San Dieguito Lagoon Center

San Dieguito River Park Joint Powers Authority
CONCEPTUAL DESIGN STUDY, FEBRUARY 9, 2010

Roesling Nakamura Terada Architects • Spurlock Poirier Landscape Architects • Acorn Group
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CONCEPTUAL DESIGN STUDY. FEBRUARY 9, 2010
In September 2000 a Park Master Plan was adopted for the coastal area of the San Dieguito River Valley Regional Open Space Park by the San Dieguito River Park Joint Powers Authority (JPA). Within the master plan, a determination was made to provide a new interpretive center to help support the goals that were developed through the Plan’s process.

The central goal and purpose of the plan was to provide the structure and guidelines that will lead to the restoration of the coastal area of the San Dieguito River Valley into a well-functioning ecological unit comprising a healthy estuary and associated uplands that support diverse and abundant plant and wildlife species, and in addition to provide for public access and interpretive experiences associated with a interpretive center that could lead to greater public understanding of the value of our coastal wetlands.

The selected interpretive center’s site is a 33 acre site near the southwest corner of Via de la Valle and San Andres Drive.

The proposed center is designed to support the goals outlined in both the Park’s Coastal Master Plan and central themes provided through an outreach process. These goals include:

- Create an attractive interface for the public in this highly visible focus area of the San Dieguito River Park, which also serves as the entrance to the cities of San Diego and Del Mar from the north and to Solana Beach when traveling from the south.
- Retain and improve the scenic vistas in the project area, in particular the panoramic open space views.
- Improve the transition between habitat areas and adjacent developed uses.
- Provide “hands-on” interactive experiences featuring the Lagoon restoration and the biodiversity of the entire River Valley.
- Provide amenities for bicyclists, hikers, and other activities associated with the Coast to Crest Trail.

Regional Meaning

The San Dieguito Lagoon’s regional location serves as a significant feature of the San Dieguito River Park and the River Valley corridor, as described further on page 1.1. In addition, traveling north or south along the coast, one will encounter a series of protected natural tidal open spaces that have become a unique feature of San Diego County’s coastal experience.

These Lagoon open spaces serve to define edges of communities and have helped to retain a strong natural marine presence along the region’s coastal transit corridors.

The adjacent map shows the relationship of the San Dieguito Lagoon to the series of lagoons along the coast.
The San Dieguito River Park

The San Dieguito River Park extends along a 55-mile corridor that begins at the mouth of the San Dieguito River in Del Mar, and ends at the river’s source at Volcan Mountain. The Park encompasses the San Dieguito River Valley and its major tributary canyons, as well as Lake Hodges, San Pasqual Valley, Boden Canyon and Pamo Valley, Lake Sutherland, the Santa Ysabel Creek drainage, Volcan Mountain and portions of the high desert in San Felipe Valley. With the expansion of the FPA boundaries in 1993 to include the entire Rutherford Ranch, the San Dieguito River Park now proposes a greenway and open space park system that will link the Anza Borrego State Park to the Pacific Ocean.

The corridor provides a cross section of San Diego County’s biodiversity and contains a rich cultural history. It links multiple communities and provides a diverse and extensive list of educational and recreational opportunities.

The new lagoon center and site provides a western gateway into the River Park and is a place to provide interpretation for both the coastal area and the River Park corridor.
Project Background

1.2

Lagoon Restoration Plan

The coastal area extends from the mouth of the San Dieguito Lagoon at the Pacific Ocean eastward to El Camino Real, and from Via de la Valle south to the bluffs along the north side of the Carmel Valley planning area. A master plan for the coastal area of the San Dieguito River Valley was adopted in September 2000 to provide a framework for implementing significant community goals for the restoration of the San Dieguito lagoon ecosystem, both tidal and non-tidal, and for the provision of public access trails and amenities for public enjoyment and nature study.

The San Dieguito Lagoon Center will support the Plan’s vision and program for the area’s restoration as a healthy, functioning ecosystem that provides habitat for a diverse and abundant wildlife population while also providing appropriate public access.
Arrival Experience

Most visitors coming to the site will arrive via a vehicle that travels through a series of driving experiences. These experiences range from a busy freeway (1) to busy intersection and shopping center traffic (2) to San Andres and the site entry. However, the initial project experience may be from the freeway where the lagoon open space becomes the dominant regional feature and the site and building will be visible from Interstate 5 as you drive north (10).

