

NATIONAL ASSOCIATION OF MARINE LABORATORIES FY 2008 PUBLIC POLICY AGENDA

WHO IS NAML?

The National Association of Marine Laboratories (NAML) is a nonprofit organization of over 120 members employing more than 10,000 scientists, engineers, and professionals and representing ocean, coastal and Great Lakes laboratories stretching from Maine to the Gulf of Mexico to the west coast, from Guam to Bermuda and from Alaska to Puerto Rico. NAML labs support the conduct of high quality ocean, coastal and Great Lakes research in the natural and social sciences, education and outreach.

NAML is composed of three regional associations:

Northeastern Association of Marine & Great Lakes Laboratories (NEAMGLL)

Institutions on the Great Lakes and marine laboratories from the eastern seaboard north of Maryland

Southern Association of Marine Laboratories (SAML)

Marine laboratories from Maryland to Texas including Bermuda and the U.S. Virgin Islands

Western Association of Marine Laboratories (WAML)

Marine laboratories on the west coast of the United States including Hawaii and Guam

OUR MISSION

Promote and support basic and applied research of the highest quality from the unique perspective of coastal laboratories.

Assist local, regional and state entities with information related to the use and conservation of marine and coastal resources using ecosystem-based management approaches.

Recognize, encourage and support the unique role that coastal laboratories play in conducting education, outreach, and public service; and

Facilitate the exchange of information and relevant expertise between NAML member institutions, government agencies, and the private sector.

FY 2008 Priority: MAINTAIN FEDERAL SUPPORT FOR EXTRAMURAL OCEAN, COASTAL and GREAT LAKES RESEARCH

NAML strongly urges federal commitment to enhance support for cutting-edge ocean, coastal, and Great Lakes research across federal funding agencies.

The marine sciences have much to offer the Nation as it seeks to strengthen its ability to innovate and compete in today's global economy. They are inherently interdisciplinary, push the envelope in terms of technology development, test the boundaries of our data collection and analysis systems, and offer an effective training ground for future scientists and engineers. As the Nation seeks to augment its investment in the physical sciences to increase its international competitiveness, NAML calls on policymakers to recognize the integrated and strategic relationship between all scientific and engineering disciplines and to support an enhanced investment in science and technology across the board as part of any long-term economic competitiveness policy. NAML also asks that the value of extramural research funding at all relevant federal agencies not be overlooked, but recognized as essential to the overall progress of coastal, ocean and Great Lakes science and education.

National Science Foundation: NAML supports increased federal funding for the National Science Foundation (NSF) consistent with the President's budget request of \$6.5 billion for Fiscal Years 2008. Basic research and the transfer and use of the knowledge developed through research are vital for the long-term economic competitiveness and national security of this Nation. It is increasingly important for the Nation to maintain and enhance its scientific edge in the global community with emerging new capacities for scientific research. NSF provides vital support for basic research and education which enhances public understanding of the Nation's oceans, coastal areas, and the Great Lakes. NSF also provides important support for basic laboratory facilities, instrumentation, support systems, computing and related cyberinfrastructure, and ship access. The final report of the U.S. Commission on Ocean Policy makes several recommendations on the need to develop and enhance ocean, coastal and Great Lakes research infrastructure. To that end, NAML strongly supports the development of the Ocean Observatories Initiative at NSF. Further, NAML urges the Congress significantly enhance the NSF's Major Research Instrumentation (MRI) program and its Field Stations and Marine Laboratories (FSML) program. FSML is a modest program that provides researchers with access to state of the art instrumentation for research and education and necessary cyberinfrastructure and data management systems that compliment the Ocean Observatories Initiative.

National Oceanic and Atmospheric Administration: A Congressionally requested study of NOAA's research programs, entitled, Review of the Organization and Management of Research in NOAA completed August 2004, concluded that extramural research is critical to accomplishing NOAA's mission. The access to such enhanced research capacities provides NOAA with world-class expertise not found in NOAA laboratories; connectivity with planning and conduct of global science; means to leverage external funding sources; facilitation of multi-institution cooperation; access to vast and unique research facilities; and access to graduate and undergraduate students. Academic scientists also benefit from working with NOAA, in part, by learning to make their research more directly

relevant to management and policy. It is an important two-way interaction and exchange of information.

NAML strongly supports a robust NOAA extramural research activity expressed though such programs as the National Sea Grant College Program, the National Undersea Research Program, Ocean Exploration and Research, research related to aquaculture, invasive species, and the various joint and cooperative institutes supported by NOAA. These partnership programs are not only consistent with the findings of the August 2004 review of NOAA research, but are also consistent with NOAA's missions. As such they should be strongly supported and made accessible to the ocean, coastal, and Great Lakes research community on a competitive basis. Supporting the extramural programs of NOAA will enable the agency to tap into the local and regional expertise NOAA needs to carry out its various missions.

NAML requests an appropriation of \$4.5 billion for NOAA for Fiscal Year 2008. This is consistent with the position of the Friends of NOAA Coalition and the position taken by the House Oceans Caucus.

