



MOUNTAINS TO MAVERICKS AND BEYOND  
San Mateo Coastside Visitor Center Concept Plan





## PROJECT

### Mountains to Mavericks and Beyond

Gulf of the Farallones National Marine Sanctuary (GNFMS) is leading an effort to develop a visitor center along the coast of San Mateo County, California. Local businesses, nonprofit organizations, state and local government agencies, educational institutions and other federal offices have been actively engaged in the development of interpretive concepts and topics for the San Mateo Coastsides Visitor Center.

GNFMS plans to develop visitor centers in communities along the coast within the sanctuary management boundary. These centers will help to educate visitors about the sanctuary and its underwater wilderness. The San Mateo Coastsides Visitor Center will specifically highlight the bathymetry, geography and ocean currents that together create the unique biodiversity and special places of the San Mateo Coast. Ano Nuevo, Pescadero Marsh, Mavericks, Deep Reef, Moss Beach, Pillar Point Harbor, Princeton Marsh, Fitzgerald/Montara State Marine Reserve and the old growth redwood forests are just a few of the distinctive spots that collectively provide one of the most scenic and biologically rich coastlines in this country.

### The sanctuary's goals for the San Mateo Coastsides Visitor Center include integrating:

#### Visitor Center include integrating:

- Dynamic stories of real places along the San Mateo County Coast.
- Visitor services that promote local, sustainable, real-life, practices.
- Collaborations that nurture a coastal "blue-green" economy.
- Opportunities to learn more about oceans, coasts and watersheds.
- Forums for community participation in marine stewardship programs.
- Experiences to build ocean literacy and inspire an ocean conservation ethic.

## ABOUT THE SANCTUARY

### A Special Place that Needs Protection

In 1981, Gulf of the Farallones National Marine Sanctuary (GNFMS) was established by Congress in recognition of the area's unique geographic and oceanographic features, which support an exceptional diversity and abundance of marine life. The wildlife habitats managed by GNFMS include 1,279 square miles within the Farallones sanctuary, an additional 1,377 square miles of the northern Monterey Bay sanctuary, from Bodega Head south to Point Año Nuevo in San Mateo County. Habitats include sandy beaches, estuaries, rocky shores, open waters and deep ocean. The sanctuary protects this ocean wilderness through research, education, conservation and stewardship programs.



## AUDIENCE

The San Mateo Coast anchors a traditional commercial fishing and farming community, and is strongly dependent upon recreation and tourism to support the local economy. The coastside attracts tourists – locally, nationally and internationally – engaged in recreational fishing, kayaking, cycling, surfing or otherwise enjoying the communities along the coast. Many visitors, and even local community members, are not aware of why this area is unique, or of the issues surrounding the impact their daily activities have on the ocean.

Tourists come from the greater Bay Area on day and weekend trips, from California's Central Valley to escape the heat in the summer, and from countries all around the globe, year-round, to experience the beauty of the San Mateo Coast. As a result, this new visitor center model will be in a unique position to reach a wide range of audiences all of whom have a daily impact on the health of our ocean.

### Target audience:

- Coastside Residents
- Bay Area Visitors
- Central Valley Vacationers
- International Travelers
- School Groups

The GFNMS Facilities Master Plan (GFNMS, 2006) recommends growth and improvement in visitor outreach in the Half Moon Bay area to more effectively serve both the Gulf of the Farallones and Monterey Bay national marine sanctuaries. The San Mateo Coastside Visitor Center will implement elements of the GFNMS Management Plan (GFNMS, 2008), a document that guides the direction of scientific research, public policies and educational programs.



The Beauty of the San Mateo Coast,  
A Special Place of Many Special Places...

## VISION AND GOALS

The vision of Gulf of the Farallones National Marine Sanctuary (GFNMS) is to become a global leader in fostering a marine stewardship ethic. The educational mission of GFNMS is “to educate and engage residents and visitors in the GFNMS watersheds about their connection to the sanctuary and to develop a sense of personal responsibility to protect the marine environment.”

Visitor centers and educational programs are designed to enhance public awareness, understanding and appreciation of sanctuary wildlife habitats and build stewards to take on the responsibility of protecting these special places.

The San Mateo Coast was selected for a new visitor center for its demographics, easy access to sanctuary waters and the unique physical and biological processes of the area. The same dynamics that generate cresting 50-foot waves at Mavericks, the internationally famous surfing area, also set up prime conditions for the abundant and diverse marine life that thrive along the San Mateo Coast. The preparation and future implementation of the Coastsides Visitor Center Concept Plan will help to ensure success

in achieving critical sanctuary initiatives including marine spatial planning, promotion of sustainable fishing, farming and green businesses, as well as serve as a perfect launching spot for visitors to explore the sanctuary through low impact recreation and ecotourism.

The vision for the Coastsides Visitor Center is to forge a new center model that pushes beyond nature interpretation and moves toward building community sustainability through its design, programs and exhibits. This mixed-use Sanctuary visitor center model will provide an exciting forum for the local community and tourists to discover this world-renowned ocean wilderness and to get involved in the development of solutions to marine problems.

### Visitor Center Goals:

- Demonstrate the connectivity of California’s watersheds to the sanctuaries situated along the coast of San Mateo.
- Engage residents and tourists in low impact recreation activities to explore the sanctuaries.
- Inform visitors about actions and choices they can make each day to protect our oceans.
- Forge community economic viability by promoting sustainable fishing, farming and other green businesses.
- Develop strong working relationships with coastsides business, fishing and agricultural communities to solve problems in the local marine ecosystems.



