

**Cordell Bank National Marine Sanctuary
Advisory Council Meeting Minutes
April 7, 2009**

Meeting Commenced at 9:45 a.m.

Introductions –

Introduction and welcome by executive director of Point Reyes National Seashore Association – Mark Bartollini

Coast guard introductions:

Captain Cullen –

Kevin Bruen – oil spill prevention and response

Gus Bannan – oil spill response

Brittany Steward – Living Marine Resources

Ellisa Garrity – Law Enforcement

Roll call, Review Agenda – Lance Morgan

Roll -

Council Members Present:

George Clyde

Brittany Steward

Edmund Smith

Vic Chow

Lance Morgan

Todd Steiner

Chris Mobley

Susan Anderson

Staff Present:

Rowena Forest

Dan Howard

Review Last Meeting's Minutes

Motion

Edmund Smith moved to accept 12-3-08 Cordell Bank Advisory Council (SAC) minutes as final

George Clyde seconds

All in favor

Public Comment – Lance Morgan

Mike Milne Sea Turtle Restoration Network:

Mike presented on the Conservation of the Leatherback sea turtle

Jackie Dragon – Marine Sanctuaries campaign and shipping issues. Jackie announced hearings regarding shipping issues

Dan Howard commented on shipping and oil spill issues

Managers Report – Dan Howard
Budget Update

Regulations from Management Plan Review are now final. Dan discussed the new and updated regulations

Cordell Bank – Gulf of the Farallones National Marine Sanctuary Expansion Bill update

Cordell Bank NMS office expansion update

New research assistant

Questions and discussions regarding name for the Boundary Expansion Bill in new Congress, aircraft monitoring for Cordell Bank National Marine Sanctuary (NMS), and the National Marine Sanctuary twin otter aircraft.

Education Report – Dan Howard for Jennifer Stock
Oceans for Life Program

Oral history project – divers from first Cordell Bank dives

PRBO Conservation Science partnership with teachers in the field

Oakland Museum partnership with Cordell Bank to develop Sanctuary exhibits in the science wing

KWMR monthly program – Ocean Currents

Research Report – Dan Howard for Lisa Etherington
New research assistant – Kaitlin Graiff

Condition Report at the printers

Bodega Marine Lab looking at new Cordell Bank buoy deployment

Cordell Bank specimens

Ship research time for 2009

Regional ocean monitoring program

Taxonomy conference at Monterey Bay Aquarium Research Institute

SAC Seats Update and Schedule October Retreat – Rowena Forest

Rowena gave an update of the most recent open seats on the Cordell Bank Advisory Council, and the need to adequately fill the Maritime Activities seats. The Council discussed this.

The Council scheduled a one day retreat for October 8th, 2009

Member Updates – Lance Morgan

Brittany Steward – Coast Guard update

Todd Steiner –

SPAWN received a BWET Grant to conduct a wetlands educational project

Worst spawning season for Coho salmon in the local watershed in the last 14 years

George Clyde –

Visited Florida Keyes National Marine Sanctuary and visitor center

Work group of Gulf of the Farallones National Marine Sanctuary regarding vessel permitting and monitoring in Tomales Bay

Vic Chow –

Vic presented about the marine education program he runs for primary and high school students in Sonoma County

CAMEOS Project – graduate students at Bodega Marine Lab taking research projects to high schools and middle schools, conducting projects with students and culminating in a scientific project

Projects for intern high school students – marine debris

Cal Pass program

Edmund Smith –

Research on the herring spawn in San Francisco Bay. Low rains impeded the spawn this winter. George Clyde commented on the herring activities in Tomales Bay

Chris Mobley – Superintendent Channel Islands National Marine Sanctuary (CINMS)

Safety drills done off the NMSP vessel Shearwater, in conjunction with US Coast Guard

Whale strike issue at Channel Islands National Marine Sanctuary – Chris discussed issues regarding communications with shipping traffic in regards to whale strikes. CINMS will conduct further monitoring and observations of traffic and marine mammal/whale interactions.

