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TTY USERS CALL VIA MD RELAY

June 4, 2004

Admiral James D. Watkins, Chair  
U.S. Commission on Ocean Policy  
1120 20th St., NW  
Suite 200 North  
Washington, DC 20036

Dear Admiral Watkins:

Thank you for the opportunity to comment on the Preliminary Report of the U.S. Commission on Ocean Policy (Report). My compliments to you, the Commissioners and staff for your exemplary work in producing the Report. The ideas and recommendations put forward in the Report clearly document the challenging course that lies ahead of us if we are to untangle policies described by the Report as “disparate, confusing, and single-issue governance tools.” We must eliminate the confusion and contradictions that have resulted from this unworkable policy approach.

A national ocean policy is an essential foundation for the development of an ocean governance model particularly if that policy recognizes, supports, and assists the states in implementing frontline management of the coastal zone.

The State of Maryland’s comments on the Report reflect the work of an interagency task force that I directed to be formed in anticipation of the release of the Report. Nine State agencies, the Maryland Office of the Attorney General, and the Coastal and the Watershed Resources Advisory Committee reviewed the report with more than sixty individual reviewers involved in this effort. The State’s specific comments on the recommendations of the Report are contained in the attachment. The comments reflect the direct experience and expertise of decades of involvement in coastal management.

The State of Maryland concurs with the goals of the U.S. Commission on Ocean Policy (Commission) for clean, safe and sustainably managed oceans and coasts. We endorse the efforts to achieve ecosystem-based management supported by sound science, effective governance mechanisms, and an informed public. Maryland has been using this management approach for many years especially with regard to the restoration of the Chesapeake Bay and its coastal bays. We welcome the development of a clear and consistent national policy to assist states in achieving coordinated management of our nation’s coastal and ocean resources.

As the Commission prepares to finalize its recommendations for the President and Congress, I respectfully request that you consider several themes throughout your deliberations:

- *The need to incorporate state and local perspectives into the development and implementation of federal plans and programs.* States have the primary responsibility for the protection of our coastal and nearshore resources. Little can happen to reverse the course of the decline in these resources without the direct and substantial participation of the states and local governments that are the frontline managers of the coastal zone. Enhanced partnerships through increased federal support, rather than under-funded prescriptive and punitive approaches, are needed to advance more effective coastal and ocean management. I commend the Commission for soliciting state's input for inclusion in the Final Report.
- *The need to build upon existing programs.* The Report's focus on the need to improve coastal and ocean resource management obscures how much has been accomplished in the relatively short period of the last thirty years. Much of what has been accomplished has been through states that serve as laboratories for innovation. On-going efforts will yield further progress. Federal assistance to strengthen these efforts to see them to fulfillment should be made a priority over adding new programs, layers of bureaucracy, or additional demands upon states.
- *The need to prioritize among the broad suite of recommendations presented in the Report.* Establishing budgetary priorities among the recommendations and the development of a strategic framework for funding and implementation are essential. Without this focus, the attainment of effective national policies and governance will not be achieved. The foremost priority of the Commission, Congress and the Administration should be ensuring that those recommendations that will make the most substantial and immediate difference in improving the environment and quality of life in our coastal communities are undertaken as soon as possible. There are critical needs, opportunities, and plans in place that cannot wait. One of the greatest needs is to provide commensurate funding to state and local governments as regulations are amended and implemented to address future demands.

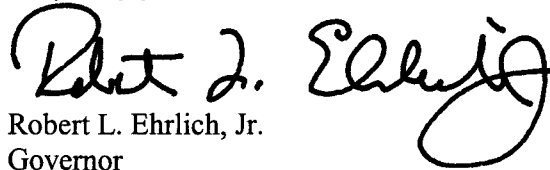
The Report is only a starting point in the realization of improved coastal and ocean management. An on-going dialogue with Maryland and other coastal states is essential to filling in the many details. We recognize that this is an enormous undertaking and we look forward to being a willing and committed partner to fulfill the intent of the Oceans Act of 2000. To this end, Maryland is ready to work with the Commission and the appropriate federal agencies to build a unified strategy to gain support for improved coastal and ocean resource management.

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Admiral Watkins

I have requested our Secretary of the Department of Natural Resources, C. Ronald Franks, to be the point of contact for matters relating to the Commission. Please call on him if we can be of assistance to the Commission.

Again, I thank you for your work on behalf of our oceans. I look forward to seeing the Final Report.

Very truly yours,

A handwritten signature in black ink, appearing to read "Robert L. Ehrlich, Jr.", with a large, stylized flourish at the end.

Robert L. Ehrlich, Jr.  
Governor

## **ENHANCING OCEAN LEADERSHIP AND COORDINATION**

The State of Maryland agrees with the Commission's finding of a need for coordinated goals and objectives and a national leadership structure for coastal and ocean management in order to develop and implement a strategic vision to see those goals and objectives realized. Maryland has taken a similar approach with the Governor's Chesapeake Bay Cabinet, which has been effective in bringing a coherence and focus to Maryland's policies and their implementation for many years. We believe that a successful national policy must be built on strong ties with state managers.

The lack of consistency, coordination, and efficient delivery of programs and services among the federal agencies is a serious problem for the states and significant improvements are required. The Preliminary Report is focused on adjusting the federal management regime and large-scale assessment and management approaches. The fact that states have the primary responsibility for coastal and nearshore resources is not sufficiently recognized throughout the Preliminary Report.

As with other recommendations proposed throughout the Preliminary Report, the Commission needs to carefully consider how new organizational entities being proposed would be an improvement over the way things are done now as measured by on-the-ground improvements. Clarification is needed on how the proposed National Ocean Council relates to the existing coordination role of the Council on Environmental Quality. The Commission is cautioned about putting too much responsibility in the National Ocean Council at the risk of national policy becoming top heavy and the Council becoming a bottleneck. Attempting to bring all of management under one structure may exacerbate existing inefficiencies and create new ones. Consideration should be given to the possibility that a more efficient governance structure might argue for less consolidation across the board than envisioned by the National Ocean Council model, and more consolidation in specific areas, including habitat, erosion management, energy, marine commerce, and transportation.