A public visitor center working group meeting.

## PLANNING PROCESS AND COMMUNITY OUTREACH

The Coastside visitor center planning effort was undertaken in 2009. The public involvement process included regular meetings with the Sanctuary Advisory Council Visitor Center Working Group and staff. The working group was comprised of seventeen members representing coastal businesses, local nonprofit groups, government organizations and the Sanctuary Advisory Council. The Working Group met five times over the course of the year to provide input and direction on visitor center concepts to the advisory council. In addition to advisory council input sanctuary staff met with stakeholders to develop additional partnerships and gather information pertinent to the development of the Visitor Center Concept Plan. Sanctuary staff and the working group hosted a community workshop in fall 2009 to gather additional feedback from coastal residents and business owners.

## TEAM

### San Mateo Coastside Visitor Center

#### Working Group Members

Bob Breen, Chair, Sanctuary Advisory Council  
 Jim Anderson, Commercial Fisherman  
 Pat Conroy, Vice Chair, Marine Biologist  
 Dave Cresson, Consumer Surveys of Half Moon Bay  
 Dana Dahl, Beach House Hotel  
 Brenda Donald, Sanctuary Advisory Council  
 Peter Grenell, General Manager, Pillar Point Harbor  
 Kenny Howell, California Canoes & Kayaks  
 Mike Laffen, Half Moon Bay Brewing Company  
 Ed Larenas, Surfrider Foundation  
 Mary Larenas, Surfrider Foundation  
 Tom Mattusch, CPFV owner "Hulicat"  
 Charise McHugh, Half Moon Bay Chamber of Commerce  
 Duncan McLean, Commercial Fisherman  
 Kellyx Nelson, San Mateo County Resource  
 Conservation District  
 Pietro Parravano, Pillar Point Harbor Commissioner  
 Elena Young, Harbor Seal Company

### Gulf of the Farallones National Marine Sanctuary

#### Staff Members:

Carol Preston, Project Lead, Education & Outreach Coordinator  
 Maria Brown, Superintendent  
 Christy Walker, Education Specialist  
 Irina Kogan, Resource Protection Specialist  
 Mary Jane Schramm, Media Liaison, Public Outreach Specialist  
 Justin Holl, Crissy Field Visitor Center Manager

#### Consultant Team Members:

Jeff Northam, Exhibit Designer, Pouncing Pachyderm Productions  
 Jana Sokale, Facilitation & Planning Services, Sokale Environmental Planning  
 Mark McGowan, Graphic Designer

#### Other Marine Sanctuary Staff:

Rosemarie McKeeby  
 Office of National Marine Sanctuaries  
 National Marine Sanctuary Foundation



# MOUNTAINS TO MAVERICKS & BEYOND

## MAIN VISITOR CENTER

### INTERPRETIVE THEME:

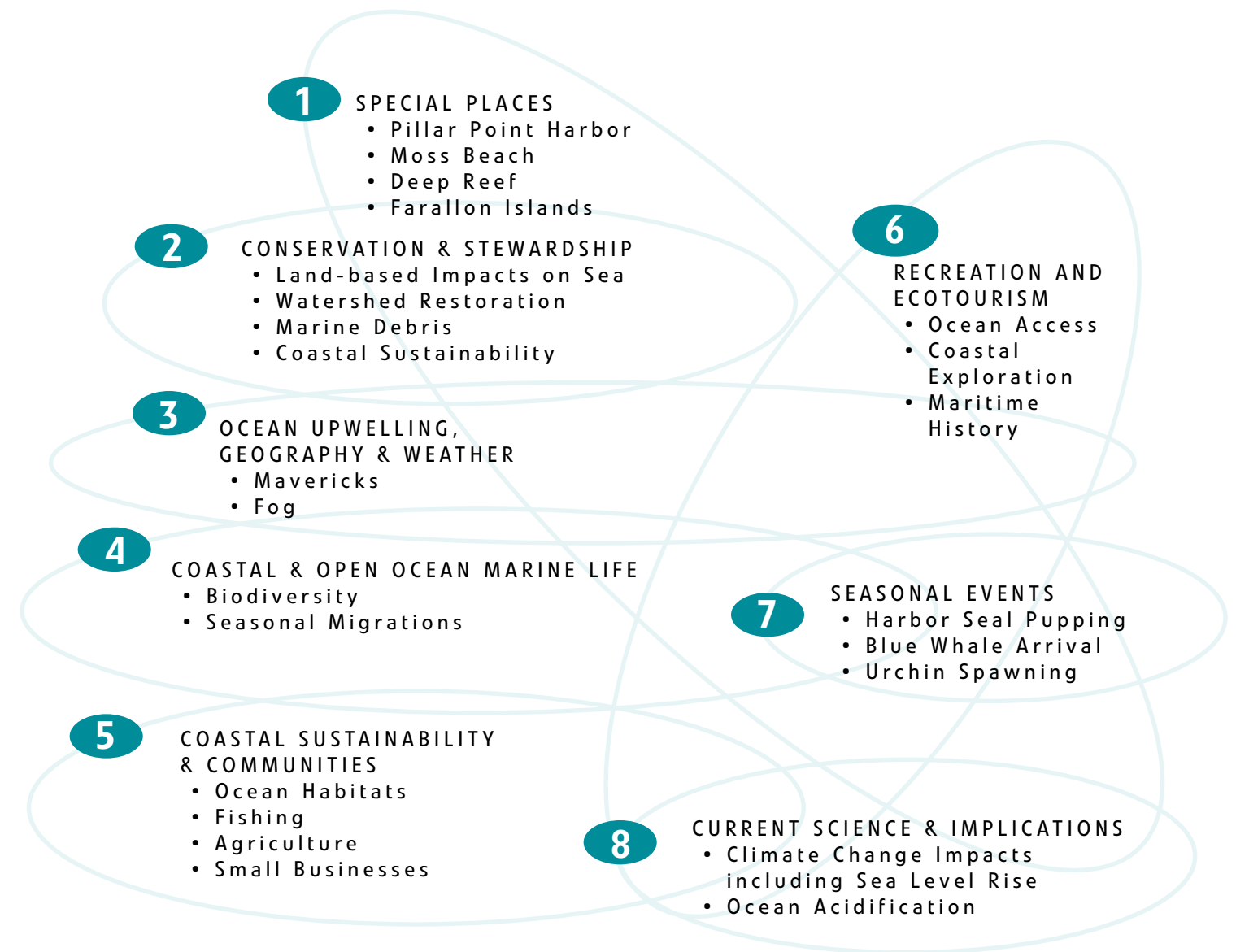
#### Gulf of the Farallones Oceanographic Ecosystem and its Communities

