

**Written Statement of
Matthew E. Menashes
Executive Director
National Estuarine Research Reserve Association**

**Hearing on
State Planning for Offshore Energy Development: Standards for Preparedness**

**Before the
Subcommittee on Insular Affairs, Oceans, and Wildlife
Committee on Natural Resources
U.S. House of Representatives**

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Thank you Chairwoman Bordallo, Ranking Member Brown, and Members of the Subcommittee for the opportunity to testify on behalf of the state agencies and academic institutions that operate the nation's 27 National Estuarine Research Reserves (reserves) about planning standards for offshore energy development in the context of the oil spill disaster in the Gulf of Mexico.

I am Matt Menashes, Executive Director of the National Estuarine Research Reserve Association (NERRA). Our association was founded in 1987 by the state and academic institutions that operate the reserves. NERRA is dedicated to the protection, understanding, and science-based management of our nation's estuaries and coasts.

I appreciate the opportunity to testify, and on behalf of NERRA's members, want to express our appreciation to the committee for focusing this hearing on planning issues. While we know that Americans right now really just want someone to stop the oil spill, the reality is that what was needed, and what is still needed, is to have effective plans in place before disasters like this happen. Planning is what we do in order to reduce risks in the first place. Planning is what we need to ensure effective response when something happens. Effective planning is an obligation we owe to our communities so we can recover quickly when disaster strikes. Planning is absolutely required in order for us to execute our responsibility, and the trust we hold, to protect and restore the environment.

As you know, the National Estuarine Research Reserve System (reserve system) was authorized in 1972 under the Coastal Zone Management Act (CZMA). The program is a unique federal-state partnership which brings the National Oceanic and Atmospheric Administration (NOAA) together with state agencies and universities to protect lands and waters for long-term research and education purposes. NOAA and reserve staffers collaborate to provide education, training, and stewardship programs that ensure the protection of these wonderful places while advancing our collective understanding of how estuaries function. As part of the CZMA, the reserves play a strong role in providing the science needed by coastal managers at the local, state, and federal levels to effectively manage our estuarine and coastal resources.

The five reserves in the Gulf of Mexico make up nearly 45 percent of the total acreage of the reserve system. The Rookery Bay reserve in Florida, designated in 1978, has over 110,000 acres. The Apalachicola reserve in Florida, designated in 1979, has over 246,000 acres. The Weeks Bay reserve in Alabama, designated in 1986, has just over 6500 acres. The Grand Bay reserve in Mississippi, designated in 1999, has over 18,400 acres, and the newest reserve, Mission-Aransas in Texas, designated in 2006, has over 186,000 acres. With such a significant amount of the total system located in the Gulf of Mexico, we are obviously concerned about the long-term impacts of this spill on natural resources in the reserves and beyond.

Perhaps the best way to put our concerns into context is this; staffs at our two Florida Gulf coast reserves have been working for over 30 years to improve the condition of their estuaries. They conduct research, educate citizens, and provide science-based information to decision-makers at all levels of government. They work on some of the most pressing long-term environmental questions in the Gulf region, from freshwater requirements for Gulf coast oysters to restoration of the Everglades. In just over 60 days, though, 30 years of effort could be lost from one short-term event with highly destructive, long-term consequences.

My comments today are intended to highlight what our people on the ground in the Gulf of Mexico region are experiencing and how those experiences can inform planning efforts so that we are more efficient, and respond faster in a coordinated way, in response to future events. I want to assure the committee that our members will continue to work with their federal, state, and local partners to ensure that the research we conduct, and the training and education we provide, are integrated into preparedness and contingency plans at all levels of government and across the country. I also want to let you know that we recognize that what is happening in the Gulf now will most likely change our program's emphasis in the Gulf of Mexico for years to come. We will conduct careful assessments, we will secure the necessary resources, we will do the research, and we will restore the reserves while helping others in region restore the Gulf.

Our recommendations are included in this testimony and are summarized at the end.

Preparedness Planning

Nobody was prepared for an incident of this magnitude, including our members and their federal partners. While there were gaps in planning and issues of coordination have arisen and will continue to arise, our members are extremely grateful for the support they have received from federal partners at NOAA, the U.S. Coast Guard (USCG), and the Department of the Interior in particular. In a time of crisis, the level of professionalism that has been shown time and time again by our federal partners is testimony to efforts undertaken at all levels of government to improve coordination and efficiency. In particular, our members in the Gulf and I want to commend our partners at NOAA's Estuarine Reserves Division for their efforts to coordinate the reserves' response to the spill.

