



# National Association of Marine Laboratories

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**Synopsis**  
**9<sup>th</sup> Biennial Meeting of NAML**  
**Wrigley Marine Science Center, University of Southern California**  
**3-5 October 2007**

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## **Action Items**

1. **EE Just Award:** Motion passed to allow Education Committee to move forward with the award.
2. **NOAA Office of Education White Paper Request:** Decided to have Education Committee respond to the request of Louisa Koch, Director of Education, NOAA Office of Education, and generate a White-Paper on marine education and Climate Changes, and to work with NOAA's Education Partnership Programs with Minority Serving Institutions.
3. **Agency Vacancy Appointments Posting:** Post and update on the NAML Website, the Agency Vacancy Appointment List so appropriate NAML members can apply or be recommended for vacancies on Agency Panels or Advisory Boards.

4. **Presidential Candidate Survey on Marine/Coastal Issues:** NAML should consider developing a national survey on ocean/coastal issues for submission to the Presidential candidates to complete.
5. **ORPP Support:** Maintain support of NOAA's ORPP as a NAML FY 2009 priority item.
6. **NAML Appointment - Ocean Studies Board:** Tony Michaels will be nominated to fill a vacant position on the National Academy's, Ocean Studies Board.
7. **OBSF/NAML Cooperation of Infrastructure Support:** OBSF will submit a workshop grant to NSF in early 2008, after which OBFS and NAML will form a steering group of about 20 members to design and shape the purpose of the workshop. A NAML liaison may be identified to serve on the group.
8. **NAML/NSF's LSAMP Partnership:** A steering group will be formed to organize NAML's actions with NSF's Louis Stokes Alliances for Minority Participation program (LSAMP). Volunteers include, Jim Sanders, Matt Gilligan, and Ken Sebens. Lewis-Burke will create a matrix of NAML labs and LSAMP alliances to help the steering group identify future actions and help the NAML membership make connections with their local AMP. NAML would also accept Art's invitation to attend and participate in his next Washington meeting.
9. **OBFS/NAML Interactions:** It was decided that cooperation between the two groups still is important. It was recommended that on the off-year (non-biennial meeting year), the two organizations hold a joint NAML/OBFS meeting; held regionally. It was further suggested that all NAML labs should join OBFS, and then the cooperation between the two groups could be carried out at the member level.
10. **NAML Finances:** To the question of dues increases, it was decided to persist with the current choices of the FTEs and dues charges.
  - A. Regional supplemental donations to NAML
  - B. Allow Regional Treasuries to designate payments for non-lobbying efforts, and/or raise their dues schedule.
  - C. Wendy Naus, LBA, asked to prepare fact sheet of Public Policy Committee accomplishments to be used to recruit NAML funding at a higher levels.
11. **Membership Committee:** New committee charged with reviewing eligibility, dues structure and revising the NAML Mission Statement and posting it prominently on the NAML Website among other items.
12. **Emeritus Member Election:** Mike Hadfield, WAML Treasurer, Retired Director, Kewalo Marine Laboratory, Pacific Biomedical Research Center, University of Hawaii, Honolulu, HI was nominated and elected to Emeritus Member status.
13. **Business Plans & OPS Manuals:** Tony Michaels will begin the process of initiating this project.

**NAML Biennial Meeting**  
**Wrigley Marine Science Center, University of Southern California**  
**3-5 October 2007**

**Meeting Call to Order:** The meeting commenced with introductions and a message from Tony Michaels, NAML President and host, about the meeting. He opened the meeting by the wrap of the official NAML gavel, noting that it is one of the few times he gets to rule with authority. He said that some of the participants would arrive following the National Sea Grant meeting in San Diego. Those present did introduce themselves (Attendees List, Appendix I).

House keeping activities came first. A snorkeling and kayaking schedule was passed around for those interested in participating. The designated time was 6:30 AM each morning, Wireless internet system is available at the lab, and instructions on how to log in were passed out. Tony noted that there are open computers also available. He asked everyone to conserve water as this year is the driest in history. Tony warned that deer and bison are around the grounds so keep your distance. Rattlesnakes also are here, so stay on the paths. On the Island's local schedule is Buccaneer Weekend, and there will be debauchery galore.

Following in the NAML tradition, Tony related that the Agenda is organized, but it is not fixed. He intended for the meeting to be flexible and open for discussion on all points. For the first afternoon, NAML Business Meeting topics would come first, to be followed by a reception preceding dinner, and then Regional Meetings after dinner. Tony announced that regrettably, Shirley Pomponi had a death in her family and would not attend the meeting, but he would fill in for her where needed. Also scheduled were discussions on NSF's Field Stations & Marine Lab infrastructure support program as well as their Education and Diversity program. Another important item would be NEAMGLL's nomination and members' vote for the next NAML President-Elect.

As part of the Biennial Business is the formation of an Audit Committee. JoAnn Leong, Kelly Clark, and Scott Quackenbush volunteered. They would meet with Alan on Thursday to review the Financial Records and report back to the meeting on Friday.

**EE Just Award:** Tony's first item on the Business Agenda was the EE Just National Medal of Excellence. The discussion was led by Matt Gilligan who thanked the LBA staff and the Education Committee members for getting this initiative going and following up on the NOAA Conference on Ocean Literacy recommendation (2006). It is recognized that NAML is the obvious organization to issue the award based upon its national role in marine research and education, and to recognize EE Just and the effort for diversity inclusion in marine education. Matt discussed his life's story including his stint in France before the Germans expelled him. There were many barriers to his career.

In general, the Medal would be awarded every two years, and would honor a visiting researcher to a marine lab whose science, done at the host laboratory, was deemed of the highest merit. The criteria and selection of nominees would be the purview of an Awards Committee established by NAML. Paul Sandifer and Rick Spinrad are involved in the planning process, and they are anticipating a proposal coming from NAML for this award. In addition to NOAA, other agency funding is possible including the National Marine Sanctuary Foundation. It would unite the NOAA effort if it happens. Matt said is also looking for support from the (NAML) organization. In the worst case, NAML would come up with \$12k. Negotiations about the options for cost sharing are under discussion.

It was noted at the meeting that there is no mention of diversity in the drafted information. Matt said it was done purposefully. The Award is to recognize the science of the nominee, not the ethnicity, and to raise and honor the name of EE Just at the same time. It was felt that this award was perfect for promoting ocean literacy as supported by NAML. Mat said as envisioned, it is being proposed to be a long-term commitment by NAML as an honor for EE Just, and a true statement of NAML's concern for this award and its importance. It was suggested that a long-term endowment that would eventually carry the award would be the best way to proceed. Matt reiterated that the award is an interagency initiative for ocean literacy, so other agencies or foundations will likely support it. Once established, it will trigger the formation of an Award Committee that could also be charged with finding continued funding levels. Kumar said that he is on the Estuarine Foundation. He noted that NOAA can pass funds through the Foundation. He is on the Foundation Board and could assist if necessary with options through the Foundation. Having sufficient money reserves from NAML long-term is a current concern, but George Boehlert noted that the Regional Organizations have flush treasuries, and could assist. When asked about eligibility, Matt stated that it will be open to everyone, a gray-hair award.

