

## **Research Activity Panel: Meeting Minutes**

Spatial Information Visualization and Analysis (SIVA) Center California State University Monterey Bay

Friday April 11, 1997

09:00 - 12:00

Introduction of members and guests (G. Cailliet)

## **Members present**

Greg Cailliet, Moss Landing Marine Labs- Chair

Rick Starr, U.C. Sea Grant- Vice Chair

Andrew DeVogelaere, MBNMS- RAP Coordinator

Jane Delay- MBNMS- SAC Coordinator

George Boehlert, NOAA/NMFS/PFEG

Mike Field, USGS

Randy Kochevar, Monterey Bay Aquarium Deborah Johnston, CA DFG/ Monterey Rikk Kvitek, CSUMB

Giacomo Bernardi, UCSC

Jennifer Nielsen, Hopkins Marine Station

Leslie Rosenfeld, Naval Postgraduate School

Mark Stephenson, CDFG/Mar. Pollution Studies Lab Les Strnad, CA Coastal Commission

Gary Sharp, CIRIOS@CSUMB

Guests:

Ellen Faurot-Daniels, Friends of the Sea Otter

Dan Costa, UCSC

Marsha Moroh, CSUMB

Bill Head, CSUMB

Bruce Heyer, UCSC

Jack Paris, Director of the SIVA Center

## **CONSENT ITEMS:**

Modifications to the agenda (G. Cailliet)

The following items were added to the meeting's agenda:

- 1) RAP feedback on the Sanctuary Currents Symposium
- 2) MATE National Science Foundation Grant to the Monterey Peninsula College
- 3) Update on the Proposed Edward F. Ricketts Underwater Park

Approval of the minutes for March 1997 (G. Cailliet)

The DRAFT Minutes from the March 1997 RAP meeting were approved without amendments.

## **PRESENTATIONS**

Overview of activities at CSUMB and the SIVA Center (B. Head)

Marsha Moroh, Dean of Sciences at CSUMB, welcomed the RAP.

Bill Head, Chair of the Earth Systems Science and Policy Department at CSUMB, explained that the curriculum entails rigorous undergraduate training in both technical and policy aspects of marine science. Another integral part of the curriculum as described was the University's emphasis on service learning. Students are required to complete at least 50 hours in the field as interns at various institutions throughout the region. As a result of this exposure to the applied training, many students are already being hired by local companies to work on special projects.

Jack Paris, Director of the SIVA Center, provided more detail on this component of CSUMB. To date, California State University, Monterey Bay has invested \$1.5 million in technology software to ensure state of the art equipment for the students. SIVA is intended to be more than GIS technology, incorporating other techniques such as visualization of scientific data, remote sensing both above and below the ocean's surface, image processing and enhancement, and GPS technology. Marine science majors will be

required to take courses in all of the technologies at the upper division level.

Brief tour of SIVA Center (R. Kvitek)

Rikk Kvitek gave a tour of the SIVA Center and its facilities.

Some regional GIS efforts and products (R. Starr)

Rick Starr gave a report on regional GIS efforts and other applications of the technology available from the SIVA Center and MLML Habitat Center. Highlights included a collaborative (U.C. Sea Grant, MLML, NOAA- NMFS and SRD) marine habitat project which developed maps of the ocean floor from side scan surveys conducted during the 1996 McArthur cruise. The maps were made for the Big Creek area. Characteristics of the ocean floor at Big Creek will be matched with fish distributions. A poster on this work was presented at the 1997 Sanctuary Currents Symposium, and won an award for best multidisciplinary project.

Regional studies such as the one described are being compiled into a regional spatial database that can be used by a large number of people. The technology available through the SIVA Center will provides public access to numerous databases.

Another related project pertains to the California Department of Conservation -- GEOSAR -- who work above the water. There is a wealth of very detailed information and collected data for topographic maps covering the Elkhorn Slough National Estuarine Research Reserve and the Big Sur coast. Some of the data may be useful in determining solutions to Sanctuary related problems, such as elevation data along the coast in terms of CALTRANS trying to avoid letting things runoff into the ocean.