We have identified two key areas where we believe attention needs to be focused to ensure adequate preparedness planning is in place. First, it is clear that we need to prioritize outreach and training for responding to oil spills higher than we have. The severity of oil spills in the coastal and marine environment requires us to rethink our training priorities. This is particularly

clear when weighing the severity of spills against the short time periods during which oil spills cause damage. The risks are too great not to prioritize oil spill training.

A couple of recent examples speak to the reserves' abilities to facilitate training and outreach. The Rookery Bay reserve in Florida held a workshop with the USCG for over 70 organizations and agencies working on the spill to facilitate increased coordination and training. The Rookery Bay staff was able to pull the workshop together within 48 hours because of their connections to networks of coastal resource managers in the state. In addition, our Weeks Bay, Alabama, and Grand Bay, Mississippi, reserves collaborated with the Sea Grant institutions in the region on outreach workshops for local communities. Our people know the players and their communities, and can assist agencies at all levels in training and outreach.

We need to think about opportunities for NOAA and the USCG to provide training to local and state level officials, including senior level officials, on larger scale events like this one. There are planning lessons from Department of Defense-style "all hands" drills that should become part of the way we do business in coastal management, particularly as we look more and more at the ocean and our coastal areas as ways to meet our energy needs.

Our experiences during this crisis highlight several areas where we believe better coordination between federal agencies and our staff for training can have a significant impact in the short-term:

- 1. Hazardous materials (hazmat) and hazardous waste operations (hazwoper) training.* It is clear that the availability of trained hazmat and hazwoper workers has been an issue facing incident commanders. While we recognize that all spill responses are unique, some standardization will allow workers to be better prepared. The states have been struggling to figure out hazmat training requirements. It is my understanding that there is a lot of misinformation about the requirements for who needs training and for how long it has to be. It is also my understanding that this information is changing on a week-to-week or sometimes daily basis. Congress and the federal agencies need to ensure that sufficient personnel are trained--or available to provide training--on short notice in order to quickly ramp-up booming and oil recovery operations. We have the infrastructure to help our partners develop this capacity. From classrooms and auditoriums to other site-based infrastructure like storage areas and hazmat labs, many of our facilities make ideal locations for this type of training. Technical staff at the reserves already provide training programs for coastal managers, local decision-makers, and the public on a regular basis and can easily gear up for a focus on hazardous materials. Strong networks of potential clients for such training and excellent outreach capabilities exist at our reserves. We believe Congress could require that NOAA and other federal agencies take advantage of the investments already made in the reserve system and quickly generate new capacity for such training.
- 2. Natural resource damage assessment (NRDA) training.* Nothing delays governmental response more than the confusion that results from a steep learning curve. As we have seen with this spill, reserve staffers and agency managers were temporarily hamstrung while they learned how the NRDA process worked. In addition to basic, recurring training on how NRDA works, NOAA needs to invest more effort and resources into

providing training on NRDA sampling before a spill occurs. With limited resources and personnel, it is more efficient for such training to be done before a spill occurs, so that in the thick of a disaster, staff can be *doing* the assessments rather than *learning* how to do the assessments. Standardization of basic NRDA sampling protocols would allow sampling to begin immediately after an incident. Each day of delay in assessing resources puts information useful to the restitution process at risk. I do want to point out that an excellent web-based seminar, given each day, was developed by NOAA to guide sampling teams through data entry formats, photo and global positioning system (GPS) documentation. Due to the rapidity of the response in the early days, however, some of our first sampling crews were not able to participate in this training prior to sampling.

3. *Incident Command System (ICS) training.* Many reserve managers and staff have been deployed to the incident command center. This training would be extremely valuable to explain the incident command process and the role of each team member. There is a free online course from FEMA that should be recommended to all natural resource managers.

4. *Shoreline Cleanup and Assessment Team (SCAT) protocol training.* While some of our reserves and states are now trained for shoreline cleanup and assessment, we recognize that reserve staff and other natural resource managers should be trained in these protocols before a spill occurs.

