded citizens to preserve the open lands surrounding Laguna Beach, including Laguna Canyon. In 1970 this group incorporated as the non-profit Laguna Greenbelt, Inc., to lobby the County of Orange and other agencies for open space acquisition and preservation.

**1968:** Laguna Greenbelt founded.

**1970:** Christmas rock concert draws 20,000 people to Sycamore Hills.

**1978:** Sycamore Hills property purchased by the City of Laguna Beach. This land eventually becomes the James Dilley Greenbelt Preserve.

**1986:** Laguna Canyon Conservancy established by Councilmember Lida Lenney and others to assist in Canyon preservation efforts.

**1989:** 636-foot long photographic mural “The Tell” was designed by artists Jerry Burchfield and Mark Chamberlain and constructed in Sycamore Hills. Estimated 9,000 citizens from throughout the region walked in Laguna Canyon to protest the planned 2,150-acre Laguna Laurel housing development.

**1990:** The Irvine Company agrees to negotiations with the City of Laguna Beach to sell the Laguna Laurel property for \$78 million.

**1990:** Nearly 80% of Laguna Beach voters approve a tax increase to fund the \$20 million downpayment for Laguna Laurel to The Irvine Company to initiate the land transfer.

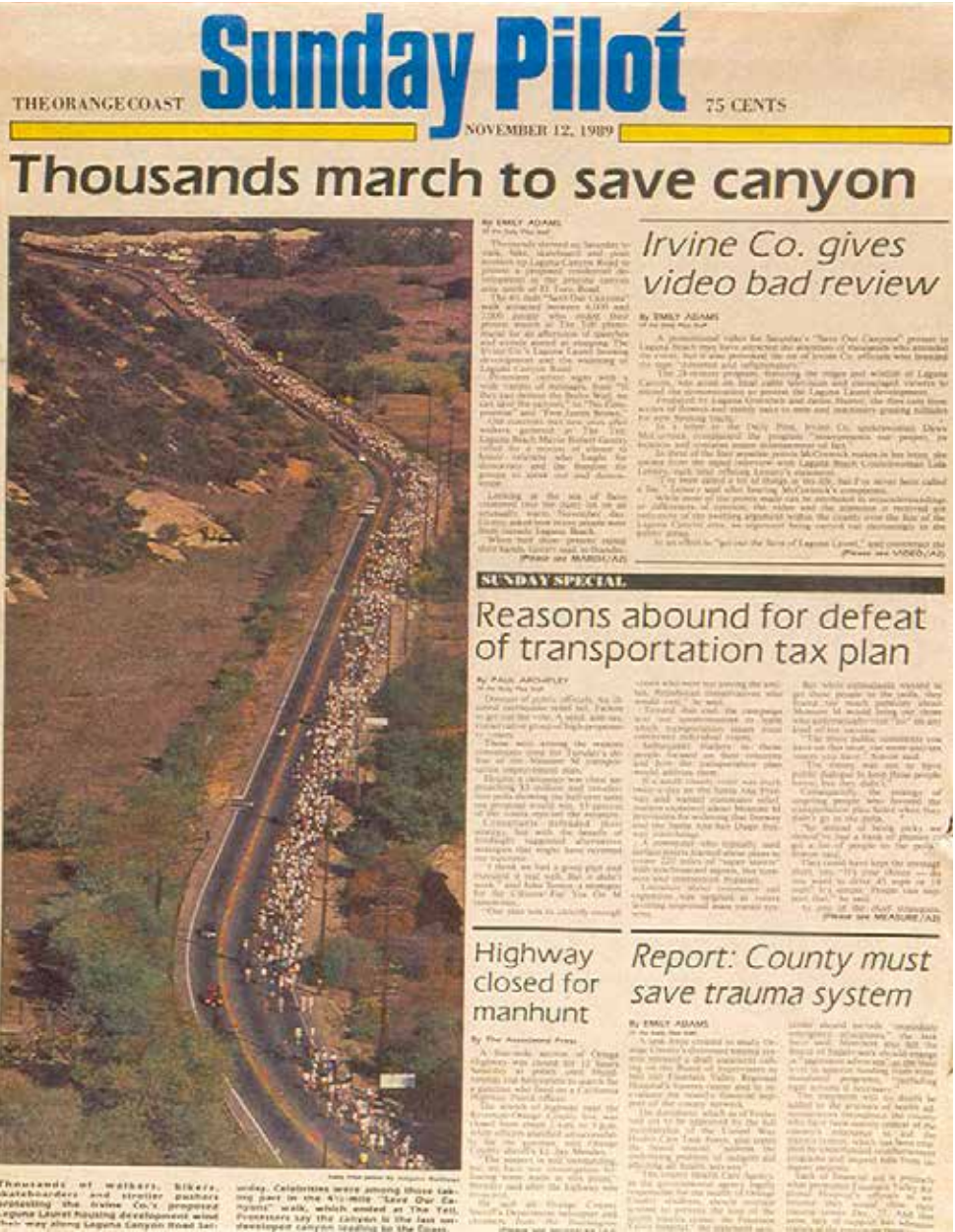
**1991:** Laguna Canyon Foundation is founded to assist in funding of remaining Laguna Laurel debt, and to help in management of Laguna Canyon open space.

