



Woods End Wilderness Preserve Trail Drainage and Improvement Project

Presentation to the Coastal Greenbelt Authority
- July 10, 2024

Christopher Macon
City Manager

April Baumgarten
Public Works Administrator

Introduction

- ▶ Woods End Wilderness Preserve is a City of Laguna Woods-owned 10.6-acre property located north of the intersection of El Toro Road/Aliso Creek Road.
 - ▶ Acquired by the City of Laguna Woods in 2002
 - ▶ Leased to the County of Orange for operation as part of the Laguna Coast Wilderness Park since May 1, 2011
- ▶ The lease agreement requires the City of Laguna Woods to obtain the County of Orange's approval prior to making improvements within Woods End Wilderness Preserve.
 - ▶ Coastal Greenbelt Authority review

Proposed Project

- ▶ **The Woods End Wilderness Preserve Trail Drainage and Improvement Project** is included in the City of Laguna Woods' Fiscal Years 2023-34 Capital Improvement Program.
- ▶ Funding for the project will be provided by:
 - ▶ State of California Proposition 68 (Per Capita Program)
 - ▶ General Fund - match for Proposition 68 funds
 - ▶ American Rescue Plan Act
- ▶ Award and execution of a construction contract is anticipated prior to the December 31, 2024 obligation deadline for the American Rescue Plan Act.

Goal 1

Reduce stormwater runoff to El Toro Road without reintroducing paved surfaces

1 of 2

April 24, 2024



Goal 1

Reduce stormwater runoff to El Toro Road without reintroducing paved surfaces

2 of 2

April 24, 2024



Goal 2

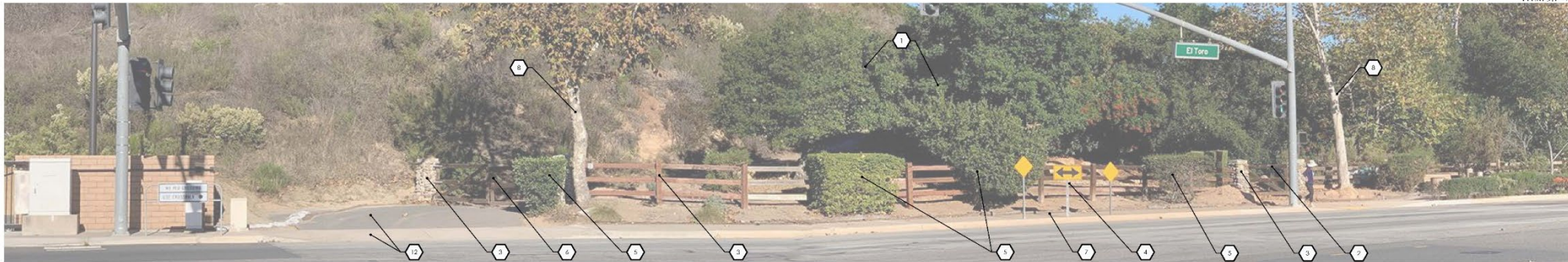
Refresh existing entry facilities and enhance wayfinding from El Toro Road

April 24, 2024

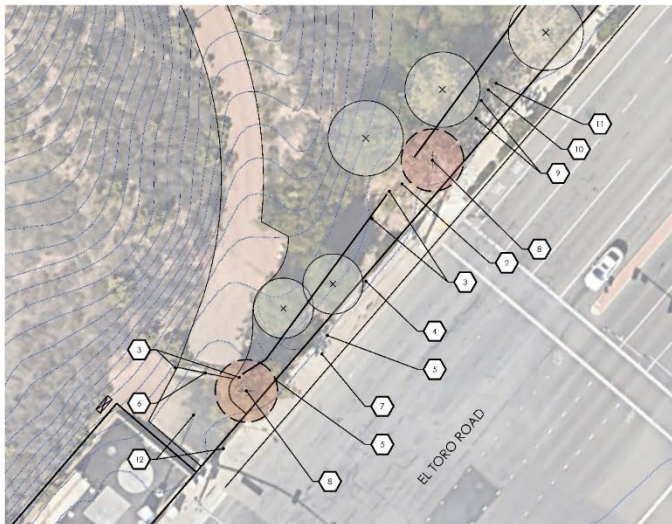


Other Goals

3. Relocate the pedestrian entrance closer to on-street parking
4. Maintain a plant palette representative of the Laguna Coast Wilderness Park
5. Add bollards at the intersection of El Toro Road/Aliso Creek Road
6. Add video surveillance at frontage



EXISTING CONDITION



EXISTING CONDITION - SITE PLAN

EXISTING CONDITIONS LEGEND

- DESCRIPTION:
- 1 EXISTING TREES TO BE PROTECTED IN PLACE
 - 2 EXISTING TRAIL ENTRANCE TO BE REMOVED
 - 3 EXISTING PILASTER AND FENCE TO BE REMOVED
 - 4 EXISTING WARNING SIGNAGE TO BE REMOVED
 - 5 NON-NATIVE SHRUBS TO BE REMOVED
 - 6 VEHICULAR ACCESS DOUBLE GATE TO BE REPLACED
 - 7 EXISTING CONCRETE SIDEWALK TO REMAIN
 - 8 EXISTING TREE TO BE REMOVED
 - 9 EXISTING BENCH & TRASH CANS TO REMAIN
 - 10 EXISTING DRINKING FOUNTAIN TO REMAIN
 - 11 EXISTING BIKE RACKS TO REMAIN
 - 12 EXISTING ASPHALT DRIVEWAY AND CROSSING TO BE REMOVED