CINMS budget

CINMS educational film for public outreach and visitor center

New CINMS facility on University of California Santa Barbara campus

Lance Morgan –
Northern-Central Marine Protected Area meetings

Sonoma County Water Agency alternative energy/wave energy applications and permits

High Seas Marine Protected Areas projects at Marine Conservation Biology International

Ocean Acidification conference with Olympic Coast National Marine Sanctuary

Fishing Regulations Overview – Lisa Etherington

Identifying pressures on the Sanctuary resources through the Condition Report.

Commercial Fishing Closures (EFH and RCA)

Terminology – Essential Fish Habitat for ground fish, Habitat Area of Particular Concern, Essential Fish Habitat Conservation Areas

Coast-wide Habitat Areas of Particular Concern (HAPC)

Coast-wide EFH Conservation Areas (Closures)

Commercial Fishing Closures (EFH and RCA)

Essential Fish Habitat Conservation Areas

Commercial Rockfish Conservation Areas

Cordell Bank Rockfish Conservation Area

Recreational Rockfish Conservation Areas

Prohibited areas for bottom trawling within CBNMS

Percentage of CBNMS closed to bottom trawling

Clarification of types of ground fishing allowed in Cordell Bank NMS

Other fishing allowed on or near Cordell Bank

Discussions and Questions for Lisa –

The Council requested a copy of Lisa's power point for reference

The Council discussed the fishing zones around Cordell Bank

Chris Mobley discussed fishing regulations in and around Channel Islands NMS.

Lunch

Channel Islands National Marine Sanctuary Working Groups Update

– Chris Mobley

Working groups of the Channel Islands – logistics and process of the working groups

Drafting of reports

Approaches to filling working groups:

Standing working groups – fishing, conservation, enforcement, research advisory panel, etc.

Forming special working groups – bringing together people from a broad spectrum of interests to address a particular issue

Reporting back to the Sanctuary Advisory Council

Compatibility Index – Dan Howard

Compatibility Index (with threshold activity levels) is a strategy from the Management Plan. Dan would like to put together a working group of the Council to address this.

In the Sanctuary's management plan: "Facilitate to the extent compatible..." struggle to define what compatible is. Dan illustrated examples of other government agencies compatibility determinations - flow charts, etc..

Stellwagen Bank National Marine Sanctuary has done considerable work on establishing their compatibility index for their activities. Chris Mobley addressed that with boundary expansion the compatibility index may change. Edmund Smith addressed the possibility of more levels of addressing threshold activity levels than an index. Susan Anderson addressed that it is important to not reinvent the wheel by way of following an established index, and addressing the issues broadly. Brittany Steward suggested that applicants have a way to first see if their project is compatible or not before approaching the Sanctuary.

Ocean Acidification – Lance Morgan

CO₂ in the ocean and ocean PH

Ocean acidification explanation

How ocean acidification impact on organisms

Long-lived deep water corals, and adaptations to environmental fluctuations

Aragonite Saturation Horizon (ASH)

Effects on distribution of deep-sea reef-forming corals

Aragonite Saturation Horizon depth projection

CO₂ increase makes it difficult for calcifying organisms to form biogenic CaCO₃

Pteropods are an important food source for many commercial species

Shell dissolution in a live pteropod

Unknown effects on a marine food web

We know: oceans are more acidic, ASH is shallower, Calcifying organisms respond negatively in labs, physiological effects on squid and fish
We don't know: organism response in situ, ecosystem effects
Maintain ecosystem resilience – near-pristine reefs in Central Pacific withstand warming best, genetically diverse eel grass is more resilient to warming
Reduce other stressors, loss of biodiversity, etc.
Reduce CO2 emissions – Even if this stopped outright now, there would be a lag in decreased ocean acidification = acidification would continue.

Climate Change Site Scenario Working Group Update – Dan Howard, Lance Morgan

Dan Howard commented on climate change site scenario working group, and summarized a draft report of the working group. This document was written by the working group in order to inform Sanctuary management of the effects on resources from climate change. Dan summarized all the sections of the report including – phenology, ecosystems and community responses, fishing pressure, public health, ecotourism, coastal infrastructure, etc.. This document will be examined at the next climate change site scenario group. Dan would like input of the Cordell Bank SAC on the draft in Mid-May, in-order to review it before the next SAC meeting in June. The SAC provided some initial comments on the document.