**1993:** Laguna Coast Wilderness Park is created by the County of Orange in the area formerly planned for the Laguna Laurel development.

**2001:** The final Laguna Laurel parcel in Laguna Canyon is donated by The Irvine Company for permanent open space.

**2007:** The Nix Nature Center opens in Little Sycamore Canyon.

**With all the successes in establishing the approximately 22,000-acre Laguna Greenbelt land preserve, the specific care and attention to its centerpiece creek seems to have slipped into the abyss of neglect. To this day, the creek remains Laguna Canyon’s Hidden Gem....and is the reason for this document.**



Thousands march along Laguna Canyon Road to protest development plans in Laguna Canyon (November 1989).  
Image Courtesy: BC Space Archives





#### Precedent photographs of creek amenities in other communities

(clockwise upper left to lower right) : 1) Ojai, California multi-use trail, 2) Oso Creek (Orange County), 3) Oso Creek and adjacent multi-purpose trail, 4) Oso Creek, 5) San Luis Creek, San Luis Obispo, 6) Commercial activity along San Luis Creek, 7) Strawberry Creek, UC Berkeley, 8) small pedestrian bridge at Strawberry Creek, UC Berkeley, 9) Rustic designed decomposed granite trail.

## 2.0 GOALS + RECOMMENDATIONS

### 2.1 Overall Goal Statement

To those reading this document, the terms “creek” and “restoration” may be puzzling. Can a shallow dry ravine with no trees or water really be called a “creek”? How can a creek be “restored” when it is buried underground or encased in concrete?

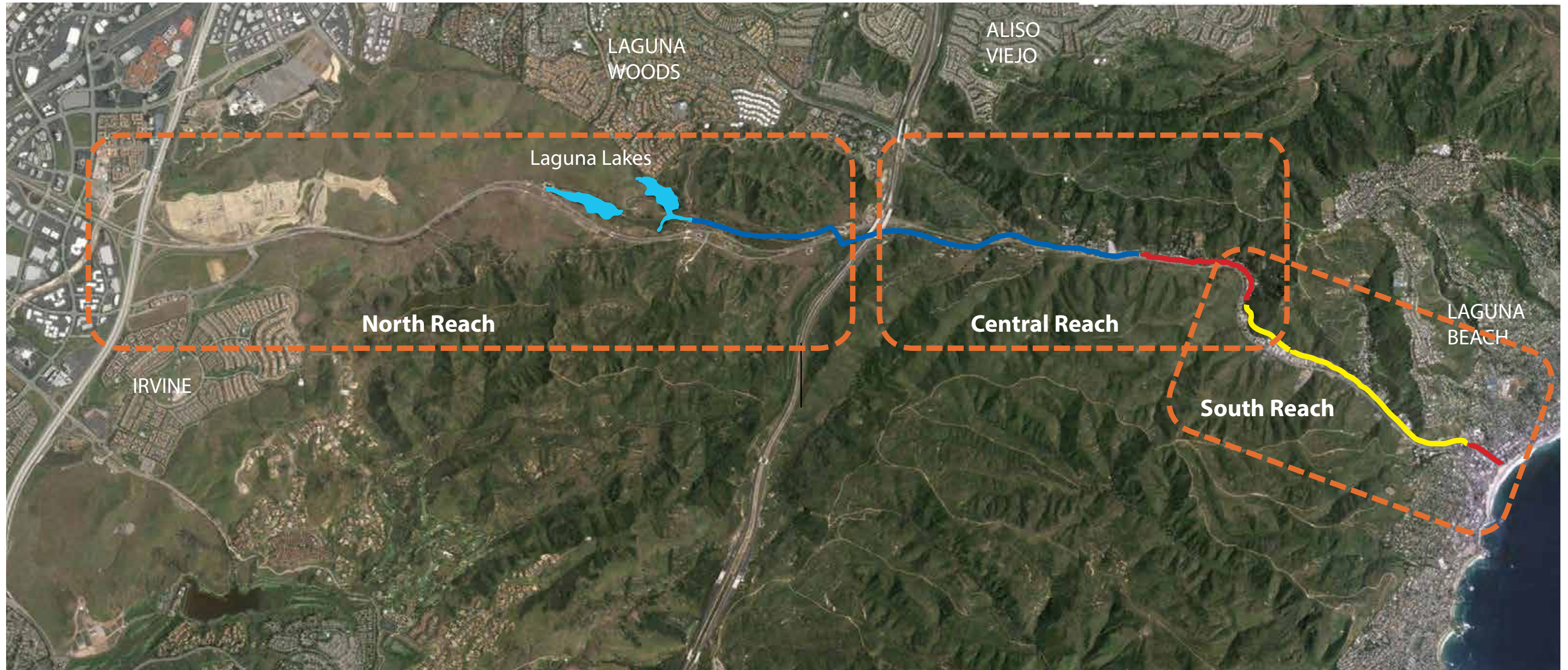
**Creek:** A creek is a concentrated watercourse that transports water from rainfall, natural springs, or other sources from higher ground to lower ground. Whether the creek is in its original native habitat, or in a re-graded earthen condition, or enclosed in a concrete channel, the term “creek” still applies. . . from its upstream source to its terminus at the ocean.