The San Mateo Coastside Visitor Center theme “Mountains to Mavericks and Beyond” captures the important land-sea connection that is critical to the health of our ocean. This theme allows the audience to comprehend and appreciate the interconnectedness of the landscape from the Coast Range Mountains to the internationally famous Mavericks surf spot and beyond. Programs and exhibits will provide interpretation of sanctuary habitats and wildlife as well as nurture sustainable fishing, farming and eco-tourism. Visitors will be encouraged to support sanctuary and partner stewardship projects and to share conservation messages with family and friends.

#### Interpretive Messages to be interwoven throughout

##### the exhibits and education programs:

- Conservation & Stewardship
- Climate Change
- Local Sustainable Practices & Communities
- Current Science & Implications

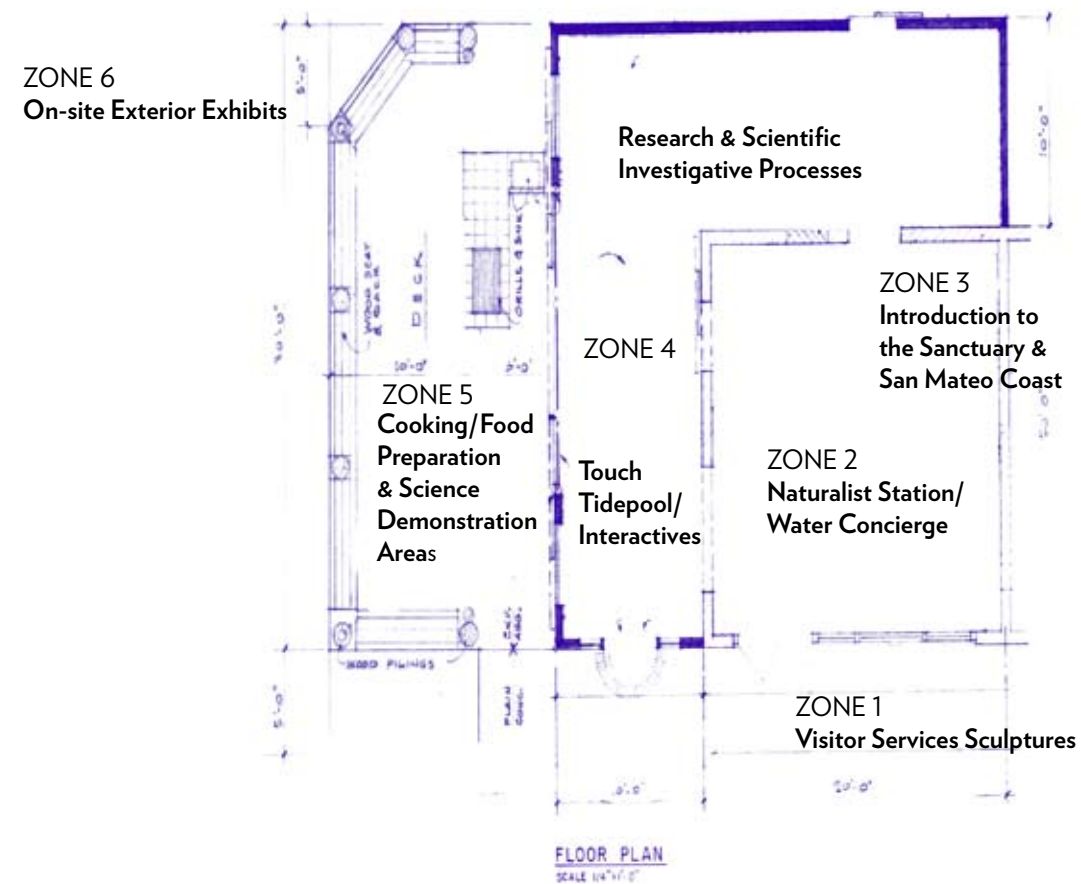




MOUNTAINS  
TO  
MAVERICKS  
AND  
BEYOND:  
EXHIBIT  
CONCEPTS



The size of the actual physical space allotted for each exhibit element will depend upon the site ultimately selected for the San Mateo Coastside Visitor Center. Nevertheless, to fulfill the desired goals and functions, the physical space that exhibits and programs will occupy will be divided into seven areas or zones. There will be six on-site zones plus one off-site zone to interconnect the visitor center with other locations along the coastside.



