

*Huntington Beach Wetlands Conservancy &
Wetlands and Wildlife Care Center of Orange County
Interpretive Center*

Interpretive Master Plan

July 2008

Prepared by



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Planning Committee

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Introduction

In 2008 The Acorn Group began development of the interpretive master plan and worked closely with members of both the Huntington Beach Wetlands Conservancy and Wetlands and Wildlife Care Center of Orange County throughout the planning process. The interpretive planning session held in February 2008 helped guide development of content and establish the foundation for the exhibit design work. As an outcome of that session, an interpretive summary was produced, defining the overall interpretive theme, six subthemes, messages, and visitor goals.

Based on the direction established in that document, The Acorn Group prepared the interpretive master plan. This document includes a detailed floor plan, exhibit perspectives, narrative description of the exhibits, and other elements that will help the Conservancy and Care Center move forward into the design development phase.

Members of the Planning Committee

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Purpose of the Interpretive Center

One of the tenets of interpretive planning is that it is purposeful. To this end, interpretation should contribute to the advancement of an institution's mission statement. The mission statement and the vision statement of the Huntington Beach Wetlands Conservancy read as follows:

The mission of the Huntington Beach Wetlands Conservancy is to restore and preserve the few remaining wetlands in Huntington Beach and throughout Orange County.

We create a functioning system of coastal wetlands for future generations of people and wildlife by acquiring, restoring, preserving, and maintaining coastal wetlands of significance in Orange County to:

Connect people with a healthy and functioning ecosystem;

Provide a world class model for coastal wetland conservation;

Offer the appropriate balance of resource protection with public access and education opportunities concerning the importance of coastal wetlands;

Engage the community in protecting these resources in perpetuity.

At the same time, interpretation should also contribute toward the advancement of the mission statement of the Wetlands and Wildlife Care Center which reads:

The mission of the Wetlands and Wildlife Care Center is to educate the public about man's impact on the environment, especially fragile coastal wetlands, and mitigate that impact through care and rehabilitation of native wildlife.

The mandate to broaden visitors' understanding of and appreciation for wetlands environments and species is specifically called out in the guiding documents of both institutions. It was also called out during discussions related to the purpose of the building's exhibits and the target audiences. The exhibits will need to showcase the highly dynamic nature of wetlands, the processes and cycles that sustain the health of wetlands—as well as human—communities, the species that spend all or part of their life cycle there, the human activities that affect the health and functionality of wetlands ecosystems, and the steps humans can and do take to protect and recover habitats and wildlife.

The exhibits will need to be both informative and interpretive in order to arouse curiosity, increase interest, and move visitors to new levels of understanding. At the same time, they will need to inspire visitors and encourage them to apply such understanding to their behaviors and actions at home and elsewhere.



What sets this facility apart from neighboring coastal wetlands is the wildlife rehabilitation aspect. Upper Newport Bay Ecological Reserve, Bolsa Chica Ecological Reserve, Los Cerritos Wetlands, and Golden Shore Wetlands, to name a few, share with the Conservancy similar stories about habitat restoration. It is the cooperative endeavor of restoring wetlands habitat **and** rescuing, rehabilitating, and releasing wildlife that stands out as unique. People who visit will experience something very different from what other local wetlands or wetlands-based facilities offer, particularly if they can view wildlife and, however remotely, real-time animal care procedures taking place at the Wetlands and Wildlife Care Center.

The planning committee envisions the building's primary function as an interpretive center and educational facility. As such, plans call for exhibits that are positioned so that they allow the central space to be open. Small groups in guided tours or other programs will be able to move freely through this space. When large groups use the space, the portable interpretive panels can be sequestered against the back wall to accommodate two columns of tables that conceivably can hold 60 people.

The group identified other uses for the building as well, including public and private meeting space, a place to hold fundraising events, and a launch point for tours of the adjacent facilities and lands, including the wildlife hospital, native plant nursery, and restored wetlands and coastal dunes.

Target Audiences

Target audiences for the interpretive center range from the "ecotourism" crowd and local outdoor enthusiasts to students in kindergarten through college level classes. Other audiences include adults who seek training in wildlife rehabilitation, neighbors, potential donors and supporters, and governmental and nongovernmental groups that need meeting space. The needs of these audiences are compatible within the space, provided the numbers are controlled.

While the proposed exhibits likely will be incorporated into guided tours and other programs, they will remain public displays that casual visitors will visit on their own terms. As such, it may be difficult to tightly control the sequential manner in which they are visited. Further, because of the tremendous range in age level among the various target audiences, displays, and labels will need to be designed for multiple layers and levels of learning. Front-end evaluation is not part of The Acorn Group's scope of work; minimally, the Conservancy is advised to share the conceptual drawings during a public review process and later, solicit comments on draft interpretive text and label copy with representative members of the various target audiences.

- ❖ Elementary and middle school students participating in school field trips and after-school programs
- ❖ High school students seeking opportunities for service-learning and community service projects
- ❖ College students enrolled in coursework related to ecological restoration, conservation biology, and wildlife rehabilitation
- ❖ Outdoor and wildlife enthusiasts, neighbors, and other members of the community
- ❖ Volunteers enrolled in wildlife rehabilitation, ecological restoration, and docent training
- ❖ Attendees of governmental and nongovernmental group meetings at the Center

About the Site

The physical site of the Huntington Beach Wetlands Conservancy and Wetlands and Wildlife Care Center encompasses two acres on a narrow strip of land bordered by Pacific Coast Highway to the west and a massive power generating station to the east. Because first impressions create lasting impressions, it is recommended the committee spend some time examining the parking lot and pedestrian entrance. These features contribute to the general ambiance of the site. More importantly, they shape the visitor's expectations. Ease of wayfinding and degree of feeling welcomed play significantly in shaping a visitor's experience.

As noted, the facility is not well marked at the moment, although plans are in place to add signs and public art. The access point is on Newland Street, although the address suggests it is Pacific Coast Highway. Bronze letters that read "Wetlands and Wildlife Care Center" are mounted at the street corner, and there is a temporary banner along Newland Street. The addition of the new signs and pelican sculptures will help mark the facilities, but additional media may be needed. Other notable features at the site—a wetlands plant nursery, the restored Talbert Marsh, and holding quarters for wildlife—should also be signed.

In addition, the most direct path from the parking lot to the building interior is through a doorway marked as an exit. The official entrance is located on the "side" of the building apart and not visible from the parking lot. If group consensus is to keep the entrance as is, this confusion will need to be mitigated, such as with a clearly marked pathway, signage, and landscaping. At the same time, the two entrances that are parallel to the highway—the exhibit area and the hospital center—need to be clearly distinguished.

Further, the public exhibit area needs a name that unifies the two organizations and clearly states its purpose (e.g., interpretive center). The entrance portal itself offers an excellent backdrop for a sign or set of letters. The wall above the doorway can be seen from Pacific Coast Highway and offers ample space for such media.

The very openness of the room presents another challenge, some of which has been mitigated through exhibit design. Placement of exhibits along a "pathway of discovery" and the development of some "nooks and crannies" will help create a more intricate and intimate visitor experience. At the same time, a balance has been struck between the inclusion of pathways and preservation of the open central space.

Additionally, it would be wise to establish specific, dedicated times and days for public viewing and for educational programs. During the latter, the center could be closed to the public.



Interpretive Foundation

The Acorn Group's planning process is based on the principles of interpretation—a "communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource." At the center, its ultimate purpose is threefold: 1. To help people connect with the wetlands, wildlife, and surrounding environs; 2. Advance the missions of both institutions; and 3. Inspire and enlighten in order to open minds and promote stewardship.

It is important to note that interpretation is not the presentation of facts, but rather the presentation of material that piques curiosity and relates to the audience's experiences. Freeman Tilden, an early champion of interpretation, suggested that the primary interests of visitors to sites of natural beauty and cultural significance are in whatever touches their personalities, experiences, or ideals.

Interpretation has five essential qualities. It is **purposeful**—it serves the visitor as well as the institutions' missions. It reflects goals, as well as specific, measurable objectives in three realms: emotional, cognitive, and behavioral (stated on pages 30-33). It is **enjoyable**—it is entertaining, stimulating, interactive, and multi-sensory. It is **relevant** in ways that are meaningful and personal. The experiences are meaningful when they link to something the audience already knows; they become personal when they link to something the audience already cares about. Interpretation is also **organized**. The media are well planned, sequential, and easy to follow. Last, it is **thematic**. It focuses on a central message about the subject matter that serves to connect facts and concepts together as a unifying whole. A theme organizes the media, allowing the visitor to know where the presentation is going, making it easier to connect it to other information.

Interpretive themes and sub-themes

A theme is the principle message, or story, about the subject matter which serves to connect topics and concepts together as a unifying whole. A theme allows for a linkage of important ideas concerning the topic(s) the committee identified (see Appendix). It is well documented that theme-based interpretation is easier to comprehend and recall at a later point. It serves as an "advance organizer," giving the visitor a sense of where the exhibit media are going and making it easier to connect their content to other information.

Although the central theme may or may not be articulated verbatim in media or programs, it is the conclusion that we hope visitors will reach on their own after experiencing the exhibits and the impression that will linger long after the details of the visit have been

Interpretation is a communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource.