**Restoration:** In the context of this plan, the term “restoration” is used broadly. After decades of re-grading, construction, and channelization, Laguna Canyon Creek cannot be brought back to its original natural beauty. However, there is no doubt that the creek can be improved, from both an esthetic and ecological standpoint. As an example, newly-planted native trees can identify the current watercourse, even those sections which have been channelized, to restore some aspects of the creek’s original character and beauty. The intention is not to replicate the original creek, but to restore the spirit of the creek.

The following pages depict the entire canyon, from the 405 Freeway to the Pacific Ocean, divided into three (3) separate Planning Areas. Each planning area map includes specific locations for improvements, such as invasives removal, tree additions, fencing improvements, and related recommendations.

**The overall goal is to provide pragmatic, implementable suggestions to beautify the creek and its immediate surroundings. . . including wildlife habitat, trail opportunities, and related environmental enhancements. To make near-term improvements achievable, these recommendations do not need to be undertaken in total, but may be done individually as resources and funds permit.**

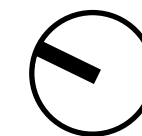




## LEGEND

- Open Natural Creek
- Open Channelized Creek
- Covered Channelized Creek
- Lakes

## 2.2 Three Planning Areas









3.2 Northern Reach Recommendations

N1

**Entry Monument:** At the signalized intersection of Lake Forest Drive, Laguna Canyon effectively begins. A corten (rusty) steel “Laguna Canyon” sign of a similar material to the LCWP signage could be installed in this location. This sign should be low profile, rustic and understated in size. . . “not shouting but rather whispering” that one is entering the canyon.

N2

**Concrete divider/slope:** On this sloping median divider, the ground surface has been paved with gunite (concrete) for erosion control. On similar roadway slope conditions in other areas of the county, these slopes are often covered with grouted natural cobblestones. This treatment presents a more visually attractive and rustic character that would improve this prominent “first impression” of Laguna Canyon (see Figure 1/2).

N3

**Dirt Piles:** When LCR was rerouted in 2006, the excess soil from grading was stock-piled in the areas dividing the road. The height and engineered shape of these “dirt piles” gave an unnatural appearance to the formerly flat and gently rolling terrain. CalTrans has since modified some of these mounds, but should be encouraged to remove and/or reduce the height even further.

N4

**Dilley Preserve:** Consider upgrading of shade structure, restroom enclosure, educational displays, and native landscaping in this highly-visible facility (see Figure 4).

N5

**Earth-color Concrete:** Concrete elements and paving in this reach, such as bridge abutments, detention basins, and related facilities, are constructed of natural color grey concrete. This concrete is urban in appearance, and would be more attractive if treated with earth-tone concrete dye to blend with the rustic environment.

N6

**Invasive Removal:** A consistent monitoring program should eliminate all invasive plant species, in particular Arundo and Pampas Grass, which can overtake riparian areas. Elsewhere, invasive species such as Tree Tobacco and Washingtonia palms (among others) need to be monitored and removed as necessary to preserve and protect the native habitat.

N7

**Sycamore Plantings:** In the course of re-grading for the new route of LCR, the original location of Laguna Creek has been modified. To visually identify the watercourse from the roadway, native riparian trees such as California Sycamore should be planted along the creek from James Dilley Preserve to the lakes.

N8

**Dilley Fencing:** In wilderness areas such as National Parks, chain-link fencing is typically used with dark brown or black vinyl coating to make it recede into the background. Fencing in the Dilley Preserve area (necessary for wildlife safety) is industrial galvanized steel and should be painted dark brown or black. Fence relocation away from road and more rustic gates should be considered (see Figure 3).