## **ADVANCING REGIONAL APPROACHES**

While the State of Maryland supports improved inter-governmental coordination, the establishment and role of Regional Ocean Councils as called for by the Commission (Recommendation 5-1) is too unspecific to comment on. The regional councils envisioned by the Commission should not add another layer of bureaucracy that places more demands on the states or replaces existing effective regional agreements and compacts. Maryland has 20 years of experience with regional management through the Chesapeake Bay Program. The Chesapeake Bay and Coastal Bays Programs currently

coordinate and set priorities for the Bays, and these should be looked to as models for the regional ocean councils.

The Commission also needs to consider scale efficiencies as the geographic focus and management structure enlarges. If Regional Ocean Councils are to be established, their interests and focus should be narrow and appropriate in scale to the size of the region and the dominant issues in those regions.

A regional watershed framework needs to be inclusive enough to be meaningful in a functional ecological sense but restrictive enough to represent reality at the local government level where most programs are implemented. While it is necessary to assess watershed functions, conditions, trends, and impacts to determine management strategies, this approach reaches a point of inefficiency when program management, studies and monitoring consume the majority of staff and funding resources such that acting on these trends and implementation becomes secondary.

## **COORDINATING MANAGEMENT IN FEDERAL WATERS**

Though the State of Maryland is in favor of improved coordination among federal agencies through the establishment of a leadership structure, division of responsibilities and coordination mechanisms, the Commission's proposed restructuring of responsibilities is for the most part beyond the purview of the State. The Report should address how those changes will result in on-the-ground improvements in management and improve our ability to manage the challenges we will face over the next 50 years. The Commission should also take into account that more layers of bureaucracy or program offices are likely to add to and create inefficiencies.

Maryland supports area-focused approaches to improved coordination and management. The Preliminary Report discusses the establishment of marine protected areas (MPAs). These should be promoted as one among several means of improving coastal and ocean management. The need and focus of such area designations will vary. Where designated, MPAs should be coordinated and consistent with state management efforts.

It should also be noted that in discussing improved governmental coordination, the Preliminary Report leaves unaddressed the many federal agencies that take an active role in funding, or undertaking, or obligating underwater archaeological research or surveys in compliance with various federal statutes and programs.

## **PROMOTING LIFELONG OCEAN EDUCATION**

Given that states play a fundamental role in education, the Commission's recommendations should have a more explicit focus on strengthening existing and effective local-state-federal partnerships. Maryland is committed to promoting life-long learning about the environment in a way that promotes personal stewardship and is now

in the process of developing a statewide curriculum. The pieces are in place for Maryland's full participation in a new and vigorous national coastal and ocean education effort. The Maryland State Department of Education (MSDE) has incorporated opportunities for oceanographic studies through the new Pre-K – 12 curriculum objectives and partnerships with the Maryland Sea Grant, and the Mid-Atlantic Regional Center for Ocean Sciences Education Excellence, (COSEE, a consortium consisting of the University of Maryland's Horn Point Laboratory Center for Environmental Science, Rutgers University, the Virginia Institute of Marine Sciences (VIMS), Hampton University, Stevens Institute and the New York Aquarium). These organizations post lessons, resources, and references on the Internet and offer teacher training workshops and summer internships. Maryland supports the Commission's call (Recommendation 8-5) for expansion of the national COSEE program.

The Commission's Report should provide a greater voice of support for existing marine science education programs. Although there are references to the successful role of the Sea Grant Colleges and the National Estuarine Research Reserve System (NERRS) in bridging the gap among research and education communities; there is no mention of Sea Grant or NERRS in any of the recommendations. Maryland Sea Grant, for example, already links research directly with the delivery of defined education tools, such as school curricula, secondary school teacher training and classroom educational materials, as well as outreach to the public through communication and extension services.

An important dimension of education that receives little mention is the education of decision-makers at all levels of government who are ultimately responsible for ecosystem-based management. Again, existing programs like Sea Grant and NERRS that connect scientists, local communities, state agencies and non-governmental organizations should be supported for that purpose. In a similar vein, the Commission's recommendations concerning the nation's ocean-related workforce (Recommendations 8-10 through 14) should specifically address the need for training of the technical experts needed to achieve truly ecosystem-based management of ocean resources. There is little or no federal support for such training at present.

## **MANAGING COASTS AND THEIR WATERSHEDS**

Maryland supports the proposed reauthorization of the *Coastal Zone Management Act* (CZMA) to better enable the Maryland Coastal Zone Management Program to fulfill the broad objectives of the Act. In order for the State to meet its expanding programmatic responsibilities under the CZMA, such as the implementation of the coastal nonpoint source control program, development and tracking of performance measures, and the development and continual updating of the State's Coastal and Estuarine Land Conservation Plan, increased federal resources are needed for the State. For the past 10 years, Maryland's share of the amounts appropriated by Congress for state coastal management grants has been capped while grants for states with much less shoreline and population have increased several fold.

The State of Maryland agrees with the Commission's recommendation for the establishment of performance measures for coastal zone management programs. (Recommendation 9-1). Such measures are already under development within NOAA. That effort needs to be expanded to the development of the full complement of necessary features for a performance measurement system such as the establishment of baselines, trends, measurable goals and objectives, tracking mechanisms, and means to evaluate why particular objectives were met or unmet. The great diversity among states and ecosystems requires that performance measures be based on state based objectives and ecosystem needs. The Commission should urge NOAA to work more closely with states in developing performance measurement systems which further adaptive management and reflect state priorities.

The Commission recommends a watershed focus in pursuing ecosystem management. (Recommendation 9-4). Maryland supports this approach and has taken a leading role in watershed management through the combination of its Tributary Strategies, Watershed Restoration Action Strategies and Total Daily Maximum Load Programs.