**EXHIBIT ZONE 1**

**Visitor Services Sculptures / Where & How to Explore the Coast Sectors of the Blue-Green Coast Economy & Ecotourism**

“Blue-Green” economy is a vibrant, ocean-based economy that is economically and environmentally sustainable

**EXHIBIT ZONE 2**

**Naturalist Station/Water Concierge**

**EXHIBIT ZONE 3**

**Introduction to the Sanctuary & San Mateo Coast**

Ocean Upwelling, Geography, Bathymetry, Geology, Mavericks, Weather—from the coastal plain to coastal mountain ridge

**EXHIBIT ZONE 4**

**Touch Tidepool/Interactives/Research & Scientific Investigative Processes**

Webcams, Live Video Feeds of Local Wildlife Hotspots-Año Nuevo (elephant seals), Devil’s Slide Rock (murre), Farallones (birds & mammals)

**EXHIBIT ZONE 5**

**Demonstration Area: Cooking/Food Preparation & Science Demonstrations**

Promotion of sustainable food & economy model as well as science marine life investigations

**EXHIBIT ZONE 6**

**On-site Exterior Exhibits**

Mavericks wave mural and current weather/wave conditions with animated tide chart

**EXHIBIT ZONE 7**

**Off-site Exhibits**

Signposts, satellite exhibits, self-guided walking, biking, auto tours, via cellphone and podcasts, GPS treasure hunts and other programs



At the entry to the San Mateo Coastsides Visitor Center will be an array of sculptural elements representing local ecotourism resources and activities available to the visitors—a farmer with fruits and vegetables, a crab fisherman with pots, and a surfer carrying her board. In the front bay window will be video monitors detailing information regarding the various activities, recreational opportunities and visitor services available that day or season.



Video footage from Mavericks and other local surf spots will play. Surf and tide forecasts will allow visitors to better plan for surfing, tidepooling, kayaking, hiking and other recreational opportunities available each day.



Bronze or concrete sculptural, live-action figures will invite interaction, entice visitors to enter the visitor center, and promote sectors of the local “blue-green” economy by helping visitors enjoy their coastsides experience.



Video monitors will allow visitors to the coastsides to get the latest information on what to do and see, where to stay or eat and other visitor services along the San Mateo Coast 24/7.



Coastsides farms, ranches, roadside stands, stores, and restaurants will be promoted that feature seasonal, organic and locally grown flowers, produce, meat and cheese.



The “catch-of-the-day” available from the boats in the harbor will be detailed, as well as available fishing and whale-watching tours.



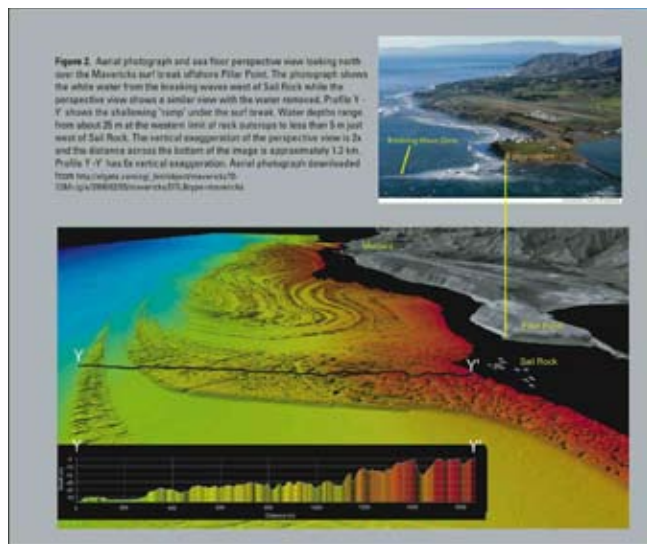
**A**t the San Mateo Coastside Visitor Center, a “water concierge” will show some of the life in the area as well as help visitors find many interesting destinations to discover.

Information on trails, tidepools, kayaking, biking, wildlife viewing and other recreational activities along the San Mateo coast will be available as well as directions to lodging, shopping and dining experiences that promote a sustainable blue-green economy.



Visitors will learn of the many wildlife species and viewing hotspots found along the coasts. Live webcam links to the Farallon Islands, Año Nuevo and Devil's Slide Rock will allow visitors to view birds and mammals during their seasonal visits to local coastal cliffs and beaches to breed and/or feed.

The land-sea connection is apparent in how everything on the coastside is dependent on the unique combination of sea and land found here. The weather, the plants and animals and even the many ways people earn their living and spend their leisure time. From the giant surf at Mavericks to the foggy tops of the surrounding mountains, it all starts with the ocean—from the sea floor to the hilltops and everything in between.



The bathymetry of the sea floor at Mavericks.



Fog often forms over the sea at Half Moon Bay and moves inland providing the mountains, redwoods and farms with moisture in an otherwise dry climate. The water cycle will be depicted here as it happens in this landscape.