Figure 1: Existing Laguna Canyon Road



Figure 2: 5-Freeway slope - Capistrano Beach

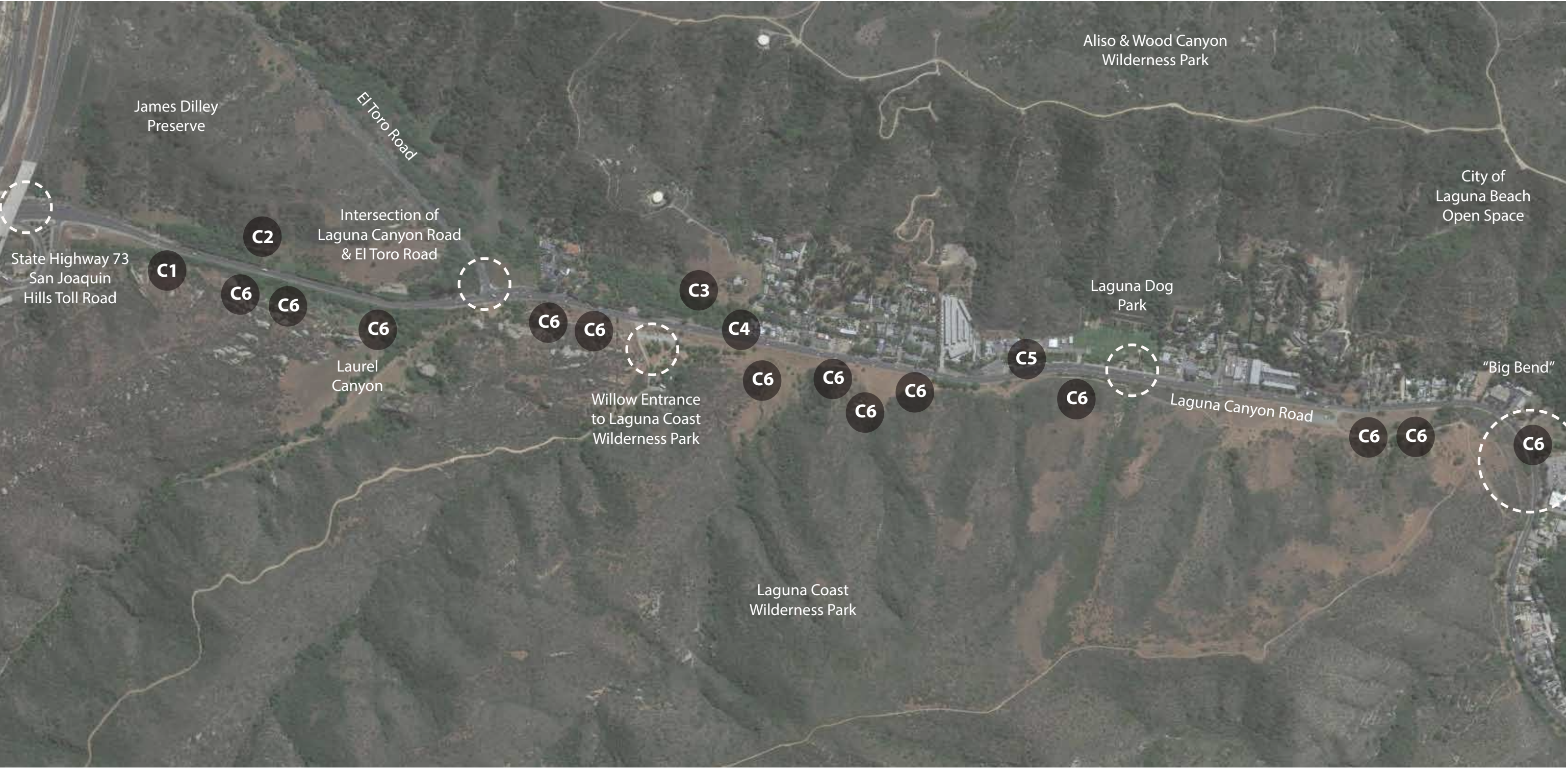


Figure 3: Dilley Fencing - chain link

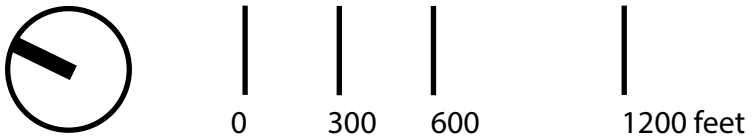


Figure 4: Restroom and dumpster at Dilley





4.1 Central Reach Opportunities & Constraints





4.2 Central Reach Recommendations

C1

**Arundo Removal:** The central reach of Laguna Canyon Road (LCR) has extensive stands of *Arundo donax*, a highly invasive non-native species that naturalizes in riparian areas. This bamboo-like plant is highly flammable, clogs waterways, and chokes out desirable native species. *Arundo* is a noxious pest that should be removed (see Figure 1).

C2

**Dilley Preserve Trail.** Study the feasibility of creating a trail from the El Toro Road/LCR intersection to the Dilley Preserve staging area. This trail could be separated from LCR by a native planting area/swale, or constructed further from the road. This would link the existing Canyon neighborhoods to the Dilley Preserve, the Nix Nature Center, and Laguna Lakes trails.

C3

**DeWitt Nature Trail:** In the “Conceptual Restoration Plan for Laguna Canyon Creek” by PCR and Aspen Environmental Group in 2003, the city-owned “DeWitt Property” (between Sun Valley neighborhood and Anneliese’s School) was identified for a loop nature trail. This concept could be developed further as a community environmental resource.

C4

**DeWitt Dirt Piles:** During construction of SR 73, significant loose soil eroded downstream across Laguna Canyon Road. In removing this soil from the road, it was pushed to the side of the road, especially fronting the DeWitt property. These dirt piles restrict the natural flow of water and pedestrian travel, are unsightly, and should be removed (see Figure 3).

C5

**Animal Shelter Fencing:** The City Animal Shelter parking lot is enclosed by a 6 ft. tall chain link fence with security wire on top. The existing fencing is visually obtrusive and should be replaced with a shorter, more rustic design that complements the canyon setting. In addition, rustic landscape screening and a safe pedestrian path in the public right-of-way should be considered (see Figure 4).

C6

**Sycamore Plantings:** When Laguna Canyon Road was originally paved, the meandering Laguna Canyon Creek and its mature native trees were removed. Sycamore and Oak trees should be replanted at various locations to replace these original trees, to define the current location of the waterway and restore the character of the creek corridor (see Figure 2).