National Association for Interpretation, 2000

forgotten. Subthemes further develop the central theme, allowing for a logical progression into storylines. Typically a well-planned experience conveys three to five subthemes, all of which are subordinate, but directly related, to the central theme.

The matrix on the following two pages shows the relationship between the theme, subthemes, and storyline messages.

Overarching theme

Coastal wetlands and native wildlife are vital and worth caring for.

Subthemes

Healthy, functioning wetlands are influenced by and dependent on natural cycles, processes, and events.

Wetlands serve as critical habitat for many species, some threatened with extinction.

Wetlands offer tangible and intangible benefits to humans.

Human activity, intentional or incidental, can influence the health of wetlands and wildlife in detrimental ways.

Coastal wetlands are under constant threat from development and the consequences of other human activity.

Humans have the capacity and responsibility to protect, conserve, and restore wetlands habitats and to care for and when necessary, rehabilitate native wildlife.

A successfully developed interpretive theme emerges from the delivery of the product and the exploration of the idea or ideas. When used well, a theme provides a focus that encourages audiences to consider resource meanings and understand and appreciate the resources in ways they otherwise might have missed.

Meaningful Interpretation

David Larsen

Coastal wetlands and native wildlife are vital and worth caring for.

Subtheme 1

Healthy, functioning wetlands are influenced by and dependent on natural cycles, processes, and events.

Subtheme 2

Wetlands serve as critical habitat for many species, some threatened with extinction.

Subtheme 3

Wetlands offer tangible and intangible benefits to humans.

Messages:

Wetlands are highly dynamic systems, driven by the ebb and flow of the tides. Twice each day, the tide comes in, bringing water, salt, and nutrients. And twice each day, the tide recedes, leaving some portions of the wetlands exposed to the drying effects of sunlight and wind.

Nutrient flow in wetlands is governed by biogeochemical cycles—oxygen, carbon, nitrogen, and water, to name a few. Other cycles, such as life cycles, ecological succession, and climate, also play a role.

System processes, including photosynthesis, respiration, population dynamics, eutrophication, and decomposition contribute to the Functioning of wetlands.

Seasonal events, such as annual migrations of waterfowl, shorebirds, and songbirds contribute to the remarkable pulse and productivity of life in wetlands.

Messages:

A wetland is transitional land between terrestrial and aquatic systems that is periodically covered with shallow water. Wetlands include tidal mudflats, estuaries, coastal salt marshes, freshwater marshes, and portions of rivers, streams, and ponds.

Many animals spend all or part of their lives in wetlands. Numerous fish and marine invertebrates begin their lives as larvae in coastal salt marshes and estuaries. Migratory birds depend on wetlands as rest stops and refueling stations during their long migrations.

Wetlands are home to more than one-third of the nation's threatened and endangered species. Huntington Beach's coastal wetlands are home to the endangered least tern, light-footed clapper rail, and Belding's savannah sparrow.

Messages:

Wetlands provide humans with "ecosystem goods and services." Tangible goods include wetlands-based foods such as shellfish and fish, other foodstuffs, and even medicine. Ecosystem services transform natural assets, such as salt marsh vegetation, into functions that sustain and fulfill human life. These intangible functions include flood control, filtration of water, erosion control, and support for fisheries and recreation.

Wetlands are critical to commercial fisheries. Two-thirds of all fish consumed worldwide are dependent on coastal wetlands at some stage during their life cycle.

Wetlands serve as critical wildlife habitat and attract many species of migratory waterfowl and other animals humans enjoy watching. Talbert Marsh alone is home to at least 80 species of birds.

Coastal wetlands and native wildlife are vital and worth caring for.

Subtheme 4

Human activity, intentional or incidental, can influence the health of wetlands and wildlife in detrimental ways.

Messages:

Point source pollution takes its toll on wetlands and wildlife. In 1990, 400,000 gallons of crude oil spilled from the *American Trader* oil tanker into the coastal waters of Huntington Beach. The ocean, beaches, and wetlands were affected, as were thousands of oiled seabirds, waterfowl, and fish.

The *American Trader* incident served as a catalyst for local and state action.

Other detrimental effects are indirect, such as upstream nonpoint source pollution, increased water flow from upstream sources, and the introduction of non-native, invasive species. These activities contaminate the environment, change salinity and water levels, and change the composition of wetlands species.

Subtheme 5

Coastal wetlands are under constant threat from development and the consequences of other human activity.

Messages:

Salt marshes, estuaries, and mudflats once dotted the entire coastal region of the state.

In a 200-year span between the 1780s and 1980s, 60 acres of wetlands were lost every hour across the country. In California alone, less than nine percent of the state's historic wetlands remains intact.

Wetlands have been degraded, drained, filled, and converted for agricultural, residential, recreational, and other use.

Tidal blockage—interstates, roads, levees—prevents daily tidal flow so critical to the functioning of healthy wetlands systems. Of the 30 coastal marshes in Southern California, only a few have not been cut off from ocean tides.

Subtheme 6

Humans have the capacity and responsibility to protect, conserve, and restore wetlands habitats and to care for and when necessary, rehabilitate wildlife.

Messages:

Human activity can affect wetlands beneficially. Various organizations such as the Huntington Beach Wetlands Conservancy work to protect, conserve, and monitor wetlands habitat. The Orange Coast River Park will serve as another important regional resource.

Other organizations such as the Wetlands and Wildlife Care Center work to rescue, rehabilitate, and when possible, release injured, ill, orphaned, and oiled animals.

Individuals can become involved in both the Conservancy and Care Center. Volunteer effort and financial support sustain the work of these organizations.

Individual action at home, including reducing runoff, not releasing motor oil, excess pesticides, and other contaminants into gutters and storm drains, and landscaping with non-invasive, drought-tolerant plants such as California natives can reduce our "footprint" on coastal wetlands and waters.

Floor Plan

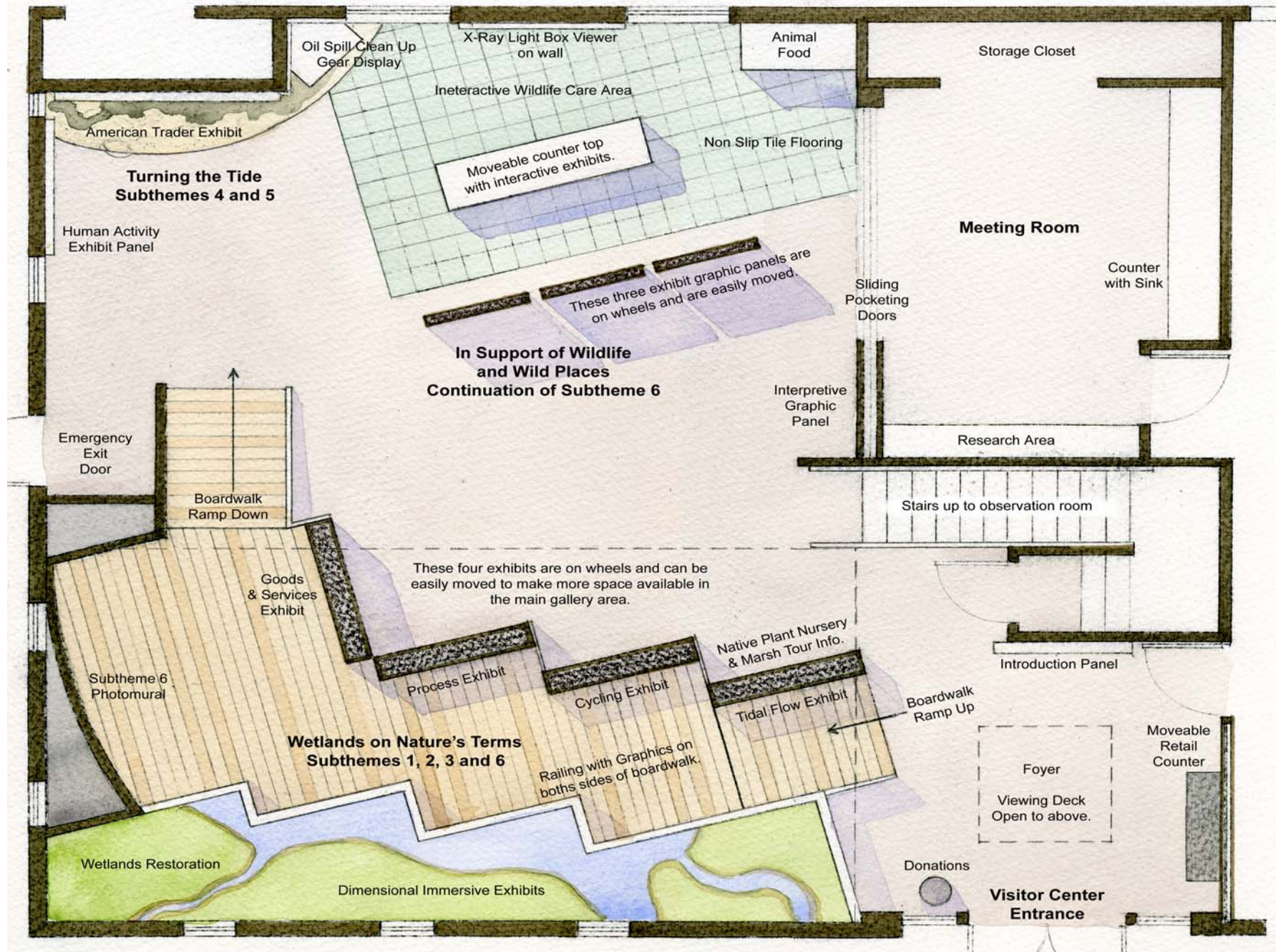


Exhibit Narrative

The visitor enters the foyer of the interpretive center through the double doors parallel to Pacific Coast Highway. There they are greeted by floor to ceiling photographs of coastal wetlands and wetlands wildlife, displayed on the main wall. Raised lettering of an inspiring quote¹ sets the tone for the experience ahead, and serves to merge the missions of the two organizations into a cohesive unifying statement. The taxidermied brown pelicans (remounted in more natural positions) are suspended from the stairwell; a small plaque mounted on the wall explains that all of the displayed specimens succumbed to injury or illness. With the boardwalk immediately in sight, foot traffic is directed into the first section of the “exhibit gallery.” We recommend polishing and waxing the concrete floor and applying scrim to the windows to control sunlight and glare.