**Action Item:** Kumar Mahadevan moved, with a second by Tony Micheals, the Education Committee proceed with the project.

Discussion of the motion centered on verifying agency support for the proposal. Matt noted again that the principal supporter and our contact person is Paul Sandifer for NOAA, and Matt reiterated that Paul is committed to the award. It was suggested the EE Just Award could be sandwiched in with the Knaus Fellows recognition ceremony for visibility and to insure its importance. The Motion passed unanimously.

**NOAA, Office of Education:** Continuing on the topic of Education, Tony noted that NOAA's Office of Education is looking for direction from NAML to assist putting its education program in a proper, acceptable framework for the marine community. Tony mentioned that a White Paper to be written by NAML people on Climate Education has been solicited by NOAA. Tony said that NOAA's Education Office is a new office with new dollars, and so input from would be very well received. Louisa Koch is the point person following up from her visit to this year's BoD meeting in March, and a subsequent meeting with Tony. She is especially looking to connections between NAML Institutions and NOAA's Education Partnership Programs with Minority Serving Institutions.

Discussion followed and it was mentioned that ASLO's Multinational Sessions Program is a good program as are others directed to promote diversity in marine educations. People now use, "under-represented" as the better and newer term. Pat Cook and Linda Duguay are putting together an under-represented program through COSEE and other groups. Matt said he is urging that ASLO organizers don't schedule these sessions concurrently, so people can go to all of them. The Meeting is scheduled first week in March, currently. Tony said that the Board is moving the NAML meeting so it won't conflict with ASLO. It is currently scheduled for the last week in February.

**Action Item:** It was decided that the Education Committee will do the requested White-Paper, but input from any member would be welcomed.

Tony noted that new Climate Change money was procured, and a good portion of it is going into education. He cautioned that the Marine Community now needs to spend that money wisely so the programs will be accepted and funding continued. EPP Center has the largest pot of money

for collaborative efforts between marine labs and that it is now focused on diversity. Of concern is the new requirement that now says students need a 3.0 average or better to qualify. That is a movement in the wrong direction as these students need extra help said Matt. Another concern about the EPP program is the perception that the group is closed and hard to break into to get awards. With the new funding, we will have to see and watch for improvements. It was noted that funding awards to institutions with marine labs is especially well directed because the aim of marine labs is to educate and to engage under-represented students. It was noted the time period for responding to the request is short, so NAML needs to move expeditiously. We want to produce a powerful White Paper that can go even beyond NOAA.

**Advisory Board Positions:** Tony passed out a sheet written with Wendy Naus' help that tracks open slots on major Advisory Boards. Positions on ocean-related groups are primed for a NAML nominee. We are looking to see a steady increase in NAML appointments so that these people can help move our agenda forward. A position on the Ocean Studies Board of the National Academies is now open. Shirley Pomponi is looking for good candidates. It was noted that faculty members at marine labs are perfectly acceptable too. Tony reiterated that we would keep track of the openings, and then announce them out to the community.

**Action Item:** As we have kept updated on the NAML Website, the list for legislative contacts, we will now also post and update this Agency Vacancy Appointment List.

This procedure is an excellent way for NAML to come forward and get appointments, and thus have our agenda pushed. Tony said that the EPA Advisory Board will have 30 members to be replaced next year as the current class rotates off. These Boards do have a major impact on policy and program development. It is a good opportunity for us. Jim Sanders was just appointed to the Board, and Jeff Reutter is on ORAB is a good example. There is a NAML Nomination Committee who will call people to help get persons nominated to these positions. Serving on these Boards helps individuals as well as the agencies; connections and contacts are made between colleagues, and it provides a way to learn how to move about through the agencies and get assistance. It was recommended that we publish a list of those individuals who are representing NAML on these committees, what they have accomplished while on their Committees, who recommended them to the Committee, and what our success rate has been with promoting and forwarding NAML's goals.

**NAML Finances:** Tony passed out the Budget Sheets compiled by done by the NML Treasurer, Alan Kuzirian. Tony noted with conviction that NAML almost has made it over the cusp of success for fund raising. It was a concern for everyone that the Association still needs to vigorously pursue funding. Tony noted the success we have made. The merger of JOI and CORE into the Consortium for Ocean Leadership (COL) will still have to be watched to see where and how they will be reorganize and where they will proceed. The latter is definitely a concern. Tony recommended that we talk about this among ourselves over meeting period and readdress the topic on Friday. Tony noted that the core number of the membership has remained intact. And that the dues contributions have risen this year. It was agreed that all the postings to the NAML website to increase participation have been a good idea. Our efforts and Action Items are being noted by membership as well as the agencies in DC. Kumar suggested that we discuss how to move forward with funding. He said that there is a pool of labs that is willing to contribute more money. It was restated that the Board has resisted the impetus to create a two-tiered payment system. Private funding efforts by Tony were not successful because the foundations queried said they will not fund advocacy projects.

It was agreed that many labs are considering the expenses associated with COL vs NAML. The advances made by NAML are being recognized as is our governance structure. The new COL now has the elected board running the entire show; no direct voting at all by the membership. Information flow from COL has also stopped, and members are getting concerned. Kumar recommended that we establish a reserve amount of funds for the Treasury, and then add a modest dues increase to the members so we won't spend the Treasury down. Tony said he was optimistic that NAML can make it financially at the current level of expense activity. Ivar Babb suggested adding National Sanctuary Programs because of their public policy and outreach endeavors should be recruited as NAML members. They would increase membership and revenue. He also suggested a new dues structure for Federal Labs structured around the need to keep Regional funds shielded from LBA activities. It was further suggested that Marine Academic Departments are another potential for new members. Tony asked if we should go and recruit departments. The EE Just Award is an example of how marine labs offer department scientists opportunities. Matt found that there are >300 marine departments that offer marine educations or marine-related programs. He suggested that we can promote relationships with these land-locked departments to get students to use marine coastal labs. It was noted that NEERS programs are joint NOAA - State relationships. Who benefits asked Kumar from NAML's activities? He reminded everyone that inclusions and discussions of common problems inherent in running marine lab are still an important NAML function. Ken Sebens said that field stations may be too small to join NAML, but inclusion of their collective departments as members would make sense. Also brought up in the discussion were Marine aquaria. Their costs for membership in aquarium associations (AZA) are huge. Tony noted that the organization of Environmental Deans and Directors, as a group is working under the NAML model, and it is working very well. They hold a large yearly meeting that brings their entire membership together. "Who is NAML?" is the question people ask. NAML promotes the integration of students and people into the interaction between the environment and marine community.

**Adjournment:** Due to the hour and with the recommendation that these topics be discussed among the participants and the promise that the topics would be further addressed on Friday, the meeting adjourned for wine and socialization.