Site Visual Analysis
Design Outreach

A primary design goal for the new Lagoon Center was to develop a meaningful, functional project that supported the unique needs of the Joint Powers Authority, the community, stakeholders, and visitors. To accomplish this members of the JPA and its design team of Roesling Nakamura Terada Architects, Spurlock Poirier Landscape Architects and Acorn Naturalist developed a series of outreach design workshops. The meetings brought together various stakeholder groups to gather information and to develop the Center’s design requirements as well as understand the River Valley and Lagoon’s regional uniqueness.

The outreach process was developed around three-stages. The first stage was a series of “listening” meetings held in June 2009. The design team met individually with each group to understand key issues and gather design input. In addition to meeting with the River Park staff, the team met with the following stakeholder groups:

- San Dieguito Lagoon Committee
- San Dieguito River Valley Conservancy
- Friends of the San Dieguito River Valley
- San Dieguito Lagoon Center Design Advisory Committee
- San Dieguito River Park Project Review Committee

Stage two was a three-day design workshop that was held at the site on July 17th, 18th and 19th, 2009. Members of the design team set up a design studio at the construction trailer site where they interacted with community members, stakeholders and the general public to help shape the design of the new center. The result was a 1”=100’ conceptual site plan, floor plans and a study model that set the initial design direction for the project. The schematic design, developed from the model and site plan, is presented within this submittal.

After further development of the design from the design workshop, a third, and final stage included the creation of an internet web-log (blog) where design updates could be posted to solicit additional public comments. The blog contained a project narrative, plans, elevations, sections and perspective renderings. The blog provided invaluable input and helped to shape the conceptual design that is presented within this document.

Based upon the outreach meetings, workshop and blog, a list of common design comments began to emerge. Shared goals and comments for the Center included the following:

- Utilize the entire site for interpretive experiences.
- Center as a place for learning / community resource.
- Building should blend in with site.
- Minimal obstruction to views / low to ground. (work with topography)
- Easy access to trails.
- Example of energy efficient design.
- Maximize daylighting of interior spaces.
- Maximize views to sky / birds.
- Provide viewing platforms.
- Decompress you from the busy street.
- Building as a buffer / portal.
- Spaces that can expand to the outside.
- Allows for phasing and future growth.
- Place for scientist, artist, students.
- Integrate research.
- Provide ongoing projects by community to invite return visits.

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**Diagram 1.4.1 - Design Outreach Process**

**Project Background 1.4**

San Dieguito Lagoon Center
San Dieguito River Park Joint Powers Authority
Diagram 2.0.1 - Climate
The site location and its east-west orientation provide an ideal setting to maximize passive solar design strategies to heat and cool the building. The site also allows the project to utilize prevailing cooler coastal breezes.

Diagram 2.0.2 - Physical Constraints
While the project site is ample in size, it has several significant physical constraints that the site and building design must conform to. A key constraint is a narrow “pinch” point that links the east and west end of the site. Combined with a 100’ “no construction” setback from the Lagoon, this point creates a highly constrained development condition. Along the northern edge of the site are power and storm water easements. In addition, western views along the west property line of the site are visually impacted from the back facades of the existing commercial buildings.
Diagram 2.1.1 - Auto Circulation

Via de la Valle serves as a main adjacent traffic corridor that provides access to two busy retail centers and to Interstate 5. From Via de la Valle, the site is accessed at the west end from San Andres Drive. West of San Andres are six busy lanes of traffic while east of this intersection traffic is reduced down to two lanes. Entry onto the site is via a decomposed granite road. An existing dirt road runs along the northern edge of the site for maintenance purposes.

Diagram 2.1.2 - Noise

The primary source of noise onto the site is traffic noise coming from Interstate 5. At the lower west end of the site, traffic noise is minimized yet increases as you walk eastward, where the elevation is higher and views are better. Three ways to mitigate external traffic noise include construction of earthen berms, provision of experiences at the lower elevation near the Lagoon's edge, and use of construction materials and design that minimize noise impacts.
Part II. Conceptual Design

The design supports the concept of utilizing the entire site for interpretation. Learning extends beyond the building and begins upon entering the site at the entry gate.

Through design, a series of interactive experiences are developed to enhance the understanding of the site. The Site Design narrative describes this in more detail.