Wetlands on nature’s own terms, subthemes 1- 3, and 6

The “exhibit gallery” is divided into three sections. The first section is built on messages relevant to subthemes 1-3. Visitors walk along a meandering path defined by a boardwalk (built directly on top of the concrete floor) to immerse themselves in the dynamic nature of coastal wetlands. Distant, intermittent calls of clapper rails, terns, and osprey and the sound of the surf add realism to the boardwalk experience, as do mounted taxidermied specimens overhead. Set against the wall are subsurface cutaways of the mud substrate exposed at low tide, saltwater-saturated cordgrass at high tide, and a narrow vertical column of water with models of larvae of important fisheries, such as halibut. Photomurals cover the entire wall space; the scrim becomes part of these scenes so the visual flow is not interrupted. An overview panel, mounted directly atop the first photomural, introduces the visitor to coastal wetlands—their pulse and productivity, their role as wildlife habitat, and the seasonal events we celebrate.

Reading rails extend along both sides of the boardwalk. They define the space and display text and simple interactives that engage the visitor, young, young-at-heart, and older. Four large interpretive panels become a portable backdrop to this exhibit. Mounted on locking casters so they can be moved for special events, these panels focus on the dynamics and importance of tidal flow; the cycling of nutrients, water, and living organisms; the processes that govern the system, and the wetlands goods and services we benefit from.

The boardwalk curves along the southwest and west walls. Here, the focus is subtheme 6 as it relates to wetlands restoration. A series of photomurals highlight major phases of restoration, starting with an image of the baseline—a degraded wetlands—and progresses to an image of current restoration work, and concludes with an image of a restored wetlands. The photomural narrative reveals the complexity of issues the Conservancy must address when restoring wetland areas, such as the permitting effort, the need to address problem discharges, the labor intensity of the restoration work, and the ongoing commitment required to ensure long-term restoration success.

An interactive simulation game challenges younger visitors to control various factors that must be considered when restoring wetlands. These factors include: hydrology (tidal flow, stormwater runoff, urban runoff, the balance of salt and fresh water); biology (feral and invasive species, the capacity of plants and microbes to absorb or breakdown contaminants, presence of threatened and endangered species), and chemistry (contaminants introduced with runoff, nutrient loading, total dissolved solids). Comparable to the game “Life,” visitors spin a small wheel and encounter a situation that causes them to advance or retreat on a game board.

¹ “Like winds and sunsets, wild things were taken for granted until progress began to do away with them. Now we face the question whether a still higher ‘standard of living’ is worth its cost in things natural, wild, and free.” [Aldo Leopold] or

“Greater familiarity with marshes on the part of more people could give man a truer and more wholesome view of himself in relation to Nature. In marshes, Life’s undercurrents and unknowns and evolutionary changes are exemplified with a high degree of independence from human dominance as long as the marshes remain in marshy condition. They have their own life-rich genuineness and reflect forces that are much older, much more permanent, and much mightier than man.” [Paul L. Errington, “Of Men and Marshes”]

Exhibit Narrative, Continued

The boardwalk ends near the emergency exit whose door (but not overhead sign) is masked by large floor-mounted interpretive panels.

Turning the tide, subthemes 4-5

The second “exhibit gallery” section highlights the turning point marked by the *American Trader* spill in 1990. Here, messages relevant to subthemes 4 and 5 are conveyed. The flooring in this corner exhibit cluster is treated to resemble beach sand (without the maintenance challenge). The west-facing wall of the electrical room displays a series of panels and a push-button activated monitor that displays film footage from the oil spill and the clean-up efforts (and wildlife rescue) that followed. Appearing to ooze from the footing of the wall are replicated globs of oil, reminding visitors of its permeability. Replicated oil stains several fiberglass-reinforced concrete rocks mounted on the floor as well. Oiled cleanup equipment (pads, boom, boots, etc.) are included to indicate some of the steps taken in response to a spill. Whether we display a preserved, still oiled victim is yet to be determined. Another panel highlights the policy changes that ensued following the *American Trader* spill—establishment of the Office of Spill Prevention and Response in California’s Department of Fish and Game, the role of the Wetlands and Wildlife Care Center in oil spill response and recovery, and the role of the Huntington Beach Wetlands Conservancy in the protection and restoration of coastal wetlands habitat.

A portion of the exterior northeast (power plant side) wall is used to display a series of interpretive panels that focus on the effects of nonpoint source pollution, “development”, and blockage of tidal flow on coastal wetlands.

In support of wildlife and wild places, continuation of subtheme 6

The third “exhibit gallery” section begins at the end of the second section and extends along the northeast wall to the meeting alcove. This area is transformed into a simulated interactive “wildlife care hospital.” Here, the flooring replicates the actual flooring in the WWCC to lend a clinical look. Positioned on a long, portable counter are diagnostic tools that help determine cause of injury or illness. These include a permanently mounted microscope with selection of slides including one with intestinal parasites from patient no. 1, an x ray light box and various x-rays, including those of the broken bone from patient no. 2, and a computer screen that mimics the screen of an ultrasound that projects images from various patients, including those of patient no. 3 that show an obstruction caused by ingestion of plastic. The visitor (targeted for ages 7-14) would read the history file (a modified flipbook) for patients 1-3, explore the medical tools, search for specific data, and through a process of elimination, identify each animal’s medical problem. This exhibit area serves to highlight the challenges involved in diagnostic veterinarian work without moving into the actual field of treatment and rehabilitation, which inadvertently could convey the message that “anyone could work with injured wildlife at home.”

Interpretive panels on the wall reveal how labor- and cost-intensive wildlife rehabilitation work is. The food requirements alone for a great blue heron’s month-long stay would illustrate this point in concrete terms. Attention could also be called to the actual number of wildlife cared for during peak times or the hours involved in the response to an oil spill. Other important information on these panels includes the effects of domoic acid poisoning, plastics, tackle, and other environmental hazards, both natural and human-caused or human-exacerbated. One panel serves as a “hall of fame,” highlighting recent success stories.

A video monitor mounted on the wall allows visitors to view “behind the scenes” activities, including real-time animal care procedures taking place at the WWCC, wildlife housed in the outdoor holding pens, and work taking place at food preparation stations, the native plant nursery, and wetlands restoration construction site.

Three large but still portable panels (mounted on locking casters) physically defines this space, helps control noise, and serves as the backdrop for a series of interpretive panels that focus on 1. The mission and activities of the Huntington Beach Wetlands Conservancy; 2. The role of individuals in sustaining the Conservancy and Care Center, as well as becoming well informed wetlands steward at home; and 3. The significance of the Orange Coast River Park and the Conservancy’s place within it, including interpretive trail access and how it fits within a master plan of county-wide trails and natural areas.

Meeting alcove

The meeting space/reading room is permanently established in the alcove. New walls help enclose this carpeted space (and create more display area for interpretation). Featured within this space are a permanent conference table, chairs, bookshelves, DVD player and digital monitor, and “kitchen” counter space (without refrigerator or microwave). In addition to new walls, an accordion room divider serves to section off this space when small group meetings are held. A ceiling-mounted electric projection screen is positioned in front of this alcove for use during large group gatherings in the exhibit gallery.

Classroom space in the exhibit gallery

When large groups are gathered in the exhibit gallery, the portable interpretive panels and veterinarian counter can be moved toward the northeast wall. Narrow six-foot tables can be set up in two columns facing the meeting alcove’s projection screen.

Retail display

Retail merchandise can be displayed and sold in one of two locations: the foyer or in front of the meeting alcove. For either location, we recommend that sample merchandise be attractively displayed under glass in a moveable display counter with locking casters. Actual inventory (e.g., multiple sizes and colors of tee-shirts) can be stored in a lockable cupboard in the meeting alcove. In addition, a donation collection box is mounted on a pedestal in the foyer, strategically positioned to garner the attention of departing visitors.