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**NAML Biennial Meeting**  
**Thursday, 4 October 2007**  
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**Meeting Call to Order:** Tony opened the meeting with a brief review of the day's events. There were new persons in attendance so he asked that we go around the room with introductions. Tony then introduced the first speaker of the day, Joel Widder, Lewis-Burke Associates. Tony praised the works of Joel and Wendy Naus with regard to their efforts to move forward NAML's Public Policy endeavors, and he especially noted how far NAML has come as a result.

**NAML's Public Policy Update/Agenda Issues:** Joel presented information on the current status of the Senate Appropriations Subcommittee on Commerce, Justice and Science. This subcommittee is the principal source of science money, from which the majority of NAML members obtain their funding. Joel said that the Government is operating on a Continuing Resolution (CR) that is now

in affect until 16 November. Congressional Discretionary spending is up over the Executive Branch with \$933 Billion on the table. There is a \$23B gap between the two. How it will shake out is unknown at this point. However, there are good science numbers in the Congressional package.

**NSF:** 8% gain and is being supported by White House. Bush's American Competitive Initiative (ACI) is helping to maintain Executive Branch support. Both the House/Senate are in support of the proposed money using the Ocean Research Initiative as an anchor. Congress has added money for education. Money for IOOS and NEON has been funded including a new drilling vessel. Money supporting the gains in NSF is being questioned by the Administration, so the final figures might get scaled back.

**NOAA:** \$3.8B is being requested by the Administration. The House says \$4.0B which is the first time they have proposed levels greater than the Administration. The Senate is supporting climate change research, and energy conservation is keeping things going in a positive direction. The Senate \$4.2B emphasizes ocean and coastal issues - including \$800 M in new money for JOCI-related recommendations (Joint Ocean Commission Initiative).

**NASA:** The Administration has requested \$17B with emphasis in manned space missions and at the expense of Earth Sciences. The House is adding \$290M to restore science programs including R&D, and Climate Programs important to earth science. The Senate is recommending adding and additional \$150M.

**Other Science Agencies including EPA and USGS:** The Administration has been supporting funds for climate change [Climate Adaptation and Mitigation Commission Research Program], but has recommended a cut of about \$500 million for EPA in FY 2008 for a total budgetary request of \$7.2 billion. However Congress, for EPA Science and Technology, has requested a 3 percent increase. The House and Senate are recommending budgets of \$8.1 billion and \$7.8 billion, respectively.

**NAML Public Policy Actions and Accomplishments:** Recent events have indicated that when Joel's phone rings, the person calling is going to ask if NAML is going to take a position on a particular issue. NAML is now definitely being recognized and we are being asked for our input. Joel said that NAML's recent NURP letter was a good example. Fred Grassle gave testimony about NURP. He worked with Joel and a NAML letter was sent in that fit in with Fred's testimony. A NOAA Aquaculture Bill is now being considered with positive support coming in from environmentalists and scientists. Joel said that calls have definitely come in to see what NAML is going to do. A position Letter is being put together by Joel and Wendy with the PPC. It will be consensus building on the issue especially within NAML itself.

NAML's Education Committees has been approached by NOAA's Education Office to craft a white paper for them on Marine Education. The ACI issue has brought money to Education, and NOAA's Ed Office is formulating strategies and wants NAML's input.

At the March BoD Meeting, a Nominations Committee was formed to encourage NAML directors or their staff members to apply for Agency Advisory Committee positions so that NAML's voice can begin to spread into wider circles. Shirley Pomponi is now Chair of the National Academies' Ocean Science Board (OSB) through our efforts. The Nominations Committee is seeking to get members on the Geosciences Board.

**Future Next Steps for NAML:** Joel suggested that NAML may now expand into following EPA and other water programs. NSF, Sea Grant, NURP/OE are currently well covered on policy issues and related legislation. One important issue is to build partnerships with agencies to insure appropriate funding ratios between extramural and intramural at NOAA. We are now more

balanced with respect to following that issue, and can shift emphasis if needed without losing perspective.

An important upcoming issue is the Next Administration. Whoever gets elected will bring changes in policy and personnel. NAML must be prepared to integrate with the new administration. It was recommended that NAML establish contacts early with members of the Transition Teams so that we might help to shape the new Administration's Agenda with respect to particular issues of our concern; Coastal-Ocean-Environmental issues. A "Transition Working Group" should be established. Joel said the FY-09 budget from the current Bush Administration; will be unremarkable; basically the same as FY-08. That will give us time to work on gaining inroads into the next new administration. It is difficult to get the attention of science advisors for the various Presidential campaigns since the campaign staff is dealing with a plethora of issues (war, etc). However, it will be easier (but not necessarily easy) to communicate with the campaign people once the two main candidates have been determined.

**General PPC Discussion:** Kumar asked about the Agency List that was solicited from the membership to determine where their main money sources are. It was noted that the Education Committee is tackling that project. Wendy Naus conveyed that the response rate was low from her first solicitation for information. The issue will have to be addressed again. It was affirmed that the one new addition to LBA's list of agency activities to follow would be the EPA.

Jim spoke about the Nominations Committee, and that Shirley Pomponi was looking for another NAML candidate for appointment by the following day. The Ocean Studies Board (OSB) is a very important board whose purviews pertain directly to many NAML activities. Jim requested the name of another NAML person, or also acceptable, one their scientists. Jim recommended Tony Michaels' name be submitted as NAML Past-President. It would follow our precedent set by Jeff Reutter. Joel suggested strongly that we present and back one candidate and he recommended that we again follow the previous process of nominating the Past-President. Tony said he felt honored to be asked to serve, and recommended further discussion to see if others might be worthy of being chosen also. Jeff recommended the process of presenting the retiring president as the candidate of choice because that person has the greatest knowledge of NAML having just left office, and is in a perfect position to follow through on key issues. Kumar asked about which discipline topics OSB were looking for. The list of 6 was read: it included, infrastructure, education, etc. It was noted that Tony would fit easily into any and all of them.

The discussion returned to how to identify key advisors who can support our efforts to form and influence the next new Administration. The winning candidate's Transition Team is key; know the members of the team, said Joel. They are the people that do the recruiting for setting up the Agencies, etc. Joel also noted that members of the transition team are not necessarily the ones on the campaign teams. There is a big mix of people and of interests. Joel said he would assist in watching who is being recruited to key positions. Ivar suggested putting together a NAML Priorities White Paper now so it would then be ready for use. It will undoubtedly need to be tweaked and updated before it is finally formed and put out. Tony thought preparing ahead of time would be a good idea. Joel asked if we should work alone or with other ocean leadership groups including the new Council on Ocean Leadership (COL). It was agreed that a general invitation be sent to all possible partners. The White Paper should be a document with a defined set of questions to the Transition team to see where their thinking is going, and on what issues they would likely address. That way NAML would have name recognition right at the beginning of the Administration by being attached to the document. When the question arose as to who would help to form the White Paper

with information on where NAML's positions lie, Tony said that these are Public Policy items, and are the focus of the Winter meeting. It is there where we set our PPC Agenda. We will address these issues again on Friday.