Figure 1: *Arundo donax*



Figure 2: Sycamore trees at Dog Park



Figure 3: De Witt dirt piles



Figure 4: Animal Shelter

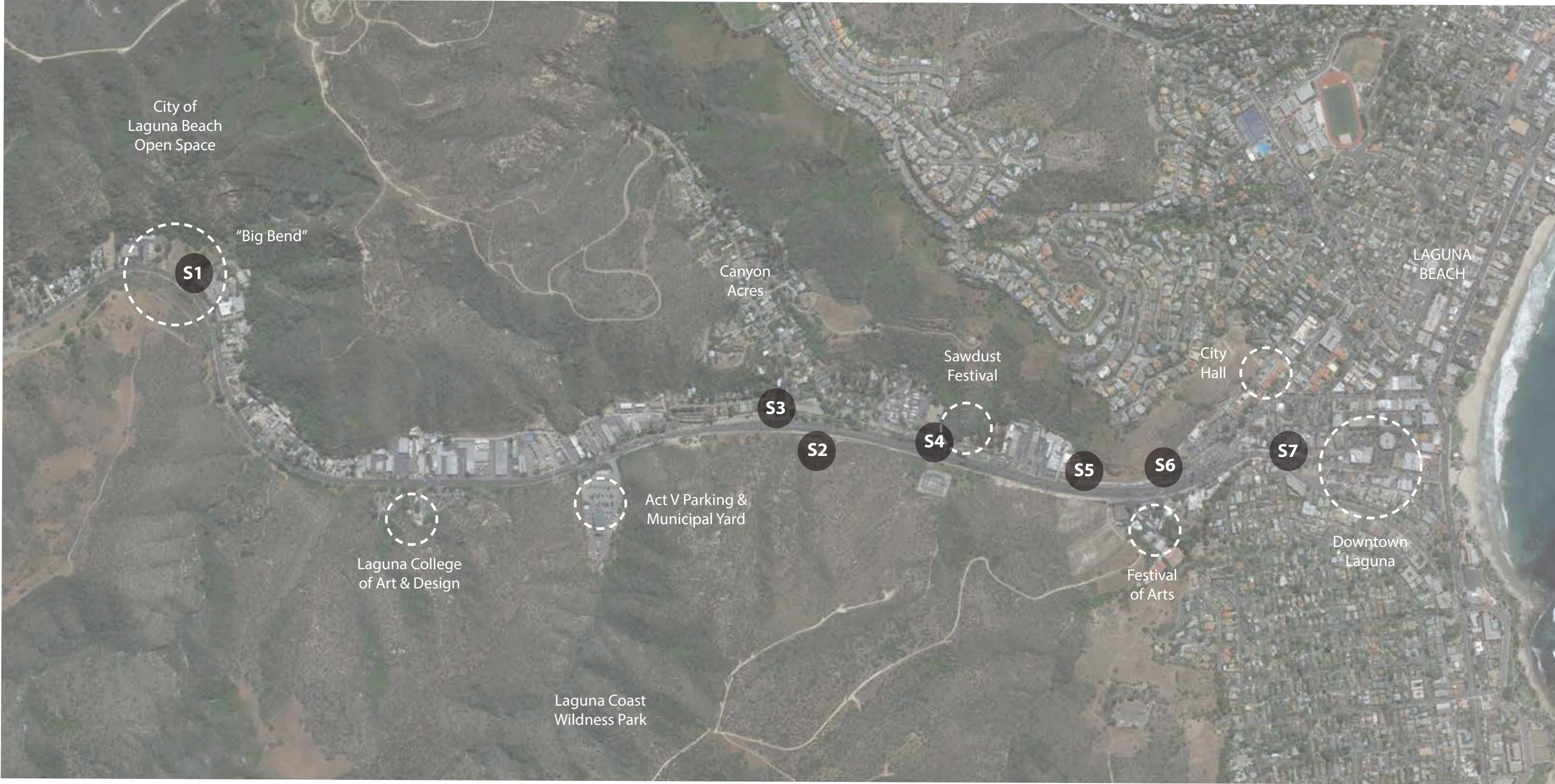


Figure 5: Animal Shelter

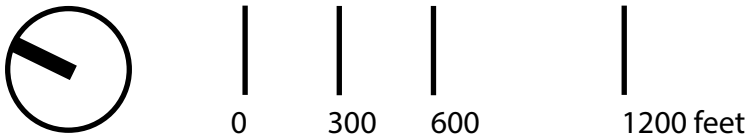


Figure 6: Lack of pedestrian connection





5.1 Southern Reach Opportunities & Constraints





5.2 Southern Reach Recommendations

S1

**Wildlife Corridor:** The proposed Wildlife Crossing at Big Bend has been recommended by County and statewide agencies to link the natural migration of wildlife from Laguna Coast Wilderness Park to Aliso and Wood Canyons Regional Park. This crossing would be an overpass, and would not affect vehicular or non-motorized circulation on LCR.

S2

**Day Worker Center:** This facility does not visually contribute to Laguna Canyon in a positive way. The structure should have a more subdued color scheme [such as olive green], chain link fence should be replaced with a more rustic fence such as wood rail, signage/graphics should be improved, and additional drought-tolerant plantings should be provided (see Figure 2).

S3

**CalTrans Parcel:** A remnant parcel of land is situated between Canyon Acres Drive and Ganahl Lumber property, adjacent to Laguna Canyon Creek. This parcel has been partially landscaped by a Canyon Acres resident who also maintains the property. This landscaping should be retained and additional native oak and sycamore trees planted (see Figure 3).