National Aeronautics and Space Administration: NASA's support for earth and space sciences is vital in helping us better understand our own planet. For example, NASA's Earth Science Applications theme benchmarks practical uses of NASA-sponsored observations from Earth observation systems and predictions from Earth science models. The National Academy of Sciences released a report¹ this year which calls on NASA to "renew its investment in Earth observing systems and restore its leadership in Earth science and applications." NAML is one of the many groups that believe we need a balanced investment in NASA that will maintain a strong and vibrant earth and space science enterprise. If we are concerned about the fate of the planet, NASA's support for science is absolutely crucial to understanding and ultimately deciding how to address the concerns we are facing. NAML will continue to advocate for a robust NASA Earth Science budget for Fiscal Year 2008.

Environmental Protection Agency: A significant proportion of marine laboratories receive extramural research funding from EPA. Of particular interest to NAML is the Science to Achieve Results (STAR) Grants and Cooperative Agreements Program within EPA's Office of Research and Development (ORD). The STAR program funds research grants in numerous environmental science and engineering disciplines and engages the nation's best scientists and engineers in targeted research that is in complement to EPA and other federal agency research activities. The Environmental Monitoring and Assessment Program (EMAP) is another important EPA program. This program focuses on the development of tools necessary to monitor and assess the status and trends of ecological resources. In addition to these two programs, NAML will also monitor the National Educational and Internship Programs, National Coastal Assessment, National Estuary Program, and the National Water Quality Monitoring Network and will advocate for a robust extramural EPA research program for FY 2008 and beyond.

¹ Earth Science and Applications from Space: National Imperatives for the Next Decade and Beyond, Committee on Earth Science and Applications from Space: A Community Assessment and Strategy for the Future, National Research Council, January 2007

FY 2008 Priority: MAINTAIN FEDERAL SUPPORT for INNOVATION and COMPETITIVENESS

NAML strongly supports efforts by the Bush Administration and the Congress to strengthen the nation's position as a world leader in scientific innovation and competitiveness.

- NAML is encouraged that the federal government has begun focusing on the physical sciences for targeted funding increases, particularly efforts to double the budget of the National Science Foundation (NSF) over the next 10 years.
- However, we will continue to advocate that other federal agencies involved in the physical sciences are also supported within this context, namely extramural research programs within the National Oceanic and Atmospheric Administrations (NOAA) and the National Aeronautics and Space Administration (NASA).
- Improvements in the quality of education provided to our students with a strong foundation in math and science as well as support for universities and laboratories that provide world-class education and research opportunities will only benefit the nation and its science enterprise.

FY 2008 Priority: SUPPORT IMPLEMENTATION OF OCEAN COMMISSION AND OTHER FEDERAL OCEAN, COASTAL and GREAT LAKES RESEARCH PRIORITIES

NAML continues to strongly support implementation of the recommendations made by the U.S. Commission on Ocean Policy² (2004). In addition, NAML played an active role throughout the development of the interagency Ocean Research Priorities Plan³ (2007) and is very supportive of the final plan and looks forward to working toward its implementation.

• NAML believes that public policy with respect to the nation's oceans, coasts and Great Lakes should always be based on sound science and the most up-to-date expertise. The U.S. Commission on Ocean Policy's analysis of existing policies and future needs with respect to governing oceans, coasts, and Great Lakes has resulted in a collection of bold and broad-reaching recommendations for reform. The Congress has taken these recommendations to heart and has begun address the nation's ocean needs in recent years. Implementation of these recommendations by the Federal government will enable the U.S. to maintain and strengthen its role as a world leader in protecting and sustaining the planet's oceans, coasts, and Great Lakes. NAML is particularly supportive of the Commission's recommendation to re-align NOAA's

² An Ocean Blueprint for the 21st Century, U.S. Commission on Ocean Policy, April 20, 2004

³ Charting the Course for Ocean Science in the United States for the Next Decade: An Ocean Research Priorities Plan and Implementation Strategy, NSTC Joint Subcommittee on Ocean Science and Technology, January, 2007

functions to support ecosystem-based management approaches. In addition, we fully endorse the Commission's recommendations to double the federal investment in ocean, coastal, and Great Lakes research as well as its recommendation to promote a strong federal investment in ocean, coastal, and Great Lakes education, outreach, and stewardship.

• Further, the Bush Administration made great strides this year when it released its decade-focused Ocean Research Priorities Plan, which identifies the nation's most pressing short- and long-term ocean research needs. NAML participated in workshops and public commenting periods throughout the development of this plan and is supportive of the outcome. Further, NAML is encouraged that the Administration proposed new funding for ocean issues in its budget request for Fiscal Year 2008. However, NAML urges the Administration and Congress to not overlook the importance of the extramural research community to implementing the plan's goals. NAML hopes that the dedication to ocean, coastal and Great Lakes issues expressed by the federal government the last few years will continue and be enhanced in future years so ensure that the external research community is being utilized to the greatest extent possible.

