

**CONSORTIUM FOR OCEAN LEADERSHIP COMMENTS ON:
INTERAGENCY WORKING GROUP ON OCEAN OBSERVATIONS
JOINT SUBCOMMITTEE ON OCEAN SCIENCE AND TECHNOLOGY:
INTEGRATED OCEAN OBSERVING SYSTEM STRATEGIC PLAN
04 APRIL 2008**

Reviewer: Please provide complete contact information (name, affiliation, physical address, phone, e-mail). And append name and affiliation at the end of each comment so attribution remains after a sort is conducted.

| CHAPTER | FROM PAGE | FROM LINE | TO PAGE | TO LINE | COMMENT |
|------------------------|------------------|------------------|----------------|----------------|--|
| General Comment | | | | | Overall the Draft Integrated Ocean Observing System Strategic Plan (hereafter the Draft Plan) is well-written, although in places it is a bit redundant, and it relates well to the Ocean Commission Report, the Ocean Action Plan, the IOOS Development Plan and the Ocean Research Priorities Plan and Implementation Strategy (ORPPIS). Ocean Leadership strongly supports the objectives and actions outlined in the Draft Plan. Ocean Leadership recommends that the Final Plan clearly identifies which organizations will be the lead for specific objectives and include a timeline for those objectives. |
| General Comment | | | | | Ocean Leadership is concerned that the Draft plan lacks a clear strategy for DMAC. Such a strategy is necessary to ensure data interoperability for federal and non-federal data. Ocean Leadership believes that it is vital that all federal agencies and the regional observing systems commit to providing data in adherence with accepted and published DMAC data standards. |
| General Comment | | | | | Ocean Leadership is concerned that insufficient funding of IOOS continues to be a major barrier to the development of operational capabilities and full integration of an ocean observing system. Although the Draft Plan contains Action 1.2.2 to adopt a long-term funding model for sustained operation of the existing federal IOOS assets, the Final Plan should provide real and up-to-date estimates of the costs to fully integrate the system across agencies and regions, sustain the federal assets, and to truly build the regional and global component. Congress has been requesting this type of information for more than three years. |
| General Comment | | | | | One area where further work is required is IOOS's link to biological data. The Draft Plan fails to recognize the value of the marine biota's role in maintaining a healthy and resilient marine environment. The Draft Plan should include provisions to advance biological observing technologies. The development of observing |

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| | | | | | systems for marine organisms trails that of the physical and chemical ocean observing systems and a concerted effort is needed to bring biological observing to the same level. The need for such technology is noted but it may warrant recognition as a highly critical need at this time. The Draft Plan should also include a strategy to incorporate existing biological data systems, which are not routinely collected by current ocean observing systems. |
| | 3 | 9 | | | If the prioritized assets will address “assessment aspects of benefit 6” (protect and restore healthy coastal ecosystems more effectively) in Ocean Leadership’s opinion improved assessments should also contribute to societal benefit “7”—enable the sustained use of ocean and coastal resources. |
| | 3 | 13 | | 41 | The Outcome/Benefit Vignettes provide some good examples as to how IOOS will help meet local and agency needs as they relate to the prioritized assets and societal benefits; however they are lacking concrete vignettes on assessment aspects and benefits 6 and 7. |
| | 4 | 12 | | | Ocean Leadership recommends that you add “predicted” before the word “future”. This would clarify that the future assessments of the state of the oceans will be based on models and forecasting. |
| | 6 | 13 | | | Ocean Leadership recommends that you add “state and local governments” before the phrase “private sector” as state and local governments are key players in identifying regional needs and supporting regional systems. |
| | 7 | 6 | | 12 | Ocean Leadership concurs that until such time as Congress passes an IOOS authorization bill, which may modify the existing IOOS governance structure, interagency cooperation must be accomplished through the existing interagency mechanisms such as the Interagency Working Group on Ocean Observations (IWGOO) and the Joint Subcommittee on Ocean Science and Technology (JSOST). However the text fails to recognize that the IOOS authorizing legislation calls for an Interagency Program Coordinating Office, staffed by employees of agencies represented on the Interagency Ocean Observation Committee, whose duties are to facilitate the Interagency Ocean Observation Committee’s responsibilities for system implementation, budgeting, and administration. In short, Ocean Leadership believes that the day to day coordination and implementation of a truly integrated system will rest on the shoulders of this Office. That vision should be strongly articulated in the Draft Strategic Plan. In addition, the Draft Strategic Plan in Figure 4. fails to recognize the existence of a Ocean Observations Subpanel as part of the Ocean Research and Resources Advisory Panel. This Subpanel is a critical link to providing the IWGOO with |