## DISCUSSIONS

Discussion and review of man-made sound in the sea, with a focus on the proposed Navy surveillance operation (G. Cailliet)

The Conservation Working Group (CWG) addressed a letter to the Chair of the Sanctuary Advisory Council (SAC) requesting that the RAP be directed to produce a summary of existing information on the impacts of sound in the sea.

Dan Costa, an Associate Professor of Biology at the University of California, Santa Cruz, was asked by the RAP Chair to compile a bibliography of existing literature on the subject of sound in the sea, along with any available information on the Navy submarine detection experiments. Michele Jacobi, a Sea Grant Fellow working with Andrew in the MBNMS office, will assist Dan with the project. If the SAC wants more information, then the RAP will request that some of the MBNMS budget be allocated to annotate or summarize the references.

Discussion and review of several aquaculture proposals (G. Cailliet and L. Strnad)

Les Strnad briefed RAP members on California Coastal Commission (CCC) concerns about recent efforts to expand abalone aquaculture operations in Pillar Point Harbor. In a formal letter to the RAP, the CCC requested that specific questions about aquaculture practices be addressed so that the CCC can make an informed decision about the proposals.

The RAP was asked to review literature and consider issues related to: 1) specific impacts to Sanctuary resources from expanded aquaculture activities; 2) the extent of impacts to Sanctuary resources from the cumulative effects of an increase in kelp harvesting necessary to support a larger aquaculture industry.

The RAP had a detailed discussion concerning its role, the lack of adequate information on the proposed topics and sources to fund research, and the need for a centralized permitting system to coordinate and document the cumulative effects of on-going marine activities relative to Sanctuary resources. RAP members decided on the following action:

- Andrew will send copies of the letter from the CCC to all RAP members with a cover letter encouraging them to review the documents or pass them to a colleague within their respective institutions knowledgeable about the issue;
- If it is determined that the topics are important, the RAP will also identify resources and colleagues in the field who can help review the issues and questions in more detail;
- If this subject is determined to be a significant MBNMS issue in terms of water quality, than the professional staff of the Water Quality Protection Program (WQPP) will be asked to address the questions in more detail;

Greg clarified the role of the RAP and expressed his concerns about the RAP being used as a free consultant. That being said, Greg commented that it was within the RAP's purview to be on top of issues such as aquaculture because of the research implications to Sanctuary resources.

Discussion of effects and management of kelp harvesting (G. Cailliet)

With respect to regulations governing kelp harvesting, the RAP was informed that the California Department of Fish and Game is responsible for regulating the take of kelp. Enforcement of the regulations is dependent upon the availability of funds.

Ellen Farout-Daniels, Science and Education Director for Friends of the Sea Otter, informed RAP members that the Fish and Game Commission had agreed to put the topic of kelp harvesting on their May meeting agenda. The inclusion of the topic was in response to a letter from the Friends of the Sea Otter. Ellen will be attending the meeting and will specifically request that the Commission consider the distribution of kelp throughout the MBNMS with a focus on the kelp forests in Monterey Bay. In particular, Ellen will ask them to consider the impacts from the take of kelp given the proposed expansion of the region's aquaculture industry. Ellen offered to take other RAP concerns to the meeting. Please contact her directly at (831) 373-2747.

RAP members agreed to incorporate the need for mapping kelp resources into the revised Sanctuary Science plan.  
SHORT INFORMATION ITEMS

## **Verbal items:**

Summary of the SAC meeting (G. Cailliet)

Highlights from the April 4, 1997 Sanctuary Advisory Council meeting were as follows:

- The SAC Charter and Protocols were approved with some reservations. The Sanctuaries and Reserves Division (SRD) proposed a couple of controversial changes having to do with working group representation on the SAC. According to the new document, the Chairs and Vice-Chairs of the working groups will not automatically be appointed as SAC members and alternates. SAC members and alternates will be selected by Sanctuary management from the list of qualified applicants;
- There was a discussion on proposed coastal legislation and the appointment of a SAC Legislative Task Force;
- Bob Hardy from the California Department of Fish and Game (CDFG) gave a presentation on the practice of "tree-fishing." It appears to be an ever increasing business. CDFG is presently monitoring catch and take. It is hoped that the information can be used to impose limits on "tree-fishing" practices through legislation. When asked if the RAP would consider whether or not this was an issue that should be addressed in more detail, Greg suggested that the RAP wait until there is more information to review;
- Work on the Vessel Traffic Safety workshops is ongoing;
- There was a report on the California and the World Oceans conference. It signified a real movement to identify funding to put into marine science education and research. General response to the conference was positive;
- The SAC 1996-97 Annual Report was approved;
- The Advisory Council's meeting schedule was changed. The SAC will be meeting the first Friday of every other month. The next meeting of the SAC will be on Friday, June 6 in the Hudson House of the Pt. Lobos State Reserve.

Update on MBNMS Superintendent and research position (G. Cailliet)

Ms. Carol Fairfield, a career marine biologist and federal fisheries analyst, has been selected as the new Sanctuary Superintendent. Ms. Fairfield is expected to take over responsibilities of the MBNMS sometime this summer. RAP members expressed appreciation for the fact that SRD appears to have selected someone knowledgeable and sensitive

about environmental resources.

Introduction of the Sea Camp concept (R. Starr and L. Strnad)

Les briefed the RAP on the concept of a Sea Camp in the Monterey region. CSUMB has made efforts to procure the Pt. Sur Naval facility. The California Coastal Commission and others hope to use part of the facility for a Sea Camp. Sea Grant has been approached to help fund a workshop to consider the Sea Camp idea. The Monterey Bay region is ideal for a Sea Camp, with the numerous marine science facilities as well as some good high school programs.

## **Additional Items to the Agenda:**

### 1) Feedback on the Sanctuary Currents Symposium

RAP members had the following comments as feedback on the 1997 Sanctuary Currents Symposium:

- Offer alternatives to the concurrent sessions. Many conference participants wanted to attend both sessions. RAP members suggested videotaping the sessions, or organizing a more concentrated morning and afternoon session, and to schedule the cocktail hour for later in the evening;
- The location was comfortable;
- The Poster sessions were excellent -- RAP members requested that the poster award recipients be present to receive the honor; particularly the younger elementary and high school students being recognized for their work;
- Topic: RAP members agreed that the topic -- "Cumulative Human Impacts On Sanctuary Resources" -- would be appropriate;
- The RAP extended its gratitude to Jane Caffrey and Don Potts for their work in organizing this year's conference and suggested appointing Les Strnad's replacement at the CCC along with RAP member Caroline Pomeroy from UCSC to work on planning next year's conference.

Other comments:

RAP members discussed the conference's change of focus from being purely research oriented to more general in nature. Greg noted that this discussion also took place last year and reminded RAP members that the consensus at that time was that there were too many academic conferences already and that the area needed broader exposure. The RAP considered a few alternatives one of which was to hold a general session in the morning and more specific sessions in the afternoon.

RAP members discussed ways for improving and better focusing the poster session. One suggestion, received well by the working group, was to give the author of each poster a few minutes to verbally introduce their work before the poster session. 2) MATE Program and National Science Foundation grant to the Monterey Peninsula College

Leslie Rosenfeld gave an update on the Marine Advanced Technology Center (MATE), a national consortium of marine scientists.

### 3) Proposed Edward F. Ricketts Underwater Park

The RAP commended the MBNMS for its balanced and sensitive approach to the proposed Ricketts Underwater Park.

## **Written items (no discussion unless there are questions):**

Feedback on the Light in the Deep Sea Report (R. Kochevar)

Send e-mails directly to Randy Kochevar

NMS Research Reports, see handout (A. De Vogelaere/J. Roletto)

see handout

Permit Report (S. Kathey)

See handout

McArthur Schedule (A. De Vogelaere)

See handout

## **New Business**

Greg provided an update on the status of the new building for Moss Landing Marine Laboratories (MLML). Items for future meetings

## **ADJOURN**

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