EXISTING TREE LEGEND

	BOTANICAL NAME	COMMON NAME
X	E-1	EXISTING OAK TO BE PRESERVED
↑	R-1	EXISTING SYCAMORE TO BE REMOVED



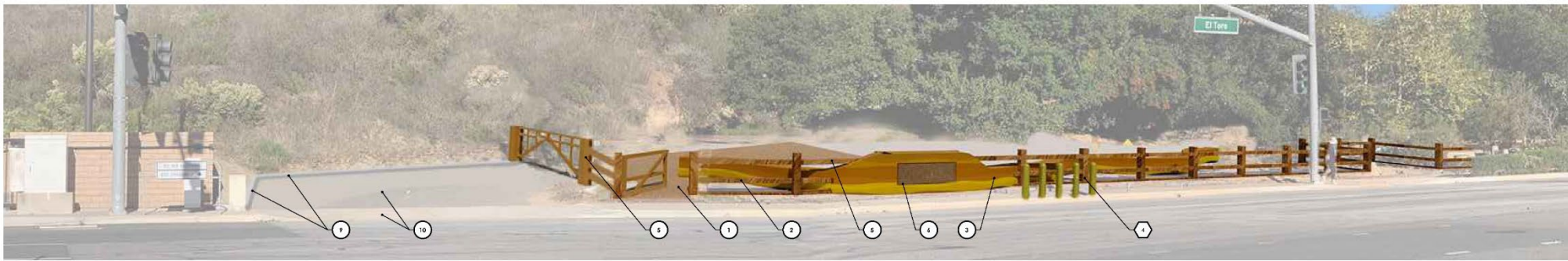
PROPOSED SITE PLAN

PROPOSED LEGEND

- DESCRIPTION:
- 1 NATIVE SOIL
 - 2 SPLIT CEDAR FENCE SEE DETAIL B - SHEET 2
 - 3 RAMMED EARTH CONCRETE WALL SEE DETAIL C - SHEET 2
 - 4 PEDESTRIAN ACCESS SINGLE GATE SEE DETAIL B - SHEET 2
 - 5 STEEL VEHICULAR ACCESS DOUBLE SWING GATE SEE DETAIL D - SHEET 2
 - 6 PARK MONUMENT SIGN SEE DETAIL C - SHEET 2
 - 7 DRAINAGE DIPS - EROSION CONTROL SEE DETAIL A - SHEET 2
 - 8 STEEL PIPE BOLLARDS AND WARNING SIGNAGE
 - 9 6" CURB
 - 10 ASPHALT DRIVEWAY & CROSSING TO BE REPLACED; ACCESSIBILITY IMPROVEMENTS TO CROSSING
 - 11 STORAGE CABINET FOR OC PARKS TEMPORARY SIGNAGE

TREE LEGEND

	BOTANICAL NAME	COMMON NAME
T-1	QUERCUS AGRIIFOLIA	COAST LIVE OAK



PROPOSED RENDERING

THIS DOCUMENT IS THE PROPERTY OF RJM DESIGN GROUP, INC., AND NO PART THEREOF SHALL BE USED, REPRODUCED, OR MODIFIED WITHOUT THE WRITTEN CONSENT OF RJM DESIGN GROUP, INC. © 2022 RJM DESIGN GROUP, INC. All rights reserved.



PROPOSED SITE PLAN



QUERCUS AGRIFOLIA - COAST LIVE OAK



RAMMED EARTH WALL EXAMPLE



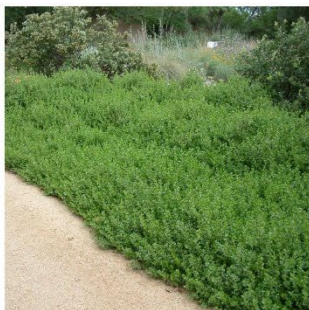
SPLIT CEDAR RAIL

TREE LEGEND

BOTANICAL NAME COMMON NAME
T-1 QUERCUS AGRIFOLIA / COAST LIVE OAK

SHRUB LEGEND

BOTANICAL NAME COMMON NAME
S-1 BACCHARIS PILLULARIS / PIGEON POINT / DWARF COYOTE BRUSH
S-2 CEANOTHUS 'DARK STAR' / CALIFORNIA LILAC
S-3 MUEHLENBERGIA RIGENS / DEERGRASS



BACCHARIS PILLULARIS - DWARF COYOTE BRUSH



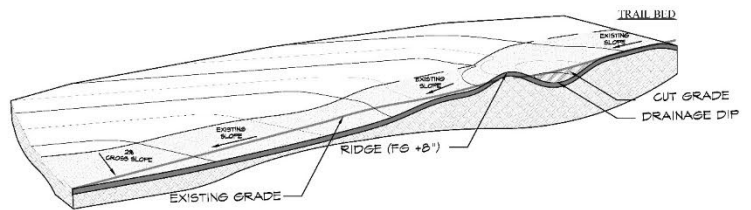
CEANOTHUS 'DARK STAR' - CALIFORNIA LILAC



MUEHLENBERGIA RIGENS - DEERGRASS



PARK MONUMENT SIGN ENLARGEMENT

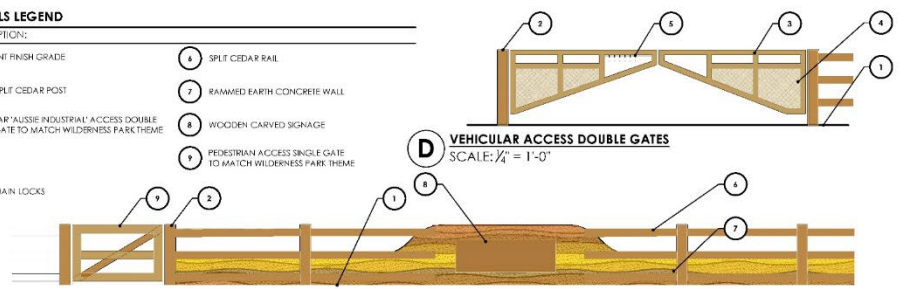


NOTE:
DRAINAGE DIP TO BE INSTALLED ALONG THE MAIN TRAIL IN ORDER TO DIVERT EROSION SEDIMENT AWAY FROM NEW PEDESTRIAN TRAIL ENTRY AND VEHICULAR ACCESS DRIVE. VISUAL APPEARANCE OF DRAINAGE DIPS TO MATCH OTHER EXISTING IN LAGUNA COAST WILDERNESS PARK.