Key features of the project include:

- Project promotes the scientific and cultural understanding of the Lagoon and River Valley experience.
- Regenerative planting of the site is part of the message.
- Demonstrate upland and wetland associations on site.
- Provide for citizen science on site: Provide exhibits that are developed by visitors and school groups.
- Emphasis on ecological science: regenerative ecology.
- Culture and history directly related through interaction and manipulation of ecology by Indians and later development.

Project supports a variety of recreational activities that are in concert with the lagoon habitat.

- Trails: hiking, equestrian use, jogging, strolling, natural gardens
- Trail hierarchy that separates equestrian, bike, and pedestrian trails.

- Gathering spaces: community and group events.
- Passive open space: relaxation, picnicking.
- Bird watching and wildlife viewing.

Project provides a poetic understanding of the unique and diverse lagoon and river valley to the east.

- The site is an important portal to the River Valley.
- Crossing point of historic north-south coastal travel and exploration; significant resting spot for migratory birds along the Pacific Flyway.
- Now the gateway from the primary north-south transportation corridor (freeway/transit/rail) into the County’s most intact river system and the Coast to Crest Trail.

Entire site is engaged as interpretive and contemplative experience that is always changing related to seasons and passage of time.

- Allow people to engage the environment and site directly and minimize indoor experience/interpretation.
- Use overlooks, viewpoints, and the natural phenomena of the site to enrich experiences visually, viscerally, tactically, auditorily, and even aromatically. For example point out the mountains to the east from an overlook to talk about the scope of the river valley and its ecology.

Level of development in this plan makes an effort to balance desire for specific program opportunities and uses with commitment to experience of nature and open space.

- Continue to refine program components that should be on the site, but examine possible program for compatibility and suitability through this process.
- Minimizes indoor program and maximizes outdoor program.
- Places significant program below the view shed from the Trail.
- Uses building pieces to frame outdoor space.
- Places service and maintenance program at west edge of site.
- Maximize open space by using existing service road to connect east and west ends.

Lagoon Center Floor Area

The Lagoon Center floor area was developed working with the SDRP staff and stakeholder groups to determine program needs. The Floor Area table on this page provides the final design program for the Lagoon Center and Maintenance Building.

<table>
<thead>
<tr>
<th>BUILDING</th>
<th>AREA (In Square Feet)</th>
<th>Subtotal</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. LAGOON CENTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUBLIC SPACE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entry/ Reception</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Exhibit Area / AV</td>
<td>1,100</td>
<td></td>
</tr>
<tr>
<td>Exhibit Storage</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>Multi-Purpose Space</td>
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<td></td>
</tr>
<tr>
<td>Research Lab</td>
<td>608</td>
<td></td>
</tr>
<tr>
<td>Teaching Lab</td>
<td>570</td>
<td></td>
</tr>
<tr>
<td>Public Restrooms</td>
<td>351</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>308</td>
<td>4,651</td>
</tr>
<tr>
<td>ADMIN SPACE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin Offices</td>
<td>432</td>
<td></td>
</tr>
<tr>
<td>Ranger Office</td>
<td>144</td>
<td></td>
</tr>
<tr>
<td>Conference Room/ Library</td>
<td>336</td>
<td></td>
</tr>
<tr>
<td>Storage</td>
<td>100</td>
<td>1,012</td>
</tr>
<tr>
<td>Lagoon Center Net Area</td>
<td>5,665</td>
<td></td>
</tr>
<tr>
<td>Lagoon Center Gross Area</td>
<td>6,000</td>
<td></td>
</tr>
</tbody>
</table>

II. MAINTENANCE BLDG.

| Maintenance Area | 1,035 |
| Rangers Office   | 432   |
| Storage / Mech.  | 60    |
| Maintenance Bldg. Net | 1,527 |
| Maintenance Bldg. Gross | 1,608 |

Planning Concepts 3.0
Site Design

The project site plan was developed to suggest an alignment of the Coast to Crest trail in order to link special places on the site. The site plan orchestrates arrival from the busy corner at San Andres to a new onsite parking area that is designed to minimize impacts to natural habitats and to separate vehicles from pedestrian activity.

This parking area also includes the ranger’s station and garage. A loose grove of native trees in the parking and service areas provides shade for vehicles, screening and buffering of the busy commercial corridor just to the north and west of the site, and provides a transitional space as visitors make their way to the open views of the site.