Consideration of the Gulf of the Farallones and Monterey Bay SAC's Joint Resolutions – Dan Howard and Lance Morgan

Dan read the two resolutions – Ocean Acidification and Energy Development – to the Cordell Bank SAC for consideration. These resolutions were also sent out to the Cordell Bank SAC prior to the meeting for their review and consideration. Dan requested input from the SAC on the first – concerning ocean acidification.

George Clyde commented in support of adopting the resolution concerning ocean acidification for Cordell Bank NMS.

Action Item: Motion

Edmund Smith moved that the CBNMS council adopt the Ocean Acidification resolution as written by the joint SAC of Gulf of the Farallones and Monterey Bay National Marine Sanctuaries .

George Clyde seconds

All in favor

The Council reviewed the resolution adopted by the joint SAC of Gulf of the Farallones and Monterey Bay National Marine Sanctuaries concerning wave energy, and discussed it in context to issues effecting Cordell Bank. George read the energy development section of Dan Basta's challenge letter sent out to NMSP staff and Advisory Councils, concerning priorities for the new administration. The Council discussed the fine points,

and pros and cons of translating an alternative energy resolution to match conservation areas and Sanctuaries. The Council agreed that there is more to consider than a blanket resolution can cover with this issue at this time. Lance suggested that the discussion be continued at further SAC meetings, and Council members further research the issue and present at the next SAC meeting in June, encompassing all alternative energy – not just wave energy.

Meeting Adjourned 3:30pm

Action Items

Motion

Edmund Smith moved to accept 12-3-08 Cordell Bank Advisory Council (SAC) minutes as final

George Clyde seconds

All in favor

Motion

Edmund Smith moved to adopt the resolution as written by the joint SAC meeting of Gulf of the Farallones and Monterey Bay National Marine Sanctuary SACs concerning Ocean Acidification, for Cordell Bank National Marine Sanctuary.

George Clyde seconds

All in favor

Attachments

Attachment #1

CB Education Update SAC meeting April 7, 2009

Jenny is full speed ahead in planning for Ocean for Life program

Ocean For Life

Oceans For Life will bring multinational students to the US from the Greater Middle East to encourage understanding diversity in cultures and using the ocean as a connecting habitat that we all need. 15 students from the Middle East will be paired up with 15 students from the US and will have an immersive experience in the FKNMS, or CA NMSs and work with GF and CB staff to learn about the west coast ecosystem. The students arrive July 30 and head down to Monterey on August 4th. After working with GF and Jenny, the group will go to Monterey area and do activities in Monterey region with Camp Sea Lab. Students are coming from: Pakistan, Saudi Arabia, Morocco, Bahrain, Egypt, and Lebanon. This year is a pilot program and the goal is for continued “field study like” programs to continue in future years.

Oral History Project

We've long thought about the value the divers who helped establish CBNMS had stories to share about their involvement with the Cordell Expeditions group and their experiences diving on Cordell Bank. No other effort exists to date and their work was instrumental in the designation of the sanctuary. Luckily, many of the members live in the Bay Area. Jenny is leading this effort and this year we will be focusing on the eldest of the group Harry Sherman, who has the most dives ever done on Cordell Bank and Bob Schmieder the leader of the team, who also recently donated his entire collection to the Cal Academy of Sciences for safekeeping. The interviews will be transcribed into a document and the sound files will be useful for educational pieces on our website.

Combining education and science through R/V Fulmar

Working with PRBO, we are going to offer a few teachers an opportunity to participate in the shared vessel time with PRBO on the Fulmar this summer. During the May and September cruise, we will have a group of 4 or 5 teachers come out for one day with a PRBO or CBNMS education staff person to participate and learn for one day. In July, we will host one teacher for the entire cruise and are recruiting for applications for that experience right now. The goal is for teachers to apply the experience and information to their classrooms and share with their students and colleagues. We would like this year's teacher to produce a Google Ocean experience that shares what the monitoring effort looks like visually on the internet. If you know of any teachers that would be interested in applying and are sea savvy, let Jenny know.