Second, we believe preparedness requires continual improvements in coordination between all levels of government. The people who work in the reserve system understand the importance of maintaining relationships with different levels and agencies of government. Our unique model, the federal-state partnership with NOAA, requires us to coordinate with the federal government on an almost daily basis. Our role in our communities is to support local decision-making with scientific information, and we work with our county government and town councils regularly. We cannot, however, claim that we maintain relationships with every federal and local official involved in preparedness planning. For instance, Area Contingency Plans (ACPs) are developed by the USCG in coordination with county-level Emergency Operations Commands (EOCs). We are not confident that each of our reserves is integrated into ACPs or known to county EOCs. We do not believe that county level EOCs regularly engage with the resource managers in coastal areas. There must be some type of incentive, or mandate, for ACPs and EOCs to integrate coastal protected areas into their planning efforts. While some of our reserves were involved to varying degrees with ACP efforts, it has become obvious that many local entities were not. This causes some local efforts to be fragmented.

Training and inter-governmental coordination are just two areas for Congress to examine as we look to improve our preparedness planning. We believe these are areas where small investments or minor policy changes can lead to significant change in a short time frame.

Contingency Planning

What we have learned from this event is that even the best processes and planning can sometimes marginalize good information. While we fully support the centralized response

planning model, we recognize that the model has its limits. Plugging our people, our program, and our data into this model can be difficult.

As an example we do not believe that our principal federal partner, NOAA, is recognized for their expertise in some state-level contingency plans. The reserves are a unique natural resource. While these sites are owned and operated by the states and sometimes local governments in a networked model, NOAA has significant natural resource trust authority for reserve resources. If state plans do not account for NOAA's role in the reserves, and if contingency plans for protecting reserve resources are not well established, we believe both the federal and state partners will be limited in successfully preventing injury to reserve resources or in negotiating effective settlements with responsible parties.

Contingency planning requires the ability to anticipate what could happen and develop plans for multiple scenarios. It also requires the ability to adapt to changing conditions on the ground. Primarily, however, contingency planning requires excellent information. We now recognize that reserve management and staff have not been sufficiently plugged in to the USCG's ACPs.

As an example, reserves now generally have high resolution spatial data about critical habitats that is a significant advancement over the data we had just five or 10 years ago. We need to ensure this information is provided to the USCG and that boom deployment strategies reflect it. As the USCG makes decisions about where to deploy boom, their highest priority must be on protecting fragile coastal wetlands including marshes and mangroves. We don't think anyone will argue that the cost of restoring marshes and mangroves is exorbitant, and that such restoration is not often highly effective. By using booms to push oil to less fragile areas, incident commanders can more effectively deploy a limited number of skimmers and help ensure oil does not get into sensitive areas in the first place. Having the best scientific information available for contingency plans will reduce costs and increase success rates for restoration.

NOAA and the state agencies that manage the reserves need to ensure that the USCG regularly updates boom deployment strategies in ACPs based on the latest scientific information about our reserve resources, and also do so in consultation with local communities. We know, for example, that our reserves in Florida were actively involved in creating ACPs for the resources they manage. Staff identified and mapped boom placement locations, sensitive resources, and oil recovery locations. We cannot say with certainty, however, that all 27 reserves have had this level of involvement in ACP development. We encourage the USCG to be clearer with federal and state partners about the process for updating ACPs. We encourage these agencies to consider an annual updating process that reaches out to coastal resource managers in the reserve system and other programs. We also request that the USCG engage the right people in these tasks by working with existing networks of coastal managers and marine protected area managers to deliver information in a timely fashion. We believe there is an opportunity through the reserve managing agencies and NOAA to regularly update incident command centers regarding reserve resources to ensure that effective planning is in place before a spill happens. We recommend that NOAA develop guidelines for reserve managing agencies to coordinate with the USCG. We also recommend that NOAA and the USCG report to Congress their progress on this issue.

We believe county-level EOCs must be incentivized to engage with the coastal management community on contingency planning. We don't believe there is currently an effective mechanism to ensure this happens. Oftentimes, EOCs do not have connections with the marine protected area and coastal management networks. We believe our reserve staff can assist county EOCs in building these relationships.

Earlier I noted that contingency planning requires the ability to adapt to changing conditions. While we do have some concerns about improved coordination with the USCG, we have found that they are willing to make adjustments based on new information we develop and provide. We would like to commend them on their flexibility during this difficult time.

For short-term, highly destructive events, whether an oil spill or a hurricane, we need federal policy to strengthen our ability to react and protect the resources we have been entrusted with. As research reserves, we also need the ability to study and understand what is happening to our resources so that we can inform future scenarios and planning. Our capacity is highly limited by the lack of immediate access to contingency funds and staff. NOAA currently does not have the ability to provide significant resources to reserves to undertake contingency efforts for staffing, response, research, or restoration. We believe that Congress should consider establishing a method for NOAA to provide contingency funds and staffing to its state agency partners who manage the reserves. Several examples are described below.