The Preliminary Report does not adequately make the case for Recommendation 9-2 to consolidate the various area-based coastal management programs. These programs could be better coordinated to enhance effectiveness.

One editorial comment must be made. At page 109, the text box reads, "The Maryland experience, which has since been scaled back under new budgetary pressures, provides one model of growth management for consideration by other state and local governments." This is incorrect. Although State funds used to fund development related projects inside designated growth areas are less compared to funding levels in previous years due to budget shortfalls, Maryland has not scaled back efforts to implement Smart Growth.

## **GUARDING PEOPLE AND PROPERTY AGAINST NATURAL HAZARDS**

Given Maryland's recent experience with the unprecedented damages seen with Tropical Storm Isabel, it is clear that there is a need to better inform the public about the risks and vulnerabilities associated with coastal hazards. Prior to the storm surge seen with Tropical Storm Isabel, many property owners far from the ocean coast had no idea that they could be at risk from flooding. As in other states, the floodplain maps developed by the National Flood Insurance Program are long overdue to be updated. A consequence of these inaccurate maps is that new development that does not meet code requirements for flood protection continues to be located in flood prone areas. Map modernization should concentrate on improved mapping and data collection rather than digitizing outdated existing maps.

The recommendations of the Commission to improve coastal hazards data management need to be expanded. (Recommendation 10-2) The issues associated with updating maps go far beyond collecting new data and transferring it onto maps. New technologies for

hazards planning have greatly expanded the potential to anticipate risks and mitigate vulnerabilities. However, the realization of that potential is dependent upon building state and local capacity to use this data at the appropriate planning level. The need is not just for acquiring data, but utilizing it at the appropriate scale and providing local governments the capabilities to manage, house, analyze and visualize the data.

Absent from the Preliminary Report is any discussion of the need for increased planning assistance to identify areas at risk from sea level rise and options to address the problem. In the Chesapeake Bay, the sea level has risen over one foot in the past 100 years — twice the global average due to land subsidence. The impacts of sea level rise are already being seen in the areas of low relief on Maryland's eastern shore with an acceleration in erosion rates, increase in flooding and the failure of wells and septic systems.

The Preliminary Report calls for mitigation planning (Recommendation 10-4). Much of what is recommended is already being done. Pursuant to the *Disaster Mitigation Act of 2000*, every county in the State has developed or is developing a hazards mitigation plan. What is needed is assistance in the implementation of those plans.

Another lesson learned from the Tropical Storm Isabel experience is that the National Flood Insurance Program's estimates for repairs are based on either outdated information or estimated costs not specific to the locale in which the damages occurred. Many homeowners were unable to make repairs to major damage to their homes when their flood insurance policies, which they are legally required to maintain, were inadequate to cover their costs. This appears to be in part a result of averaging repair cost estimates nationally. Regional differences in costs need to be taken into account in these estimates.

A more aggressive approach is needed to reduce flood damages. Although the Federal Emergency Management Agency (FEMA) has greatly expanded its mitigation efforts in recent years, much more assistance is needed for understaffed agencies and communities to retrofit structures, remove structures from hazardous areas, and discourage development in the floodplain. Mitigation alone is not enough to substantially reduce flood damages to existing structures in flood prone areas. So long as federal flood insurance is provided at subsidized rates, the status quo will be perpetuated.

The Commission should also take note of illusory budgetary savings achieved by agencies through cost transfers. An example recently occurred in Maryland when FEMA rejected a proposed mitigation project to buy-out six homes that were repetitively flooded. FEMA rejected the proposed buy-out because it did not satisfy FEMA's benefit/cost analysis. Ironically, in all likelihood a much more expensive and less desirable engineered flood control project to protect these six homes would be approved by the Corps of Engineers under its benefit/cost analysis.

The Commission's overall recommendations for reform of the Corps of Engineers (COE) Civil Works Program would foster greater consideration of coastal environmental issues and concerns into the COE process in a more consistent manner from region to region.



(Recommendation 10-1) Any changes should avoid too cumbersome a process that excessively increases the time or cost of conducting a review.

## **CONSERVING AND RESTORING COASTAL HABITAT**

Rapidly escalating land prices in the coastal zone along with diminishing opportunities to acquire large tracts make land conservation and preservation a priority in Maryland. The State issued a new plan for land conservation in December 2003. That plan prioritizes those areas that are most important to the health of the Chesapeake Bay, particularly the “green infrastructure” bordering on tributaries in the watersheds. Maryland supports the Commission’s recommendation to amend the Coastal Zone Management Act to establish a Coastal and Estuarine Land Conservation Program to assist states in identifying priority coastal areas for conservation. (Recommendation 11-1). Caution is urged in regards to the Commission recommendation to amend current legislation to use existing conservation and restoration funds for assessments, monitoring, research and education. (Recommendation 11-3). As the Preliminary Report recognizes, funding for acquisition is already far below what is needed. Funds for assessment, monitoring, research and education should be generated through other programs.

The Commission should note that despite the emphasis it has placed on ecosystem-based management, there is little discussion or recommendations in the Preliminary Report on conserving and restoring coastal habitat. This reflects an overall imbalance in the Preliminary Report that the Commission should attempt to address.

## **MANAGING SEDIMENT AND SHORELINES**

Many of the issues that arise from the efforts to restore the Chesapeake Bay relate in some way to sediments. Much of Maryland’s shoreline is eroding causing excess nutrients, impediments to navigation, loss of shallow water habitats, increases in the frequency of disturbance, and the smothering of submerged aquatic vegetation and oyster beds. In certain areas, inputs of toxics from tributaries to the Bay cause sediment contamination. At the same time, the process of erosion and sedimentation is an important natural component of the Bay and essential to its health.

