



Monterey Bay National Marine Sanctuary

Visitor Center in Santa Cruz

The National Marine Sanctuary Program and the City of Santa Cruz are collaborating in a partnership to design, construct and outfit the Monterey Bay National Marine Sanctuary Visitor Center, a U.S. Green Building Leaders in Energy and Environmental Design (LEED) sustainable building.



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BIOS
Planning Design Construction

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Introduction

Monterey Bay National Marine Sanctuary

Each year, approximately four million tourists visit the Santa Cruz, California, Beach Boardwalk area. The average visitor may spend two to three days in the area, yet may be unaware that they are near one of the richest coastal and marine areas in the world. In 1992, the federal government established the Monterey Bay National Marine Sanctuary (MBNMS) for the purpose of research, education and protection of the natural and cultural resources found within this national treasure.



Architects sketch of Visitor Center

Stretching along California's Central Coast from Marin to San Luis Obispo County in Cambria, the MBNMS encompasses more than 5,300 square miles of ocean with more than 275 miles of shoreline and is one of the largest protected areas in the world. Supporting one of the world's most diverse marine ecosystems, it is home to thousands of species, including mammals, seabirds, fishes, invertebrates and plants, as well as 150 documented shipwrecks.

The Visitor Center will encourage visitors to explore this remarkably productive marine environment, the issues impacting the sanctuary and their personal roles in protecting one of our nation's treasures. Located just steps from the ocean in Santa Cruz's famed beach area, this facility will provide state-of-the-art, interactive interpretive exhibits to an anticipated 200,000 visitors annually.

Visitor Center Mission

As the gateway to Monterey Bay, the future Viisitor Center serves the entire Central California region, and will foster stewardship of the Monterey Bay National Marine Sanctuary (MBNMS) by connecting people with and educating them about the water, geology, ecosystem, and the extaordinary diveristy of its waters.

Exploration Center Highlights

The Center will be:

- Architecturally distinct, two-story, 10,600 sq. ft. building overlooking the ocean;
- Designed to meet the U.S. Green Building Council's standards for Leadership in Energy and Environmental Design (LEED).

The visitor will experience:

- Dynamic, interactive and multi-media exhibits designed for both children and adults;
- A theater with wide-screen, real-time, underwater video;
- Hands-on samples of geology and watershed and biodiversity displays;
- How to appreciate and preserve the natural resources in the sanctuary.

Visitors may choose to interact with English or Spanish for each exhibit:

- Banners in English and Spanish to introduce each area;
- Key concepts translated into Spanish on the graphic panels and video displays.

The building will contain:

- State-of-the-art teaching classroom;
- Gift shop;
- Administrative offices.

The building will serve as:

- A multi-modal transportation center with a potential rail stop;
- Bicycle facilities;
- Pedestrian connections to the City of Santa Cruz's central Depot Park.