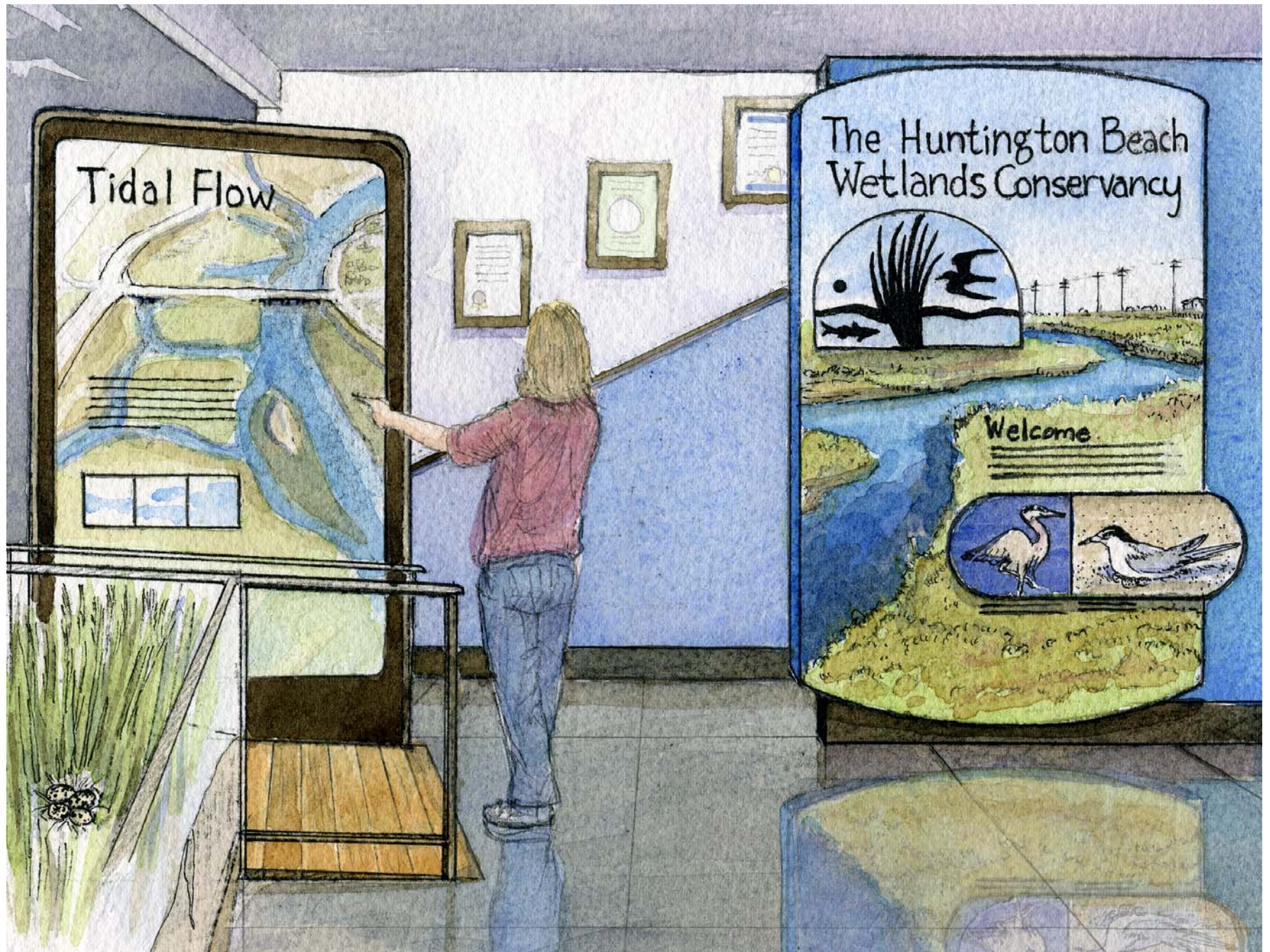
Observation deck

The observation deck affords a near 360 degree view of the coastline. Although the floor space is narrow, the wall space beneath the three windows serves as an effective backdrop for interpretive panels. Since this space is set apart from the main exhibit area, it can serve as a quiet, reflective zone where visitors can think about the center while studying the view from the windows. With narrative text and historical photographs, the panels can create a juxtaposition of the past and present. The oil derricks of 1928, for example, stand in stark contrast to the open beach and palm trees seen across the street. Likewise, the expansive coastal wetlands of the early 20th century are compared to the remnants that remain today.

As visitors complete their experience in the interpretive center, they have viewed nature on its own terms, witnessed the detrimental effects of human activity, and come to understand humans have the capacity—and the responsibility—to protect and restore both habitats and wildlife. A small sign in the foyer invites them to tour the native plant nursery and marsh once they exit the building.

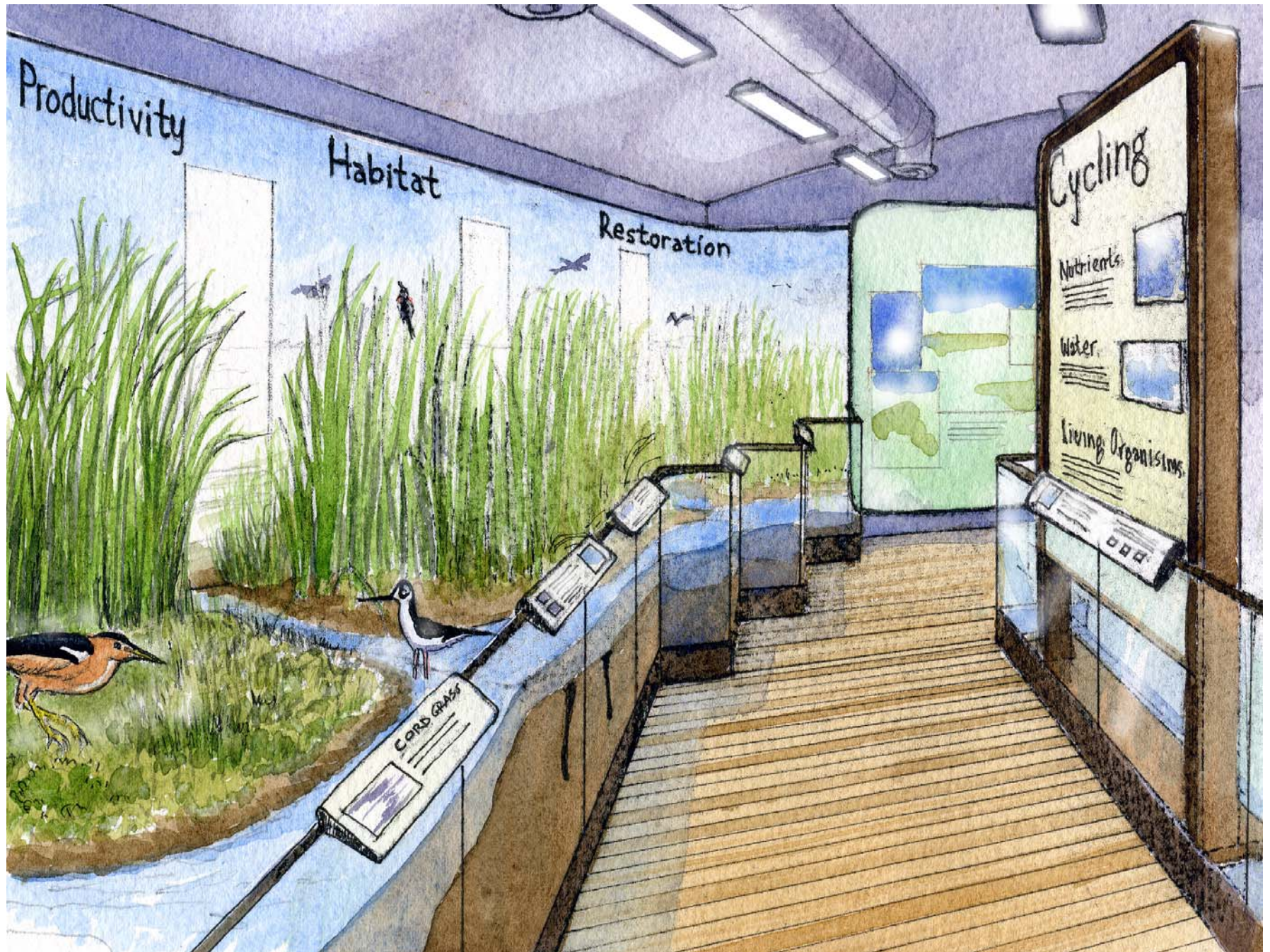
The Foyer

The visitor enters the foyer of the interpretive center through the double doors parallel to Pacific Coast Highway. There they are greeted by floor to ceiling photographs of coastal wetlands and wetlands wildlife, displayed on the main wall. Raised lettering of an inspiring quote sets the tone for the experience ahead, and serves to merge the missions of the two organizations into a cohesive unifying statement.