Once the visitor has parked their vehicle and entered the site, the plan provides a series of outdoor pedestrian spaces that are designed to “de-compress” the visitor from the busy urban environment of the Interstate 5 and Via de la Valle to a more serene experience. This is accomplished by providing a sequence of landscape experiences that lead to the Visitor Center building site.

The visitor decompresses further by hiking out to more remote and quiet outlooks on site that provide various learning experiences. Various conditions at these outlook locations make a variety of intimate and overview experiences of the lagoon and river valley. Some will be supported with shade structures, seating areas and scopes for distant viewing.

Landforms

One of the challenges of the site is the predominance of the automobile and the associated noise from Via de la Valle and Interstate 5. The site plan incorporates substantial berms along the central and north portion of the site that function to block auto noise, visually screen the center and also articulate and reinforce the physical connection between the land formations to the north of Via de la Valle and those one site.

The bermed landforms are poetic extensions of the topography north of Via de la Valle, restoring topography along with, habitat and plant communities that reinforce the story about the interaction of humans with the River Valley in the restoration. See Diagram 3.1.1 to the right.

- These new landforms near the lagoon center shield the contemplative spaces from traffic noise and activity.
- Take advantage of Via de la Valle edge for auto circulation. The plan will utilize a planned SDG&E easement for fire access, horse trailer, maintenance, service and ranger circulation to east as well as part of parking circulation within parking area.
- Works with potential widening of Via De La Valle with minimal disturbance to program
- Cluster parking to north and west.
- Locate horse trailer parking and trailhead to east.

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Diagram 3.1.1 - Visitor Sequence and Landforms
Visitor Entry Sequence
1. Vehicle Entry Zone
2. Maintenance Area / Vehicle Parking
3. Pedestrian Gathering Area
4. Decompression Zone / Lagoon Center
5. Interpretive Landscape, Trail & View Points
6. Bermed Landforms (Typ.)

Planning Concepts

No Scale

3.1
A central design concept is to utilize the entire site to support the learning experience of the Lagoon. Interpretive exhibits, view platforms, special features and art elements are strategically dispersed along pedestrian circulation paths to encourage pedestrian exploration of the site and its various unique experiences.

Figure 3.2.1 - Maximizing the Site Experience

Circulation of vehicles and pedestrians was carefully planned to minimize circulation conflicts between the two as well as to support the pedestrian site learning experience goals. Parking is limited to the west end near the active maintenance area. This allows the majority of the site to be dedicated for pedestrian, biking and horse-riding activities. When the equestrian staging area is constructed at the east end of the site, an "exit only" driveway will be needed that allows vehicles to exit onto Via de la Valle.

Figure 3.2.2 - Circulation
Lagoon Center

The new Lagoon Center will be sited on the hillside, tucked into the existing slope, to shield noise from Via de la Valle and focus views towards the lagoon and the larger habitat context. The Center provides orientation, frames views, and becomes a portal to the rest of the site. Elements of the design include:

- The pedestrian trail engages major site features including the Lagoon Center by connecting it at an upper level and lower level.
- The indoor exhibit space is placed below the upper trail, so that the main visible experience from the upper trail is the view deck and views to the lagoon and valley.
- The Lagoon Center includes a central open-space courtyard that links the staff / ranger offices with the multi-purpose space.
- A Marine Wildlife Conservation Research lab is provided to support scientific research and provides a large roll-up door to promote visibility of science activities.
- The center will utilize passive solar design strategies, such as using a solar chimney to cool the interior during warm months and maximizing natural daylight and ventilation.
- The center will also utilize solar photovoltaic panels to balance the facilities energy needs.
- The center and interpretive site features will be ADA accessible.

By tucking and lowering the majority of the center into the site, the view corridors obstructions from Via de la Valle to the lagoon are minimized. This design strategy also minimizes traffic noise impacts and supports earth sheltering strategies to "super insulate" the facility for energy conservation. Additional structures include solitary view decks toward the east and a ranger maintenance building that is located at the northwest corner of the site.

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As described earlier, the new Lagoon Center will be sited on the hillside, tucked into the existing slope, to shield noise from Via de la Valle and focus views towards the lagoon and the larger habitat context. The section through the office wing shows the minimal presence of this portion of the building and the interior views that focus onto the lagoon.