With regards to this spill, we are finding that some funding for contingencies is available but that some of our financial needs are not being met. While our reserves are getting what they need to conduct NRDA hydrocarbon sampling, we believe there are funding gaps with regard to biological inventory needs. NERRA has advocated for an additional \$2.5 million for wildlife assessments at the reserves. To date we have not received this funding. We recognize that the federal government or the states will ultimately be reimbursed by the responsible party, yet without dedicated funding right now to conduct the work we cannot even get these studies underway. This is particularly exacerbated by state budget crises. We are concerned that the damages assessed on the reserves will be undervalued if we do not have the funding necessary to conduct the additional survey work needed.

In addition, because these sites are managed by state governments, or in some cases by state universities, we don't have the ability to mobilize the personnel resources of the federal government like our colleagues in the National Marine Sanctuaries or National Wildlife Refuges. Reserves are among the few site-based programs within NOAA's portfolio. The agency should work with states to deploy adequate resources to these special places in time of emergency. We have no real option for bringing in colleagues with experience in oil spills from reserves in other states to assist in our efforts. There is also no current option for NOAA to assign people to our reserves to assist during events like this. We believe Congress should require NOAA to develop the interagency personnel agreements that would allow the agency to facilitate additional staffing for reserves facing large-scale events. We need this type of procedure in place as part of our contingency planning efforts.

Additionally, there are currently no resources available to our reserves for research on the oil spill, nor when significant research opportunities present themselves from other anomalous

events. We believe this is a significant problem for a network of sites established specifically for research purposes. To give you an example, after Hurricane Andrew in 1993, we were presented with an excellent research opportunity to understand the impact of the storm on mangroves. Yet we had an extremely difficult time accessing funding following the event. Many research opportunities were lost that could have advanced contingency planning for future storm events. While BP has provided millions of dollars to academic research institutions in the Gulf, and will provide more, there is no current funding for research reserve staff to access for monitoring and impact research. I would also like to point out that the CZMA requires that NOAA, in conducting or supporting estuarine research, give priority consideration to research that uses the reserve system. Even if no direct funding is available to reserve staff to conduct research, we believe the CZMA requires NOAA to prioritize the use of the five Gulf coast reserves for research on this spill. We hope to work with NOAA to ensure that the agency's post-spill research plan gives that priority consideration to the reserves.

We believe there needs to be a way for NOAA to get resources to the reserves for the important contingency and research work needed in the face of dramatic events like a spill or a storm. We urge Congress to consider establishing a contingency funding mechanism for the reserve system.

Damage Assessment Planning

While the natural resource damage assessment process appears to be advancing, there are some areas where we have concerns. Our concerns should be considered in the context that this spill is, hopefully, anomalous.

Twenty years of NRDA experience following the *Exxon Valdez* oil spill has provided the states and NOAA with many of the tools to effectively assess damages to marine and coastal resources. We support a process of continual, iterative improvement so that we can generate excellent information while finding program efficiencies. Right now we do not have the luxury to change course in mid-spill. But there are some initial lessons that we believe could help improve the process later.

We must recognize that NOAA does not have enough personnel to effectively manage a spill of this size. This is not a criticism of NOAA; it is just the reality of federal spending priorities developed over many years. Our people report that they have had little interaction with NOAA's office that is responsible for damage assessments. We are concerned that this will have a negative effect in the future on NOAA's and the states' ability to recoup damages from the responsible party for all reserve resources. Reserves are NOAA trust resources and the agency has a responsibility to the states to ensure that the settlement from this spill reflects the full extent of damages to these resources. We believe NOAA should be prioritizing reserves for additional attention and study.

We also must recognize that sampling is expensive. While it is convenient to think that the responsible party will pay for sampling and other assessments, the reality is that we cannot recover the lost time, the program delays, and other direct and indirect costs associated with shifting labor away from our principal activities to NRDA sampling. These are costs we will never recover. Federal policy needs to address the costs incurred by agencies during catastrophic events as part of the restitution process.

Sampling is also highly complex. NRDA protocols were established following the *Exxon Valdez* spill, but it is our understanding that they have not been thoroughly updated in about 20 years. The protocols that were originally provided for sampling were generally relevant to the biogeography of the Gulf of Mexico, but some were not. For instance, biological monitoring protocols were not sufficient for this spill. I have been told that there were no approved protocols beyond benthic invertebrate and tissue sampling. NOAA and the states need to collaborate ahead of time to establish effective biological monitoring protocols. We are concerned that the efforts now underway to refine biological monitoring and sampling protocols were not done before the spill happened; this should take place as part of the preparedness process.