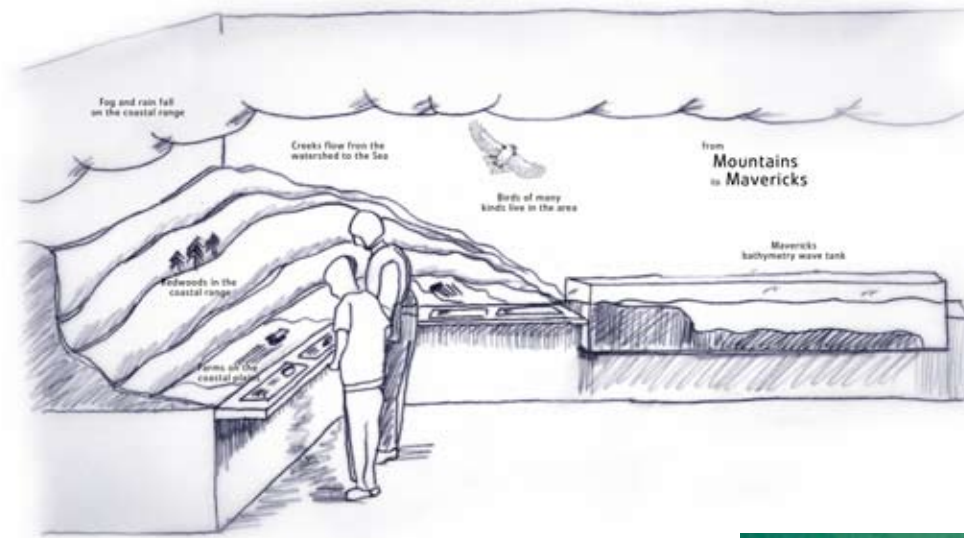
The unique climate of the Coastside area creates special areas of redwood forests and streams with historic salmon runs.

Time-lapse video of fog forming and moving inland over the coastal plain



Wave tank with sea floor profile of Mavericks will demonstrate the severe elevation changes which contribute to the massive waves.

One of the things that makes the San Mateo Coastside so unique and important enough to be protected as a national marine sanctuary is the land-sea connection. Many organisms that spend their adult life in the open ocean are dependent on the land to reproduce. Elephant seals return to places like the Farallon Islands and protected mainland beaches, such as Año Nuevo, to molt and bear their young. Anadromous species, such as the steelhead salmon, are dependent on accessible, healthy streams in which to breed. The Marbled Murrelet, a threatened seabird, nests high in old growth forests of the Santa Cruz Mountains.

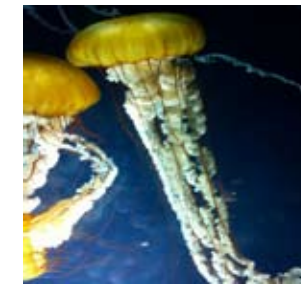


Monitors, aquaria and webcams will provide insight into the reproduction cycles of salmon and other species linked to the sanctuary and San Mateo Coast.