**Action Item:** It was agreed that NAML should consider developing a national survey on ocean/coastal issues for submission to the Presidential candidates to complete. Partnering with other organizations like the Council on Ocean Leadership could be a way to beneficially elevate the importance of this activity within the eyes and minds of the Presidential candidates, and thus help ensure that the campaign staff complete the survey [from Wendy Naus].

**Rick Spinrad; Office of Oceanic & Atmospheric Research (OAR)/NOAA:** Tony, while introducing Rick said that NAML has and continues to support NOAA's efforts. We have focused considerable efforts on NOAA and provided considerable assistance to their cause. He noted that Rick has provided return to us also. Rick said that he has always supported Joel's efforts, and thanked us for the invitation to come and speak. He told the group that it was his first visit to the Island and to see the institute. He has seen a great (and positive) change within ocean community, and that NAML has had an extraordinary influence on what is happening in DC. However, the community is still suffering from the various "camps" of organizations; there still needs to be more overall coordination among the community on ocean issues.

Rick recommended strongly that we indeed should start working with the candidates through transition teams. Rick also reiterated that coordination between marine/aquatic groups is crucial. Collective views on topics like climate change are issues on which candidates will get elected. In addition, Rick mentioned that NAML needs to be prepared to deal with a new NOAA Administrator; hopefully one who will be supportive of our issues, or one perhaps one who is not.

Rick thanked NAML for its participation over the past year on NOAA's behalf. He was especially pleased with the "Friends of NOAA" Letter, and people who were signees.

NAML's Priority Document that we had sent to him earlier then became the basis of his talk. He noted that NOAA has been invigorated by ACI that allows NOAA greater flexibility to spend education funds. The Advanced Technology Program on sensors also is helping. NOAA's Aquaculture bill is important especially since science based research is needed in aquaculture. NOAA won't be able to support federal offshore aquaculture without a sustained research component, so NAML's endorsement is important. He thanked NAML for supporting this legislation.

The Ocean Exploration and Research Program (OE/NURP merger) is concern according to Rick. The concern is that it doesn't go to one person to be administered (Senior Executive Service Leader), and then become a program of his personal design. Rick said that NOAA's research programs are being reorganized; 40% is now designated as extramural; that percentage should be increasing. OAR is only 60% of the research plan, so supporting efforts need to be addressed to the whole research program and its extramural directed efforts. The divisions of NOAA have different emphases and whether there is more intra- vs extramural support. The Sea Grant Reauthorization Bill for FY08 is being formulated. NAML's support is needed to be sure it properly funded. NAML's support of the National Ocean Observing System was noted by Rick. He said that IOOS is currently being budgeted for less than previously funded with earmarks added, but the \$16 M markup is first time the Administration has included a line item for IOOS. That is significant.

NOAA's programs are research directed, and came under scrutiny by Congress in 2004 (*Review of the Organization and Management of Research in NOAA*). NAML's recognition of the Report and its conclusions in our FY-2008 Public Policy Agenda was lauded. The move to OAR

by Rick was a result of the study report. Rick said the reorganization of research programs and personnel to OAR was a really good move for the agency: 4 of 7 programs have new directors. The Report also called for a 'Research Czar' to be appointed, but that has still not been put in place. Rick noted that the Chief Scientist position is for PR only, and that Adm. Lautenbacker does that very well. Program inconsistencies were and are still there, and they are hindering progress. The transition from research to implemented applications is not happening, and vice versa, where science efforts need to be addressed or targeted from the application side.

Rick told everyone that a true Competitive Review process for extramural research is still not an emphasis with their programs. Because of the Continuing Resolution for FY-07 funding, the expectations were that FY-06 earmarked funds would continue. However, the Broad Area Announcement (BAA) issued for earmarks stated that only those earmarks that could tie into a number of identified milestones would be funded. Thus, for the first time NOAA earmarks were competitively funded on the basis of merit. Congress welcomed this approach to earmarks and may seek to continue it in the future. As a result, NOAA and OAR in particular have grown considerably in terms of the way research is managed. But, NOAA still has a lot of work to do with regard to its extramural research component.

**American Competitive Initiative (ACI)** was not really outlined very well, but the language was kept in broad terms. Rick used that loophole to push for specific program development that had focal points for example in the Ocean Priority Action Plan. He was able to emphasize the role of marine science in ACI and to increase the US's competitiveness. Rick noted that there is a US trade surplus in one sector only: services! We export services and associated technology to specific industries. NOAA can use those kinds of services too.

The **Ocean Research Priority Plan**, its formation and implementation has been well received, and NAML's role in helping to formulate the final draft was recognized. Rick noted that infrastructure support was included in the ORPP. OMB says that type of funding looks like a budget item. However, Rick gave the example that the military plans way ahead and gets infrastructure money to do so. He would like NOAA to be able to be in that position also. He again noted that support of the Plan added \$40M more money that was not even there before. This can be used as a stepping stone to leverage more money in FY-09 and FY-10 with support by the scientific community.

**Action Item:** Maintain support of the ORPP as a NAML FY 2009 priority.

**Education and Ocean Literacy:** A change to promote Work Force Development is needed for the next generation of scientists. NAML's support of IOOS and NOAA has helped bring this issue to light. Rick has push for Congressional authorization for NOAA's oversight of IOOS only, not policy development. That aspect belongs with each individual office or program. Managing the everyday working programs is up to the industry users with science and research working to make improvements. Ocean infrastructure needs should be inventoried first, and then strategies developed from there. OSB would be good for that role. That exercise would provide the vision to work with and enable a trajectory plot of where things need to go in the future.

**Partnerships:** Rick spoke to LBA's assistance to NAML, and recommended we continue our efforts and join collaboratively with other organizations (Sea Grant, NASULGC, COL) to promote ocean issues. He again recommended NAML plan for the next administration. Jeff suggested that we put together a small group to tie education to work force develop, graduate education, REU programs, etc. (Louisa Koch's program). Rick recommended we identify 'unique aspects' of marine community that will drive work force development this in the future. Are we

positioned to meet those needs? What are the future needs of the life-sciences, marine biology, and public health?

**General Discussion:** Jim asked Rick about what missing from our report. The Diversity issue said Rick. NAML promotes teaming, cross-cutting cooperation with other organizations and represents a highly diverse constituency. Diversity and working collaboratively is what NAML is all about. We need to refocus and work harder to emphasize and make that point very clear. We need to give evidence of the role of marine labs play in promoting community wide cooperation and collaborations. Marine lab involvement with Fisheries Management Councils, NOAA office visits, and weather stations need to be included. Those components are a big NOAA items. Industry applications to these areas of interest always come to light when universities begin to work even at the fringe regions of these areas. Tony noted that California has put more money into observing systems than all the Federal agencies combined. Connections to State programs need to be developed by Federal agencies. When this happens, it inevitably goes through universities at all points. NMFS research side is not being recognized, but a large amount is being done by them. Collaborations need to be established. The NOAA Research Czar would help to recognize that issue and coordinate research efforts. Rick also noted that NAML could assist by continuing to get people to testify on the Hill. That effort is needed to address issues of concern and need.