The Boardwalk

The “exhibit gallery” is divided into three sections. The first section is built on messages relevant to subthemes 1-3. Visitors walk along a meandering path defined by a boardwalk (built directly on top of the concrete floor) to immerse themselves in the dynamic nature of coastal wetlands. Distant, intermittent calls of clapper rails, terns, and osprey and the sound of the surf add realism to the boardwalk experience, as do mounted taxidermied specimens overhead. Set against the wall are subsurface cutaways of the mud substrate exposed at low tide, saltwater-saturated cordgrass at high tide, and a narrow vertical column of water with models of larvae of important fisheries, such as halibut. Photomurals cover the entire wall space; the scrim becomes part of these scenes so the visual flow is not interrupted. An overview panel, mounted directly atop the first photomural, introduces the visitor to coastal wetlands—their pulse and productivity, their role as wildlife habitat, and the seasonal events we celebrate.



Oil Spill

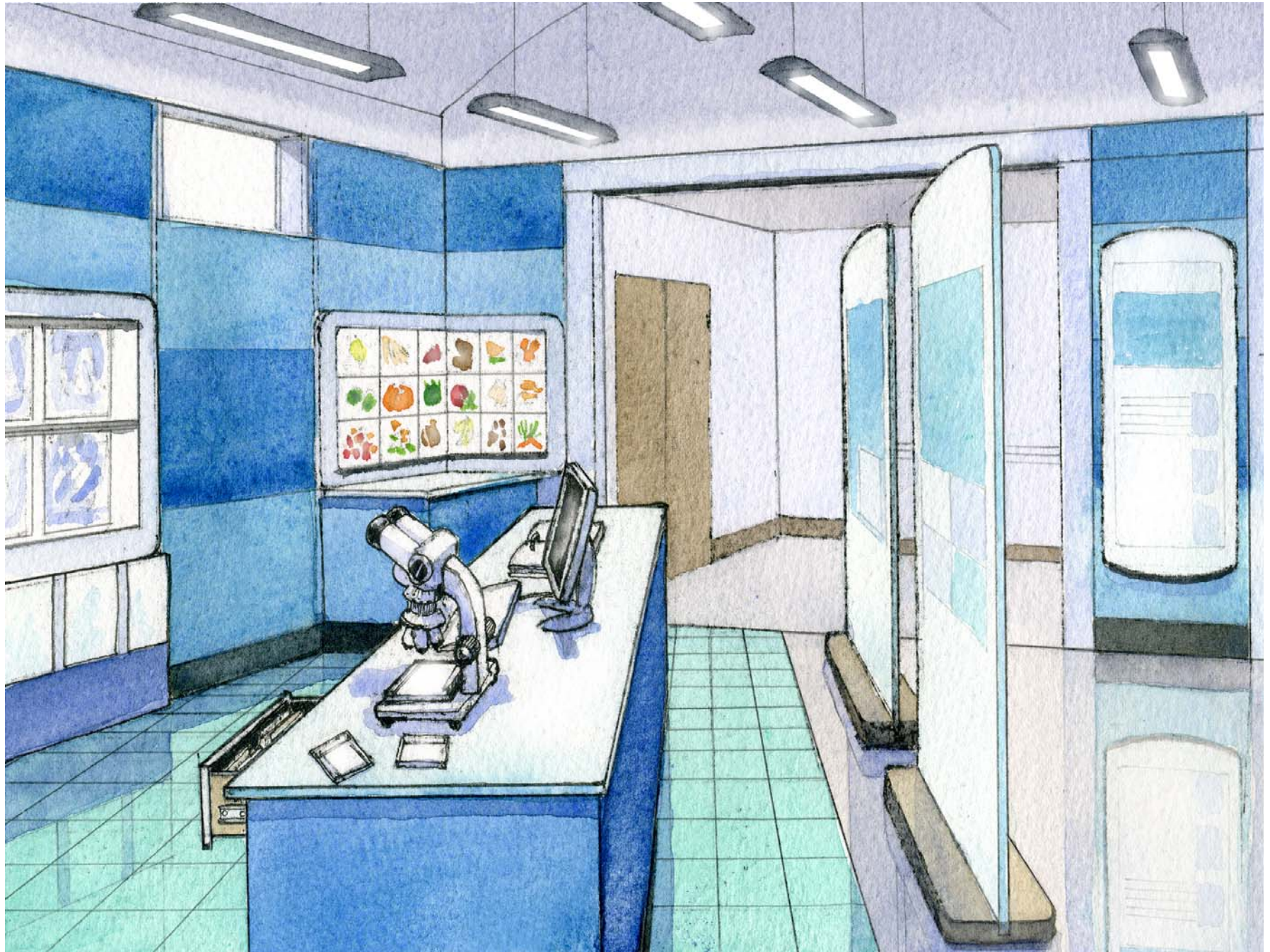
The second “exhibit gallery” section highlights the turning point marked by the *American Trader* spill in 1990. Here, messages relevant to subthemes 4 and 5 are conveyed. The flooring in this corner exhibit cluster is treated to resemble beach sand (without the maintenance challenge). The west-facing wall of the electrical room displays a series of panels and a push-button activated monitor that displays film footage from the oil spill and the clean-up efforts (and wildlife rescue) that followed. Appearing to ooze from the footing of the wall are replicated globs of oil, reminding visitors of its permeability. Replicated oil stains several fiberglass-reinforced concrete rocks mounted on the floor as well. Oiled cleanup equipment (pads, boom, boots, etc.) are included to indicate some of the steps taken in response to a spill. Whether we display a preserved, still oiled victim is yet to be determined. Another panel highlights the policy changes that ensued following the *American Trader* spill—establishment of the Office of Spill Prevention and Response in California’s Department of Fish and Game, the role of the Wetlands and Wildlife Care Center in oil spill response and recovery, and the role of the Huntington Beach Wetlands Conservancy in the protection and restoration of coastal wetlands habitat.



Caring for Wildlife

The third “exhibit gallery” section begins at the end of the second section and extends along the northeast wall to the meeting alcove. This area is transformed into a simulated interactive “wildlife care hospital.” Here, the flooring replicates the actual flooring in the WWCC to lend a clinical look. Positioned on a long, portable counter are diagnostic tools that help determine cause of injury or illness. These include a permanently mounted microscope with selection of slides including one with intestinal parasites from patient no. 1, an x ray light box and various x-rays, including those of the broken bone from patient no. 2, and a computer screen that mimics the screen of an ultrasound that projects images from various patients, including those of patient no. 3 that show an obstruction caused by ingestion of plastic.

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Estimated cost

Inventory:

floor to ceiling photograph on foyer wall with raised lettering
taxidermy work on brown pelicans
two portable, freestanding interpretive panels
construction of sq. ft. boardwalk
diorama of mud substrate
diorama of saturated cordgrass
diorama of column of water
one reading rail with text
one reading rail with text and simple interactives
audio for nature sounds
photomural on southwest wall
one acrylic overlay with text
scrim on southwest windows
four portable, freestanding interpretive panels
restoration photomural on west wall
interpretive panel on restoration and wildlife recovery
restoration simulation game
emergency exit floor-mounted interpretive panels
American Trader display floor treatment
American Trader multimedia wall display
replicated oil globs and rocks
oiled cleanup equipment
oil spill interpretive panel
interpretive panel on nonpoint source pollution
wildlife care clinic floor treatment
clinic cupboards
clinic portable cabinet
four wall-mounted interpretive panels
three portable, freestanding interpretive panels
compound microscope
x-ray light box
computer system (plus programming)
procurement of slides, x-rays, ultrasound images
diagnostic flip book with "patient files"
purchase and wiring of video camera

three photographic panels for observation deck
lighting, including spot lighting throughout exhibit areas
wildlife care exhibit space flooring
painting of exhibit walls where necessary

Fabrication budget:

\$400,00-450,000

Please note this figure is an estimate only, based on 2008 prices. It should not be used as a basis for evaluation of responses to a Request for Proposal. Companies responding to a RFP will be able to provide firm fabrication and installation costs after design development is undertaken.

Cost estimate does not include concrete floor treatment, furnishings for meeting alcove, retail cabinet, donation box and pedestal, or window treatment in ceiling.

California Vendor List for Design Development Phase

Academy Studios
70 Galli Dr.
Novato, CA 94949
(415) 883-8842
www.academystudios.Com

Bang Creative, Inc.
1281 Liberty Way, Bldg. A
Vista, CA 92081
(760) 727-2004
www.bangcreative.com

General Graphics Exhibits
695 Minnesota Street
San Francisco, CA 94107-3026
(925) 935-5276
www.gge.com

Gizmo Art Production
1315 Egbert Ave.
San Francisco, CA 94124
(415) 222-6181
www.gizmosf.com

Lexington
12660 Branford St.,
Los Angeles, CA 91331
(818) 768-5768
www.lex-usa.com

The Sibbett Group
10 Liberty Ship Way, No. 300
Sausalito, CA 94965
(415) 775-3955
www.sibbettgroup.com

Universal Exhibits Inc.
9517 E. Rush St.
South El Monte, CA 91733
(323) 686-0562
www.universalexhibits.com

Walheimer Associates
555 32nd Ave.
San Francisco, CA 94121
(415) 221-0222
www.walhimer.com

West Office Exhibition Design
225 Third St.
Oakland, CA 94607
(510) 251-9633
www.woed.com

Pacific Studios
5311 Shilshole Ave., NW
Seattle, WA 98107
(206) 783-5225
www.pacific-studio.com

Premier Displays & Exhibits
11261 Warland Drive
Cypress, CA 90630
(562) 598-5000
www.premierdisplays.com

Appendix



**Huntington Beach Wetlands Conservancy
and Wetlands and Wildlife Care Center
Interpretive Summary Interim Report
Prepared by The Acorn Group, February 2008**

Board members and staff associated with the Huntington Beach Wetlands Conservancy and the Wetlands and Wildlife Care Center participated in an interpretive planning session facilitated by The Acorn Group on February 16, 2008. Contributors included Kristen Bender, Gary Gorman, Greg Hickman, Jack Kirkorn, George Mason, Ann McCarthy, Debbie McGuire, Jamie Pavlat, Gordon Smith, Bill Weisman, and Dick Zembal.