Maryland supports the Commission recommendation to manage sediment on a regional basis (Recommendation 12-1) and emphasizes that such an approach will be most effective if formulated with respect to the physical processes that affect sedimentation. The regional approach to managing sediments is especially applicable to Maryland due to its two distinct regions: the Chesapeake Bay region and the Atlantic Coastal Bays and Ocean Coastline region. These two very different regions require different management approaches. Multiple-objective management within these regions will require the consideration of multiple physical scales — site level, river level, watershed level and physio-graphic level.

The current project-by-project approach to managing sediment is inefficient and often ignores the broader context of sediment management where multiple objectives and physical processes are at issue and potentially conflicting. Regional sediment management needs to incorporate both the aquatic transport systems offshore and watersheds of contributing tributaries. Control of sediment at the source should be the first option in management.

The need for the dredging of navigational channels, especially maintenance dredging, can often be related to the mismanagement of sediments on land. Increasing sedimentation and the contamination of sediments reaching the Bay increase the need for and cost of dredging to maintain the channels, and limit the options for dredge material disposal. Lack of sufficient funding for channel maintenance is already causing the delay of needed projects with impacts on state and regional economies.

Going beyond the recommendation for regional sediment management, the Commission should present a vision for the optimum management of sediments and a framework for improving the management of sediment and shorelines. That vision should be tempered with a recognition that some sediment problems are controllable and others not.

Maryland supports increased beneficial use of dredged materials (Recommendation 12-2). The Commission's support is needed particularly on continuing federal support for beach renourishment. Maryland's beaches are part of the State's environmental and economic infrastructure. Their maintenance has benefits that go beyond the State's borders. The Commission should urge the reversal of the Office of Management and Budget policy to discontinue federal assistance for beach renourishment projects. The Commission should also support the preservation of offshore sources of clean sand in federal waters where necessary to meet future needs for beach replenishment.

Many of the sediment recommendations contained in the 1994 report *The Dredging Process in the United States: An Action Plan for Improvement* have been implemented on a state level by the State of Maryland, and have been adopted by the local office of the Corps of Engineers. This process has proved effective in reducing conflicts associated with dredging projects. Implementation of these procedures on the federal level would serve to further improve the process.

Recommendation 12-4 suggests involvement of the Corps in monitoring and cumulative impact analysis. While the Corps may be the appropriate lead for the implementation of sediment management projects (i.e., engineering), the state resource agencies (including geological surveys) and/or U.S. Geological Survey may be a better lead agency for the necessary scientific studies for regional sediment management.

## **SUPPORTING MARINE COMMERCE AND TRANSPORTATION**

While the Commission has worthy recommendations for anticipating growth for marine transportation and the intermodal network for the delivery and distribution of goods, the Commission may have misperceived the federal government's role with its Recommendation 13-5A to periodically prioritize future federal investments among ports. The Final Report should recognize that not all decisions are for government to make. The federal government is not simply a central planning agency. It has a responsibility to balance interests in ways that are fair and equitable even if not always most efficient. Prioritizing funding for ports under a strategic plan for a national marine transportation "system" may be more problematic than it is for the other modes. Since most commercial port traffic is between domestic and foreign destinations, ports compete with each other directly without the interdependence that is evident in the aviation system, or even the highway system. Prioritizing the needs of one port over another could be construed as government intervention into the balance of commerce, and in any event, would have serious repercussions on the economies of the cities, states and regions that depend on their ports as economic engines.

The Preliminary Report mentions the needs for increased port security. The Final Report should make clear the critical need for increased federal assistance to meet Homeland Security requirements.

## **ADDRESSING COASTAL WATER POLLUTION**

With the enactment of the *Bay Restoration Fund*, Maryland has taken a big step towards improving wastewater treatment throughout the State in furtherance of the Commission's Recommendation 14-4 to increase funding for wastewater and drinking water infrastructure systems. The bill establishes a \$2.50 fee per household per month both for sewer customers and septic owners, as well as a flow-based fee for industry. The funds will be directed toward the upgrade of major sewer plants, upgrading septic systems and installing cover crops. In Congress there is a push to increase funding for the State Revolving Fund Program that would further assist large and small communities in upgrading sewage treatment plants. Maryland strongly supports this effort.

Alternatives to revolving loan funds should also be developed, as loans must be reported as debt by local governments. This adversely affects bond ratings and results in higher interest payments for all capital improvement projects.

Regional strategies are needed to revitalize urban areas where the basic infrastructure is already in place to meet population needs. Increased spending to rehabilitate older infrastructure is more cost efficient than continuing to expand service areas. This is a key objective of Maryland's Priority Places Program.

Maryland supports recommendation 14-2 to increase technical and financial assistance to communities for septic system management. Assistance is needed to better establish the

contribution of septic systems as sources of nutrient pollution and to develop defensible and cost-effective management programs where warranted. Congress should also consider establishing a revolving loan fund and other funding alternatives to assist states and localities in providing funds for replacing and upgrading septic systems.

The Commission's Recommendation 14-3 calls on states to issue regulatory controls on concentrated animal feeding operations. Maryland is developing Concentrated Animal Feeding Operations (CAFO) regulations. Maryland would benefit from expanded federal funding/cost-share for implementation in this area.

The State of Maryland is working with private industry to explore alternative uses of chicken litter, from which the run-off adversely affects the health of the Chesapeake Bay. In addition to existing alternative uses, the potential to convert litter to energy could help mitigate environmental hazards, reduce demand on current energy sources, and stimulate economic development on our State's Eastern Shore. The State supports increased federal research funding that could help advance these efforts.

Maryland supports Recommendation 14-7 for a comprehensive and coordinated approach to address the complexities of nonpoint source impacts to coastal resources. Additional resources and requirements should address performance-based criteria in recognition of the wide variety of state and local program strengths and weaknesses.

Maryland supports the Commission's recommendation of the establishment of a significant national goal to reduce nonpoint source pollution in impaired coastal watersheds. (Recommendation 14-8) There are already efforts underway that seek to establish goals for the national nonpoint source program. These program goals address nutrient reduction and improving water quality through the de-listing of impaired waterways. In addition to national program goals, there are state and regional efforts such as the Chesapeake Bay Agreement 2000 that have established goals that will complement this particular effort. The federal government needs to more effectively work with the states in establishing national goals.