Santa Cruz Beach Boardwalk and Wharf Area-Visitor Center Site

Goals

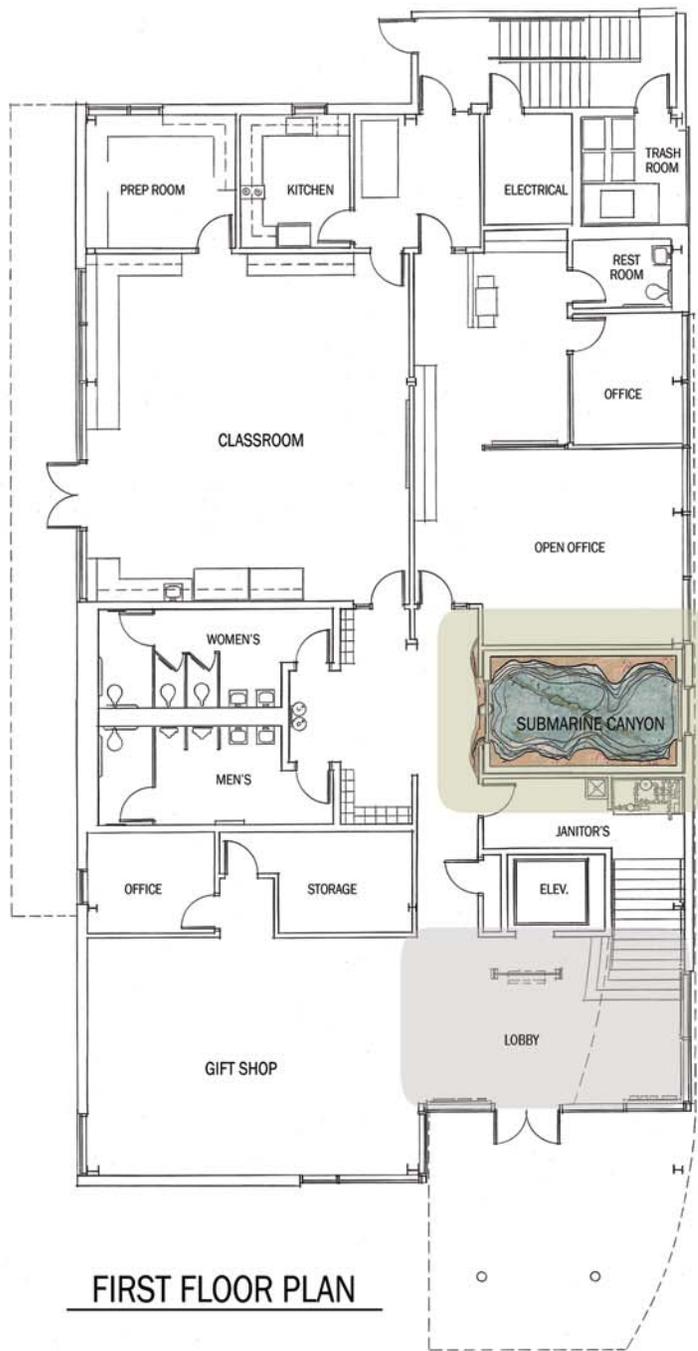
Involve and educate visitors about the sanctuary's unique and fascinating coastal and marine natural resources.