FY 2008 Priority: SUPPORT OCEAN EDUCATION, LITERACY, OUTREACH and WORKFORCE DEVELOPMENT

NAML believes that an ocean literate populace makes a well-informed and safe nation. NAML encourages the federal government to strengthen its commitment to enhancing ocean, coastal and Great Lakes education, literacy and outreach as well as workforce development.

- A strong national ocean policy can only be sustained via the most up-to-date and reliable scientific information. To ensure that the nation will continue to have the ability to address emerging ocean issues in the future, investments are needed today in coastal, ocean, and Great Lakes education programs that support learning at all age levels, by all disciplines and for all Americans. NAML strongly supports the NSF Centers for Ocean Science Education Excellence program (COSEE), NSF education and human resources generally, and NOAA's Office of Education. Such programs provide a rich environment for which collaborations and partnerships flourish. A greater understanding of the oceans and coastal ecosystems will instill in our populace a sense of stewardship for these important environments. These programs also yield a diverse workforce that includes a significant percentage from underrepresented groups. Preparing these cultural bridges would allow us to capitalize upon diverse national strengths, ensuring the flow of intellectual talent into ocean, coastal, and Great Lakes-related fields.
- NAML member laboratories contribute to maintaining a competitive and first-rate marine
 research and education workforce by providing a unique training ground that is conducive to onthe-job learning and mentoring. Marine labs are also committed to enhancing diversity within
 the field of ocean, coastal and Great Lakes research and education by fostering relationships
 with community colleges and minority-serving institutions (MSIs) to provide distinctive learning
 opportunities for individuals who may not otherwise have an opportunity to participate in ocean,

coastal and Great Lakes research. NAML hopes to be seen as a model to the nation for this type of collaboration.

• The 2006 Conference on Ocean Literacy (CoOL), which convened in Washington and at satellite sites throughout the country, provided an unprecedented national platform for discussion on the essential principles of ocean literacy and the current challenges and opportunities for both formal and informal education efforts in educating the public to make informed, responsible decisions about the ocean and its resources. NAML hopes that the topics and concerns addressed during this conference will continue to reach policymakers and the general public and will shape future ocean, coastal and Great Lakes education policy.

FY 2008 Priority:

MAINTAIN and ENHANCE PARTNERSHIPS with FEDERAL AGENCIES and the LARGER OCEAN, COASTAL and GREAT LAKES COMMUNITY

NAML understands that a concerted effort is needed in addressing ocean, coastal and Great Lakes questions of national stature. NAML will continue interacting with federal agencies and work in close partnership with the larger marine community in advancing the national ocean, coastal and Great Lakes research and education enterprise.

- Strong coordination and expanded cooperative activities between marine laboratories and federal funding agencies is necessary for the success of a given research program or center. In order to maximize the effectiveness of a national ocean policy, a collaborative effort is needed between laboratories and federal ocean-related agencies like NSF, NOAA, NASA, and EPA. NAML applauds the Administration's efforts to improve interagency coordination and cooperation with respect to ocean, coastal and Great Lakes issues through the interagency Committee on Ocean Policy and specifically the Joint Subcommittee on ocean Science and Technology (JSOST) within the National Science and Technology Council. NAML believes these are important steps to sustain necessary interagency partnerships. While the JSOST made unparalleled efforts to engage the external research community and stakeholders throughout the development of the Ocean Research Priorities Plan (2007), NAML would like to see the Administration enhance its interaction with the external marine research and education community even more to be sure that policy is indeed being made according to the most reliable science available.
- NAML believes that partnerships among organizations that are concerned about ocean, coastal, and Great Lakes research and education, as well as the Nation's research and development enterprise generally are vitally important. NAML works in close coordination with its partners in throughout the community to maximize its participation and effectiveness in the public policy process.

FY 2008 Priority: PROMOTE INTEGRATED OCEAN, COASTAL and GREAT LAKES OBSERVING SYSTEMS

NAML supports national efforts to develop integrated ocean, coastal and Great Lakes observing systems and calls on Congress to fund IOOS at adequate levels in FY 2008.

Integrated observations offer critical information on coastal processes necessary for addressing issues, such as the health of humans and marine life, weather and climate nowcasts and forecasts, homeland security, and resource management. Coastal and marine laboratories have been addressing this need. However, funding for existing subsystems has been difficult to sustain in the past. NAML is encouraged that the Administration included in its budget request for Fiscal Year 2008 a line for the development of an Integrated Ocean Observing System (IOOS) in NOAA with \$16 million set aside for initial funding. However, the amount needed to sustain and enhance current observing system efforts by the research community is over \$130 million annually.

Much work is still needed to shape the federal government's involvement in IOOS and larger global observing efforts. NAML urges Congress to support legislation in the 110th Congress that authorizes IOOS. In addition, NAML encourages the Congress to provide the highest funding level possible for IOOS in Fiscal Year 2008 to address infrastructure needs and to ensure that efforts made my the research community to date are not lost in Fiscal Year 2008 due to inadequate federal support.