The State of Maryland supports expanded regional approaches to reducing atmospheric deposition. It has been estimated that a substantial portion of the excess nutrients in the Chesapeake Bay are a result of atmospheric deposition and that much of the air-borne pollutants come from out of the State.

Maryland supports the Commission's recommendation to increase local government capacity and that of watershed groups to better manage polluted stormwater runoff. (Recommendations 14-11, 14-12 and 14-13). Maryland's current stormwater regulatory programs and other measures are fairly effective in controlling and treating runoff, although greater emphasis is needed for reducing the creation of impervious surfaces. While it is important to strengthen the capacity of local governments to manage urban nonpoint source pollution, funding is the greatest need — not strategies or technical assistance or greater institutional support. Urban nonpoint source control programs

deserve the same level of importance and funding as wastewater treatment and agricultural best management practices.

The Commission's proposal to merge the EPA and NOAA nonpoint source management programs leaves too many questions unanswered to respond to the recommendation (Recommendation 14-9). A merger for the sake of consolidation alone will not result in improvements to water quality. In Maryland, the division of responsibilities among the two federal agencies has not resulted in a problem. Both programs are administered by the Coastal Zone Management Division of the Department of Natural Resources (DNR). The focus of these programs should not be on structural reorganization but on the need for broad scale implementation of best management practices.

The State of Maryland urges the Commission to reconsider Recommendation 14-10, which calls for penalties on states for failure to meet water quality objectives. The threat of penalties is not effective if program objectives are not realistic and adaptable, nor do penalties advance the formation of partnerships between the federal and state agencies. While the threat of penalties can have some effect in providing some leverage to accomplish change, penalties should not be mechanically applied. Discretion is needed to consider the uncertainties that all programs face in achieving their objectives, e.g., weather, funding support, and the effectiveness of best management practices (BMPs) in the many different contexts in which they are applied. Penalties need to be proportional to the federal support for the program, and targeted to those programs and entities that have the ability to change the behaviors that are resulting in objectives not being achieved. Penalizing one agency for the lack of action by another is not effective.

Federal agencies and states need to define what constitutes 'meaningful progress towards meeting water quality standards.' This requires that EPA, NOAA and the states establish benchmarks toward improving water quality and meeting water quality standards. These benchmarks need to include timelines to meet environmental goals and objectives. Environmental benchmarks need to take into account the wide gap between program funding and water quality objectives.

In developing its Final Report, the Commission should give further thought to the outcome of the imposition of financial sanctions. Unless a strict pass/fail standard is applied for the imposition of sanctions, how could one state's effort be compared to another given the vastly different circumstances that occur even among neighboring states? Would the federal government fine those states that have pushed through a major effort on environmental restoration and protection, yet still failed to fully meet water quality goals/standards? Would the federal government try to take over state water programs and if so be prepared to replace existing state resources for these programs?

## **CREATING A NATIONAL WATER QUALITY MONITORING NETWORK**

Maryland endorses the Commission's recommendations for a national water quality monitoring network that provides adequate coverage of both coastal and upland areas, is linked with the Integrated Ocean Observing System, and meets the requirements spelled out in Recommendation 15-3. In particular, regional flexibility is a key requirement if the monitoring results are to be useful at the primary scale of ecosystem-based management, which is subregional. Previous federal monitoring programs that have employed uniform strategies for the sake of inter-regional comparability (for example EPA's Environmental Monitoring and Assessment Program) have proven of limited use at this scale of management. The national network proposed should build on, support and extend the results of existing management-oriented monitoring programs, such as that in place for the Chesapeake Bay, rather than duplicate them. For example, monitoring is an important part of Maryland's efforts to restore the Chesapeake Bay. The Department of Natural Resources *Eyes on the Bay* Program provides resource managers and the public with near real time information on water quality for waterbodies throughout the Bay. It is essential that states are included in the development and implementation of a national water quality monitoring network. As states have the primary responsibility for managing water quality, the scale of a national water quality monitoring network needs to be appropriate to states' management framework.

## **LIMITING VESSEL POLLUTION AND IMPROVING VESSEL SAFETY**

Maryland's Clean Marinas program has been cited as a national model to achieve voluntary adoption of best management practices to reduce pollution from recreational boating. The federal Clean Vessel Act has been instrumental in achieving the objectives of the program by providing assistance to install sewage pump-out devices at marinas. The effectiveness of the Clean Vessel Act could be improved by increasing and expanding the uses of the grants to states. In Maryland, about 74 percent of recreational boats do not have toilets on-board. Recreational boaters need to have toilets at boating destinations. Also, new boat engine technologies have greatly reduced the pollution from small boat engines. Incentives are needed to phase out these older engines.

Recommendation 16-8 proposes to move the Clean Vessel Act (CVA) assistance program for sewage pump-outs from the U.S. Fish & Wildlife Service (USFWS) to the Environmental Protection Agency (EPA). The CVA currently works well and is easy for states to administer. Since the CVA is funded under the Aquatic Resources/Sports Fish Restoration Fund, which also funds other USFWS boating-related programs, it makes sense to keep those programs at USFWS. The Commission should also take note that moving the program to EPA could create the perception of a linkage between the CVA and EPA's No Discharge Zone program which is controversial in some states and among some constituencies, resulting in less support and participation rather than more.

## **PREVENTING THE SPREAD OF INVASIVE SPECIES**

Maryland's recent experiences with the northern snakehead and the efforts needed to eliminate the fish highlight the need for broader and stricter federal regulation of the importation, interstate transport, sale and introduction of non-native species.