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| | | | | | advice from stakeholder groups familiar with and engaged in ocean observing. |
| | 7 | 20 | | | Ocean Leadership recommends that you add “non-federal” before the word “observations” to clarify that the Regional Associations are primarily responsible for the “non-federal” assets and federal agencies will continue to be responsible for the observing assets they deploy that meet particular mission mandates. |
| | 8 | 12 | | 13 | Ocean Leadership recommends the Objective 1.1. be reworded as follows: “Establish a national partnership of federal agencies to integrate the ocean and coastal observing assets of agencies and develop and implement improved capacity to unify IOOS.” |
| | 8 | 14 | | 21 | Ocean Leadership believes that reaching clear agreement on agency roles and responsibilities must be the first priority and it must be completed before the close of 2008. It is equally important that the roles and responsibilities between federal agencies and the Regional Associations be clearly defined. Ocean Leadership agrees with the National Federation of Regional Associations for Ocean and Coastal Observing that this task can only be completed once a “Concept of Operations” is in place that defines the conceptual designs for the regions and identifies regional priorities and the observing elements necessary to fulfill those priorities. |
| | 9 | 6 | | | Since the FY 09 budget has been submitted to Congress, Ocean Leadership recommends that the language be changes to “fiscal year 2010” |
| | 9 | 9 | | 11 | Ocean Leadership urges JSOST to develop not only “streamline procedures for the distribution and accounting of funds” to nonfederal partners, but that it develops a performance based certification or decertification system whereby federal agencies can enter into cooperative agreements or contracts with regional associations to fund and build regional coastal and ocean observing systems. |
| | 9 | 15 | | | Ocean Leadership recommends that input for IOOS planning and implementation occur both at the level of NFRA and the ORRAP Subpanel on Ocean Observations. |
| | 9 | 17 | | 18 | Ocean Leadership agrees, see comment for Page 9. Line 9-11 above. |
| | 9 | 33 | | 37 | Action 1.4.1 is unclear, if this action speaks to the need to develop pilot and demonstration project to test new technologies to possibly fulfill user needs. To develop new operational capabilities to meet local and national needs, policies and procedures as well as funding for incorporating advances in science and technology into an operational mode are sorely needed and should be included in the Final Plan. |
| | 10 | 27 | 10 | 30 | The statement under Action 2.2.1 is unclear. What is the desired outcome and to what end? Ocean Leadership recommends that this more detail be provided and the exact purpose of this action clarified in the Final Plan. |
| | 11 | 17 | 11 | 18 | The Draft Plan references several designs that will be considered in the course of |

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| | | | | | the development of IOOS, but is silent on the inclusion of the architectures studies commissioned by NOAA. Ocean Leadership strongly recommends that the IWGOO consider these architectures in the development of IOOS. |
| | 11 | 42 | 11 | 44 | Ocean Leadership recommends that the IWGOO avoid duplication of efforts, the Decadal Survey already identified the gaps and needs associated with satellite observations. Ocean Leadership agrees with Action 3.1.5, that if NOAA and NASA were to take any action, it should be to develop a plan that focuses the recommendation of the Decadal Survey on the gaps and needs specific to remote sensing for improved ocean observations. |
| | 12 | 10 | 12 | 15 | Ocean Leadership believes that Action 3.2.1 is unclear. Does this action refer to a national system design or an international system design? Whatever system that the IWGOO designs it must be comprehensive and include regional, national, and international needs. The design must be comprehensive and address all of these segments; it should avoid a piecemeal approach. |
| | 12 | 23 | 12 | 24 | Ocean Leadership recommends that Action 4.1.1 be reworded as follows: “Use community involvement processes to coordinate local needs with national research, observation, and modeling efforts to integrate variables priority areas. |
| | 12 | 25 | 12 | 27 | As Ocean Leadership stated in a previous comment, transition from research to operations is critical and this transformation requires clear effective federal policies that promote the transition of research activities to the operational system. |
| | 12 | 40 | 12 | 41 | Ocean Leadership supports NFRA recommendation that “regional modeling and forecast centers should be explored as a vehicle for providing users the information they need at the regional scale to address national priorities.” |
| | 13 | 14 | 13 | 15 | Ocean Leadership believes that this section should reference the need for additional data on the biota inhabiting the oceans and their distribution. Ocean Leadership recommends be accomplished by including the following between “anticipated... evolution...” “As an example, the current sensors typically deployed by ocean observing systems do not adequately address the marine biota. Efforts to census marine organisms and plot their distributions as are currently being undertaken by efforts such as the Census of Marine Life, are central to informing our basic understanding of the marine biota and the critical role that it plays in ocean processes.” Thus, engaging researchers and research agencies beyond those historically involved in ocean observing is critical to the evolution...” |
| | 13 | 35 | 14 | 28 | Ocean Leadership strongly supports the actions proposed related to the objective: “IOOS will continuously evolve through research and the incorporation of advances |

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| | | | | | in technology and understanding in the operational capability.” |
| | 14 | 22 | 14 | 28 | Ocean Leadership is concerned that Objective 5.3 is limited only to basic research that derives its data from observing systems. Much basic research will continue to be conducted outside of IOOS and will be of considerable value to understanding ocean processes and the development of basic assumptions and rules driving predictive ocean observing models. Ocean Leadership recommends adding a third objective to include data from more fundamental research: Action 5.3.3 Establish data standards and exchange protocols that will allow valuable data collected outside the observing systems, such as that stored within the Ocean Biogeographic Information System (OBIS), to be incorporated into the vast data stores of IOOS to fill important gaps in coverage with data which cannot be collected through ocean observing systems. |
| | 15 | 1 | 15 | 18 | IOOS has the potential to be a powerful educational tool; it can deliver real-time data that will significantly improve our understanding of ocean and coastal processes and how our actions influence those processes. Ocean Leadership supports these actions, but encourages JSOST to look for linkages and build on existing ocean education efforts to further support and strengthen the ocean education community. |
| Funding | 16 | 1 | 16 | 28 | Ocean Leadership agrees that federal agencies must share current and out-year budget information in order to coordinate IOOS planning and programming. The interagency process must identify priorities and develop a comprehensive and coordinated budget submission that reflects all of the need for IOOS from the coast to deep oceans and regions to international. |