Section A

Section B

The section drawings illustrate key features of the building including:

- Partial Earth Sheltering
- Operable Skylights
- Orchestrated Views to the Lagoon and Surrounding Landscape
- Maximise the Use of Natural Daylight
- Sun and shade control though the use of shade panels
Section C

The section illustrates the central open-space courtyard that links the staff / ranger offices with the multi-purpose space. The Marine Wildlife science research lab is also accessed from the courtyard to promote visibility of science activities when desired. The section drawing illustrates upper level view deck with the solar paneled shade structure above.

Section D

The section through the multi-purpose space shows how the central meeting space has extensive views to the lagoon and is also partially earth sheltered. The spaces that are deeper into the building utilize operable skylights that provide additional daylight and help to induce natural ventilation.
The north elevation drawings show how the Lagoon Center is tucked down into the landscape, minimizing the visual presence of the new center from Via de la Valle.

From this corridor views to the lagoon are enhanced from the new landscape berms that create a more naturalized landscape character to the site.

The Lagoon Center’s solar chimney will become one of few visible elements seen from Via de la Valle and provides a landmark feature for the center.

The south elevation below illustrates the design character of the center as seen from the lagoon. Emphasis is made on capturing views from the interior and exterior spaces of the center.

North Elevation (From Via de la Valle)

South Elevation (From Lagoon)
5.5.1 Birds Eye View Looking Southeast

This view of the model of the center further illustrates the concept for tucking the center into the site and creating the landscape berms at the Coast to Crest Trail. Architectural elements such as skylights, the solar chimney, the elevator and view-pier shade structure becomes one of the few building elements that are visible from this trail.

5.5.2 Birds Eye View Looking Southwest

This model view looking to the southwest shows the secondary access options to the Coast to Crest Trail from both the courtyard stair corridor trench and the pathway from the upper view deck.
A. Focused View Outlook Structure

B. Panoramic Outlook Structure

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### Design Character / Materials List

1. Earth Sheltered Roof
2. Concrete Base, Glass & Steel Framing
3. Simple Building Forms & Materials
4. Photo Voltaic (PV) Solar Panels
5. Doors that Open to the Outside
6. Board-Formed Concrete Walls
7. Thermal Mass / Masonry Stone Walls
8. Steel Shade Structure with PV Panels
9. Resin Decomposed Granite
10. Porous Paving
11. Wood Decking
12. Decomposed Granite Walking Surfaces

Additional Sustainable Features:
- Maximize use of Natural Ventilation
- Natural Daylighting
- Radiant Heat Flooring
- Occupancy Sensors
- Recycled / Green Building Materials

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San Dieguito Lagoon Center
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Part III. Interpretive Design

Because this building serves multiple purposes as a gateway, a focal point for ecological monitoring, an educational institution, and a gathering place for non-formal recreational and interpretive experiences, we recommend calling it the “lagoon center” rather than labeling it a “nature center,” “interpretive center,” or “visitor center.” While it shares common elements with all three facilities, its role within the community is more diversified than these labels imply.

**Rationale for Interpretation**

Interpretation is a form of communication that strives to provoke, relate, and reveal. It moves beyond factual information to reveal new insights into what makes the San Dieguito River Park, and the San Dieguito Lagoon specifically, so remarkable. In order to be effective, interpretation demands triangulation on three spheres of influence: the visitor’s personal (social) context, the physical site and features, and the educational mission of the institution.

We recognize that visitors have choices - they can interact with interpretive media or not, and whatever is absorbed is filtered through a personal context, influenced by the physical site and the visitor’s social context, and embedded within an educational/interpretive mission. Throughout the interpretive planning process, these three spheres are kept in focus. The ultimate aim is to effectively attend to visitor needs and interests while addressing the resource considerations and needs of management. This is accomplished by creating experiences that reveal new insights, provoke new thought, and inspire stewardship on the part of the individual.