Conducting proper assessments requires good information on what protocols to use, quick access to trained people and equipment, and most importantly sufficient laboratory capacity. Immediately after the spill, reserve managers and staff were asked whether they could quickly begin NRDA sampling. At that time our people had no sampling kits, no training, and were expecting oil to wash ashore within hours. We did the best we could in these conditions. It is my understanding that sampling protocols, though available on the web, were password protected. Sampling protocols made their way into our people's hands via email chains. As protocols changed, our people were left guessing whether they had the latest information on how to do the work. If our goal is to get people up and sampling in short time frames, sampling protocols must be made widely available so that state and county personnel can get the right information in a timely manner.

The lack of access to equipment also likely delayed sampling by a few days. Luckily, weather patterns minimized oil washing ashore, granting us sufficient time to get sampling underway.

Another concern is that some of the early sampling we conducted was lost due to the lack of analysis capacity at laboratories. We know that one of our reserves has had to resample some areas due to this problem. The laboratory backlog has apparently eased, but plans should have been in place to prepare laboratories much sooner. A network of third-party labs that can be immediately engaged for damage assessment analyses should be established.

Database management and quality assurance protocols should be developed and should be in place on the first day of a spill. These protocols should be designed and properly staffed for rapid implementation and deployment. While the sampling is happening and is now highly coordinated, we believe there are duplicative requirements being placed on reserve staff by having to report monitoring and sampling data to two different federal agencies through two different reporting systems. The Environmental Protection Agency (EPA) and NOAA have different responsibilities for damages arising from the spill and personnel are being asked to provide data through EPA's SCRIBE site and to a NOAA FTP site. We should do our best to create efficiencies and eliminate this additional burden on them, especially given the already long hours that are being worked in response to the spill. We are concerned that the agencies had coordinated on one data network and that this might result in some data being in one location and not the other. I have received recent information, though, that these issues are being resolved.

We also need to do a better job of integrating existing data sets into the damage assessment process. In a time of limited resources, existing data, particularly data that is acquired in a consistent manner over long-time periods, can and should be used in NRDA. Our experience with the NRDA process to this point shows that years of baseline data we have developed are not being used. Whether it is data collected by the reserve system's long-term monitoring program or the detailed spatial data we have collected, these data needs to be integrated into damage assessments. This will require NOAA and the states to develop a plan for using and sharing these data. It will also require NOAA to update their ESI maps on a more frequent basis with data collected by the reserves and others in the coastal management community.

Finally, in consideration of the scale of this event, it is incumbent upon programs to reconsider their long-term monitoring priorities. While it may be hard for us to currently envision hydrocarbon testing as a key protocol for the reserve system's long-term monitoring program, or for the Integrated Ocean Observing System (IOOS) network for that matter, we need to consider this as an option. Congress should require both of these programs to consider adding hydrocarbon testing to their current monitoring programs. By establishing long-term trend data for hydrocarbons in the coastal and marine environment through the reserve system and IOOS, we can help reduce the burden on hydrocarbon sampling in the future. NOAA should be required to weigh the costs of these additional sampling regimes against the risks associated with major spills and the assessment process. At minimum, however, we need to be better prepared to conduct hydrocarbon testing in the event of a spill regardless of its magnitude.

Restoration Planning

Restoring the Gulf will happen, but it will take many years. As we prepare for what many are calling the largest environmental restoration effort in history, we believe there are actions that can be taken now to improve the ability of states and the federal government to ensure restoration happens in a coordinated and efficient manner.

NOAA and the administration have spent significant time over the past 18 months focused on regional ocean governance. We support this effort and believe the Gulf of Mexico Alliance could be the coordinating body for efforts in the Gulf. The alliance has the established networks and relationships, and the experience to ensure this process is carried out effectively. It will also provide the best opportunity to highlight the value of regional ocean and coastal governance, a direction that we support.

