Monterey Bay National Marine Sanctuary
Exploration Center Update

Monterey & Gulf of the Farallones
Joint Advisory Council Meeting
2.12.09
Action Plan:
Take Science to the Public

"There is a lack of public awareness of the resource issues and threats to our local ocean. Individuals need to be informed about the issues facing the MBNMS. The creation of an informative and scientifically literate public is essential."

"The necessity of public understanding of resource issues in the sanctuary and in the creation of an informed and scientifically literate 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
- 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, and manufactured regionally

U.S. Green Building & Leadership in Energy and Environmental Design Highlights:

- Rainwater collection system—water off the site
- Natural ventilation
- Natural day light
- Grey water circulation that serves toilets for flushing
- Photovoltaic roof panels

Learning programs and exhibits provide green building education

Maximized open space reduces site disturbance

Showers for staff bike commuters promote alternative transportation

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Program Elements

Research

Education

Resource Protection

Monitoring
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.

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 car wash that recycles water.

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

Recycle plastic 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?

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

Cars, trucks and boats leak more than 400,000 gallons a year and they can carry toxic chemicals.

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 but can be a result of faulty septic systems or cattle and livestock waste.

BROCHURE RACK

DONOR PANEL

Watersheds flowing into the Monterey Bay National Marine Sanctuary

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The Sanctuary is anything but flat!
INTERTIDAL POOL

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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 …

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>December, 2006</td>
<td>Conceptual Design complete</td>
</tr>
<tr>
<td>March, 2007</td>
<td>Exhibits Schematic Design complete</td>
</tr>
<tr>
<td>September, 2007</td>
<td>Design Development complete</td>
</tr>
<tr>
<td>February, 2008</td>
<td>95% Facilities Construction Documents complete</td>
</tr>
<tr>
<td></td>
<td>50% Exhibits Construction Documents complete</td>
</tr>
<tr>
<td></td>
<td>Operations Plan Completed</td>
</tr>
<tr>
<td>March, 2008</td>
<td>Environmental Assessment Complete</td>
</tr>
<tr>
<td>August, 2009</td>
<td>AV/Graphics Design Complete</td>
</tr>
</tbody>
</table>

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>
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<tr>
<td>Planning</td>
<td>$398,815</td>
<td>$398,815</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
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<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>
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<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><strong>TOTAL</strong></td>
<td><strong>$15,548,052</strong></td>
<td><strong>$4,402,725</strong></td>
<td><strong>$1,000,000</strong></td>
<td><strong>$500,000</strong></td>
<td><strong>$9,645,327</strong></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 Interactive Mini Theater Concept:

To provide a dynamic user experience of the video "Open Ocean" found in the Monterey Bay National Marine Sanctuary, several visual elements of the "Bioelectro" gallery space are transformed into an immersive theater delivering high-definition footage from NOSA archives while providing the dynamic user experience.

This installation will not be interactive, but will focus on the video with B/4 versions of undersea "Open Ocean" audio visual elements. The actual footage will be developed to tell the story of the "Three Seasons" found in the sanctuary with the impact of the changes to the weather, biology, animals, etc., and how these directly affect the health of the theater marine minions. The images will be displayed on the projection screen from the LG projector and two projection screens that are located at the left and right sides of the exhibition. The public will be able to hear high-definition surround sound speakers and subwoofers concealed within and behind the hemispheric projection dome.

MONTEREY BAY NATIONAL MARINE SANCTUARY OPEN OCEAN MINI THEATER
Project Status: Currently in design 10/16/07

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<table>
<thead>
<tr>
<th>National Sanctuary Program</th>
<th>MBNMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2001</strong>: <em>Market Analysis and Interpretive Strategy</em></td>
<td><strong>2003</strong>: 2-year site, 23 site evaluation was conducted</td>
</tr>
<tr>
<td><strong>2004</strong>: NMS approves development of MBNMS Visitor Center</td>
<td><strong>2005</strong>: Visitor Center main messages were developed with a group of stakeholders</td>
</tr>
<tr>
<td><strong>2006</strong>: Conceptual Design for exhibits and architecture complete.</td>
<td><strong>2006</strong>: Eco-Charrette Report identifying specific LEED sustainable goals and strategies.</td>
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<tr>
<td><strong>2007</strong>: Schematic Design and Design Development for exhibits and architectural design complete</td>
<td><strong>2007</strong>:</td>
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