The purpose of interpretive planning is to identify strategies to create the optimal visitor experience in order to cultivate an informed public. While it takes into account all other plans—resource management plans, trail master plans, and architectural plan packages—and considers the site, the architecture, and the resources in their entirety, the focus remains on the visitor. Specifically, it aims to accomplish the following:

- Help people connect with the resource
- Accomplish the mission of the San Dieguito River Park JPA
- Inspire and enlighten in order to open minds and promote stewardship

Effective interpretation enables the audience to feel an immediate connection to the lagoon and river park. It strives to inform, entertain, and enlighten. It strives to be meaningful and personal; it becomes linked to something the visitor already understands and to something the visitor already cares about. At the same time, it is organized, enabling the visitor to follow the material easily and build upon it intellectually. Last, it links tangible objects, such as tides and terns, with intangible meanings, such as our natural heritage and stewardship, in order to create emotional and intellectual connections.

**Preliminary Goals for Visitors**

Goals are statements of desired outcomes that guide programs and management or operations functions. They articulate what interpretation is meant to do for the San Dieguito Lagoon, San Dieguito River Park, its visitors, and its management. They guide the formation of interpretive media and services during the planning process and permit accurate and meaningful evaluation of interpretive programming before, during, and after development.

Educational directives related to the lagoon and river park focus on the need to impart knowledge and cultivate an appreciative audience which embraces a personal sense of stewardship. To do this, interpretation must address both the cognitive and affective realms—the logical as well as the emotional aspects of the mind. People will not make behavioral changes if they only understand an issue; they must also feel that the topic has some relevance to their lives and that a behavioral change will bring one or more valued benefits. Every interpretive experience should be designed, therefore, to have an emotional or affective component as well as an intellectual or cognitive component, leading ultimately to a desired behavioral change.

The following goals ensure that interpretation is aimed at helping visitors feel connected to the rich human and natural heritage of the lagoon, its role within the greater river park, its resilience and fragility, and the role individuals, organizations, and agencies have played to protect and restore it. Ultimately, a set of specific and measurable objectives that correspond to each goal statement will need to be established.

**Emotional Goals**

- Appreciate the natural heritage of the San Dieguito Lagoon.
- Value the efforts of the San Dieguito River Park to acquire and protect open space parcels along the river corridor.
- Appreciate the cultural heritage of the San Dieguito Lagoon.
- Appreciate efforts to restore and protect the San Dieguito Lagoon.
- Appreciate the cultural heritage of the San Dieguito Lagoon.
- Understand an issue; they must also feel that the topic has some relevance to their lives and that a behavioral change will bring one or more valued benefits.
- Inspire and enlighten in order to open minds and promote stewardship.

**Interpretive Plan Prospectus 9.0**

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Cognitive Goals

- Explain how climate change can affect the ocean and lagoons.
- Describe ways in which individuals can make a difference in improving their community and the environment.
- Describe how the lagoon was used historically by American Indians.
- Describe former uses of the lagoon in the 20th century.
- Explain in basic terms the factors that create lagoon conditions.
- Describe two different ecological communities that are part of the lagoon ecosystem.
- Explain how a lagoon benefits people.
- Describe the difference between (implications of) conservation versus restoration.
- Describe what factors led to degradation of the lagoon in the 20th century.
- Identify the eastern and western boundaries of the San Dieguito River Park.
- Explain how, beyond recreational (aesthetic) value, the River Park benefits people.

Behavioral Goals

- Visitors will spend time in the lagoon center viewing the exhibits.
- Visitors will spend time outdoors at the San Dieguito Lagoon.
- Visitors will understand the need to respect the rules and regulations that protect the environment.

Theme and Sub-Themes

The following represents a synthesis of ideas proposed by the committee during the interpretive planning session. It is important to keep in mind the theme and sub-themes will not appear verbatim in print. Rather, these statements establish the overall direction and tone for interpretation at the site. They focus the media and offer a thread that weaves the stories together.

The theme is the principle message or story about the key messages, or topics. It is considered the “big idea” that connects presentation’s facts and concepts into a meaningful whole. Expressed as a complete sentence, the theme is the one “take-home message” you want your visitors to grasp and remember long after the details of the trip were forgotten.

The San Dieguito Lagoon serves as the western gateway to the San Dieguito River Park, a remarkable 55-mile course that stretches from the mountains to the coast.

Subtheme 1

Once viewed as wasteland, the lagoon now is protected and being restored, thanks to the vision and efforts of many key individuals, agencies, and organizations.