Interpretive Planning

The west coast sanctuaries are all involved in exhibit and facility planning in one way or another, where we are conveying messages about our sanctuaries to various audiences, mostly public audiences. For CB, it's the Oakland Museum exhibits and potential for exhibits at the Point Reyes Lighthouse and maybe even others we haven't identified yet. The region pulled a meeting together to discuss how to be more effective and efficient in our messaging about each of the sanctuaries and the ecosystem as a whole as we move forward, using the Grand Canyon and the NPS in general as a model. We will be producing an interpretive plan that will better enable proactive partner opportunities as we identify our priority messages to get out and in what format. This is a standard practice for National Parks, but being that we don't have "real estate" that is a destination visiting area, an interpretive plan is critical in identifying methods and messages. A lot of this work is somewhat done in different formats and stages and the west coast sites will identify a template that works for each site and be consistent, then the region will collect all 5 for use.

Ocean Currents/Radio Program

Jenny just had Jaime and Lisa on her radio program, Ocean Currents (Monday) talking about the joint monitoring effort on the R/V Fulmar this summer, next month she has an author Dan Bartolotti, author of Wild Blue, a book about Blue Whales. CBNMS gave KWMR an Ocean Communication award in January at the joint CB/GF volunteer

appreciation event for covering many ocean topics through the daily news program, other programs, and Jenny's program.

Attachment #2

Research Report for SAC meeting – April 2009

- 1) CBNMS has recently hired Kaitlin Graiff as a research specialist – a new position for the site. Kaitlin just finished a master's degree at Washington State University in Vancouver working with Dr. Brian Tissot. Her thesis focused on abundance and distribution of invertebrates in relation to fishing intensity off central California. We are excited about Kaitlin joining our staff and are looking forward to her contributions in moving our research program further.
- 2) The CBNMS condition report is being formatted for print and web page layout. It should be available for distribution by the end of the month.
- 3) Staff from Bodega Marine Laboratory are finalizing plans for the new oceanographic buoy to be placed back out on Cordell Bank. The modified design should increase the integrity of the buoy and increase the chance of recovery if the buoy and instruments are separated from the mooring anchor. Expected deployment date is within the next month.
- 4) Recently, Bob Schmieder of Cordell Expeditions donated his entire collection of specimens from Cordell Bank to California Academy of Sciences (CAS). These specimens were collected using SCUBA divers in the 1980s and represent nearly all of the specimens that have been collected from Cordell Bank. They will be greatly beneficial in developing a species list for Cordell Bank and understanding the community composition of the Bank. CAS has stored the samples until funding is provided that would allow for proper curation of the samples and entry into the CAS online taxonomic database.
- 5) CBNMS did not receive any NOAA vessel McArthur II ship time for 2009. Budget shortfalls due to increasing fuel costs and the decommissioning of the NOAA Ship David Starr Jordan has led to shifts in the NOAA ship schedules for 2009. The plans to use the NOAA experimental vessel SRVx for central California research have not yet been determined and will be dependent upon the vessel's operational funding levels.
- 6) Lisa is working with Jaime Jahncke in planning this summer's regional ocean monitoring, which will cover the offshore areas of CBNMS and GFNMS from Bodega Bay to Half Moon Bay, in May, July, and September. This is a joint project with PRBO Conservation Science and GFNMS and will continue a regional data set that has been collected since 2004. Data that will be collected include: seabird, marine mammal, and zooplankton distribution and abundance and physical oceanography. Lisa is working

with Jennifer Stock to integrate the involvement of a Teacher At Sea participant into one of the summer's cruises.

Attachment #3

**RESOLUTION OF THE CORDELL BANK NATIONAL MARINE SANCTUARY
ADVISORY COUNCIL REGARDING OCEAN ACIDIFICATION AND WEST
COAST NATIONAL MARINE SANCTUARY SITES**

Whereas, Cordell Bank National Marine Sanctuary Advisory Council recognizes ocean acidification as a significant threat to the long-term conservation and health of sanctuary resources and qualities, warranting additional NOAA research, monitoring, education and outreach, and management action to reduce and mitigate its impacts.

Therefore be it resolved, Cordell Bank National Marine Sanctuary Advisory Council recommends that the West Coast Regional Office take a leadership role in coordinating ocean acidification monitoring with the Pacific Marine Environmental Laboratory, other research laboratories, and other interested parties.

Therefore be it further resolved, the Cordell Bank National Marine Sanctuary Advisory Council recommends a coordinated approach to ocean acidification issues amongst all five west coast sanctuaries.