The Preliminary Report appropriately stresses the importance of coordination and cooperation in the United States and internationally to prevent the introduction of non-native species. A primary pathway for unintentional introductions is ballast water. Recognizing that the International Maritime Organization has recently adopted a convention that addresses ballast water management, the Ocean Commission should encourage Congress and the U.S. Coast Guard to adopt a U.S. ballast water standard that is scientifically sound, biologically meaningful and enforceable. Furthermore, the Final Report should note that the IMO standard does not meet those requirements and will do little to prevent the introduction of invasive species via ballast water into the United States. The implementation of consistent ballast water management requirements for U.S. ports is required to avoid unfair differences in infrastructure and procedure requirements among ports.

Maryland is one of the few states that regulates ballast water management, and, with the exception of the Great Lakes states, it is one of the few states to have committed substantial research dollars to this problem. The Maryland Port Administration has invested significant funds to support ballast water treatment demonstration projects in the Chesapeake Bay. University of Maryland researchers are leading experts on ballast water treatment strategies with active testing programs based in the Chesapeake Bay.

## **ACHIEVING SUSTAINABLE FISHERIES**

The Commission's Preliminary Report contains much good advice with respect to the management of fisheries in U.S. waters in recommending that an ecosystem-based approach be developed and gradually implemented. Scientists and managers in the Chesapeake Bay region already have taken a leading role in developing ecosystem-based approaches for fisheries and many of the Oceans Commission's recommendations are being considered with respect to fisheries and fisheries ecosystem plans. Furthermore, these efforts are on geographic scales appropriate to the resources, involving coordination of multi-state and federal-state jurisdictions. The Commission's Report could be strengthened if it more fully considers the roles and responsibilities of the states for fishery resources that migrate across federal-state jurisdictional boundaries in the context of ecosystem-based management. Furthermore, ecosystem-based management requires that the state and federal agencies beyond those with primary responsibility for fisheries management (e.g., those responsible for water quality, and transportation) to become more meaningfully involved in the management process.

To advance ecosystem-based management approaches, more scientific information, modeling and monitoring, as well as economic information, will be needed to support fisheries management.

We support concepts being implemented by the Atlantic States Marine Fisheries Commission under the Atlantic Coastal Fisheries Cooperative Management Act. The Chesapeake Bay is in many ways a microcosm of the U.S. coastal ocean, in the sense that virtually all of the problems addressed in the Commission Report are represented here. Scientists in the University of Maryland and in our Department of Natural Resources have spearheaded the development of a prototype Fisheries Ecosystem Plan, placing Maryland at the forefront of developing ecosystem-based requirements for sustainable fisheries management. It is important to note that the recommended approaches can be adopted and implemented incrementally rather than waiting until a complete picture is obtained, a point that the Commission's Report should make more strongly.

Maryland does not support the mandatory setting of the biological catch at or below the allowable biological catch assigned by the scientific and statistical committees (SSCs). Stock assessment data are often inadequate to be scientifically competent for setting catches. The SSC should not be in a position to order the Regional Fisheries Management Council (RFMC) or should the RFMC be put in a position to merely rubber-stamp the SSC findings. This is not consistent with a holistic ecosystem approach to management that must consider the consequences to management decisions, for example, the reduction or redirection of fishery efforts.

Maryland does not support the setting of deadlines for reports by the SSC with a default allowable catch decision by the National Marine Fisheries Service (NMFS). NMFS is the funding agency for the SSC's and would be in a position to effect the default ruling when NMFS did not adequately provide a budget to the SSC's for an adequate assessment and assignment of catch allowances. And again, suspension of all fishing should not be imposed when a fishery management plan (FMP) is not presented on schedule when NMFS funds the council staff that is charged with development of the FMP.

The Commission appears to have made an assumption that the National Marine Fisheries Service has the capacity to better manage fisheries. This assumption has little basis in experience. Delegating more responsibilities to NMFS is likely to result in bottlenecks that further bog down the whole system for managing fisheries.

The 'dedicated access privileges' recommended by the Commission can be beneficial to commercial fisheries, however careful consideration of the socio-economic consequences on a fishery-by-fishery basis are required rather than a blanket policy. Fees collected for such privileges should be dedicated to the management of the resource.

The increased use of Vessel Monitoring Systems (VMS) in fisheries management as recommended by the Commission has clear enforcement value and provides information on how catches are distributed, but is more appropriate to some fisheries (e.g. where area closures or other spatial management approaches are emphasized) than others. VMSs are



simply one of the several management measures to be considered for each fishery or group of fisheries.

## **PROTECTING MARINE MAMMALS AND ENDANGERED MARINE SPECIES**

Maryland has been cited as a national model for responding to marine strandings but that is not the full extent of the State's concern for endangered marine species. Although there is much discussion related to marine mammals, there is no mention of the need to advance conservation for other species particularly sea turtles. Turtles deserve the same attention in this report as marine mammals, particularly when it comes to securing stable funding for sea turtle research in each state.

We believe that there are circumstances where there is justification for re-evaluating the federal preemption of state management in regards to local endangered species and marine mammal issues.

## **SETTING A COURSE FOR SUSTAINABLE MARINE AQUACULTURE**

The State of Maryland agrees with the Ocean Commission's conclusions that marine aquaculture must be pursued in a sustainable manner with regard to its impacts on the environment and other marine resources. We have some concerns, however, regarding the recommendation to designate NOAA as the lead agency for marine aquaculture (Recommendation 22-1). While this may be appropriate for offshore aquaculture, aquaculture of coastal and estuarine species is often regulated by state agricultural agencies in conjunction with natural resources and environmental agencies. Defining or establishing a specific delineation of authority among federal and state agencies is advisable to prevent conflict or overlap of regulations.

Creating an Office of Sustainable Marine Aquaculture operating under the suggested guidelines and in coordination with USDA is an obvious initial step in fostering aquaculture development and could be effective in streamlining regulations if delineations of authority are clearly defined. The development of best management practices is a sound approach, but these must be adaptive to allow for innovative approaches to solving environmental issues. The establishment of federal guidelines for marine aquaculture in offshore environments could be useful to states in developing their own specific policies. The *Code of Conduct for Responsible Fisheries* contains a comprehensive set of sound guidelines for aquaculture. U.S. marine aquaculturalists should adopt these as a minimum base of operating principles.