Messages:
San Dieguito Lagoon was once the home of San Dieguito Paleo-Indians and more recent American Indians, as well as territory within 19th c. Rancho San Dieguito. It underwent significant transformation in the 1900s as a golf course, WWII naval facility, airport, and site of various developments, inc. racetrack and fairgrounds.
Recent activity has further degraded the lagoon. Constriction of freshwater flows upstream, blockage of tidal flow, habitat fragmentation due to road construction, habitat destruction due to agriculture and suburban development, and pressure of invasive species all have taken a toll.
Recent activity has further degraded the lagoon. Constriction of freshwater flows upstream, blockage of tidal flow, habitat fragmentation due to road construction, habitat destruction due to agriculture and suburban development, and pressure of invasive species all have taken a toll.

Subtheme 2

After years of degradation, the San Dieguito Lagoon once again is becoming a complex ecosystem that benefits wildlife and people.

Messages:
Restoration of the San Dieguito Lagoon, once the largest lagoon in the county, is the result of a SCE mitigation project.
Successful wetlands restoration requires monitoring, maintenance, and vigilance on everyone’s part.
Compared to restoration, conservation is a more prudent, cost-effective way to save habitats. Restoration is an expensive, long-term experiment.
Challenges, including probable effects of global climate change on the lagoon, lie ahead.
People benefit directly and indirectly from the ecosystem services provided by the lagoon. These services include flood control, water purification, “nursery” support for commercially important fisheries, and the provision of wildlife watching and other recreational and educational opportunities.
The lagoon is located along the Pacific Flyway. As such, it offers a waystation for birds migrating annually between the Arctic and Central and South America.

Subtheme 3

Preserving the entire San Dieguito River corridor ensures preservation and protection of sensitive habitats, wildlife, cultural resources, open space, and water quality.

Messages:
The San Dieguito River Park follows the river course from its source east of Volcan Mountain to the San Dieguito Lagoon to the west.
The San Dieguito River Park is comprised of a variety of habitats ranging from salt marsh, tidal lagoon, and mudflat to coastal sage scrub, grasslands, and riparian woodland to oak woodland and southern mixed chaparral.
By protecting habitat, the River Park protects wildlife. This region is rich in diversity and home to rare and threatened plants and animals.
The River Park plays an important role as a natural wildlife corridor that allows animals to move between habitats to access resources (food, nesting space, etc.).
By protecting the region’s watershed—the land and waterways that drain into the San Dieguito River—the River Park protects water quality.
The River Park conserves valuable open space, an increasingly rare commodity in Southern California. People benefit from the natural and cultural resources whose protection is ensured.

Table 9.1.1 Lagoon Center Theme and Sub-Themes
Interpretive media

The media identified in this prospectus are based on preliminary recommendations established in the master plan; ongoing dialogue with the client, the planning team, and key stakeholders; and further recommendations made by the Acorn Group.

Essential signage for San Dieguito Lagoon is identified in the glossary and ranges from identity signage to wayfinding tools and interpretive panels. While each fulfills a specific function, together they ensure a complete, high quality experience for the visitor.

Interpretation at San Dieguito Lagoon takes the form of interpretive exhibits positioned at optimal viewing locations along the trails, boardwalk, and view decks. These include bird (wading birds, shorebirds, raptors, etc.) and plant (riparian wetlands, chaparral, and coastal sage scrub) identification exhibits arranged as exterior-grade “flip books”; exterior interpretive stations; interior exhibits and displays in the building’s exhibit rooms; science lab viewing area; and the interactive lagoon lab.
Exhibit Media Concepts

LEGEND

1. Exterior Tactile Sculpture of the Entire 55-Mile River Corridor
2. Exterior Interpretive Exhibits:
   • Ongoing Lagoon Research
   • Notable Bird Sighting
   • Tide Chart
3. Wetlands Dynamic Interactive Displays
4. Full Color Photomural
5. Sepia Tones History Wall
6. Restoration Panels and Interactives
7. Future of Lagoon
8. River Park
9. Pacific Flyway
10. Curved Reading Rails
11. Student Exhibits

Exhibit Concept Plan
Interpretive panels
San Dieguito’s interpretive panels tell stories related to the lagoon’s natural and cultural history, reflective of the interpretive matrix. These are located adjacent to trails, boardwalks, and viewing platforms where appropriate. Specific content and placement will be determined during the next phase of work.