Instill in visitors a sense of personal stewardship with regard to the sanctuary and an understanding of how to help protect it.

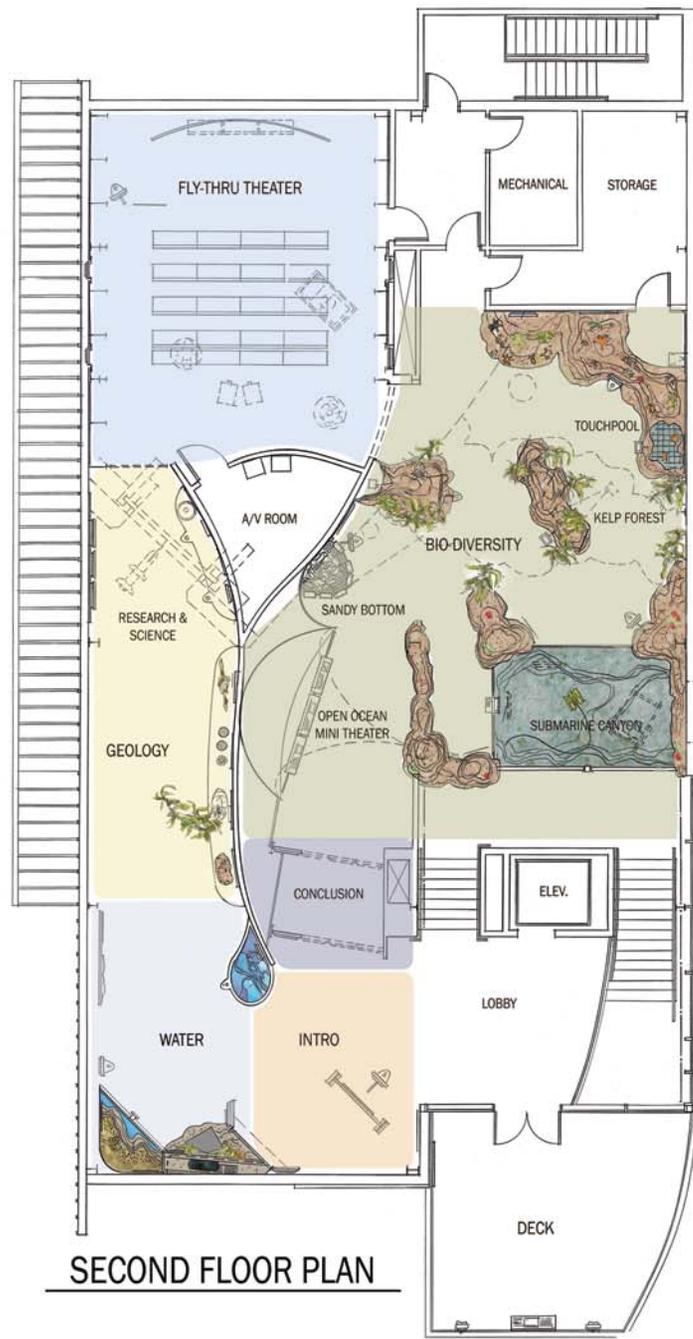
Provide orientation for visitors as they enter the sanctuary, so they will use and enjoy it in a responsible and sensitive manner.