The purpose of the session was to review the interpretive planning process; discuss the guiding principles of both institutions, and the functions and existing conditions of the interpretive center; and identify key topics and interpretive goals for the exhibits. A copy of the agenda is provided as appendix 1a; group input from this session and follow-up phone interviews is summarized in subsequent appendices (appendix 2a-9a).

Interpretive principles

To recap, the planning process is driven by the principles of interpretation—a “communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource.” At the center¹, its ultimate purpose is threefold: to help people connect with the wetlands, wildlife, and surrounding environs; advance the missions of both institutions; and inspire and enlighten in order to open minds and promote stewardship.

It is important to note that interpretation is not the presentation of facts, but rather the presentation of material that piques curiosity and relates to the audience's experiences. Freeman Tilden, an early champion of interpretation, suggested that the primary interests of visitors to sites of natural beauty and cultural significance are in whatever touches their personalities, experiences, or ideals.

Interpretation has five essential qualities. It is purposeful—it serves the visitor as well as the institutions' missions. It is enjoyable—it is entertaining, stimulating, interactive, and multi-sensory. It is relevant in ways that are meaningful and personal. Meaningful content links to something the audience already knows; it becomes personal when linked to something the audience already cares about. Interpretation is also organized. The media are well planned, sequential, and easy to follow. Last, it is thematic. It focuses on a central message about the subject matter that serves to connect facts and concepts together as a unifying whole. A theme organizes the media, allowing the visitor to know where the presentation is going, making it easier to connect it to other information.

¹ We recommend that the exhibit area of the building be called out as the ‘interpretive center.’

Purpose and function

Before delving into proposed exhibit topics, the group reviewed the mission statement of the Conservancy to determine how interpretation can contribute toward its advancement. That statement, and the vision statement, reads as follows:

The mission of the Huntington Beach Wetlands Conservancy is to restore and preserve the few remaining wetlands in Huntington Beach and throughout Orange County.

We create a functioning system of coastal wetlands for future generations of people and wildlife by acquiring, restoring, preserving, and maintaining coastal wetlands of significance in Orange County to:

- Connect people with a healthy and functioning ecosystem;

- Provide a world class model for coastal wetland conservation;

- Offer the appropriate balance of resource protection with public access and education opportunities concerning the importance of coastal wetlands;

- Engage the community in protecting these resources in perpetuity.

At the same time, interpretation should also contribute toward the advancement of the mission statement of the Wetlands and Wildlife Care Center which reads:

The mission of the Wetlands and Wildlife Care Center is to educate the public about man's impact on the environment, especially fragile coastal wetlands, and mitigate that impact through care and rehabilitation of native wildlife.

The mandate to broaden visitors' understanding of and appreciation for wetlands environments and species is specifically called out in the guiding documents of both institutions. It was also called out during discussions related to the purpose of the building's exhibits and the target audiences. The exhibits will need to showcase the highly dynamic nature of wetlands, the processes and cycles that sustain the health of wetlands—as well as human—communities, the species that spend all or part of their life cycle there, the human activities that affect the health and functionality of wetlands ecosystems, and the steps humans can and do take to protect and recover habitats and wildlife.

The exhibits will need to be both informative and interpretive in order to arouse curiosity, increase interest, and move visitors to new levels of understanding. At the same time, they will need to inspire visitors and encourage them to apply such understanding to their behaviors and actions at home and elsewhere.

What sets this facility apart from neighboring coastal wetlands is the wildlife rehabilitation aspect. Upper Newport Bay Ecological Reserve, Bolsa Chica Ecological Reserve, Los Cerritos Wetlands, and Golden Shore Wetlands, to name a few, share with the Conservancy similar stories about habitat restoration. It is the cooperative endeavor of restoring wetlands habitat **and** rescuing, rehabilitating, and releasing wildlife that stands out as unique. People who visit will experience something very different from what other local wetlands or wetlands-based facilities offer, particularly if they can view wildlife and, however remotely, real-time animal care procedures taking place at the Wetlands and Wildlife Care Center.

When asked about the purpose of the building, the group offered a range of responses although it was generally agreed upon its primary function is as an interpretive center and educational facility. As such, exhibits will need to be positioned in such a way to allow the central space to be open. However, there remains the question of classroom accommodations. While the space, even with exhibits, will be able to handle small numbers of students in guided tours or other programs, it may not be able to handle large numbers (e.g., 60 people), particularly if tables are also required. The Acorn Group will be studying capacity issues at a later point.

The group identified other uses as well, including public and private meeting space, a place to hold fundraising events, and a launch point for tours of the adjacent facilities and lands, including the wildlife hospital, native plant nursery, and restored wetlands and coastal dunes. These and other uses are summarized in appendix 2a.

Target audience

Target audiences range from the “ecotourism” crowd and local outdoor enthusiasts to students in kindergarten through college level classes. Other audiences identified by the group include adults who seek training in wildlife rehabilitation, neighbors, potential donors and supporters, and governmental and nongovernmental groups that need meeting space. The needs of these audiences are compatible within the space, provided the numbers are controlled.

While the exhibits invariably will be incorporated into guided tours and other programs, they will remain public displays that casual visitors will visit on their own terms. As such, it may be difficult to tightly control the sequential manner in which they are visited. Further, because of the tremendous range in age level among the various target audiences, displays, and labels will need to be designed for multiple layers and levels of learning. Front-end evaluation is not part of The Acorn Group’s scope of work; minimally, the Conservancy is advised to share the conceptual drawings during a public review process and later, solicit comments on draft interpretive text and label copy.

Constraints

There are a few constraints that cannot be ignored. Currently, the facility is not well marked or architecturally suggestive of a visitor’s center. The access point is on Newland Street, although the address suggests it is Pacific Coast Highway. Bronze letters that read “Wetlands and Wildlife Care Center” are mounted at the corner, and there is a temporary banner along Newland Street. The addition of the new signs and pelican sculptures will help mark the facilities, but additional media may be needed. It is also recommended that the public exhibit area be given a name that unifies the two organizations and clearly states its purpose (e.g., interpretive center).

In addition, the most direct path from the parking lot to the building interior is through a doorway marked as an exit. The official entrance is located on the “side” of the building apart and not visible from the parking lot. If group consensus is to keep the entrance as is, this confusion will need to be mitigated, such as with a clearly marked pathway, signage, and landscaping. At the same time, given there are actually two entrances parallel to the highway—the interpretive center and the hospital center—these should be clearly distinguished.

The very openness of the room presents another challenge, some of which can be mitigated through exhibit design. Placement of exhibits along a “pathway of discovery” and the development of some “nooks and crannies” will help create a more intricate and intimate visitor experience. At the same time, we will need to strike a balance between such pathways and the need to keep the central space somewhat open for programs.

Additionally, it would be wise to establish specific, dedicated times and days for public viewing and for educational programs. During the latter, the center could be closed to the public.

The physical site

The physical site of the Huntington Beach Wetlands Conservancy and Wetlands and Wildlife Care Center encompasses two acres on a narrow strip of land bordered by Pacific Coast Highway to the west and a massive power generating station to the east. As noted, the facility is not well marked at the moment, although plans are in place to add signs and public art. The entrance portal itself offers an excellent backdrop for a sign or set of letters. The wall above the doorway can be seen from Pacific Coast Highway and offers ample space for such media.

Because first impressions create lasting impressions, it is recommended the committee spend some time examining the parking lot and pedestrian entrance. These features contribute to the general ambiance of the site. More importantly, they shape the visitor's expectations. Ease of wayfinding and degree of feeling welcomed play significantly in shaping a visitor's experience.

Interpretive goals

The exhibit planning process is driven by goals and objectives. Goals are statements of desired outcomes that guide programs and management or operations functions. They articulate what interpretation is meant to do for the institutions, as well as the visitors. 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. A series of specific and measurable objectives correspond to each goal. They provide the actual basis for such evaluation.

Directives related to both institutions' educational mission focus on a desire to impart knowledge and cultivate an appreciative audience. 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. However, unlike visitor knowledge and visitor behavior, visitor feelings and attitudes are difficult to measure with accuracy and certainty that a specified variable is having an effect. Even so, progress toward attainment of affective goals often can be measured indirectly—inferred from measurement of visitor behavior, since behavioral changes are typically preceded by changes in attitude or affect.

The following goals represent a blending of input received during the 02.16.08 planning session and subsequent work by The Acorn Group. Goal statements received during the meeting are recorded in Appendix 6a.

