Jug Bay Earth Day
Chesapeake Bay, Upper Marlboro, Maryland
April 22, 2009
Jane Lubchenco, Under Secretary of Commerce for Oceans and Atmosphere
As Delivered

- Thank you, Jack. Good afternoon. I am delighted to be here at the Chesapeake Bay National Estuarine Research Reserve to celebrate Earth Day and the restoration of Jug Bay with all of you. This is my fourth celebration event of Earth Day – but the first in such a lovely setting. We have a lot to celebrate here at Jug Bay and a lot of people to thank – this restoration project has been the result of a wonderful collaboration between community groups and government agencies at the local, state, and federal level.
- Thank you, John Griffin, and your entire team at the Maryland Department of Natural Resources for your outstanding work in managing this reserve and making it a national model.
- Thank you, Chuck Fox, a special assistant to the EPA administrator for the Chesapeake Bay, who has made the Chesapeake his mission according to the Washington Post.

- I'd also like to thank Greg Lewis, Greg Kearns and the Maryland National Parks Planning Commission for having contributed enormously to this effort.
- And thank you, Beth Ebersole, Patty Delgado and the entire Chesapeake Bay Maryland Reserve team. I'd also like to recognize the fine work of the University of Maryland, Towson University and our many other partners.
- On the NOAA team I'd like to thank Peyton Robertson, Director of NOAA's Chesapeake Bay Office, and Laurie McGilvray, from NOAA's Estuarine Reserves Division and both their staffs for all their excellent work.
- 10 years of hard work have paid off and I am very proud of NOAA's involvement in this project, this is an example if the type of regional collaboration that can address local problems using the resources and skills of a broad network of partners.
- We have three great reasons to celebrate today. The first is the successful restoration of this important ecosystem. As we deal with the growing challenges associated with climate change, this collaboration illustrates the need for innovative approaches to ecosystem based management that address local needs. Estuaries around the Nation are the front line for dealing with how human activities on land are affecting the coastal

ecosystems we relies on for food, transportation, and recreation. These types of ecosystem services are the reason we value our ocean and coastal ecosystems.

- When I traveled around the country for meetings with the Pew Oceans Commission we asked people what they wanted from the ocean. They told us:
    - Clean beaches
    - Safe and health seafood
    - Abundant wildlife
    - Stable fisheries
    - Vibrant coastal communities
- The restoration of Jug Bay provides a model for restoring those ecosystem services by rebuilding the marsh ecosystem and addressing the water quality issues that were impacting the health of the ecosystem.
- Between 1989 and 1999, 275 of the 325 acres of marsh in Jug Bay were lost. Today nearly 200 acres or almost 80 percent of the marsh has been restored with wild rice which maintains water quality that the juvenile fish and shellfish communities rely on to survive. The wild rice also provides local and migratory birds with high-quality nutrition and shelter.

- Hundreds of community volunteers and schoolchildren planted seedlings in their homes, and then replanted plugs in the marsh over acres of wetlands in Jug Bay. So today we are celebrating a community success as well as a significant scientific one.
- This Earth Day we also get to celebrate the Omnibus Public Land Management Act of 2009, signed into law on March 30 by President Obama. This new Act enables us to acquire and protect critical coastal and estuarine habitats. We need to maintain resilient coastal ecosystems as we deal with the challenges of climate change. Our ability to mitigate and adapt to the changes will be linked to the health and resilience of our ecosystems. The law signed recently by the President gives a major boost to efforts to protect our nation's fragile ecosystems.
- And, finally today I am pleased to highlight the work of scientist here in Jug Bay and at all of the 27 National Estuarine Research Reserves where the System-Wide Monitoring Program has for more than a decade been conducting long-term and real-time observations of coastal water quality and weather, helping to document the changes that are already occurring. The Reserve System is now working to use its research and monitoring capacity to model the impacts of climate change on the plants and animals

in these habitats, and to understand how those impacts will affect the human communities that depend on them.

- The Reserve system is ideally situated to serve as sentinels for the impacts of climate change, not merely to observe them, but to help us understand what they will mean to coastal and estuarine ecosystems as well as to the communities that depend on these ecosystems.
- Here in Jug Bay, scientists are asking important questions such as whether the marshes here can accumulate enough sediment to keep up with rising sea levels and retain their ecosystem functions. They are also looking at changes in the composition and distribution of plants as salinity increases in these fresh water estuaries. These kinds of impacts from sea level rise will vary based on the local change and NOAA scientists are helping local communities prepare by providing local sea level measurements that take into account changes on land such as subsidence along the Gulf coast.
- As a Nation we need to improve our understanding of resilient ecosystems and ensure that coastal and regional managers have the local information they need to manage the impacts of climate change.
- Earth Day is a time for us to celebrate our connection with the Earth and renew our commitment to being careful stewards of this planet. We have

- Thank you again for all your hard work in making Jug Bay one of the successes we celebrate on this Earth Day. Thank you.