A DRAINAGE DIP
SCALE: 1/8" = 1'-0"

DETAILS LEGEND

- DESCRIPTION:
- 1 ADJACENT FINISH GRADE
 - 2 3-HOLE SPLIT CEDAR POST
 - 3 VEHICULAR 'AUSSE INDUSTRIAL' ACCESS DOUBLE SWING GATE TO MATCH WILDERNESS PARK THEME
 - 4 MESH
 - 5 DAISY CHAIN LOCKS
 - 6 SPLIT CEDAR RAIL
 - 7 RAMMED EARTH CONCRETE WALL
 - 8 WOODEN CARVED SIGNAGE
 - 9 PEDESTRIAN ACCESS SINGLE GATE TO MATCH WILDERNESS PARK THEME



B SPLIT CEDAR RAIL & PEDESTRIAN SINGLE SWING GATE
SCALE: 1/4" = 1'-0"

C PARK MONUMENT SIGN / RAMMED EARTH WALL
SCALE: 1/4" = 1'-0"

D VEHICULAR ACCESS DOUBLE GATES
SCALE: 1/4" = 1'-0"



05/20/2024



THIS DOCUMENT IS THE PROPERTY OF RJM DESIGN GROUP, INC., AND NO PART THEREOF SHALL BE USED, REPRODUCED, OR MODIFIED WITHOUT THE WRITTEN CONSENT OF RJM DESIGN GROUP, INC. © 2022 RJM DESIGN GROUP, INC. All rights reserved.



Thank you!

Christopher Macon
City Manager
City of Laguna Woods

cmacon@cityoflagunawoods.org
(949) 639-0525

Addendum - Laguna Coast Wilderness Park General Development and Resources Management Plans

Introduction or an Executive Summary – need to work on

Site Location:

Currently approximately 7,000 acres of wilderness owned by the County of Orange, State of California, Cities of Laguna Beach and Laguna Woods. Also includes ownership by SC Edison and Laguna Beach County Water District land. Managed by OC Parks.

Updates to Maps and Charts:

- Ownership map including Los Trancos, Muddy Canyon, Prop 12 acquisitions and Woods End information. Perhaps with a chart/table that Includes acreage and the acquisition timeline.
- Charts showing timeline for Laguna Laurel parcel acquisition, Parcel 5 and Prop 12 acquisitions.
- Update 1998 Figure 2A to a new Ownership map. Figure 2B could be updated using the Laguna Laurel parcel acquisition information and the preservation of the final 5th parcel.

The south coast wilderness as of 2024 includes approximately 22,000 acres of contiguous boundaries of wilderness parks and preserves. Includes City of Newport Open Space, Crystal Cove State Park, City of Irvine Open Space Preserves, Laguna Coast Wilderness Park, Aliso and Wood Canyons Wilderness Park, City of Laguna Beach Open Space and City of Laguna Woods Open Space.

1978 City of Laguna Beach purchased the Laguna Canyon area now called the James Dilley section (376 acres) of Laguna Coast Wilderness Park
1979 Dedication of Aliso and Wood Canyons Wilderness Park through development agreement with the Mission Viejo Company and the County of Orange

- 1984 State of California purchased The Irvine Company land for Crystal Cove State Park
- 1990 Historic Laguna Laurel Purchase Agreement between The Irvine Company, City of Laguna Beach, County of Orange and State of California
- | | |
|------------------|------------------------------|
| June 1993 | \$33 million for 1,286 acres |
| June 30, 1992 | \$3 million for 26 acres |
| April 9, 1993 | \$4 million for 50 acres |
| October 15, 1993 | \$5 million for 41 acres |
- April 1993 Dedication of Laguna Coast Wilderness Park
- 1998 Newport Coast Development agreement with the County of Orange, adding 2,000 acres to Laguna Coast Wilderness Park
- 2001 Gift by The Irvine Company to the County of Orange of the remaining Laguna Laurel Development land for public open space.
- 2002 City of Laguna Woods purchased 10.6 acres with funding from the 2000 State Proposition 12 through the Coastal Conservancy. Land is leased to the County of Orange for management as part of Laguna Coast Wilderness Park
- 2004 City of Laguna Beach purchased the Trinity 36-acre parcel and the Wainwright 32-acre parcel with Prop 12 Funds, and leased the parcels to the County of Orange for management as part of Laguna Coast Wilderness Park
- 2004 Ridge Park dedication as part of the Newport Coast Agreement with the County of Orange
- 2006 City of Laguna Beach purchased the Decker 11.43-acre parcel with Prop 12 Funds and leased the parcel to the County of Orange for management as part of Laguna Coast Wilderness Park
- 2007 City of Laguna Beach purchased the Haun 10.45-acre parcel, the Jaysu 27.92-acre parcel, the Stonefield 50.37-acre parcel and the Chao 58.4-acre parcel with Prop 12 Funds and leased the parcels to the County of Orange for management as part of the Laguna Coast Wilderness Park

2008 City of Laguna Beach purchased the SBD 10.38-acres with Prop 12 Funds.

2009 City of Laguna Beach purchased the Bunn-Moore 4.5-acre parcel with Prop 12 Funds

2012 City of Laguna Beach purchased the McGraw 1.99-acre parcel with Prop 12 Funds

2013 City of Laguna Beach purchased the McGehee 56.25-acre parcel with Prop 12 Funds

Management Practices:

- LCWP opened under managed access practices.
- Currently LCWP is open 7 days a week from 7 a.m. to Sunset and Parking Areas 8 a.m. to 5 p.m.
- Adaptive Management Practices guide the management of access and habitat protection. This provides the ability to close and open trails, regulate visitor use, such as hiking, biking, equestrian uses, to prevent overuse and habitat damage and restoration.

Current Conditions:

Trails

New Trails:

Old Emerald Falls- relocate start of trail from bottom of Emerald Canyon to middle of Emerald Canyon (old BVD Trail).