Combined, these emotional, cognitive, and behavioral goals will ensure interpretation is aimed at helping visitors feel connected to the wetlands of Huntington Beach, the wildlife that is found there and elsewhere in the region, and the recovery efforts exerted by both institutions. Once the goals are approved, corresponding objectives will be developed.

Emotional Goals

Visitors will have a satisfying and enjoyable time at the interpretive center.

90%² of visitors will indicate a high degree of satisfaction and enjoyment with their experience in the interpretive center.

Visitors will value the efforts of the Conservancy in conserving, restoring, and managing Huntington Beach's coastal wetlands.

90% of visitors will express strong support for the Conservancy's efforts in conserving, restoring, and managing coastal wetlands.

90% of visitors will acknowledge the high cost of such effort.

Visitors will value the efforts of the Wetlands and Wildlife Care Center (Care Center) in rescuing, rehabilitating, and releasing native wildlife.

90% of visitors will express strong support for the Wetlands and Wildlife Care Center's efforts in rescuing, rehabilitating, and releasing native wildlife.

90% of visitors will acknowledge the high cost of such effort.

Visitors will appreciate the rich natural heritage of these coastal wetlands, the wildlife and plants that are found there, and the goods and services these systems provide.

90% of visitors will express a high level of appreciation for the natural heritage of these coastal wetlands.

90% will express a high degree of appreciation for the "ecosystem goods and services" coastal wetlands provide.

Visitors will appreciate the critical importance of reducing urban runoff and in particular, contaminated urban runoff that can contaminate wetlands and coastal waters.

90% of visitors will express a high level of concern regarding the effect of contaminated urban runoff on wetlands and coastal water.

70% of visitors will acknowledge the role of individuals in contributing to or reducing urban runoff.

² Measurement of attainment of objectives will require use of assessment tools such as written surveys, interviews, and dialogue within focus groups.

Cognitive Goals

Visitors will become familiar with the plants and animals associated with Huntington Beach's coastal wetlands.

70% of visitors will be able to list two plants and two animals that live specifically in local coastal wetlands.

70% of visitors will be able to describe at least one example of a coastal wetland plant-animal interaction.

Visitors will learn that human communities depend upon the ecosystem goods and services that coastal wetlands offer.

70% of visitors will be able to explain in general terms the meaning of the words, "ecosystem goods" and "ecosystem services."

70% of visitors will be able to provide two examples of the goods and services provided by coastal wetlands.

Visitors will gain an understanding of the labor- and cost-intensive work of conserving, restoring, and managing coastal wetlands.

70% of visitors will be able to describe in general terms the steps involved in restoring degraded wetlands.

70% of visitors will understand that the process of restoring wetlands takes months or years, and involves tremendous staff and volunteer effort.

Visitors will gain an understanding of the short- and long-term consequences of oil spills.

70% of visitors will be able to state the location of the *American Trader* oil spill.

70% of visitors will be able to describe two short-term and two long-term consequences of the *American Trader* oil spill.

Visitors will learn that the *American Trader* catastrophe broadened the vision of the Conservancy, established the Care Center, created new State protocol for handling oil spill emergencies, and served as a catalyst for establishing a State network of response teams.

70% of visitors will be able to list at least two positive outcomes of the *American Trader* oil spill.

Visitors will gain an understanding of the labor- and cost-intensive work of rescuing, rehabilitating, and releasing (or permanently caring for) injured, ill, orphaned, or oiled wildlife.

70% of visitors will be able to describe in general terms the steps involved in rescuing and treating an oiled bird.

70% of visitors will understand that the process of rescuing, rehabilitating, and eventually releasing an animal takes months, and involves tremendous staff and volunteer effort.

70% of visitors will be able to explain why the Care Center limits interactions between humans and the wildlife they care for.

70% of visitors will understand that the process of rescuing and rehabilitating an animal requires veterinarian skills and thus, should not be attempted by well meaning but unqualified individuals.

Visitors will learn about how to coexist with native wildlife.

70% of visitors will be able to cite three steps they can take at home to effectively coexist with native wildlife.

Visitors will describe the dynamic interplay of land and water, and specifically, the connection between upstream land, waterways, and downstream wetlands, and coastal waters.

70% of visitors will be able to explain in general terms how matter, including water and the chemicals it may contain, flow from land to waterways to wetlands and coastal waters.

Visitors will apply this knowledge by describing how their actions locally at home affect life downstream, and specifically, in coastal wetlands.

70% of visitors will be able to describe how a contaminant, such as used motor oil or excessive fertilizer that originates in a home located miles upstream from the coast, ends up at the coast.

70% of visitors will be able to cite at least four potential contaminants that originate in the front yard or driveway of a home.

Visitors will learn of the planned Orange Coast River Park and the Conservancy's key role as a component, and will understand the park's importance as a regional resource.

70% of visitors will be able to identify the boundaries of the planned River Park.

70% of visitors will be able to explain why wildlife corridors are important.

70% of visitors will be able to describe three benefits natural systems will derive from the River Park.

Behavioral Goals

Visitors will spend sufficient time in the interpretive center.

70% of visitors will spend at least 45 minutes in the interpretive center, actively engaged with the exhibit media.

As a direct result of their experience, visitors will seek further opportunities on the grounds.

70% of visitors will spend additional time during their visit, viewing non-releasable wildlife on display (if permissible), the native plant nursery, and the restored wetlands.

40% will indicate their intent to return at a later date to participate in a program or enjoy the interpretive center again.

Visitors will demonstrate their appreciation of the Conservancy and Care Center's work by supporting their efforts.

40% of visitors will make a cash donation on the day of their visit.

20% of visitors will join either the Conservancy or Care Center as members that year.

Visitors will indicate their commitment to helping protect coastal wetlands.

40% of visitors will indicate their commitment at home to reducing water run-off, and avoiding contaminating run-off altogether.

Visitors will indicate their commitment to coexisting with native wildlife by taking certain steps at home.

40% of visitors will indicate a commitment to coexisting with native wildlife by securing pet food, keeping cats indoors, and properly disposing of trash, fishing gear, and other potentially harmful material.

Visitors will demonstrate stewardship behaviors when visiting wetlands, nature reserves, regional parks, and other open space.

90% of visitors will abide by rules and regulations at all times.

Interpretive themes and sub-themes

A theme is the principle message, or story, about the subject matter which serves to connect topics and concepts together as a unifying whole. A theme allows for a linkage of important ideas concerning the topic(s) the committee identified (Appendix 7). It is well documented that theme-based interpretation is easier to comprehend and recall at a later point. It serves as an "advance organizer," giving the visitor a sense of where the exhibit media are going and making it easier to connect their content to other information.

Although the central theme may or may not be articulated verbatim in media or programs, it is the conclusion that we hope visitors will reach on their own after experiencing the exhibits and the impression that will linger long after the details of the visit have been forgotten. Sub-themes further develop the central theme, allowing for a logical progression into storylines. Typically a well-planned experience conveys three to five sub-themes, all of which are subordinate, but directly related, to the central theme.

The following represents a synthesis of ideas proposed by the committee during the interpretive planning session. Please also refer to the matrix (separate attachment) to review messages that correspond to each subtheme.

Proposed overarching theme

Coastal wetlands and native wildlife are vital and worth caring for.

Subthemes

Healthy, functioning wetlands are influenced by and dependent on natural cycles, processes, and events.

Wetlands serve as critical habitat for many species, some threatened with extinction.

Wetlands offer tangible and intangible benefits to humans.

Human activity, intentional or incidental, can influence the health of wetlands and wildlife in detrimental ways.

Coastal wetlands are under constant threat from development and the consequences of other human activity.

Humans have the capacity and responsibility to protect, conserve, and restore wetlands habitats and to care for and when necessary, rehabilitate native wildlife.

Appendix 1a

Huntington Beach Wetlands Conservancy Interpretive Planning Workshop

February 16, 2008

Agenda

Introductions and workshop outcome

Review and discussion of mission; purpose of building; visitor composition

Review and discussion of existing conditions

Overview of interpretive planning process

- PowerPoint presentation

- Principles of interpretation

- Glossary of terms

- Components of the 5M planning process

Development of topics

Fifteen-minute break

Clustering of topics

Development of subthemes and theme

All-group reporting

Conclusion and next steps

Appendix 2a

Purpose of building:

- An interpretive center
- A public and private meeting space that accommodates 10-12 people
- A classroom for WWCC that accommodates 30-60 people
- A launch point for tours of: WWCC facilities including enclosures of non-releasable wildlife, the plant nursery, and the wetlands.
- An information center³ during oil spills and other environmental emergencies
- An educational facility that offers programs for the visiting public and K-college students
- A place to showcase wetlands dynamics, connections to drylands and marine environments, wildlife rehabilitation activities, and specific recovery efforts of endangered coastal species
- A place to hold fundraising events
- Features to add: projection screen and small library in the building; observation deck at Talbert Marsh.

Appendix 3a

Existing conditions:

- Marginal storage for tables and chairs
- Nearby break room/kitchen for preparing foods for events in the interpretive center area
- A reception area for receiving injured wildlife
- A cupola that offers expansive views on three sides
- Generous electrical outlets throughout the space
- An alcove that could serve as permanent meeting space and library

³ The actual command center would be based elsewhere on the premises, possibly a trailer, due to the potentially large number of personnel it would need to accommodate.