Jim readdressed NAML's nomination to the Ocean Studies Board. Discussion centered on whether the person needed to have some geographic representation. It was decided that the emphasis would be that NAML represents a National Association and the person nominated would represent that larger constituency and not just the local region from they came.

**Action Item:** A motion was made by Steve Weisberg, and seconded by JoAnn Leong to nominate Tony Michaels to fill a vacant position on the National Academies', Ocean Studies Board. The motion passed unanimously.

## **Future of Marine Science Infrastructure**

**Tony Michaels:** Shirley Pomponi was scheduled to present the infrastructure review to be done by the Ocean Studies Board of the National Academies. Tony filled in for Shirley and represented the non-vessel portion of the issues. He presented his talk. The main points of his review follow: 1. There is a need to speed up the incorporation of novel technologies into marine science; 2. Need to emphasize the role of marine research on improving life and enriching human existence.; 3. Need expansion of environmental genomic centers and bioinformatics capabilities; 4. Need for Entity-based modeling and visualization issues; 5. Need for ecosystem scale manipulations, even at marco-scale levels; 6. Expansion of Aquaculture needs and associated research on environmental monitoring; 7. Implementation, acceptance, and utilization of robotics; 8. Development of human infrastructure for training the next generation of scientists. A robust infrastructure is needed to drive these processes, and that infrastructure cannot be put in place without proper levels of monetary support.

**John Heilberg, USC:** John spoke on genomics, metagenomics, transcriptomics, and their infrastructure need in marine science. What are they? They are tools to assess the biological potential of an ecosystem; the means to measure the rate of transcription of the message being expressed in the ecosystem. There are 2600 complete genomes at this time. Most of them are for pathogens and well-studied extreme environmental bacteria (extremophiles). John noted that the availability of funding sources has regulated the choices. Metagenomics do not center on individual

bacteria, but instead, it encompasses environmental sampling of all DNA present. Ultimately, the pieces of the sequences are put together to identify what is the contribution of each organism to the total makeup of, and happenings in the environment sampled. Metagenomics is further, an hypothesis generating technique based upon the proteins being expressed. It is a useable tool for the entire scientific community. Computer assembling of sequence data can be generated to map the community structure.

Transcriptomics provides a global view of the biological content of an organism that is an expression of the total potential of what an organism can do - as related to the expressed messages and proteins being produced. The technique uses mRNA expression. It requires large-scale sampling and high through-put systems; in the operating range of 50M sequences/yr. Funded, non-profit centers do things much cheaper than government centers. The new 454 FLX sequencers, at \$1500/run, can produce 2 sequence runs/wk by one person; a total 10 tb/yr information load.

Bioinformatics persons needed to sort out the meaning of the data generated. Archiving is needed for the original DNA so it can be re-investigated; each original strand is unique and never duplicated, so it must be saved for future study.

The numbers of new species generated is increasing. The genes for proteo-rhodopsins have been found to be highly conserved and thus are being used for analysis, with lateral gene transfers included. Use of nitrofixation genes with the archaea bacteria is a new tool.

**Jan Hodder OBSF President:** Two weeks ago OBSF held a meeting on infrastructure to support research and education with a focus on environmental issues. Discussion included tactics on how to expand funding sources for that support. A workshop to explore infrastructure support is being sort by a grant request to NSF. The effort is being led by Hilary Swain at the Archibold Biological Station. The workshop will seek to identify a unifying set of priorities that express OBSF's diversity and research aims; they are looking to integrate all members. Questions to be addressed include, "what is needed and how to develop the new workforce to address issues in future." Jan mentioned that she is currently co-directing the NSF Faculty Enhancement Project FIRST (*Faculty Institutes for Reforming Science Teaching Through Field Stations*) and the NSF funded G K - 12 Project.

Jan asked about the possibility of NAML's participation in the workshop process, and for suggestions on who to invite. About 20 NAML members are also OBSF members. There is definitely an overlap of interests, but not physical locations. Jim Sanders agreed we should proceed with support for their efforts, but the question is, how to do it. OBSF is just beginning the process with a tentative target of early 2008 for submission of the proposal to NSF. Tony also agreed to a formal link in the process, and asked for interested people to assist. The initial target agency for funding is NSF for they have agreed to accept the proposal for review. However, other agencies could also get involved later. Jim suggested that the NAML/OBSF members participate in a larger capacity and/or they could open up the workshop to the larger community. Jan said their aim is to target OBSF members and past program managers. NAML input on what the workshops would contain or center on would help structure their content.

**Action Item:** OBSF will submit the workshop grant to NSF in early 2008, after which OBFS and NAML will form a steering group of about 20 members to design and shape the purpose of the workshop. A NAML liaison may be identified to serve on the group.

**Steve Wiesberg (Southern California Coastal Water Research Project):** Steve emphasized that observing systems are part of the future, and so the infrastructure needs will be need to be present for support. OOS are a focal point in the Ocean Commission Report, and were highlighted in the

ORPP. The topic is important enough that individual States are getting into the game (\$21M designated for OOS by California). Currently, marine labs have only a small presence in the system that is being driven by larger oceanographic institutions and departments. Marine labs are behind because the technology started with ships and it is only now becoming in-shore for real-time data streams. Opportunities for land-based labs are becoming evident as the needs arise. The Coastal Data Information Program (CDIP; Scripps) is being used for in-shore needs including Huntington Beech surfing competitions. Marine protected areas, fisheries and water quality issues are driving the need for, and use of, observation systems. The question is whether NAML can serve a role, and as an organization representing many labs, become a larger entity that can be recognized. Marine labs could server as beta-testers for new technologies including being stable ships [piers] for quality control and testing. Labs do serve as an interface to the larger community, and thus they would be useful in displaying the products being produced. These include the development of molecular methods and genomic sampling as new technologies. Training would also be a NAML role for systems technology and development. According to Kumar, regionalization of marine labs is being done in FL to review future needs and uses of observing technologies. Biological sensor development will definitely be needed. Marine LTER centers are ‘waiting’ to be developed said Ken Sebens. NAML labs are positioned perfectly to be effective in forming these systems and their networks.