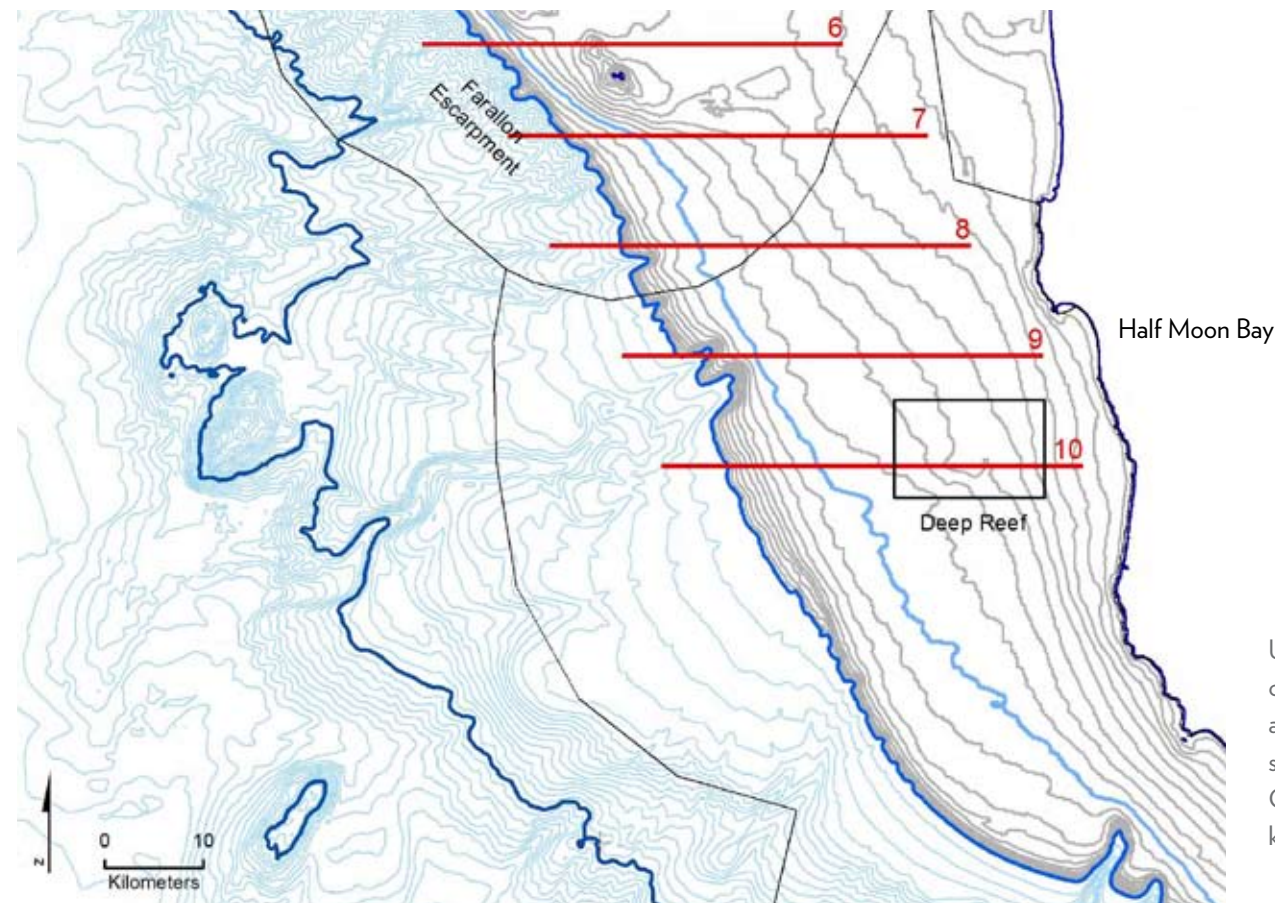


As visitors enter the exhibits a model of a Marbled Murrelet chick will be visible sitting on a depiction of a limb of an old growth tree protruding outward from high upon the wall.

Waters off the San Mateo County Coast are so rich that numerous fish, birds, turtles, mammals and other marine organisms migrate, some from remote corners of the world, just to feed here. Scientists attach data recorders and other satellite linked devices to sharks, seals, leatherback turtles and other wildlife to track their movements and better understand their life histories. Visitors will be able to view video screens displaying the real-time movements of tagged individuals during migrations to and from the area via weblinks to active research sites.



Leatherback turtles travel thousands of miles from Indonesia to the waters off the the San Mateo coast just to feed on jellies like the *Chrysaora hysoscella*.



Upwelling of nutrient-rich waters contributes to an especially diverse and abundant life in an area of near shore waters off the San Mateo County coast near Half Moon Bay known as "Deep Reef."



Scientists on a transect line near the Farallon Islands record their findings in logbooks and computer files.

Tidepools in and around Moss Beach and elsewhere along the San Mateo coast are among the most spectacular anywhere. The San Mateo Coastside Visitor Center will have an internal tidepool visible from the outside 24/7 to entice visitors to experience a completely immersive, touch tidepool inside the visitor center during operating hours.

Nearby Fitzgerald/Montara State Marine Reserve is one of the most biologically diverse tidepool ecosystems on the West Coast and is easily accessible for families. Tide charts will be readily available so visitors can decide what is the best time for visiting this and other local special places.



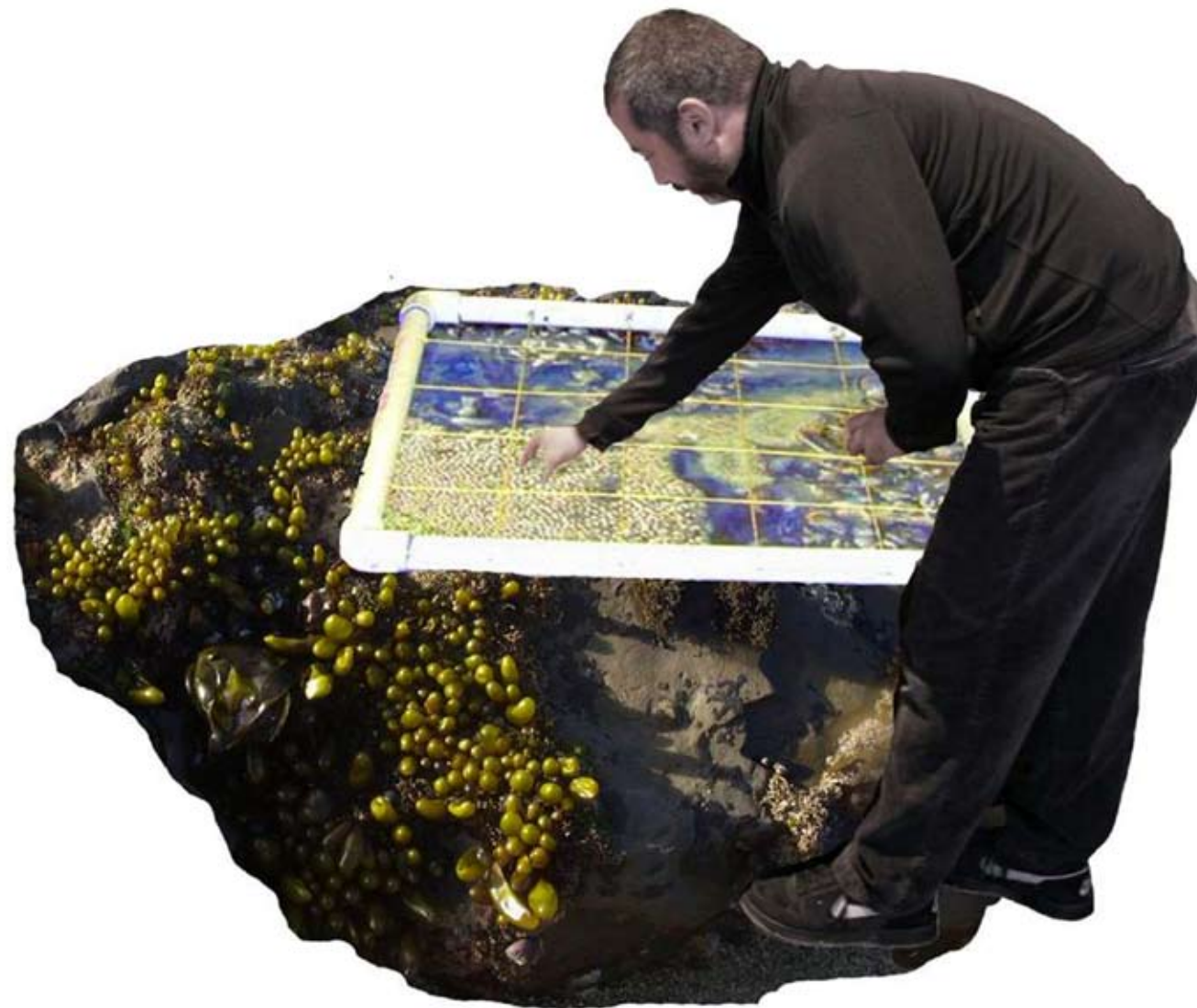
The touch tidepool will have live examples of many of the species found along the coast.