Add Woods End Trail, Ridge Top and top of Barbara's Lake Trail on SCE parcel, Gravel Trail, Edison Trail - all in the Dilley section of LCWP.

Add Bommer Ridge, Old Emerald Trail, Emerald Canyon Road. Need to verify acquisition date – early 2000s (part of Newport Coast Development Agreement). Emerald Canyon Trail is now a single-track trail from Post 14 to Back gate of Emerald Bay.

Add Lizard Trail, opened in 2016 as an authorized trail. Notes about cooperative effort by OC Parks, Laguna Canyon Foundation, Natural Communities Coalition and Mt. Bike clubs.

Add the east side of Laguna Canyon Rd. that is legally in Laguna Coast Wilderness Park. Currently managed by Aliso and Wood Canyons Wilderness Park – * but is part of LCWP. The trail is shown correctly on the current park map.

Add Mary's Trail, dedicated in 2007

Renamed Trails:

BVD was changed to Old Emerald Falls Trail

Bea Whittlesey Trail was changed to Canyon Trail

Trail Use Designations:

All trails have specific use designations to protect the habitat. Hiking Only trails, Multi-Use includes Hiking, Bicycle, Horseback. E-bikes, unauthorized motorized vehicles are not allowed on any trails.

Geology:

Any new studies? Need information from OC Parks staff.

Fire Conditions

Include latest OCFA information, joint agreements with adjoining parklands. Fire Plan with Natural Communities Coalition – Specific Fuel Modification Plans for Willow Canyon and the Nix Nature Center.

Hydrology:

Update of the realigned Laguna Canyon Road and the change in the three Laguna Lakes. Barbara's Lake and Bubble's Pond are now connected with the realignment of Laguna Canyon Road. **Should the EIR for Laguna Canyon Road be included in the references? Reference the restoration of the former Laguna Canyon Road alignment?**

Biological Resources:

- Recent LCWP studies as part of the Natural Communities Conservation Plan (NCCP)/Habitat Conservation Plan (HCP) projects
- Add web site link for Natural Communities Conservation Studies.

Physical Resources:

Current Park Access Points - these could be shown on a new map

Ridge Park, Woods End, Dartmoor, Big Bend Staging Area, Willow Canyon Staging Area, James Dilley Staging Area, Little Sycamore Canyon Staging Area with the Nix Nature Center, Laguna Bowl, Poplar Street (Water Tank), Wood's End. Also 3 access trails from the City of Irvine Open Space, and 5 access trails from Crystal Cove State Park.

New map showing the Park Access Roads and Access Points including the realignment of Laguna Canyon Road from the El Toro Road intersection toward the interstate freeways.

New Access Points since 1998 documents:

Ridge Park, Gate 9, dedicated in 2004 as part of the Newport Coast Development Agreement. **Acreage** Provides entry to LCWP, CCSP and City of Irvine Open Space Preserve at Shady Canyon through the San Joaquin Hills Tollroad (73) undercrossing. This new section of LCWP started with the managed access model of first guided hikes, then first and third Sundays open, then first and third Saturdays open. In 2007 all LCWP south of the 73 San Joaquin Hills Tollroad was open daily. The trails between LCWP and CCSP meet for park visitors use but are gated for Emergency Access Only.

The Willow Canyon Staging Area replaced the Laurel Canyon Staging Area noted in the 1998 document.

2001 Orientation Panels

The plein-air paintings, owned by the Laguna Canyon Foundation, in the Nix Nature Center Gallery are the originals that were used for a series of orientation panels that were installed throughout the park in 2001. The Orientation Panels are at the six entrances to key trails. The panels were designed to orient visitors to the “mosaic” that is the South Coast Wilderness, introduce visitors to the unique qualities of each access point and encourage responsible park use.

The six orientation signs received a second-place award in the Wayfarer Category from the National Association for Interpretation in the 2002 national interpretation competition. The development of the six orientation signs was funded by a grant from The Bren Foundation and designed by The Acorn Group and SoLa Creative.

Coastal Greenbelt Authority Update:

- History
- Include amended ByLaws

The Nix Nature should be a separate part of the Addendum. Included should be photos and current information about the exhibits, the addition of Staff – Resource Specialist, how the public is encouraged to understand the wilderness park.

Nix Nature Center:

Dedicated on March 17, 2007, the James and Rosemary Nix Nature Center is the gateway for park users to explore a vast network of trails throughout the approximately 7,000-acre Laguna Coast Wilderness Park. Many trails are linked for access into the 22,000-acres of neighboring parks and preserves.

Funding for the \$3.4 million budget for the James and Rosemary Nix Nature Center included:

\$500,000 gift to Laguna Canyon Foundation by Rosemary and James Nix for the nature center building.

\$150,000 gift by Laguna Canyon Foundation for the nature center building.

\$300,000 Laguna Canyon Foundation funding from private donations and voter-approved 2000 state park bond funds for the interpretive exhibit program.

\$1.5 million from the California voter approved 2000 state park bond funds.

\$750,00 from the County of Orange Harbors, Beaches and Parks Department (OC Parks).

Building Specifics:

A central design principle was to create a building that was subordinate to nature. The park's 1998 general development plan had called out a site for the nature center on knoll off the main Little Sycamore Canyon trail. But the current site was readily agreed to as it was already disturbed by cattle grazing, and would involve very little grading allowing the buildings to nestle into the hills, thereby keeping the majority of the canyon floor in its natural state.

The Rammed Earth wall was made from excavated material from the site, resulting in decreased impact on the environment- its green design allows for passive cooling and heating. Orientation to the south limits heat on hot days and helps warm the facility during the cooler months. To cut down on the use of fossil fuels the radiant heated floor provides warmth during the colder months, and the windows at the top of the building are positioned to catch the downdraft of the canyon to providing flow-through cooling.

In 2008 the building received an Honor Award from the San Diego chapter of the American Institute of Architects (AIA) and the Award of Excellence from the AIA's Orange County Chapter.