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### Lunch

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**Peter McCartney: Div. Biol. Infrastructure, NSF:** [Peter came in place of Jim Collins (AD for BIO)] The Field Station & Marine Lab (FSML) program and its values to NAML is evident and the new initiatives in education and observation systems requires that we cooperate with the program. Gerald Seltzer’s death created the need to reorganize the Division. Peter recognizes that the ORPP list resonates with NAML’s initiatives. Implementation of Research to Operations is a good working terminology for FSML. Peter suggested that enthusiasm for the program is important. FSML is designed to support the stuff marine labs need in all aspects. Peter related that FSML will fund \$25k Planning Grants that are useful to establish a 5-10 year spread for planning needs. Applications resulting from those efforts are much more successful in obtaining awards. Requests with a broad user-base, improving research capabilities, and education are usually favorably reviewed; as is acquisition of research instrumentation, Major Research Instrumentation (MRI). PUI (Predominately Undergraduate Institutions) support for research is another well funded program, as are REUs (Research Experiences for Undergraduates) as well as applications addressing diversity issues. Research Opportunity Awards (ROAs) for faculty at undergrad institutions score well especially if they are for NSF funded research. Other funded programs mentioned by Peter included: Undergraduate Research & Mentoring Programs (URM) in the Biological Sciences, Research Coordination Network (RCN) fosters research coordination networks between scientists with common interests from broad backgrounds and across geographically, disciplinary, and organizational boundaries to create new research directions (\$100k is available for 5-yrs). It can be a mechanism for coordinating PIs that come to marine labs and formally create new research programs.

Peter told the group that Workshop proposals can come in any time. Those proposals < \$50k can be dispersed without external review, while those, < \$100k are internally reviewed. He wared

however, that they must come in early in funding cycle so they can be funded when the money is available. Proposals that ‘push-the-edge, and are very creative are looked at favorably; i.e., strategic planning for cyber-infrastructure data and data analysis with high power computing. Virtual organizations or collaborations, and education work-force training good programs are being funded as are requests for biological databases, informatics, and research coordination networks to include needed equipment. NEON programs and their associated tools have been funded. For these applications, the needs must be well defined and the tools not readily available, but need to be developed. In general, the science requirements are important, as is how the stated goals fit into existing technology and programs.

Peter mentioned the new Office of Cyberinfrastructure: CI-Team; cyber infrastructure, training, education, advancement, and mentoring is another program of interest to NAML members. Peter said that the best grant applications come from the science discipline needing cybernetics to fulfill need. DataNet is available for those needing library-format to store and share metadata. CEOP (Cyber Environmental Observation Program) awards have funded 4 of 5 applications in marine venue.

Opportunities for marine labs/field stations also include: stewardship by promoting data sharing and policies with/for environmental programs. Scaling of biological infrastructure upward has not been done, but at small scale. They would like to scale up the program to cover larger, more incorporated research centers. NEON is the first program to move forward in this context (National Ecological Observation Network). It is mainly land-based, and data management is required for sampling collection and processing. Overlay of sites is needed to produce a good matrix system with good saturation of sampling areas. It is a separate pile of money and there is a stringent review on long-term ecological monitoring, along a defined timeline: planning, construction, use, and evaluation. NEON has partnerships with USGS, NCAR, USFS, DOE, NOAA, NASA, and OBSF-NAML. Peter stressed that FSML has a unique role in early career development and advancement for starting faculty allowing/assistance to get started.

**General Discussion:** Brian Melzian asked if NAML could apply directly for funds from FSML, like RCN and workshop programs. Peter said the Ecological Society of America (ESA) has been funded for workshops. There are ways around getting the money issued directly to NAML if needed by using a host institution; the workshop host. Peter mentioned that it would be helpful if NAML members would review proposals and sit on panels, as well as having members participate in the cyber infrastructure strategic planning activities.

**Tony Michaels, Leadership in a Collaborative Environment:** Tony presented this next topic; the NAML-CEDD Leadership Initiative (Council for Environmental Deans & Directors). Tony passed out the Announcement and Agenda for the Joan Goldsmith leadership program. The program is designed for marine and environmental leaders and their leadership development. Tony is hoping to include in these programs the next generation of people who will replaced us! Although not designed specifically for NAML, he especially would like to have NAML people participate also. Tony reported that Joan Goldsmith is well seasoned and has done this type of training for many kinds of institutions and corporations. She is using this particular program as a trial effort to see if her program will work on a diverse group but with a single unique theme, or job to do. Early career development in this area is needed with more training to follow.

**James Hicks, NSF: Diversity Initiative Issues and NAML** – Art’s presentation started off with a flashing \$. He told us that it has significance to NSF budget and the continuing resolution. Last year NSF had to operate with FY-06 funds and it was, and continues to be, hard to operate that way.

The Louis Stokes Alliances for Minority Participation program (LSAMP) has always had a very good evaluation, and that has kept it funded under good conditions; the program is Congressionally mandated. It targets under-represented minorities; African Americans, Native Americans, and Pacific Islanders and has a \$37M annual budget. It was recommended that it be raised to \$50M by the Senate. Thirty seven states have programs, with majority institutions being included, not just minority colleges. An institution needs >300 participants to be considered an Alliance. Institutes with less numbers join with others to assure that number of students is met. There is no single institution AMPs. There must be an alliance among institutions. There is also a ceiling of \$1M that is split between the alliance’s institutional members. ASAMP is not a scholarship program, but is designed to assist the students to be successful: it provides societal/professional integration, study aids (tutoring), professional character development, nurturing environment, etc. There is a new “Bridge to the Doctorate” program: pays for the first 2 years of graduate study, and it has funded 10-12 students/alliance. They have discovered that a critical mass of students is necessary to form an instant community of support, so the 12-student group was initiated. Students enter the program as a cohort, and with specific programs in place to help to successfully establish them at the institution. Each student receives per year, a \$30K stipend, plus a \$10.5K expense fund. Institutional support also is given. After Year-2, the institution must assist the students to get funds to continue. In general for all graduate programs, the drop-out rate is highest in the first 2 years. Thus, institutional fellowships can be given to the successful 2-year students to continue. Program awards are made to the students by the participating institutions and their graduate admissions committees. Jim said that Career Tracking has not been done yet on students who have completed the program; it is too young a program (doctorate) presently, and thus it is difficult to follow individual students from AMP. Kumar asked about post-doc expansion. Jim said there is another NSF funding program for post-docs, and currently it is not in LSAMP. The disciplines of Environmental and Geosciences are the least selected programs with the lowest number of participants. Jim asked the rhetorical question, how can we, the marine community increase that participation level. Jim Sanders said he would invite NAML people to DC to meet and talk to NSF people and student/institutional representatives as a means of generating or raising the awareness of opportunities in marine sciences. It has been found that undergraduate research experience is key (number one priority) to their students success. Jim recommended that we invite AMP students to your labs and recruit them into marine programs. A memorandum-of-understanding, between NSF and DOE for student participation has been established to enlist more participation in these areas.

**Wrigley Environmental Sciences Center Tour:** The Meeting adjourned for a tour of the Lab’s facilities. It was led by Michaels.

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**NAML Biennial Meeting Continuation  
Friday, 5 October 2007**

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The Meeting started with showing a UNH/ U-Tube video rap performance entitled, “Coastal Ocean Cruise Baby.” Jon Pennock, UNH, introduced the video and gave a short synopsis of its history.