In support of regional governance, we now believe that NOAA should realign its efforts for Gulf of Mexico regional issues with a primary emphasis on spill recovery. We believe the agency needs a dedicated staff, on the ground in the region, focused on bringing together NOAA resources for the long-term recovery of the Gulf. This group needs to bring together NOAA assets like the reserves, the National Marine Sanctuaries, Sea Grant institutions, state coastal management programs, the Coastal Services Center, the Restoration Center, the National Weather Service, and more and focus on finding efficiencies and avoiding duplication. They should be given direct access to the NOAA administrator or a senior designee, have significant budgetary authority, and a clear mandate to leverage all of NOAA's resources for restoring the Gulf. The team should be focusing NOAA resources on coordinated education and training,

research and monitoring, and direct restoration activities. It is our understanding that NOAA is currently coordinating regional oil spill activities through a regional fisheries service official. This will not work for Gulf recovery. Fisheries service staffers have full-time, highly visible jobs to begin with. We cannot expect them to take on this type of additional task. There needs to be a dedicated leader with a dedicated regional staff.

We also believe that the federal interagency Estuary Restoration Council, currently led by NOAA, should be charged with coordinating the interagency restoration activities that will occur in the Gulf. The council, established under the Estuary Restoration Act, can be a model for interagency collaboration and coordination on restoration efforts.

We need to ensure that all habitat restoration projects are planned to take into account the need to advance restoration science. Restoration plans must include community input and outreach, incorporate long-term monitoring, and many of the other principles identified in the report *Principles of Estuarine Habitat Restoration* by Restore America's Estuaries and the Coastal and Estuarine Research Federation. Our research reserves can provide reference sites, long-term monitoring protocols, and training for community leaders on restoration activities.

Coastal Zone Management Act

The National Estuarine Research Reserve System is authorized under Section 315 of the CZMA, which as you know, has been overdue for reauthorization since 2000. NERRA believes this spill underscores the importance of reauthorizing the Coastal Zone Management Act and improving the reserve system. We will work with the Subcommittee to explore areas to improve the legislation so that in the event of another catastrophe, the reserve system is prepared.

Summary of our Recommendations

1. All levels of government need to place higher priority on oil spill training. Our reserves can assist in providing training through the Coastal Training Program and also provide infrastructure for other trainers.
2. Federal policy should provide incentives for, or mandate, ACPs and EOCs to integrate coastal protected areas into their planning efforts.
3. NOAA should collaborate with the reserve managing agencies/universities to develop guidelines for coordination with the USCG. NOAA and the USCG report to Congress their progress on this issue.
4. Congress should consider establishing a method for NOAA to provide contingency funds and staffing to its state agency partners who manage the reserves. Congress should require NOAA to develop the interagency personnel agreements that would allow the agency to facilitate additional staffing for reserves facing events like this.
5. NOAA should prioritize reserves for additional attention and study during and after oil spills by NOAA scientists and other researchers.
6. Federal policy needs to address the costs incurred by agencies during catastrophic events as part of the restitution process.

7. NOAA and EPA should coordinate and use one data network for NRDA sampling.
8. NOAA and the states must develop a plan for using and sharing reserve baseline data prior to spill and during the NRDA process. This will require NOAA to update ESI maps on a more frequent basis with data collected by the reserves and others in the coastal management community.
9. NOAA should be required to weigh the costs of additional hydrocarbon sampling for existing long-term monitoring programs against the risks associated with major spills and the costs of the assessment process. At a minimum, we need to be better prepared to conduct hydrocarbon testing in the event of a spill regardless of its magnitude.
10. The Gulf of Mexico Alliance should play an active role for Gulf restoration by coordinating state and local activities and working with federal partners.
11. NOAA should develop a regional office for the Gulf of Mexico charged with coordinating the agency's role and assets, including the reserves, in the oil spill recovery and restoration process.
12. The interagency Estuary Restoration Council should be given a mandate to improve federal interagency coordination on Gulf oil spill restoration.
13. Restoration plans must include community input and outreach, incorporate long-term monitoring, and many of the other principles identified in the report *Principles of Estuarine Habitat Restoration* by Restore America's Estuaries and the Coastal and Estuarine Research Federation.
14. The CZMA must be reauthorized. NERRA will work with the Subcommittee to ensure that the reserve system is strengthened, particularly in the area of preparedness and planning related to large-scale incidents like this.

Finally, Chairwoman Bordallo, Ranking Member Brown, and Members of the Subcommittee, on behalf of the more than 400 people who work at the National Estuarine Research Reserves and our many not-for-profit partners, we wish to express our condolences to the families of the Deepwater Horizon workers who lost their lives in this incident. We also want to recognize the impacts to the people of the Gulf region whose livelihoods and quality of life are in jeopardy. Our efforts to help restore the environment will draw inspiration from the strength of the families who lost loved ones and the resiliency of the people of the Gulf region. I will be happy to answer any questions you may have.