Exhibit Design: In 2007, The Acorn Group, SoLa Creative, and Laguna Canyon Foundation received the First Place Interpretive Media Award from the National Association for Interpretation for interpretive exhibit program at the Nix Nature Center.

Total Area of Buildings (exhibit and administration): 3,000 square feet

Total Exhibit Space: 2,300 square feet

Goal for Future Revisions of Interpretive Exhibits - Need to work on

Nix Nature Center Overview

Most exhibit schemes in neighboring nature centers rely on dioramas to depict the land. These consist primarily of preserved plants and animals grouped together as a tool to interpret each Park's ecological communities. The Nix Nature Center, and the Laguna Coast Wilderness experience itself, has broken new ground. The immediate surroundings of the Center provide a better and more vibrant example of the natural communities than could be artificially replicated indoors. Rather than follow tradition, the interpretive media focuses on specific views seen from the Center, i.e., Four Portals - Quail's Peak, Little Sycamore Woodland, the Grasslands, Saddleback

Mountain with its two majestic peaks- Santiago Peak and Modjeska Peak, with each interpreted from an artistic, historical, and scientific perspective.

Each of these landscape images are presented as three distinct but integrated views – a full view – interpreted through such media as oral histories, original art, and “immersion displays” so that the visitor begins to appreciate and comprehend the richness of these multiple perspectives. . (For example, Portal One interprets Little Sycamore Woodland with the artist’s rendition of sycamores and robotic bats, the Acjachemen Indian stories about the symbolic meanings of the native animals that live in the Sycamore Woodland, and the text explaining the scientific information about Little Sycamore and integrating all elements in that portal.)

Portals

The Nix Nature Center is organized into “portals.” Portal is defined as a door or entrance, especially an imposing one. The portals in the Nix Nature Center are entrances to different aspects of Laguna Coast Wilderness Park. The great thing about each portal is that it features the landscape visible just outside the nature center.

As one moves from portal to portal within the center, one gains a broad perspective of the park’s significance and more focused perspective on the inherent worth of specific park resources, as seen through the lenses of culture, the arts and sciences.

The Nix Nature Center was created based on collaboration. The collaborators chose a theme that would best support the mission of protecting the park and inspiring the public to “Keep it wild!”

Theme:

- The Laguna Coast Wilderness experience is a blending of perspectives. Viewing the land through the lens of native people, artists, scientists, and others allows one to see multiple views and gain a broader understanding of the inherent worth of the land.

Subthemes:

- For thousands of years, Juaneno Indians, or the Acjachemen, have lived on or near Laguna Coast Wilderness Park. These first stewards, scientists, artists, and historians gained an intimate understanding of the moods and resources of this area.
- For the past one hundred years, plein air artists have interpreted and recorded the rich wilderness raising the awareness of the region's beauty and fragility.
- Members of the scientific community recognize the biological, geological and paleontological value of Laguna Coast Wilderness Park. The park is a living laboratory and classroom. The cataloging of rare and endemic species of plants and animals, the documentation of post-burn ecological succession and the tracking of large predators are examples of current scientific projects.

Entryway to the Nix

At this location, the entry structure frames a view to Quail's Peak and invites visitors to explore the interpretive exhibits inside.

Inside the Nix

When entering the Nix Nature Center, volunteers and staff welcome the visitors to the park and ask them sign in. The visitors sign-in allows the park to track park usage showing that people do value having wilderness parks and that our visitors come from all over. Visitors are encouraged to tour the center counterclockwise. As they exit the visitors are encouraged to peruse the following information available at the reception counter and literature racks by the exit door: upcoming events, volunteer training and orientations, stewardship dates, wildlife sightings, other park events around Orange County.

Entry Corridor- Decompress and Absorb

The entry corridor serves as a decompression zone. Softly lit and relaxing, the pathway leads the visitor along the interior side of the rammed earth wall to view images that celebrate the canyon's wildlife, wild lands, and human history helping them to connect to the resource. The quote on the wall just inside the door is thought provoking – it sets the mood. The intent of the

building design is to begin the tour by entering the "decompression area" and circulating counter-clockwise.

A Full View

The "Full View" experience is first encountered here. The visitor turns a wheel similar to a "View-Master" to study the myriad lenses through which we view nature. The *Full Views* theme is illustrated by looking at the bobcat through the eyes of a scientist, artist and historian. We encourage children and adults to turn the wheels and talk about the presented views.

Throughout the Nix Nature Center we see a unique blending of perspective allowing us all to follow our own flow, widening our experience and leading us to that space where we examine our thoughts to find our place and to define our relationships with nature. We find that the historian, artist, and scientist appreciate the natural world for what it offers them. To each of them, the earth is precious, its resources are inspiring and life sustaining.

Beyond its rare beauty, Laguna Coast Wilderness Park is symbolic in terms of human connections to the land across time and place. Native peoples, plein air artists, scientists, and park advocates, to name a few, share a strong connectedness to the landscape, although their perspectives may differ. One rock outcropping may serve as a record of ancient times for one group, and for another, a spiritual place of honor, a source for artistic inspiration, or the microhabitat of a rare plant under study.

Though diverse in their perspectives and drawn to the land for different reasons, these groups share a common bond with the Laguna Coast Wilderness. Their stories are worth telling in ways that complement each other, building upon anthropology, the arts, and the sciences to provide the visitor with a more complete picture. Their stories will enrich the visitors' experiences and provide them with a "full view."

Gallery

This gallery pays tribute to Laguna Beach's famed plein air art movement. The laminated placards in the holder to the right to add insight to your viewing. The easel display showcases some of the founders of the original art colony. These paintings by six celebrated artists captured the spirit and beauty of Laguna Coast Wilderness Park on canvas as we know it today. Started more than a century ago, the plein air art movement continues to thrive. Laguna Canyon Foundation received a grant from Joan Irvine Smith to purchase the paintings for display in the Nix Nature Center.