Great stuff! Tony then announced plans for a group photo, as well as logistics of the departure schedule.

### **NAML Business Meeting; continued:**

**Education:** The topic commenced with the introduction of the letter Tony/NAML received from Louisa Koch, NOAA’s Director of Education. She has requested input from NAML to assist her in developing and expanding NOAA’s educational programs. It was decided that we would draft a NAML White paper on Education, and send it in by the end of the year as requested. A draft would be sent to the membership by mid-November for their review and feedback. Members volunteering to write the first draft include, Kelly Clark, JoAnn Leong, Kumar Mahadevan, Matt Gilligan, Tony Michaels, Sandra Gilchrist, Jeff Reutter, and led by Ivar Babb. It was agreed that the letter must be focused, and reflect how NAML sees education fitting into NOAA’s programs. The steering group may contact NAML labs involved in NOAA EPP program to get that information. It was agreed that the letter should follow the Denver Meeting format (ORPP) because of the tremendous impact it had. It was noted that 80% of the scientists at the Denver meeting were from NAML labs. Jeff related that he is chairing a NOAA education session and will hear testimony on ocean education by the agencies. He feels their scope is very narrow.

**NSF/LSAMP Assistance:** It was decided that we would provide Art Hicks with a Matrix of LSAMP Universities that have marine programs. We would also accept his invitation to attend and participate in his next Washington meeting. Tony suggested that we make a strong analogy between Art’s Costa Rica model and experiences for students at marine labs. He was also suggested that NAML labs participate in the competitive recruiting of minority students. OBFS participation could be included among LSAMP’s experiences. This participation may include a proposal to NSF for the creation of a competitive program that places LSAMP students at NAML labs. Tony reminded everyone that the two lowest accepted categories for LSAMP participation were environmental and geosciences. We need to remedy that situation by aggressively recruiting students into those and other marine disciplines.

**Action Items:** A steering group will be formed to organize NAML’s actions. Volunteers include, Jim Sanders, Matt Gilligan, and Ken Sebens. Lewis-Burke will create matrix of NAML labs and LSAMP alliances to help the steering group identify future actions and help the NAML membership make connections with their local AMP. NAML would also accept Art’s invitation to attend and participate in his next Washington meeting.

**Infrastructure Planning:** It was noted that the Ocean Studies Board (OSB) and Rick Spinrad are moving forward on a planning study of infrastructure support. The initial step will be to get the project defined and funded. The study will likely get started by the end of the calendar year and take about 12 months to complete. Community viewpoints were requested to be given to them by NAML. It was agreed that we would do it. Kumar suggested that Tony send to the membership the infrastructure-needs matrix he has used previously even though it might be narrow and reflect his bias. Members can then add items to it to broaden the topics covered and improve the document. The defined set of important/pertinent research questions and the technology needed to answer them is lacking. We need to fill those gaps in order to accomplish the task. We must ask questions about what are the current and future societal needs, and list the sciences that will be needed to fill those

needs. Then we can work on obtaining the infrastructure to accomplish the task. Tony stressed that the “Quality of Life” issues from the Ocean Research Priorities Plan should be included in the working document, and thus, we could move forward with that. Another important point is the requirement of ‘proportional representation’ on the advisory boards so that none of them are dominated by a biased view; like larger allocations to ships, satellites, observation systems, etc. The inclusion of gene sequencers, and bioinformatics as applied to environmental fingerprints are also important infrastructure components that need to be considered.

**Action Item:** Tony’s infrastructure matrix will be sent to the Membership with a request for added information and included topics. A steering group will be formed to coordinate the outlined activity and draft NAML’s submission to the OSB

**OBSF / NAML Interactions:** OBSF will write a letter to NSF requesting funds to sponsor a workshop on field stations and marine lab infrastructure support. NAML will help as needed, especially for its review. It was noted that the workshop should be directed at listing substantive ideas, like the ORPP, with large, overarching themes. That will assist in its success.

**Action Items:** In general, it was decided that cooperation between the two groups still is important, but is likely to be more successful if based on specific action items that could be jointly pursued.. Tony recommended that on the off-year (non-biennial meeting year), the two organizations hold a joint NAML/OBFS meeting. It was also suggested meetings could be scheduled regionally as is our current practice. That would overcome the potential size issues with many field stations being too small to host a larger meeting. Another solution would be to have a nearby marine lab host an OBFS meeting if the size scale fits for about 100+ people. It was further suggested that because dues for OBFS are \$100, all NAML labs should just join, and then the cooperation between the two groups could be carried out at the member level.

**NAML Governance and Finance:** Jim Sanders broached the finance issue by asking if the members still supported the NAML Public Policy initiative. All present agreed that NAML was at the ‘Cusp of Success’ with the revenue initiative for LBA activities, and agreed to push forward. Suggestions directed at pushing us over-the-hump ranged from a dues increase, and the need to recruit old and new members, to encouraging members to increase their giving, and asking for supplemental giving. Kumar brought up the possibility of broadening the membership by including marine departments and marine colleges. Wes Tunnell agreed that those two groups would fit into the marine model. Forming a Membership Committee was suggested to help with recruitment and sustaining members. Individual memberships were another possibility suggested. Further membership recommendations brought up were: update Webpage to entice new members, and allow foreign labs to join as non-voting members. It was suggested that the membership criteria be based upon of what NAML espouses; i.e., the Articles of Organization or more generally, that marine labs sit at the intersection between the coastal community and the environment. Jonathan Pennock suggested that NAML members promote NAML membership through the upper levels of the university administration and get dues being paid at higher FTE levels, and not dilute the membership with \$500 members.

It was eventually agreed that NAML should preserve its “Core Identity”, and then add members who follow that philosophy. Kumar again stressed the important differences between running a marine lab as a director versus those of a department chair. Department chairs will support public policy, but they are not tuned into marine lab problems or their solutions. Tony suggested an “affiliate membership” for those interested in supporting NAML’s public policy

agenda. Everyone further agreed that no one solution would get us to the goal; multiple solutions will have to be chosen.

**Action Items:** To the question of dues increases, it was decided to persist with the current choices of the FTEs and dues charges.

Regional supplemental donations to NAML: these would occur either periodically or yearly depending upon the need. These would originate from funds from the Regional Treasuries that would be designated for payment of non-lobbying efforts like website charges, travel and meeting expenses, and regular office activities/expenses. Under this paradigm, a graded regional dues assessment could be implemented for this purpose, or local membership dues could simply be increased equally.

SAML voted to return the non-Federal portions of the 2007 dues to NAML.

Wendy Naus was asked to prepare fact sheet of Public Policy Committee accomplishments to be used to recruit NAML funding at a higher levels.

