Monterey Bay National Marine Sanctuary
Exploration Center Update

Monterey & Gulf of the Farallones
Joint Advisory Council Meeting
2.12.09
Monterey Bay National Marine Sanctuary Exploration Center
The problem at the public level is awareness of the resource issues and threats to our local ocean. Individuals need to be informed about the status of the flora and fauna in the sanctuary and in the creation of an informed and scientifically literate public.

Action Plan:
Take Science to the Public

“Therapeutic lap kogapublic awareness(about issues) and treatments to raise public awareness and understanding of the issues facing the MBNMS’ ecological integrity is a critical task for the public...”
Santa Cruz Beach Boardwalk Location
Estimated 3-4 million visitors annually

The breakdown of visitors based on surveys for 2007 (Statistics courtesy of Seaside Company):

40% = San Francisco Bay Area
    (1/3rd go to the Monterey Bay Aquarium)
18% = Local Market
15% = Central Valley
10% = Other Northern California
12% = Foreign travelers or out-of-state
  5% = Southern California

Demographics=
    56% Caucasian
    26% Latino
    8% Asian
    6% African American
    4% Other
The visitor center will be an architecturally distinct two story, 10,600 square foot US Green Building Leaders in Energy and Environmental Design (LEED) building overlooking the ocean.
Exploration Center Goals

• Establish the City of Santa Cruz as a gateway to the MBNMS providing orientation for visitors.

• Raise the awareness of the Sanctuary’s presence.

• 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.

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

- LEED Silver Targeted

- Stormwater cistern collects rainwater for storage and reuse
- Waterless urinals and low-flow fixtures reduce water use 30%
- Ventilation louvers draw natural air into the space
- Low-emitting paints and adhesives contribute to improved indoor air quality
- Maximizing open space reduces site disturbance
- Showers for staff and bike commuters promote alternative transportation

- Light-colored roofing reduces the heat island effect of the site
- Building upkeep will implement sustainable maintenance practices
- Daylighting and views provided for the majority of the space
- High-efficiency thermally insulated glass
- Deep overhangs protect from direct solar exposure
- At least 20% of materials manufactured with recycled content
- At least 20% of materials extracted, processed, & manufactured regionally

- Learning programs and exhibits provide green building education
- Fan-assisted stack towers provide natural ventilation and help to optimize energy performance
- 95% of construction waste to be diverted from landfill
- Infrastructure in place for future photovoltaic energy production
- Landscaping swales treat run-off from the site and roof prior to entering the stormwater system
- Water-efficient landscape
- Natural ventilation
- Natural daylight
- Grey water circulation that serves toilets for flushing
- Photovoltaic roof panels

- National Marine Sanctuaries

- U.S. Green Building Council

- LEED®: LEED® Green Building Rating System®
Biodiversity: the variety of life in a particular ecosystem

Ecosystem: a community of organisms and the habitat they live in

Habitat: a living thing’s home

Biosphere: an area of land whose water cycles and drainage into a stream, lake, or ocean

Sanctuary: a safe place, a refuge

National Marine Sanctuaries
Water Quality = Quality of Life

We all depend on clean water
Todos dependemos de agua potable

Always wash your car at a carwash that recycles water.

At home, chemicals in your sink can flow down the sidewalks and streets and into the ocean through storm drains.

Recycle used motor oil and fix your vehicle’s leaks. Never wash spills into storm drains.

Cars, trucks and boats leak more oil into waterways and the ocean every year than any tanker has ever spilled.

Recycle plastics and pick up trash, especially on streets and beaches.

Who wants to swim or sail in water full of cigarette butts, plastic bags, water bottles and other trash?

Don’t go in the water if you see signs like this!

When the bacteria exceed from human or animal waste is too high, authorities close beaches. The bacteria usually come from sewage spills that can be a result of faulty waste systems or uncollected livestock waste.
The Sanctuary is anything but flat!
Sea life in these waters
Open Ocean

Interesting fact regarding panel topic goes here.