NEED TO WORK ON Updating

Portal One: The Peaks of Saddleback

Scientific Perspectives:

A corten steel structure frames the Santa Ana Mountains, Modjeska and Santiago Peaks, rising more than five thousand feet in the are joined by a saddle, earning the formation the name of Old Saddleback which looms over central and south Orange County. Saddleback and Laguna Coast Wilderness Park share an ancient marine past—a common thread of history interpreted through a hands-on Cretaceous fossil discovery station, bas relief Miocene fossils, and replicated Miocene formation that showcases the vertebrae and jaws of a rare toothed whale, pectins, Megalodon shark teeth, and other fossils—all within the reach and touch of the visitor. Over the course of millions of years, shallow seas inundated Orange County at least five times, each time bringing characteristic deposits of diatoms, clams, snails and ammonites in the sandstone and shale. These layered deposits provide clues to the land's Pliocene and Pleistocene past.

The canyons of both the Santa Ana Mountains and Laguna Coast Wilderness Park serve as watersheds that drain water off the slopes and into springs, creeks, rivers, and eventually the Pacific Ocean. Water that flows from the Santa Ana Mountains feeds San Juan, Silverado, and Santiago Creeks -- waterways that meander through the Orange County plains. Water that flows

from the hills and ridges of Laguna Coast feed the Laguna Lakes and Laguna Creek that reaches the ocean at Main Beach.

Cultural Perspectives:

The cultural significance of the peaks to the Acjachemen is explained in a second interpretive panel, whose message is punctuated by audio recordings such as the shriek of a red-tailed hawk passing overhead. (the recording is not working as of 1/09) While the Santa Ana Mountains are prominent in the culture of the Acjachemen, Modjeska and Santiago Peaks are considered sacred. The spiritual leader, Chinigchinich, is said to have traveled to the top of Santiago Peak, or Kawalpa, after first appearing at Puvungna, an ancient village site in Long Beach.

Coulter pines grow in the higher elevations of the Santa Ana Mountains. Their pine nuts were an important food item for the Acjachemen and their timber was harvested for use in the construction of Mission San Juan Capistrano. Coast live oaks grow at lower elevations and in the canyons extending from the mountains to the coastal plains. Their acorns were a staple food item in the Acjachemen diet, as well as for local wildlife species such as deer.

Artistic Perspectives:

It is interesting to note the resin replicas of the fossils were made from actual fossils excavated from the realignment of the Laguna Canyon Road. The artist painstakingly made molds to replicate exactly the forms of the originals.

Portal Two: The Little Sycamores

Scientific Perspectives:

Expansive windows frame Little Sycamore Canyon. The origin of the canyon's name and the reason for the local sycamores' small size are the subject of scientific debate. Perhaps a shallow layer of soil shapes the dwarfed trees over sandstone bedrock. Regardless, they still form significant deciduous woodland and serve as habitat for many forms of wildlife. They also serve as nesting and roosting sites for birds of prey and possibly as feeding sites at

twilight for pallid and mastiff bats. In addition, they serve as hosts for parasitic mistletoe that in turn is the food source for the larvae of the purple hairstreak butterfly.

Cultural Perspectives:

The Spirit Animals console is a push button-activated auditory exhibit. There are also speakers in the cabinet to use for class tours.

Tribal elders David Belardes and Joyce Perry of the Acjachemen nation recorded brief stories about the significance of five key spirit animals and denizens of Little Sycamore Canyon—hawk, rabbit, rattlesnake, deer, and coyote. Based on Chinigchinich beliefs, the religion of southern California's native people, young boys were given an animal protector, or spirit animal, during their initiation ceremony. In addition to providing general protection, the animal's power was thought to also protect them in wars. Each boy had a vision in which he saw a particular animal.

Artistic Perspectives:

The stylistic Sycamore Trees house two exhibits:

1. Five robotic bats serve as an artistic representation of ultrasonic servomotors, sensor technology. Synchronized to the dimming of the synthetic sun, the bats awaken at twilight and begin their sequence.
2. The tree trunks, while serving as a divider between portal one and two, are a backdrop to a medley of poems, rebus, and clues that draw younger visitors into the tree trunk maze and challenge them to identify and name five animals that are active at twilight and night.

The playful mechanical bats roosting in whimsically rendered sycamores, introduce the visitor to the nighttime activities of the wilderness. The time when the park is truly alive is the time when visitors are not in the park. The unique choreography of the bats, the rhythmic poetry and imagery helps our imaginations connect with the magic of the night bringing us closer to view in our minds eye natural choreography unseen.

Full Circle Mural

Featuring the spectacular work of faculty and students of the Laguna College of Art and Design, the Full Circle mural interprets the Laguna Coast wilderness across time and space. Flowing in a circular fashion, the landscape and three-dimensional sculptures focus on five distinct periods in the parkland's history—early California wilderness when the Acjachemen first settled here (sculpture of one version of their creations story), to the Spanish and Mission era (carretaras wheel), to the Mexican rancho era (sculpture of rancheros), to the modern agricultural era (walnut groves), and finally full circle back to wilderness (inset circle). Visitors are free to turn the carretera wheel, an artifact from the Spanish and Mission era and gaze at the incredible bronze red-tailed hawk. Like all of the portals' exhibits, "Full Circle" blends art, science, and culture from which to view nature. Visitors can step into each time period as they view this artistic timeline and the wagon wheel artifact. On the mural, they view some of our native blooming plants and recognize a serenity of peace as the storyline takes us "full circle" giving back to the life sustaining land.

When Laguna College of Art & Design (LCAD) student Katy Betz first presented her concept for a mural to hang in the James and Rosemary Nix Nature Center, she wanted it to convey the beauty of the wilderness. "My goal is for visitors to have a genuine experience of the land. I want this mural to take visitors' thoughts full circle, away from daily concerns, so that they walk away in a respectful, informed and peaceful frame of mind," she wrote in her narrative proposal.