Funding for marine aquaculture research and development is currently very limited and should be expanded. It should also be recognized that marine aquaculture will play an important role in ecosystem restoration and biotechnological products as well as food production. To ensure innovation and support for research and outreach efforts with the greatest economic potential, research priorities should be established by an official

advisory committee with state and industry representation and the inclusion of restoration and biotechnology experts.

Responsibly managing and conducting aquaculture requires more than technical expertise in raising fish and shellfish. Federal assistance for new aquaculture ventures should require these high risk ventures to have in place sound business practices such as business plans, access to insurance, and adequate long-term capital needs to ensure that the substantial work required on the part of state agencies to review and approve these types of ventures is not wasted due to poor business planning.

## **CONNECTING THE OCEANS AND HUMAN HEALTH**

The State of Maryland supports the recommendations of the Ocean Commission regarding the oceans and human health, in particular the expansion of competitively awarded research and development grants for research that lays the groundwork in the new fields of marine bio-products, bio-toxins, marine microbiology and virology. Improved methods and networks for monitoring natural waters will be particularly advantageous if they improve our ability to predict unhealthy conditions. Better predictive tools are needed and should be highlighted as an important research target under Recommendation 23-4. In addition to the need for improved methods for identifying and monitoring pathogens, chemical toxins and organisms in ocean waters as advocated in Recommendation 23-3, pollution from pharmaceuticals raises several threats: the extension of anti-microbial resistance in natural microbial populations, and the possibility of immunologic effects, endocrine disruption, and other toxicity in receptor species, including humans. Methods and programs to adequately monitor the presence of pharmaceuticals in commercial seafood should be recommended.

## **MANAGING OFFSHORE ENERGY AND OTHER MINERAL RESOURCES**

Maryland strongly supports dedicating outer continental shelf royalties for needed investments by states in meeting coastal management needs. Despite the increases in investments in coastal restoration and protection particularly with Maryland's new fees to upgrade sewage treatment plants, the estimated funding needs to meet our Bay restoration objectives far surpass available funds.

Maryland has just enacted the *Renewable Energy Portfolio Standard and Credit Trading Act* that requires that a certain percentage of energy sold in Maryland be derived from renewable sources. This legislation includes ocean-based energy sources – tidal, current, and thermal – in defining eligible renewable sources. The legislation also includes wind-based energy generation, which, as the Report indicates, could be sited at offshore locations. Streamlining the renewable permitting process could help Maryland more quickly realize the renewable standards set forth in the legislation, and do so at a lower cost to consumers.

The streamlining of permit processing for offshore renewable energy sources needs to give full consideration to other uses of offshore resources particularly the need to preserve sand resources where needed for future beach renourishment projects. In addition, full consideration of environmental impacts is needed such as those that may occur in avian flyways. The visual impacts of wind turbines on nearby communities also needs consideration such as when facilities are located within sight of tourist destinations such as Ocean City.

## **A NATIONAL STRATEGY FOR INCREASED SCIENTIFIC KNOWLEDGE**

The State of Maryland endorses the development of a national strategy for increasing scientific knowledge that is directly applicable to improving coastal and ocean management. Given the seriousness of the problems of the coastal ocean environment around this nation and throughout the world, the magnitude of the challenge for sustainable management of ocean resources, and the lagging nature of federal investments in comparison with other fields of science, the proposed doubling of the federal ocean and coastal research budget over five years (Recommendation 25-1) is a reasonable goal. While these investments would support expanded basic research, ocean exploration, social science, and the Integrated Ocean Observing System, Maryland believes that new funding should be directed to the science and technology required to achieve science-based measures to use, safeguard, manage, and restore ocean and coastal resources. The State recommends that the Final Report include a focus on the science needed to support ecosystem-based management as an explicit criterion in its recommendation for a national ocean research strategy and a means to prioritize the allocation of resources (Recommendation 25-2).

The State of Maryland also suggests that the critical and sustained investments in ocean research made by the states be made a more explicit part of the national research strategy. Maryland and other coastal states invest heavily in the marine science programs of their public universities. This has resulted in internationally prominent centers of excellence that contribute significantly to environmental and resource management. Where such significant expertise and physical research capacity already exists, the federal government should strengthen partnerships between federal agencies and state universities rather than attempting to duplicate the expertise within federal laboratories.

In addition to biological and physical research, the Commission recognizes the importance of economic studies and social sciences to improving coastal and ocean management (Recommendation 25-3). The establishment of a national program for social science and economic research would have much value. The focus of the Commission appears to be on statistical analysis. In-depth policy analysis is also needed of the social and market drivers that affect coastal communities and resources. Effective policy analysis needs to incorporate multiple perspectives such as those of recreational fishers and boaters, the tourism industry, residential and commercial developers, lending institutions and tax advisers.

## **ACHIEVING A SUSTAINED, INTEGRATED OCEAN OBSERVING SYSTEM**

The Preliminary Report of the U.S. Commission on Ocean Policy lays out a bold vision for stewardship of our ocean resources and for protecting human lives and property, by significantly improving forecasts of marine and terrestrial conditions over time scales ranging from short-term warnings to long-term effects of global climate change. Of particular interest to the State of Maryland is the strong call for implementation of the Integrated Ocean Observing System (IOOS; Chapter 26). As projected, this sustained, continuous system would provide a wealth of real-time forecasts and information products tailored to serve Maryland's needs. These products would help guide shipping to Baltimore Harbor, aid port security, enable effective response to hazardous material spills, improve marine weather forecasts, support ecosystem-based management of fisheries, facilitate emergency management of storm surges, and track and guide the restoration of Chesapeake Bay's water quality.