Another interesting fact on the panels topic goes here.

A Leopard Shark cruises through the kelp forest. Many creatures depend on the kelp forest for (insert fact here).
As a result of visiting the Sanctuary Exploration Center, visitors (of all ages) will:

- recognize that the sanctuary exists;
- learn about the many cool things in the sanctuary;
- grasp how they are connected to the resources, how they affect them, and that living things (including people), can continue to benefit from them.

Ultimately leading to a feeling of stewardship for the sanctuary and that it is worth protecting.
Where we are in the process today …

December, 2006: Conceptual Design complete
March, 2007: Exhibits Schematic Design complete
September, 2007: Design Development complete
February, 2008: 95% Facilities Construction Documents complete
50% Exhibits Construction Documents complete
Operations Plan Completed
March, 2008: Environmental Assessment Complete
August, 2009: AV/Graphics Design Complete

4 months for final permitting & bid negotiations

14-month construction period

Project Completion
• Project Background
• Architecture
• Exhibit Content
• Timeline/Budget
## Monterey Bay National Marine Sanctuary Visitor Center Budget

<table>
<thead>
<tr>
<th>Project Elements</th>
<th>Total Project Costs</th>
<th>Committed To Date</th>
<th>Additional PAC</th>
<th>Other Funds</th>
<th>Funds still needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>$2,000,000</td>
<td>$2,000,000</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Planning</td>
<td>$398,815</td>
<td>$398,815</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Facilities</td>
<td>$9,714,811</td>
<td>$1,372,538</td>
<td>$0</td>
<td>$500,000</td>
<td>$7,842,273</td>
</tr>
<tr>
<td>Exhibits</td>
<td>$3,434,426</td>
<td>$631,372</td>
<td>$1,000,000</td>
<td>$0</td>
<td>$1,803,054</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$15,548,052</td>
<td>$4,402,725</td>
<td>$1,000,000</td>
<td>$500,000</td>
<td>$9,645,327</td>
</tr>
</tbody>
</table>

### Facilities Budget Breakdown:
- Construction, building costs, site improvements, parking reconstruction = $5,581,000
- Construction Contingencies = $1,368,000
- Green Building Requirements = $247,645
- Construction inflation with 2-year delay = $613,877

Facility square footage costs = $425/sq ft
Exhibit square footage costs = $700-$750/sq ft
Open Ocean Mini Theater Concept:

To provide a dynamic, visitor experience of the world’s “Open Ocean” located at the Monterey Bay National Marine Sanctuary, visitor the small exhibits in the “Biodeformation gallery” open semi-hemispheric immersive theater delivering high definition footage from NMMA archives will provide the dynamic, immersive experience.

This education area will not be interactive, but will immerse the visitor with 90 minutes of immersive “Open Ocean” media visual experiences. The exhibit footprint will be developed to tell the story of the “Three Seas” located in the sanctuary with the channels to the weather, tide, animals, etc. A seamless display that ties seamlessly across the length of the theater stimulates visitors from incising the projection onto the screen from the LED projector for the complete immersion of the audience. A single high-definition surround sound speaker and subwoofer are concealed behind and within the hemispheric projection screen.

MONTEREY BAY NATIONAL MARINE SANCTUARY OPEN OCEAN MINI THEATER

Project Status: Currently in design

National Marine Sanctuaries
National Sanctuary Program

2000: National Marine Sanctuary System Education Plan

2001: Market Analysis and Interpretive Strategy


2004: NMS approves development of MBNMS Visitor Center


2003: 2-year site, 23 site evaluation was conducted

2004: Architects and Exhibits firms chosen.

2005: Visitor Center main messages were developed with a group of stakeholders

2006 Conceptual Design for exhibits and architecture complete.

2006 Eco-Charrette Report identifying specific LEED sustainable goals and strategies.

2007 Schematic Design and Design Development for exhibits and architectural design complete