The Nix Nature Center's Interpretive Exhibit team selected Betz' "Full Circle" mural concept in spring 2005 from among fourteen student designs. Betz' mural incorporates such images as a gnarled coast live oak, sandstone outcroppings, wagon wheel tracks, hikers, Laguna Canyon Road, a waterfall and many native plants and animals. Its ultimate purpose is to explore the different ways the land was used over time and to show how its history has

come full circle. Over time, the land has gone from wilderness to land inhabited by American Indians to ranch land. Today it is returning to its natural state as a wilderness park through stewardship efforts.

Under the direction of instructor Mia Tavonatti, a handful of students worked in class to develop the mural over the 2005 spring and fall semesters including, Mihn Kim, Marissa Mackey, Ryan Darling and Tony Lemos. The students in her mural painting class spent four to eight hours per week on the murals. Class met for three hours every Friday in a City of Laguna Beach bus barn, where the full size, 25-by-8.5-foot mural base was temporarily affixed to the wall. The students sketched rough details in charcoal, then developed designs and color palettes for the final version. Each student team member contributed a different perspective to the design process. For inspiration, Tavonatti created a reference CD of plant, animal and landscape photos in different seasons.

Another Laguna College of Art and Design student Daina Mattis who learned how birds are made to prepare her for her project sculpted the graceful bronze statues. To sculpt the realistic red-tailed hawk, she studied photos, taxidermy specimens, and birds in the wild. She started with an armature of aluminum wire posed like a bird in flight. Working from the general pose to the specifics of the hawk's wings, beak, eyes and talons, she carefully shaped the bird in clay down to the finest detail.

“It's such a different form that you have to invent everything,” she said. “The feathers are so thin that I had to switch from water to oil-based clay, and then I had to mix wax into it to make it lighter and sturdier.”

Throughout the process, she received guidance from Raymond Persinger, head of LCAD's sculpture program. When she finished with the sculpture's first stage, she moved on to building a shimstock support for the ¾-inch rubber covering that she shaped around the form. Next, she layered plaster over the rubber. This “plaster jacket” was split in half, and then filled with wax to make a cast.

Finally, the mold was sent to a bronze foundry for the month-long process of creating a finished sculpture. Called the “lost wax method,” this process was first used in ancient Greece. It involves making a secondary ceramic mold and putting it into a kiln, melting out the wax and pouring in the molten bronze. Once the bronze cast was finished, the ceramic shell was knocked out and the sculpture sandblasted, painted with a patina and mounted.

Portal Three: Of Buckwheat and Sage

Scientific Perspectives:

Viewed right outside the portal’s windows, the coastal sage scrub habitat is key habitat for many plants and animals, some of which are threatened or endangered. The California gnatcatcher, cactus wren, and spadefoot toad are showcased in this portal and interpreted through the eyes of field biologists. They also served as the source of inspiration for the portal’s art piece; a hand carved wooden bowl by local artist Keith Klafs. As such, the park is the focus of the Central and Coastal Sub-Region of the Natural Communities Conservation Plan / Habitat Conservation Plan (NCCP/HCP). The California gnatcatcher, cactus wren, orange-throated whiptail lizard and foothill mariposa lily, to name a few, are species identified in the NCCP/HCP and whose survival is dependent upon other species within the coastal sage scrub. The park serves as sanctuary for that which is threatened, endangered, or of special concern.

Cultural Perspectives:

Acjachemen traditions based on use of sage scrub and riparian plants such as elderberry, wiregrass, and willow are celebrated in this portal. Replicated artifacts such as willow seed beaters and an elderberry flute, created for this project David Belardes, one of the tribal elders, are displayed on the sandstone boulders positioned beneath a striking photomural of a sacred cave. Members of the Acjachemen Nation continue to use locally occurring plants for traditional food, fiber, medicine and ceremony. Some of these plants can be seen in the park. The harvesting of elderberry, prickly pear

cactus fruit and lemonade berry for food, and yucca and milkweed for cordage and nets are examples of coastal sage scrub plants important to their people.

A freestanding boulder features a replicated bedrock mortar. Here visitors are invited to try their skill grinding corn and think about grinding and preparing acorns for a meal. A flipbook photo album comprised of phenolic resin “pages” helps visitors recognize key plant and animal species of the coastal sage scrub.

Spaniards, Mexicans and other early Californians have used this land for cattle and sheep ranching. Two centuries of grazing have left their mark. The land grants of Spain and Mexico gave way to ranches, to walnut groves and eventually to housing tracts. Gazing out the portal we see the beginnings of our efforts to return the land to the way it was before these intrusions.

Artistic Perspective:

The sculpted walnut bowl is by Keith Klafs. The egg shape represents the earth and the California gnatcatcher, cactus wren, and spadefoot toad connect the viewer to the diverse species inhabiting the area. Tactile in its design, it reminds us that animals do not live in isolation and that diversity of species are important for the survival of all.

Portal Four: Stories in Stone (exhibits are not complete as of 1/09)

Text for Geology Map Table

Scientific Perspectives:

This portal’s windows frame part of the Sespe Formation, Quail Peak rises over 800 feet in the distance, its midpoint bisected by an ancient volcanic dike. As in ancient times, Laguna Coast remains a geologically dynamic landscape. Uplifting, folding, and weathering continue to shape the region and influence the occurrence of certain plants and animals. This, together with numerous fault lines, indicates this region is seismically active.

The sandstone outcroppings replicas throughout all of the portals display these rock formations as a classic mark on this landscape and the source of much of the sand at Laguna Beach. A large number of unique native plant species cluster around these rock outcroppings, including coastal prickly pear and cholla cacti, as well as needlegrass, and species of special concern such as the endangered Laguna Beach *Dudleya* and intermediate mariposa lily.

Cultural Perspectives:

The photography of the sandstone caves connects us to studies at Upper Newport Bay. Early human occupation of the region began somewhere between 13,000 B.C. and 6,000 B.C., or even earlier. Native people used the Park's sandstone caves as living sites during the winter season. The county's inland valleys and foothills were used for wild seed harvesting and hunting; its coastal plains and shorelines were used for shellfish gathering and fishing. Some accounts, based primarily on linguistics, suggest that by 500 – 1500 A.D. the Tongva and Acjachemen entered Los Angeles, Orange and parts of Riverside and San Bernardino Counties from the southern Great Basin. Other accounts indicate the Acjachemen have been here significantly longer. The Acjachemen territory extended throughout Orange County. Extensive trading among tribes, including the Tongva, Chumash, and Luiseno, took place. Trade was based on craft specialization, with surplus raw goods of one tribe traded for those that were scarce in other areas.