S4

**Pine Tree Removal:** The Laguna Beach Landscape and Scenic Highways Resource Document has recommended that the pine trees along LCR (in the Frontage Road area) be replaced with native sycamore and oak trees. This recommendation should be implemented, on a phased basis (see Figure 5).

S5

**Channel in Arts District:** The creek channel in this highly visible location is an environmental travesty. The creek is treated as a nuisance rather than an asset. Efforts should be made to improve fencing, plant native trees along the edges, and study concepts that could lead to soft-bottom portions of the channel and other naturalizing effects (see Figure 1).

S6

**Median Islands:** The Landscape and Scenic Highways Resource Document also recommends removing the turf in the Arts District median islands and replacing with native and drought-tolerant plant materials. This concept should be implemented to create a more sustainable landscape in this highly visible location (see Figure 4).

S7

**Information Kiosk:** An Information Kiosk should be constructed in the creek frontage near the bus depot to describe the history of Laguna Canyon Creek, its natural functions, and impacts on wildlife and the ocean. In particular, the importance of water quality should be emphasized (see Figure 6).



Figure 1: Concrete channel



Figure 2: Day worker center



Figure 3: CalTrans parcel



Figure 4: Laguna Canyon Road medians

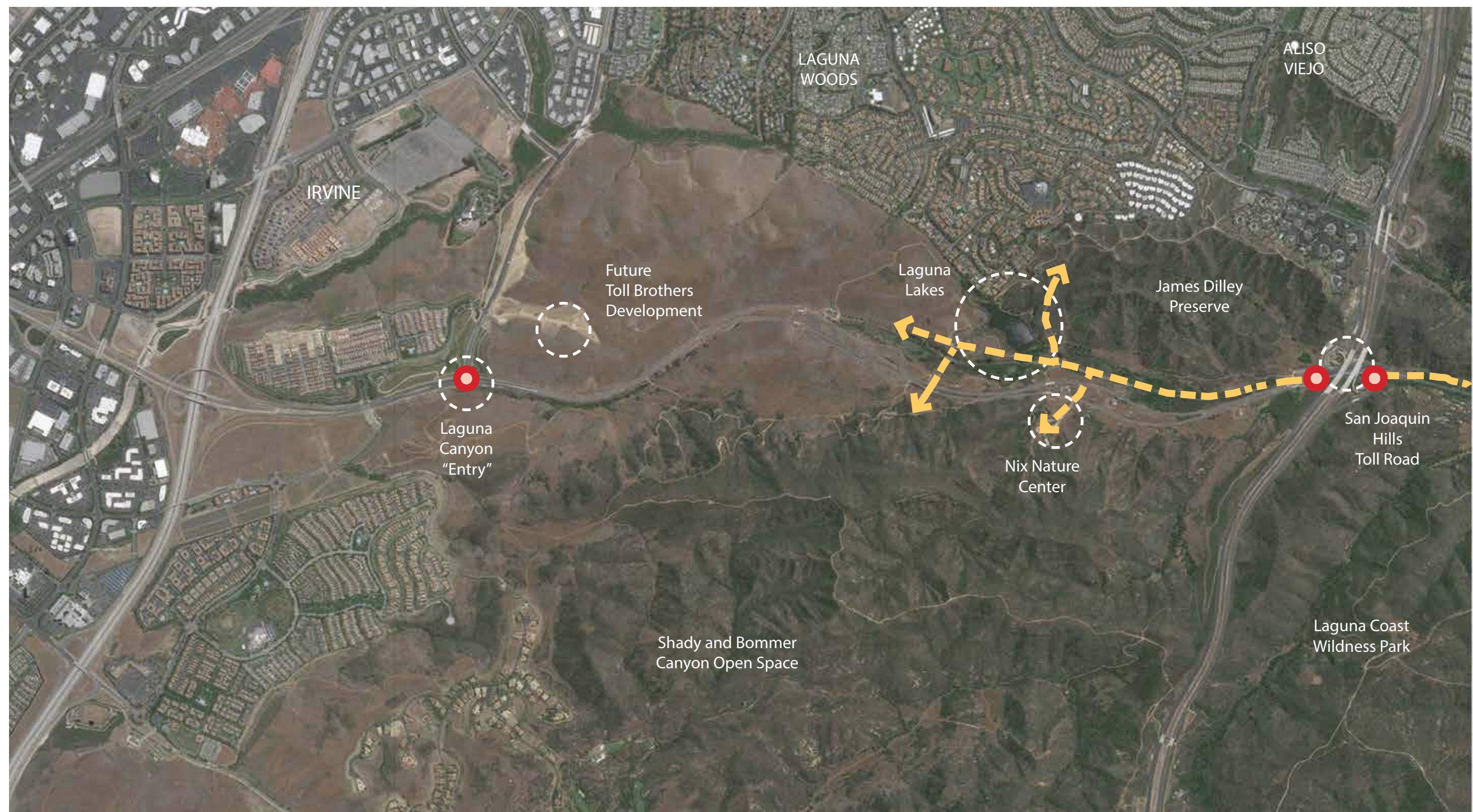


Figure 5: Pine trees



Figure 6: Potential information kiosk





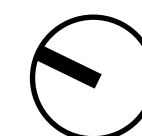
## LEGEND

- Proposed Pedestrian Path: Decomposed Granite (DG)
- Existing Signal / Crosswalk