A Membership Committee was created: It will be composed of the Regional Presidents, and the NAML Pres-Elect. Jonathan Pennock volunteered, and Churchill Grimes will serve representing Federal Labs. They are charged with:

- reevaluating the dues structure
- recruiting new members through personal contacts
- Procuring voluntary supplemental dues donations
- Developing a clear definition for membership eligibility
- revisiting and updating the NAML mission statement
- Recommending necessary Bylaws changes dealing with broadening the membership; to possibly include academic departments, aquaria
- Committee will report back on the membership at the Winter Meeting

**Additional Action Item:** The following action item was also accepted:

- Feature NAML revised mission statement prominently on the NAML homepage.

**Continued Discussion:** Brian Melzian noted that only a 25% growth is needed. Tony Michaels offered as an incentive, a bottle of wine to each member who brings in 1 new member at the top 2 levels. The wine will be a Wrigley family wine; Pinot Noir.

**NAML President-Elect:** Representing NEAMGLL, Jeff Reutter proposed Ivar Babb for nomination to the office of NAML Pres-Elect for 2008. Jim Sanders moved to close nominations. With the proper second, the motioned passed.. Steve Weisberg then moved to elect the nominee, and with a second from George Boehlert, the motion carried.

**Audit Committee Report:** Scott Quackenbush reported that the audit of the Treasurer's books was accomplished and that no discrepancies were noted. The committee has signed the off on the Biennial Treasurer's Report. It was moved, seconded (Kelly Clark, David Christy respectively), and voted unanimously to accept the Audit Committee's report.

## **Regional Reports**

**WAML:** George Boehlert reported that 11 WAL members were present, the largest regional number attending. Mike Hadfield, WAML Treasurer, Retired Director, Kewalo Marine Laboratory, Pacific

Biomedical Research Center, University of Hawaii, Honolulu, HI, was recommended for election to Emeritus Status. According to the NAML Bylaws, such a recommendation can be approved by a vote of the membership. George Somero gave the biographical report of Mike's distinguished career.

**Action Item:** Tony Michaels and Matt Gilligan then moved and seconded a motion to elect Mike Hadfield as an Emeritus Member. The motion passed unanimously.

George reported that WAML will provide student support for travel to ASLO. WAML will foster the submission of multi-cultural candidates. WAML also plans to donate \$2K to ERF for their 2009 meeting. George noted that WAML added 3 new Federal labs as associate members. And that they would continue to recruit new members and maintain old ones they will now include Estuarine Reserves as members. Their next meeting will be held at the Katisma Lab in 2008, and following that, Friday Harbor in 2009. WAML will initiate a COSEE program with Jan Hodder as PI, and perhaps create a model, Tri-State Governors Office program in support of Marine Labs. Linda Duguay is on the panel.

**SAML:** Wes Tunnell reported that the formation of a joint NAML/SAML account is being undertaken to insure the non-profit status of SAML. The arrangement of the account was approved by the BoD. SAML also voted to pay up to 1/3 of the initial costs for the EE Just medal. SAML will contribute to NAML for support of its Public Policy Activities \$8,000/year for the next two years. A March or April, 2008 Meeting is being planned. SAML's Relief funds will be held in escrow for next disaster, although Wes hoped that Rick Spinrad will probably fund the whole relief effort from his funds. Wes mentioned that 8 SAML members were present at the wine meeting.

**NEAMGLL:** Ivar Babb gave the report, and told the group that NEAMGLL is seriously engaged in membership discussions, to recoup dues from delinquent members, and to gain new members and re-invigorate old ones. Within that discussion was whether to include Marine Sanctuaries and Reserves as members. Ivar stressed that Meeting attendance was very important. He related that they had picked and nominated a candidate for the next NAML, Pres-Elect. NEAMGLL members discussed the EE Just Award within the context of given multiple several smaller awards instead of one; following NAML's regionally-based structure (x3 awards). The next NEAMGLL Meeting will be held at U-Conn in the Spring of 2008. One of the major initiatives for the meeting will be to invite Joel Widder to promote NAML's Public Policy Committee activities and action plans for 2008. NEAMGLL also agreed to contribute \$6,000 to the NAML Treasury to assist with end of year costs. It was also announced that Graham Shimmield was just appointed as the new director of the Bigelow Lab.

**West Coast, Coast Guard Issue:** Tony Michaels related that their local Southern California Coast Guard jurisdictional district has ruled that education is NOT an allowed activity on a research vessel. They have ruled that students present on university research vessels are paying passengers, via their paying tuition. Thus, students are not allowed on research vessels for educational purposes without being certified as a commercial vessel for hire. Graduate student participation on boats for research purposed related to the thesis, can uphold the vessels research status. USC is looking to promote an exemption to the ruling for degree granting universities. Fortunately, the current situation is a local issue, and Coast Guard Commandants change every two years.

The issues driving the ruling are: 1) a safety issue centering around the required enclosed, fixed rail-system that cannot be installed on a research vessel with a rear winch, trawling system.

The other issue centers on when does the person in charge of the boat, require a captain's license. Currently the boat's size is the criteria, but that is not universally fixed either.

**Financial (Business) Models for Marine Labs:** The discussion was led by Tony Michaels, It centered on how lab directors manage income and expenses at marine labs. It was pointed out that OBFS had published a document on, "How to Run a Field Station". The document was highly recommended by those who knew of it. Copies can be obtained from the OBSF website.

Tony asked if such a document was also NAML-worthy and feasible, or was our inherent diversity too high to accomplish it. Kumar suggested that there is a basic set of parameters common to all marine labs, so the book could be done at our level. Sharing existing OPS-Manuals within the membership was suggested. Jon Pennock thought it might follow a "Mini-Wikipedia" format. It was further brought out that the Encyclopedia of Earth, that does have topic-editors, might allow NAML members to join with that group and publish an OPS manual. Also suggested was the possibility of holding a workshop funded by NSF to write a manual similar to OBFS's; i.e., FSML planning grant. Steve Weisberg asked that we include Financial OPS information to include salary scales. Also recommended was the dedication of NAML Website space for survey data and upgraded OPS information. We were informed that SAML had done a salary survey this year for small boat safety operations. Brian Melzian also recommended that Green-options for marine labs be included in any OPS manual generated.

**Action Item:** Tony said that he would begin to put this together.

**Small-boat policy:** This topic is usually addressed by diving safety officers on the West Coast said Tony. The University of California, State Education System has set the standards. In California, small boat courses are required for all operators [any boat < 26 ft]. It could become a business venture for marine labs to do the training for the public. Pubic courses have a large range of standards because they are not yet fixed. In general, Coast Guard Auxiliary and Power Squadron courses are now considered the standard.

**Adjournment:** Tony thanked everyone for coming and for a good tenure as NAML President. He ceremoniously passed the NAML gavel on to Jim Sanders. Everyone left in good spirits.

Respectfully submitted with assistance from Wendy Naus gratefully acknowledged,



NAML Secretary / Treasurer  
26 November 2007

**Appendix I**  
**Attendee List: NAML Biennial Meeting, 3-5 October 2007**

**NAML Members**

Ivar G. Babb, NURC, Univ-Connecticut, Avery Point, Groton, CT; [babb@uconn.edu](mailto:babb@uconn.edu)  
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