The traditions of the Acjachemen are celebrated by the display of animal carvings and other items of maritime material culture. These items were commissioned specifically for the Nix Nature Center. The interpretive text speaks to dependence of these people on the geologic features of the land, including the caves and availability of steatite.

Artistic Perspectives:

Intricately crafted artifacts made by descendants of the Acjachemen; projectile points, a pelican steatite effigy and fishbone hooks are reminiscent of a period of time, which ended in the 18th century with the arrival of the Spaniards and establishment of the missions. Domingo Belardes crafted these artifacts.

Portal Five: Onward - The Vision to Save the Land

A semi-transparent window graphic captures a pivotal point in the park's history—the making of The Tell, a photograph art installment in opposition of the development of Laguna Canyon and the Toll Road and the gathering for The Walk, a peaceful event where an estimated 8-10 thousand individuals demonstrated their concern. Located at the Center's exit point, this graphic also sets the tone for the visitor's experience outdoors, challenging them to think about their own relationship with this land. The culminating message is the question posed to the exiting visitor,

What relationship will you forge with this land?

Laguna Greenbelt, Inc. hosts Wildlife Corridor tour for advocates and government officials

On Wednesday, June 12, 2024 the Laguna Greenbelt hosted a tour of a key portion of the Irvine-Laguna Wildlife Corridor in Irvine, near the intersection of Astor and Lynx. Led by John Leonard, FivePoint, VP of Engineering, attendees included representatives from the U.S. Fish and Wildlife Service, the California Department of Fish and Wildlife, the Orange County Department of Public Works, the City of Irvine, Congresswoman Katie Porter's office, FivePoint (developer of the Irvine Great Park), and the environment groups Power in Nature and Laguna Greenbelt. The purpose of the tour was to highlight the current progress of the Corridor while addressing key remaining obstacles, particularly overcoming the blockage created by the I-5 freeway.

The Irvine-Laguna Wildlife Corridor is a dedicated wildlife pathway being constructed to reduce habitat fragmentation in the southern Orange County region. When completed, the Corridor will provide a six-mile route for wildlife to travel between the Cleveland National Forest and the 22,000-acre Laguna Coast Wilderness. This 600-800-foot-wide, two-and-one-half mile long segment is being developed by FivePoint in conjunction with the City of Irvine as part of the creation of the Irvine Great Park.

As the tour began, Irvine Mayor Farah Khan shared her thoughts. "This Corridor was so critical in establishing a route for our natural habitat. I want to thank FivePoint for their forethinking and working with the city in such a unique way to make sure we were able to build the Irvine-Laguna Wildlife Corridor as we were building out the Great Park neighborhoods."

Melanie Schlotterbeck, head of the Southland Region for the Power in Nature coalition summed up why the 120 environment groups within their organization support the Corridor: "We need connectivity value between landscapes so that deer, coyote, foxes, and bobcats have access to other landscapes to reproduce so they are not dating their cousins."

During the short hike, attendees noted the care taken to utilize native vegetation and to create wildlife-friendly surroundings while also serving as a flood water control project. Attendees discussed the importance of ensuring wildlife mobility over the I-5 freeway and highlighted its importance to the function of the Corridor. This critical portion requires additional solutions to ensure the Corridor functions fully from the Pacific Ocean to the Cleveland National Forest. Additionally, the group discussed the possibility of building an interpretive and viewing center adjacent to the Corridor to establish a permanent fixture to educate the public on the Irvine-Laguna Wildlife Corridor and its importance to Orange County wildlife.

Speaking for the Laguna Greenbelt President Norm Grossman said, "I would like to offer a special thanks to John Leonard for his incredible work in heading the development of this segment and the rest of the FivePoint team for their decade-long support of the project. We thank all those who attended and hope to see them soon, when we can celebrate the completion of the Corridor."

For more information about Laguna Greenbelt, go to <https://lagunagreenbelt.org/>



Laguna Canyon Foundation Trail Maintenance Nears Completion

BY CLARA BEARD | LB INDY
 Laguna Canyon Foundation's 2023/2024 trail season, which began in October, will wrap up on June 29. Over the past nine months, LCF held 39 volunteer trail stewardship days that resulted in noticeable trail improvements in Laguna Coast Wilderness Park and Aliso & Wood Canyons Wilderness Park. In total, staff and volunteers improved 3,470 linear feet of trail tread, brushed 15,480 linear feet of trail, and installed or improved 258 drains to better control the impact of water on the trail during the rainy season. These improvements create a better user experience for all trail users while also ensuring that critical trail-adjacent habitat is protected. A project that many mountain bikers and hikers have been excited about is the recent improvements to Cholla Trail in Aliso & Wood Canyons Wilderness

Park. Thanks to funding by an anonymous private donor, Cholla Trail has been significantly improved over the last six months. LCF staff and volunteers smoothed out the rough tread and narrowed the trail, which in some places had eroded the surrounding landscape and become as wide as a road.

The improvements to Cholla Trail are one example of the trail work Laguna Canyon Foundation does around the parks every day to maintain Laguna Beach's world-class trail system while protecting the surrounding wilderness. To get involved and help improve trails and better protect wildlife habitat, visit lagunacanyon.org/events. Upcoming trail volunteer days will be held tomorrow, June 22 and June 29.

Laguna Canyon Foundation is dedicated to preserving, protecting, enhancing, and promoting the 22,000-acre South Coast Wilderness.



Laguna Canyon Foundation staff and volunteers take a break from their work on Laguna Coast Wilderness Park and Aliso & Wood Canyons Wilderness Park trails. Photo courtesy of LCF