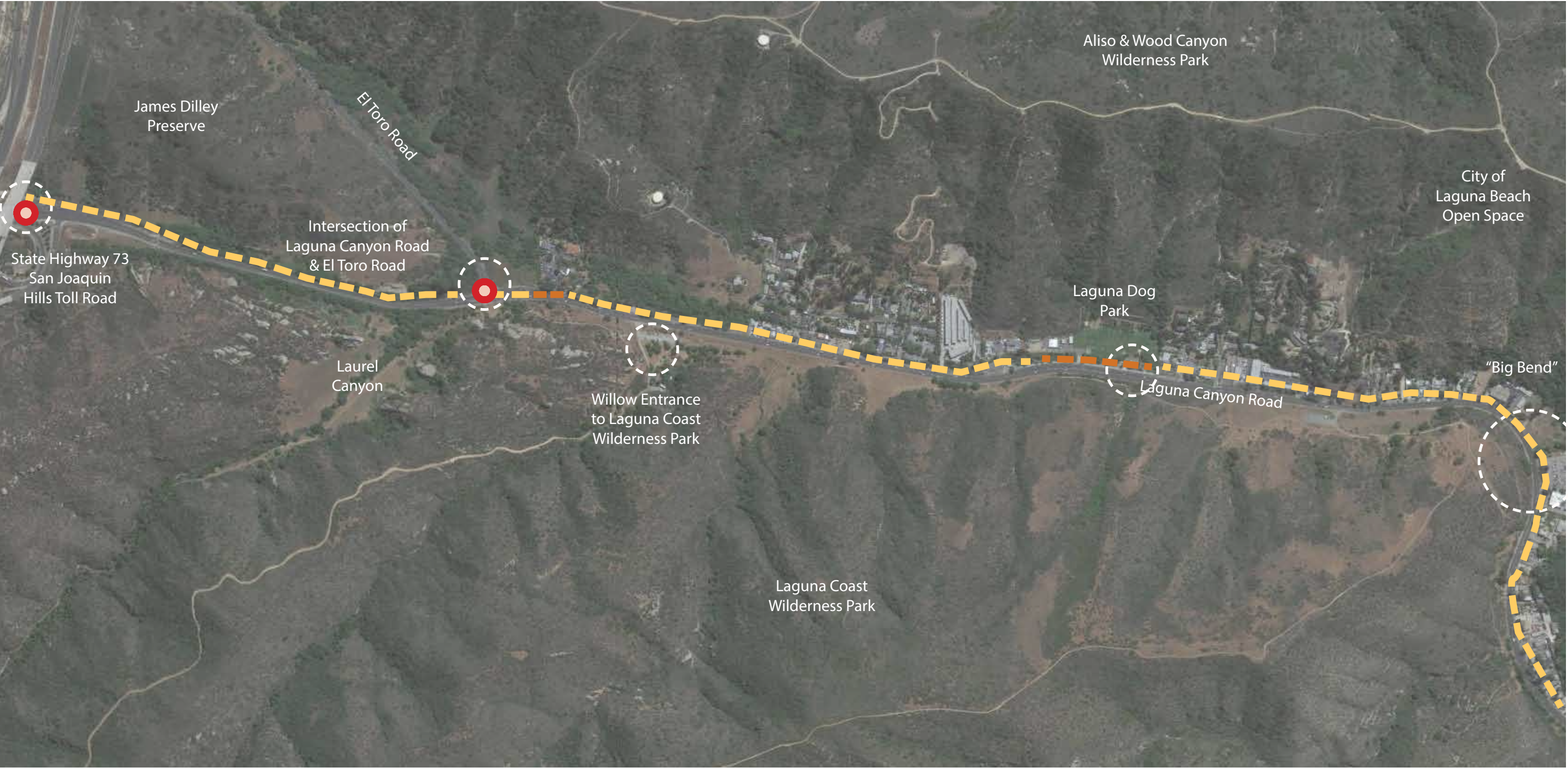
### NOTE:

1. Trail in Northern Reach shall follow "Lakes Trail" in Dilley Preserve.
2. On-road Class II bicycle trail exists on both sides of LCR in Northern Reach (not shown).

## 6.1 Northern Reach Trail Connections & Linkages







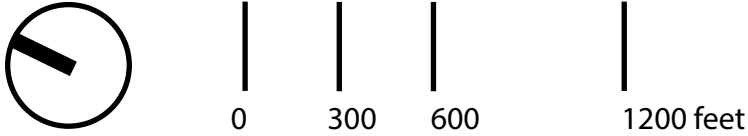
**LEGEND**

- Existing Pedestrian Path / Walkway
- Proposed Pedestrian Path: Decomposed Granite (DG)
- Existing Signal / Crosswalk

NOTE:

1. Off-road pedestrian path in Central Reach is shown on Eastern side of LCR to serve existing development.
2. Bicycle trails on LCR to be determined (not shown).
3. Off-road pedestrian path on Western side in Central Reach to be determined (not shown).