Appendix 4a:

Constraints:

- A potentially confusing visitor entrance that is not immediately adjacent to the parking lot
- An entrance that intuitively looks like a front entrance but is not.
- A potentially confusing vehicular entrance off Newland Street, although the address is stated as Pacific Coast Highway
- The presence of a large electrical generating plant behind the facility
- Current lack of signage⁴
- Presence of a sump stone wall that serves as a barrier to PCH traffic and hides the building
- Maximum of 46 vehicles in the front parking area (and total of 65 spaces on the premises)
- Presence of emergency parking stalls in “front” of the building.

Appendix 5a:

Target audience

- “Ecotourism” crowd, thus requiring that the Center works collectively with neighboring hotels and the Huntington Beach Conference and Visitors Bureau
- Students in K-12 classrooms as well as colleges and universities
- Adult students seeking wildlife rehabilitation training
- Surrounding neighbors
- Governmental (California Coastal Conservancy) and non-governmental organizations that need meeting space
- Outdoor enthusiasts including hikers, cyclists, surfers, and beach goers.

⁴ New signs and metal sculptures will be installed soon. Additional signage may be needed.

Appendix 6a:

Suggested goals

committee member 1

1. Appreciate that wetlands and wildlife are interesting and beautiful natural occurrences
2. Develop an understanding of how wetlands function and human influences upon them
3. Develop behaviors which reduce the negative influences on wetland life
 - a. A reduction of coastal pollution
 - b. Reduction of injured wildlife caused by human behavior

committee member 2

1. Know what is a coastal wetland and why it is important
2. Know what humans do to wildlife
3. Change attitude about no. 1 and no. 2
 - a. Volunteer for tasks (docent work, wildlife care, etc.)
 - b. Donate money for ongoing operations[Develop] a deeper understanding of issues.

committee member 3

1. Visitors will appreciate the negative impact of human activity on coastal wetlands and wildlife (e.g., oiled birds)
2. Visitors will understand the role they have in protecting coastal wetlands
3. Visitors will share their knowledge of coastal wetlands and wildlife with others

committee member 4

1. Appreciate usefulness of salt marsh wetlands
2. Enjoy exposure to wetlands and wildlife
3. Understand impact of upstream influence on wetlands survivability

4. Donate to continuation of wetlands maintenance
 - a. Stop contributing to polluted streams
 - b. Return visits and brings friends and family
 - c. Become a volunteer
 - d. Get financially involved

committee member 5

1. Feel connected to (stewardship towards) wetlands species
 - a. Want to come back
 - b. Want to join the organization
2. Understand man's impact on wetlands and wildlife—specific examples
 - a. Understand how their yard plants affect wetlands
 - b. [Understand] what actions they take [can] affect the wetlands
3. Want to become involved in the organization
 - a. Give money
 - b. Volunteer time

committee member 6

1. Have fun and feel connected
 - a. Have fun learning
 - b. Inspire others and share
2. Get it—that [wetlands and wildlife] are important and interesting to them
 - a. Understand wetlands and wetland plant communities
 - b. Understand human role in the biosphere

3. Want to return and tell folks about the experience
 - a. Recreate in the outdoors
 - b. Support wildlife and habitat programs

committee member 7

1. Respect and value of wetlands and wildlife
2. Connection between everything
3. Conservation as a lifestyle

committee member 8

1. Aware of multi species of wildlife in our area and how people affect their environment
2. Aware of the value of wildlife
3. [Understand] how encroachment affects native wildlife, the importance of wildlife, and what is being done to protect wildlife
4. Money: donations and funding. Who is doing it and what does it cost?

committee member 9

1. See the salt marsh wetlands and coastal dunes as beautiful and interesting—want to come back to them again.
 - a. Look at the small things (salt marsh plants, mud organisms, insects)
 - b. What you see as tides up or down.
2. Improved understanding of ecological connections in the salt marsh and how good salt marsh functioning benefits humans.
 - a. Salt marsh food web, organisms in mud, bird feeding adaptations.
 - b. Fish nurseries (sport and commercial fish), migration stops, endangered species.
3. Decreased behaviors that harm wetlands and wetlands organisms and increased [frequency] visiting and observing wetlands.
 - a. Decreased trash dropping, oil pouring down drains, etc.
 - b. Come back, visit other wetlands nearby and elsewhere.

committee member 10

N/A

committee member 11

N/A

Appendix 7a:

Suggested topics

History of the organization(s):	where we were, where we are, where we are going, history of HBWC and WWCC, cost savings of a non-profit managing wetlands, source of funding, the need to engage others to help the efforts of HBWC and WWCC
Oil spills:	effects of oil spills on wetlands, WWCC's role in oil spill response (command center), effects of oil on animals (wildlife), cost of cleaning one animal, establishment of the Office of Spill Prevention and Response (OSPR) in 1990 as a result of the <i>American Trader</i> incident, what happens in an oil spill, Alliance for Wildlife Rehabilitation and Education (AWRE), the (role of) Huntington Beach Wetlands Conservancy and Southern California Edison
WWCC response to oil spills:	emergency response to spills, intake and triage, critical care, steps involved in rehabilitation, long-term care, and release
Wildlife care in general:	mechanics and cost of wildlife care, wildlife restorative care, wildlife emergency care, common reasons for the rehabilitation of wildlife, "horror board" (e.g., fishing line, hooks, lures), 3 Rs (rescue, rehabilitation, release), husbandry while in care, wildlife triage, emerging diseases among wildlife (e.g., Domoic acid, <i>stecititis</i> [sic]), WWCC's role in caring for wildlife, non-releasable wildlife, appropriate behavior around wildlife
Restoration projects:	wetlands restoration, maintenance of wetlands, dune restoration, dune maintenance, native plant restoration, water quality monitoring, moving earth and water, what is being done to mitigate effects of human activity of wetlands and wildlife, wildlife monitoring, trail development, interpretation on the trail, cost of wetlands protection and restoration
Human connection:	volunteer and docent training and coordination, staff development, outreach programs, public education, environmental education, opportunities for hiking and being outdoors, awareness that wetlands are for people too and this place is "our treasure," public access, public and media relations, interpretive center development, development of continued funding, opportunities to become wetlands stewards
Function and status of wetlands:	function of wetlands, nutrient cycling, tidal cycles and processes, loss of wetlands locally, statewide, and nationally, role within Orange Coast River Park, the effects of urban runoff and other urban activity on coastal ecosystems, the urban interface on coastal ecosystems, effects of global warming specifically on wetlands and coastal ecosystems, connection of coastal wetlands to other ecosystems, personal behaviors that affect wetland ecosystem health, significance of coastal dunes

Wetlands flora and fauna:	endangered species and recovery projects, respect for wetlands wildlife, coexistence (“humans <i>and</i> , not <i>or</i> , animals”), the significance of high levels of biological diversity and productivity in a wetlands, presence of light-footed clapper rail (as an indicator species), least tern (feeding, not nesting), Belding’s savanna sparrow (and its relationship to pickleweed), recovery of certain species (e.g., clapper rail), wetlands fish, birds, mudflat organisms, and invertebrates, wetlands food chains and food webs, tidal influence on wetlands life (plants, birds, mudflat organisms), dune plants, wildlife habitat, adaptations of wetland plants and animals, migratory “rest stops,” importance of all species (including coyote), appropriate behaviors (e.g., not feeding opossums), wildlife lore, effects and control of non-native species
Ecosystem goods and services:	direct and indirect benefits to people (e.g., water quality, flood protection, ocean nurseries), relationship of AES plant, the wetlands, and the organizations, the need for open space, worth of wetlands, why bother restoring wetlands

Appendix 8a:

Suggested themes

The health of coastal wetlands and wildlife depends on human behavior and activity that enhances nature and minimizes negative impacts on the environment.

One big pool of life that people are just a part of, but greatly affect.

Conservation and respect.

Habitat is primary [for] the welfare of wildlife. The rehabilitation of injured only effective long term if habitat for them to live in is available and healthy.

Appendix 9:

Input from phone interviews⁵

Arrival and entrance:

Board members agree that the pedestrian entrance is an issue and that the problem needs to be mitigated through 1. placement of signs and other wayfinding tools that guide arriving visitors to the “front” entrance and/or 2. reversal of entrance and exit.

Accommodations of groups:

Board members agree that the room needs to function as a classroom as well as exhibit area. We should aim for a maximum seating capacity of 50-60 (although 60 at tables is probably too high) and an average group size of 30.

Exhibit development budget:

The exhibit development budget has not been determined. The interpretive plan should produce materials for the capital campaign.

“The board has agreed from day one that they do not want to create a piece meal project; they want it to be first class.” As such, it may be helpful to determine a phased approach to project implementation.

Building name:

Currently, the building is called the Wetlands and Wildlife Care and Education Center⁶, a name that does not necessarily suggest the building is open to the public. There is agreement among board members to call the exhibit portion of the building the “interpretive center” and the other the “hospital center.” Entrances should be labeled accordingly.

At the same time, there are naming opportunities, and names could change with sponsorship.

⁵ At the time this summary was submitted for review, not all committee members were available for phone interviews.

⁶ The question remains: should both institutions be reflected in the name of the entire facility?