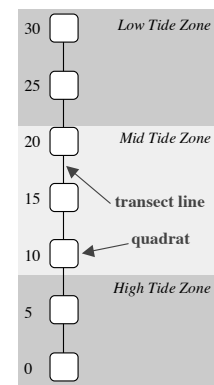
Along the San Mateo coast are many varied ecosystems, rich in plant and animal life. One of the ways scientists study these environments is to make periodic counts of the animals and plants within a designated area. Monitoring studies of this kind taken over many years enable scientists to compare the counts and assess the health of the target environment.

For tidepool studies quadrats are defined by square or rectangular frames made of pvc pipe and string forming a gridwork of equal-sized areas placed along a transect line in either a random or uniform spacing.

The Quadrat exhibit will allow visitors to do their own transect study in a virtual way. Video images of a tidepool, will be projected from underneath a grid so that visitors can count the plants and animals within it. The complexity of the rocky reef represented by the video images can be varied depending on the age groups of visitors or sophistication of the education program.



Scientists conduct rocky intertidal monitoring at two sites within the sanctuary: the Farallon Islands and Duxbury Reef.



Transect schematic



Various scenes within tidepool environments can be explored virtually on the Quadrat exhibit.

One of the ways scientists study the health of the sandy beach is to make periodic counts of an indicator species such as the Pacific Mole Crab commonly known as a sand crab.

In contrast to the tidepools, on the sandy beach samples are taken with round, open-ended tubes that are pushed into the sand to collect a column of sand at various locations along the transect lines.

The sand samples are deposited in mesh-bottomed sieves that allow the sand to fall through, yet retain sand crabs. The number and sex of sand crabs are recorded for each location along the transect.

Scientists, as well as high school students, examine sand crab specimens back in the lab to dissect and look for the presence of parasites.

In the visitor center exhibits sand crab replicas will allow visitors to collect samples and do population counts. An adjacent durable microscope will allow examination of prepared slides of parasites.



Studies of sand crabs provide useful information on location, population size, age, sexual composition, and the presence or absence of parasites. This data provides valuable information as to the health of the sand crab population and the overall health of the sandy beach environment.



A teaching & cooking demonstration area will provide a multi-purpose space for presentations to the public and school groups. Cooking demonstrations utilizing locally produced food items will promote local fisheries, farms, ranches, restaurants & sustainable businesses. Science classes will be hands and minds-on to investigate marine life.



MAANDAG 2 MAART 2009  
**Brussel sprouts with bacon & almonds**

**Ingredients:**  
 4 strips of bacon cut into 1/2 inch pieces  
 1 1/2 lbs of Brussel Sprouts (ends removed, cut in half and then sliced - each half sliced into 1/3rds)  
 1/2 cup of almonds  
 1/4 tsp of salt  
 freshly ground pepper

**Directions:**  
 Sauté bacon in a skillet until cooked (slightly crispy) about 6-8 minutes - do not drain the fat.  
 Add Brussel Sprouts into bacon and saute for another 5-6 minutes.  
 Add almonds and saute for 1 more minutes.  
 Season with salt and pepper.



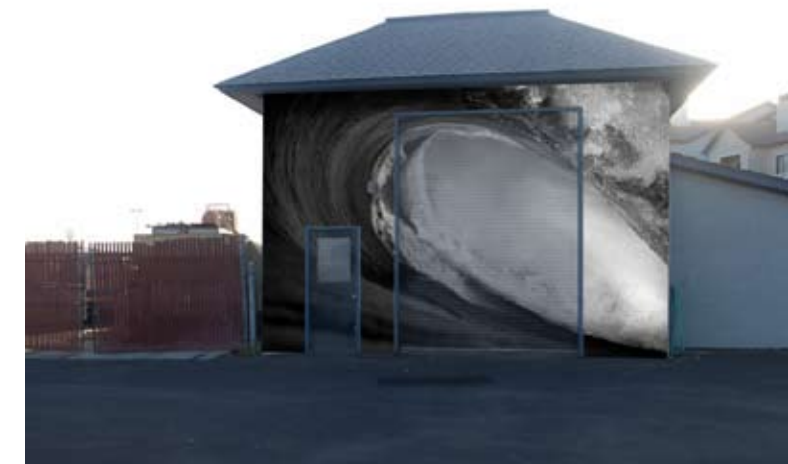
Locally grown fruit, vegetables and wild caught local fish will be featured in the cooking demonstrations. Recipes with maps included will guide visitors to farms and ranches in the area.