Construct an environmentally sensitive building that will demonstrate the advantages of sustainability.



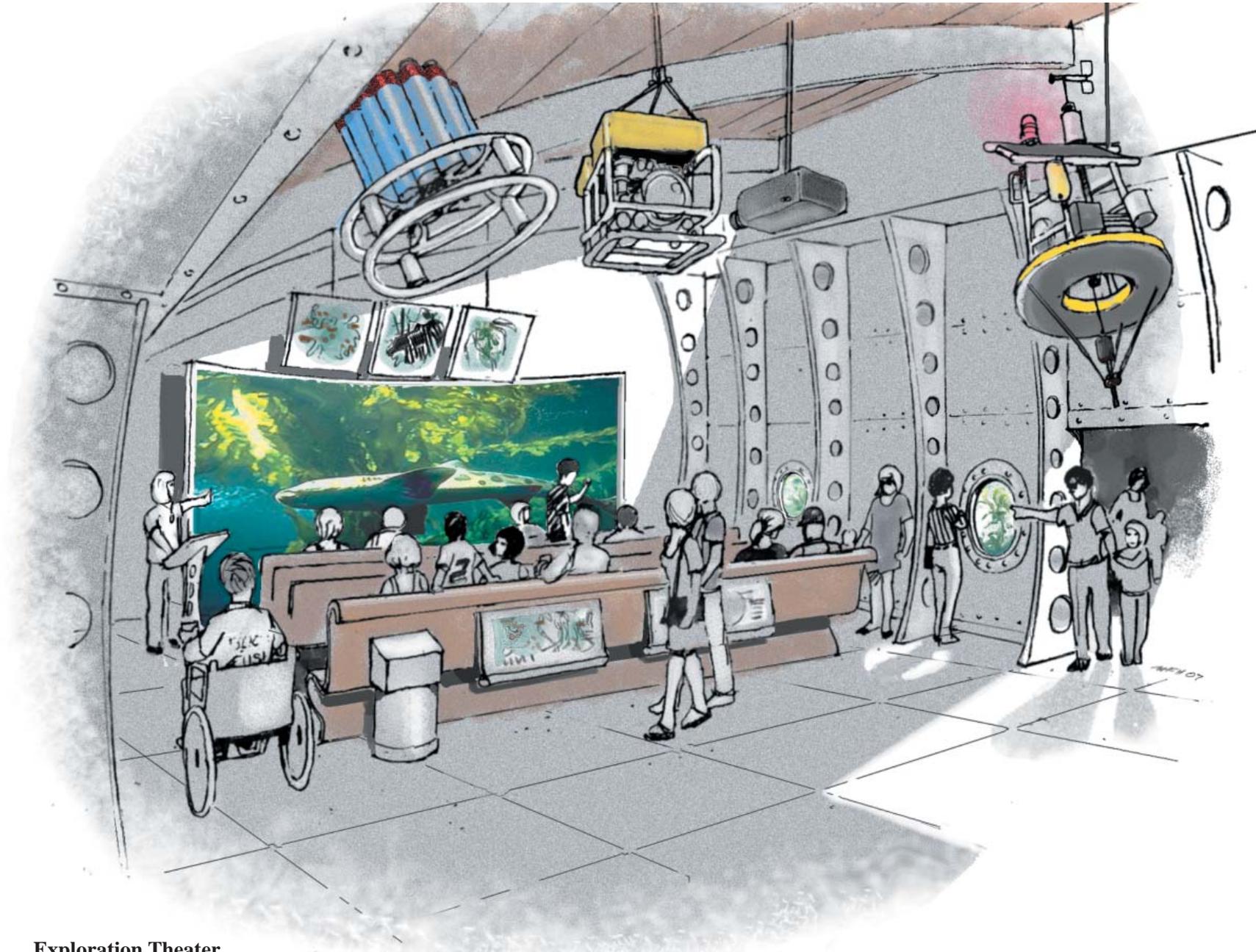


FIRST FLOOR PLAN



SECOND FLOOR PLAN





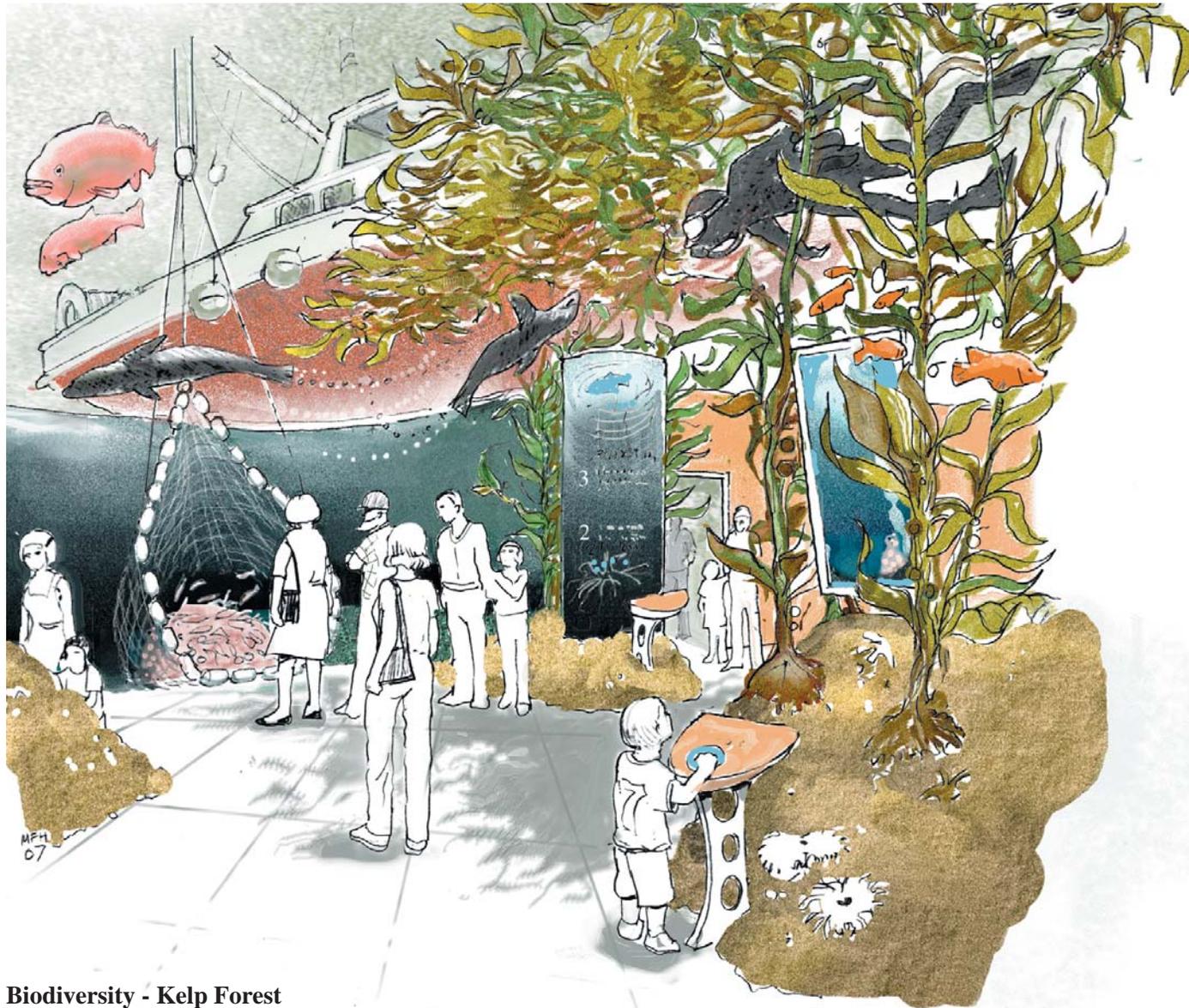
Exploration Theater

In the theater, actual footage from a remotely operated vehicle voyage and computer-generated animation shows visitors the canyon from Elkhorn Slough to Davidson Seamount, featuring rocks, marine snow, amazing deep sea animals and more. The theater is a multi-purpose room with flexible seating. It will be capable of projecting real-time video, slides, DVDs and computer-based presentations and will have audio equipment for guest speakers.



Biodiversity - Intertidal Touchpool

Exiting the theater, visitors are drawn to a beautifully re-created Rocky Tide Pool surrounded by wall murals that continue the view out across the sanctuary. One section is specially designed as a discovery area for small children featuring tidepool animals and algae. The central pool is filled with detailed models of tidepool animals. An overhead monitor shows a naturalist discussing this habitat's fragility until someone discovers the video station at the pool's edge. Then the monitor shows close-up images of and information about small, rarely seen tidepool animals. A third area challenges visitors with an interactive grid survey of tidepool life.