Species identification
Bird (wading birds, shorebirds, raptors, etc.) and plant (riparian wetlands, chaparral, and coastal sage scrub) identification panels are arranged as exterior-grade “flip books” in the native plant areas.

Exterior Interpretive Stations
Three-dimensional sculptures or tools that perform a scientific/interpretive function are located on or near viewing platforms. Some are kinesthetic and could include “wind arrows” that illustrate the changing direction of wind according to altitude; a fixed spotting scope for bird watching; water level gauge calibrated to ocean tide level; tactile sculpture of the entire 55-mile river corridor; historical site-specific photo essay, and bas relief silhouette sculpture of bird heads and bills that serve as art and species identification.

Interior Exhibits and Displays
Exhibits within the building serve as a portal to an experience found immediately outdoors. Their purpose is to introduce the real objects, places, or ideas that are found outside. Exhibits should pique curiosity, provoke visitors into further study, and help them leave with a new sense of perception and a meaningful relationship with the San Dieguito Lagoon and SDRP.

Specifically, the exhibits reflect the content defined in the interpretive matrix and are clustered according to the sub-themes. Upon arrival, the visitor is greeted by a spectacular photomural that celebrates the San Dieguito Lagoon. Interactive counter top displays along the east wall explore both the natural processes and forces that make wetlands a highly dynamic ecosystem, as well as the ecosystem services wetlands provide. Curved reading rails in front of the south-facing viewing windows display species identification information and spotting scopes.

Visitors can push button-activate sound clips of the calls and songs of lagoon birds they likely will encounter once they step outside. Weight-bearing walls in the exhibit gallery serve as the backdrop for large interpretive panels that celebrate the lagoon’s human history, recovery and restoration, ecological role, and placement within the San Dieguito River Park. Audiovisual equipment in the theater offers a continuous loop of viewing for the casual visitor or the venue for a formal presentation to a small target audience. The theater wall space also serves as the backdrop for changing exhibits, such as photography and art.

Marine Research Science Lab & Viewing Area
The marine research lab provides space to conduct or facilitate marine wildlife research as well as provide public access and interaction with the ongoing research. Adjoining to the lab are panels showcasing current research and monitoring work undertaken at the lagoon, including that of current citizen science projects. Panels may also include daily “notable bird sightings” and current tide charts for visitor reference. The panels reinforce the message that the lagoon is subject to ongoing study and monitoring.

Lagoon Teaching Lab
Comparable to the discovery rooms seen in museums, the Lagoon Teaching Lab offers a classroom lab experience to student groups during the week, gathering spot for “citizen science” volunteers, and “discovery lab” experience for families during the weekend. The discovery boxes are similar to what the National Zoo and other institutions have created with topic-specific collections of specimens, biofacts, viewing equipment (e.g., hand lenses), and activity cards that guide parent-child interactions. Fresh benthic samples, plankton, and other specimens are available for viewing. Rubbing plates, stencils, and rubber stamps are available to create “field guide” sheets for younger naturalists. Resin skull, claw, and beak replicas invite touch without worry of damage to fragile and rare specimens. Docents could staff the lab during the weekend.

Next Steps
Development of an interpretive master plan is highly recommended. Based on this prospectus, the plan should articulate specific strategies necessary to address the identified goals, including the development of interpretive media for the trails, boardwalks, and building, as well as suggested interpretive programming such as guided tours for the public, written materials (inc. brochures), electronic media (inc. website, podcasts, and other technology), and K-12 educational programs.
Part IV. Sustainable Design Strategies & Conceptual Cost Estimate

Diagram 10.1.1 - Natural Ventilation and Solar Shading Concepts

A unique feature of the project will be the use of a solar chimney that is designed to induce natural ventilation air flow through the exhibit building. The top of the solar chimney is heated by the sun via a glass chamber at the top of structure. As hot air rises to the top of the chamber, low cooler air is drawn across the interior space to the lower entry of the chimney. The diagram above illustrates this concept.
**LEED Version 3.0 Checklist**

### Sustainable Sites Possible Points: 26

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**LEED Gold**

The Lagoon Center will serve as an example of sustainable building design for a Southern California coastal site. The project utilizes new technology and passive solar design strategies to create a state-of-the-art energy savings facility that will support the Parks goals of restoration and protection of the Lagoon and River Park corridor. The Center is being proposed as a LEED Gold certified facility utilizing the LEED Version 3.0 checklist.