Over a decade ago, the University of Maryland launched the Chesapeake Bay Observing System (CBOS). Soon after a program of monthly aircraft remote sensing flights commenced. NOAA's Physical Oceanographic Real-Time System (PORTS) was also initiated to help guide shipping to the ports of Baltimore, Hampton, and Norfolk and the Maryland Department of Natural Resources Eyes on the Bay program began to instrument docks and piers in Bay tributaries to track water quality. CBOS could not have been done without commitments to make substantial investments in infrastructure and operations, and without an integrated, cooperative effort from governmental (federal, state, and local), academic, and private-sector partners. This experience has also shown, through the success of coastal forecasting demonstration projects (under the auspices of the National Ocean Partnership Program), that such a coalition can produce forecast and analysis products which greatly enhance the ability to provide timely warnings and to adaptively manage marine resources.

The time has arrived when observing systems can produce real-time information on the coastal ocean that is valued by a variety of constituencies. With the advent of IOOS, new regional associations can not only accelerate the development of these systems, but also accelerate the production and delivery of relevant information to the end users. For the State of Maryland, this means fully participating in the Mid-Atlantic regional association. Through this process, present State activities in the observing system arena will be enhanced by leveraging the combined activities in the larger domain of the entire Bay and adjacent continental shelf.

As much as possible all dimensions of ecosystems need to be monitored. It should be noted that investments in observing systems should be a supplement not a substitute for continued investment in other monitoring approaches. The complexities of the environment cannot be simplified using broad scale monitoring systems without losing predictive capabilities.

It should also be noted that investment in monitoring needs to be balanced with the foremost priority of actually addressing problems. Though we have much to still learn about coastal and ocean ecosystems, there is much that can be done to address many of the problems that have been identified. Media accounts of Congress's reaction to the Preliminary Report mention the high priority of some members to invest \$1 billion in observing systems but no mention is made of the critical and immediate need to make on-the-ground improvements in the nation's marine ecosystems and our ability to sustainably manage them. The Commission's Final Report needs to urge Congress to strike an appropriate balance between investments in environmental assessment, planning, protection and restoration programs.

## **OCEAN INFRASTRUCTURE AND TECHNOLOGY DEVELOPMENT**

The State of Maryland supports the recommendations of the Ocean Commission for enhancing ocean infrastructure and technology development. In particular, targeted support is required for the development of environmental sensors and advanced telecommunications needed for the full development of the Integrated Ocean Observing System. Maryland is well-placed to participate in advancing technology development as it is the home to the headquarters for the Alliance of Coastal Technologies, a collaboration among NOAA and eight research institutions, to advance the development, application and testing of new sensor technologies.

As the Commission points out, greater federal investments are required for the modernization of critical assets. States, including Maryland, have invested heavily in the permanent infrastructure (research laboratory buildings) needed to support ocean research, but find it increasingly difficult to support the capital costs of rapidly evolving instrumentation. Federal investment is needed to support institutions in keeping up with instrumentation advancements.

## **MODERNIZING OCEAN DATA AND INFORMATION SYSTEMS**

The State of Maryland agrees with the recommendations of the Ocean Commission for modernizing the storage, management, distribution and analysis of overwhelming amounts of ocean and coastal data and information. Synthesis and interpretation of information for use in ecosystem-based management should be a central design requirement for the new systems and data centers that will be required.

Throughout Chapters 25 & 28, the recommendations identify various federal agencies that need to be involved in the increased coordination and communication roles. Recommendation 28-2 would direct NOAA and the Navy to "establish a joint ocean and coastal information management and communications program to generate products relevant to national, state, and local needs." Yet there is no direct inclusion of those user communities in developing those programs or protocols. None of the recommendations address involving local partners — regional, state, county, municipal and tribal

governments — who often are the ones making decisions using these data and analyses. Due to the fact that the agencies or sections collecting data are often not the ones using the data, Maryland has found that the issues and substantial expenses accompanying data processing and analysis are often given inadequate attention and that data is left unused or is much more expensive to develop due to the lack of consideration of the full range of users needs. Embarking on this new and much needed initiative without the direct involvement of all interested parties will not yield the success it might otherwise achieve. Regional, state, local, municipal and tribal governments should have the opportunity to be engaged in these efforts at the outset.

Sound science and computer system development principles and practices dictate that any new project begin with an assessment of user needs. The best means of accomplishing this is to have all the users involved at the outset. Including all interested parties in the beginning of any effort has several real and tangible benefits:

1. The resultant product — be it a system design or operation protocol — has the benefit of input from all the potential users of the system at the beginning of development. Modifications at later dates, often costly in time and money, can be avoided or minimized;
2. With user buy-in, the system or protocol has a better chance of success with success being defined as utilization. In the terms of state and local governments, this means improved decision making based on access to needed data; and
3. Federal agencies can demonstrate to the Office of Management and Budget (OMB) that there has been local participation in their efforts at the outset rather than scrambling to find local support of programs designed without local input.

## **FUNDING NEEDS AND POSSIBLE SOURCES**

It is encouraging to see the strong statement in the Preliminary Report that states cannot take on more unfunded federal mandates. For the many visionary activities and projects set forth herein, the Report provides a realistic funding mechanism in the Ocean Policy Trust Fund. From the OCS oil and gas leasing and development income, the funds identified will pay for the estimated costs of the report's recommendations. This is a most unusual situation for a proposed federal activity, provided the funds are not tied to burdensome requirements that do not advance more efficient governance and enhanced local decision-making. It is also encouraging that the Commission has recommended distributing a portion of the OCS receipts to coastal states that do not have mineral activities off their shores.

Previous revenue sharing proposals have proposed a two-tiered approach with producing states receiving a separate and larger portion of revenues under the first tier and all coastal states receiving a portion according to the allocation formula developed for state grants under the *Coastal Zone Management Act*. A third tier should be added to provide

additional funds to those states such as Maryland which serve as receiving and distribution points for energy facilities.