Biodiversity - Kelp Forest

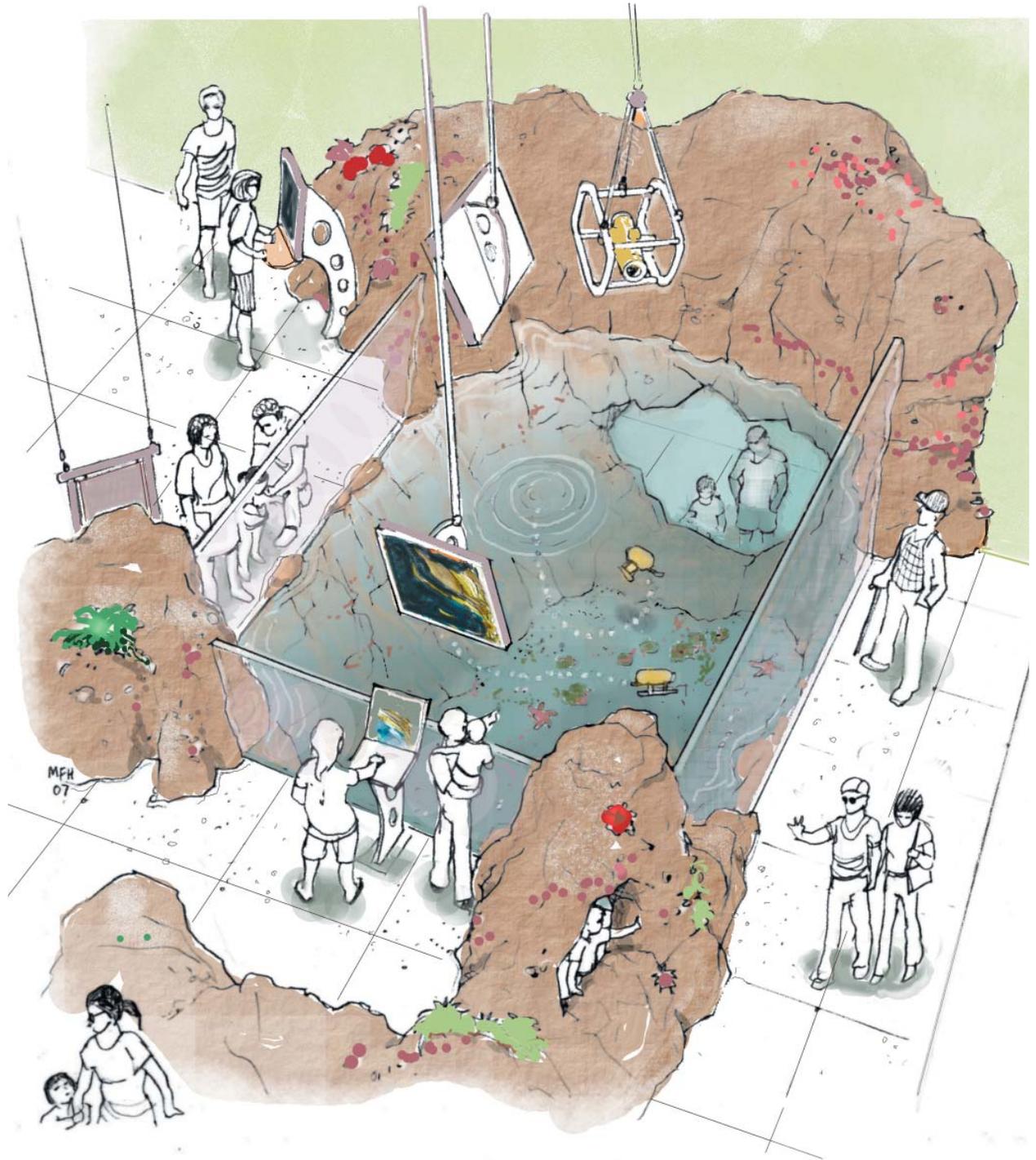
Across from the touch pool, visitors are immersed in a lush, rocky-bottom-to-ceiling Kelp Forest populated by models of top snails, kelp forest fishes, marine mammals, a cormorant and a kayak or diver. Touchable model holdfasts, sea stars, urchins, snails and cucumbers are on the bottom as well as marine debris. Visitors hear waves, whales, sea lions, snapping shrimp and divers' bubbles. A concise graphic panel explains biodiversity and how MBNMS is home to an incredible diversity of species which then move out to populate other areas.