**6.2 Central Reach Trail Connections & Linkages**







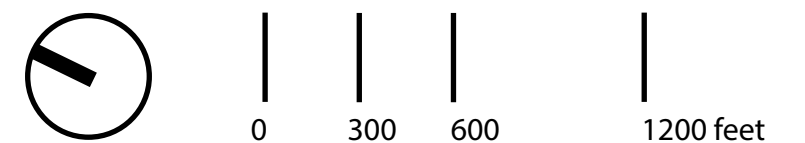
## LEGEND

- — — — Existing Pedestrian Path / Walkway
- — — — Proposed Pedestrian Path: Decomposed Granite (DG)
- Existing Signal / Crosswalk

### NOTE:

1. Off-road pedestrian path in Southern Reach is shown on both sides of LCR from LCAD to downtown.
2. Bicycle trails on both sides of LCR to be determined (not shown).
3. Off-road pedestrian path from LCAD to the North to be determined (not shown).

## 6.3 Southern Reach Trail Connections & Linkages





# 7.0 CONCLUSION

The recommendations and concepts presented in this document are reasonable and practical...and can be done incrementally on a project-by-project basis. While there may be additional studies required for implementing larger planning issues related to zoning, vehicular circulation, bicycle trails, transit, and utility undergrounding [among others], there is no need for postponing improvements to Laguna Canyon Creek and its adjacent edge properties. Environmental restoration and enhancement will provide the unifying link that provides visual continuity throughout the Canyon. The channelized Laguna Canyon Creek in the Civic Arts District, for example, is obviously unattractive in its current condition. Its ugly chain-link fence and sterile concrete bottom allows no water percolation or organic growth. If upstream storm infiltration could be increased to reduce volume, it might be possible to remove some portions of concrete in the bottom of the channel. This modification would soften its appearance, as native plants and cat-tails could be re-introduced. If upstream pollutants were eliminated, frogs and birds could come back to the area they once inhabited. Other visual improvements to the existing channel could include earth-color staining of the concrete sides [or stone veneer], replacing the chain-link fence with more attractive fencing/handrails, and planting along the edges with native trees. Many creeks were channelized in developing areas during the 1930’s WPA era, yet these creek channels became beautiful amenities by utilizing natural stonework, attractive handrails, and landscaping...often including pedestrian-friendly trails. We recognize that some recommendations may be easier to implement, and others will be more difficult or expensive. ***But, every native tree planted, every invasive shrub removed, every safe pathway created, and every eyesore eliminated is a positive step towards the goal.***

There are the energy and resources in our community to accomplish many of these tasks, from both private and public sources. There are environmental clubs and Scout groups among our youth, service clubs among our elders, and volunteers of all ages who are ready and willing to help.

A recent example is the creek restoration project adjacent to the City ASL / Dog Park property in Laguna Canyon in 2006. The City received a small grant from the Southern California Wetland Recovery Project, and purchased native shrubs for the project. City crews removed the invasive Pampas Grass shrubs in the creek and in the Dog Park, and provided other labor for tree planting. Over 50 volunteers, organized by Dr. Bill Roley and others, provided labor for weed removal and native shrub planting over a two-day period. A local resident donated 30 large sycamore and oak trees, and local environmental organizations provided additional funds for this successful public/private project.

***Everyone who travels Laguna Canyon is charmed by its magic. Restoring and respecting its neglected namesake creek, by providing trails, environmental education, and restoring its natural beauty, is our collective obligation. All over our state and nation, cities and towns have restored waterways [large and small] to become award-winning features. In California, Strawberry Creek in Berkeley and San Luis Creek in San Luis Obispo are well-known examples of reclaiming formerly industrialized and covered creeks into places of beauty and inspiration...adding untold value to the quality of life in those communities. In the past decade, the City of Los Angeles has adopted an ambitious program to “green” the Los Angeles River by using these same concepts and goals, which have proven successful and are continuing. We in Laguna should be doing no less.***

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## SPONSOR:

Foundation for Sustainability & Innovation

## ENDORSED BY:

Laguna Canyon Foundation  
Laguna Greenbelt, Inc.  
Laguna Canyon Conservancy

## PHOTOGRAPHY CREDITS:

Tom Lamb: cover (sycamore leaf); Ron Chilcote: page 3 (Laurel Canyon and tributary stream); Robert Hansen: page 3 (aerial photo); Charles Michael Murray: page 6 (“The Tell”). All other site photographs by the authors, unless noted.

## DEDICATION:

This project is dedicated to all those who have donated so much time and energy to the cause of preserving Laguna Canyon, so that future generations can experience the beauty and majesty of this special place. In particular, we honor the inspiration of Jim Dilley who conceived and founded Laguna Greenbelt, Inc. in 1968, and the dedication of Lida Lenney, who founded the Laguna Canyon Conservancy in 1986. The permanent public open space surrounding Laguna Beach now encompasses about 22,000 acres. Lida Lenney once said: [“Preserving the canyon is crucial, and the creek is the centerpiece. Restoring the creek is essential.”](#) It is in that spirit that we devote our efforts.



2006: Volunteers working to clear invasive weeds and plant native trees, Laguna Canyon Creek at Dog Park area.