To convey the enormous size of waves that can form at Mavericks, the exterior of the Visitor Center will be painted with a giant wave. The wave on the wall will be portrayed with no surfer. A smaller panel of a surfer with a hole for a person's face would be positioned in front for taking candid photographs. An alternative concept is a wave with an image of a surfboard on a sloped platform integrated within the lower wave area that would allow visitors to pose for a photograph as though they were riding a big wave. The Photo-Op is available 24/7.



Alternative plan



To build awareness of the San Mateo Coastside Visitor Center and attract visitation, the exterior wall will be outfitted with large monitors projecting eye-catching, useful, up-to-date graphical information on the weather, tides and water conditions. By providing this useful visitor service 24/7 to surfers, fishermen, tidepoolers, and visitors, the visitor center will become a first stop to exploring the sanctuary.



Exterior, colorful, up-to-date, animated graphics of tide charts as well as weather and water conditions will attract visitors.

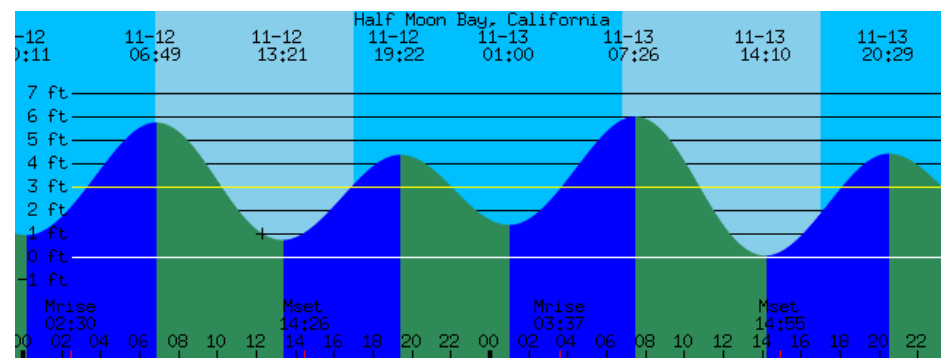
**Half Moon Bay, CA**

Currently

**61°F**  
Sunny  
Feels Like: 61°F  
Humidity: 78%  
Wind: W 13 mph  
[Hour-by-hour](#)

Tonight's Outlook

Low: 52°F  
Partly Cloudy



9/26/09  
8:02 am

Level: **1.4'**  
Rate: 0.3'/hr

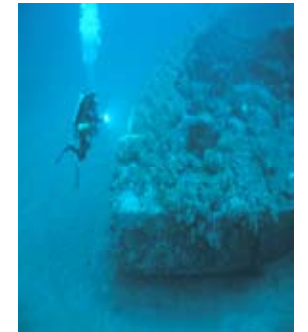
High tide: 10:59 AM  
Low tide: 2:32 AM, 7:03 PM

**Present Conditions:**

Water Levels:	4.82 Ft
Winds:	8 mph at 258.0°
Gusts up to:	13 mph
Air Temperature:	59°F
Water Temperature:	61°F
Barometric Pressure:	1016.0 Mb
Relative Humidity:	Not installed

Offsite satellite exhibits and self-guided podcast, cellphone or GPS tours will help visitors explore the many opportunities to experience the coastside beyond the walls of the San Mateo Coastside Visitor Center. Whether done by auto, bike, boat, or foot these tours and satellite exhibits will also entice Coastside visitors at these remote locations to come to the visitor center itself.

MARITIME HERITAGE:  
SHIPWRECKS,  
BOOTLEGGING  
& WARTIME RELICS



FISHING TECHNIQUES, GEAR  
& UP-TO-DATE HARBOR ACTIVITY



LOCAL WILDLIFE HOTSPOTS



DIVERSE GEOLOGICAL FEATURES



Beyond the visitor center a connection is established with merchants and sites along Half Moon Bay Main Street and other coastside communities and locations. These can include streetside interactives, podcasts, geocaching, and other self-guided tours. Readily identifiable signposts will establish a connection and build a synergy between the visitor center and these remote locations.



## BUILDING SETTING, REQUIREMENTS AND SITE SELECTION CRITERIA



### VISITOR CENTER SETTING

- Ocean View
- Sanctuary Inspired Setting
- Access to Salt Water for Maintaining Live Exhibits
- Walking Distance to Field Trip Sites – Beach, Marsh, Mudflats, and Rocky Shore
- Visitation Creates Synergy with Area Businesses to Support Local Economy
- High Foot Traffic Area
- High Visibility from Roads
- Adjacent to Other Facilities that Attract Visitation
- Access to Coastal Trail
- Available 24 Hours a Day

### BUILDING REQUIREMENTS

- Rooms Suitable for Teaching School Groups
- Laboratory Space for Teaching
- Office Space for Staff
- Access and Parking for Buses
- Accommodates School and Tourist Bus Access
- Meeting Space for Community Groups
- Adequate Parking
- On-site Restrooms
- Green Construction Methods and Materials
- Exterior Space for Outdoor Exhibits
- Potential for Expansion

### POTENTIAL VISITOR CENTER SITES

- Pillar Point Harbor
- Buildings along the San Mateo Coast
- Downtown Half Moon Bay

### POTENTIAL SATELLITE EXHIBIT LOCATIONS

- Pillar Point Harbor
- Coastal Trail Sites
- Mavericks Area
- Downtown Half Moon Bay Sites
- San Mateo County Beaches
- Fitzgerald/Montara State Marine Reserve



**We invite you to voice your support for the  
San Mateo Coastside Visitor Center.**



For more information contact:

**Gulf of the Farallones**

National Marine Sanctuary

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<http://farallones.nos.noaa.gov>

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