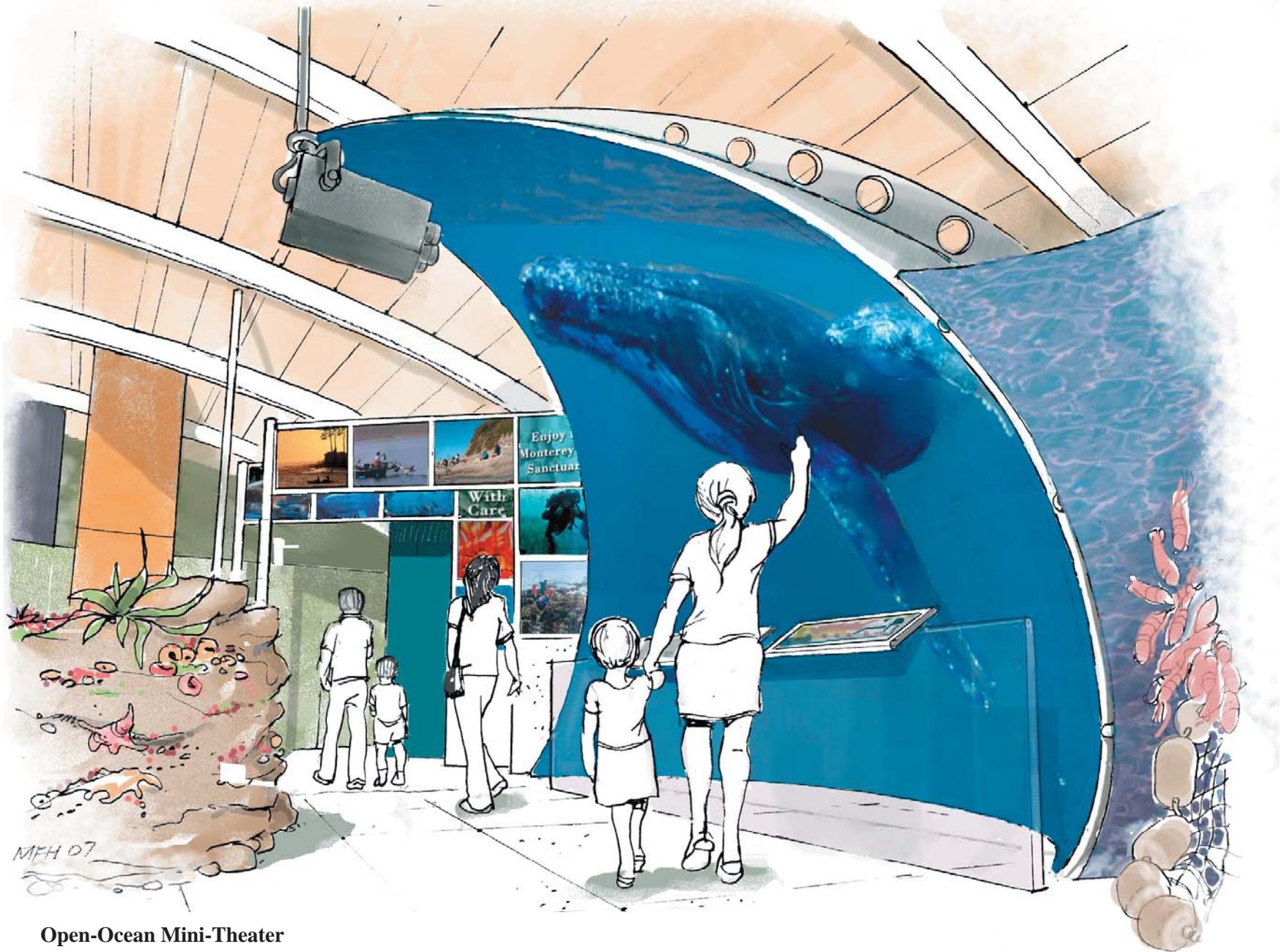
Captions on the objects identify them and explain their significance. For example, rockfish illustrate the study of what happens to species and habitats over time. This is a major focus of monitoring efforts in the sanctuary. Visitors can explore the zones in a kelp forest on a large, rear-projection screen controlled with interactive controls. Another video monitor identifies life in the kelp forest canopy.

Biodiversity - Submarine Canyon

Across from the kelp, visitors can look over or through a glass railing and into the Submarine Canyon they saw from the landing. From here, the visitors can use an interactive video to identify lanternfish and other deepsea animals barely visible in the dim light. They can also learn more about the newly discovered diversity of the deep sea and the techniques and technology researchers use to explore this ecosystem. Overhead, a pair of monitors displays images of deepsea rocks and animals in the exhibit, transmitted by a VideoRay camera controlled by visitors in a cleft in the rocks.

As the rocks give way to a Sandy Seafloor, an overhead fishing boat trails a purse seine full of squid. Graphics explain the history of sustainability in this area and the role Marine Protected Areas play in maintaining that sustainability. The interactive video here compares historical and contemporary fishing techniques and equipment, follows the decline and recovery of whales and sea otters, and may include role playing interactives.





Open-Ocean Mini-Theater

Seabird sounds draw visitors into the Open-Ocean Mini-Theater where they view stunningly beautiful footage that uses migratory species such as fulmars, sea turtles, dolphins, krill and whales to tell the story of the three seasons of the sanctuary and how they affect the weather, water surface conditions and kelp forest growth.