

**DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
COMPLETE STATEMENT
OF
COLONEL YVONNE PRETTYMAN-BECK
DISTRICT ENGINEER, NORFOLK DISTRICT
FOR THE HEARING BEFORE THE
SUBCOMMITTEE ON FISHERIES CONSERVATION, WILDLIFE AND OCEANS
COMMITTEE ON RESOURCES
UNITED STATES HOUSE OF REPRESENTATIVES
ON
OYSTERS RESTORATION, MANAGEMENT, AND RESEARCH

ENVIRONMENTAL MATTERS COMMITTEE ROOM
LOWE HOUSE OFFICE BUILDING
ANNAPOLIS, MARYLAND
11:00 am, 14 October 2003**

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE:

I am Colonel Yvonne Prettyman-Beck, District Engineer, Norfolk District. With me today, is Ms. Christina E. Correale, Chief, Operations Division, Baltimore District. We are here today representing the Honorable John Paul Woodley, Assistant Secretary of the Army for Civil Works. I am pleased to represent the Army and the Corps of Engineers on this important matter.

I appreciate the opportunity to inform you of the Corps' activities in support of the Chesapeake Bay oyster restoration efforts. I am very proud of the restoration work that the Baltimore and Norfolk Districts have accomplished to date in waters of the Chesapeake Bay and its tributary rivers. I am looking forward to seeing more positive results as our completed projects continue to provide their benefits, and as new projects come on line in support of oyster restoration.

My objective during this testimony is to provide you with an assessment of the Chesapeake Bay Native Oyster Recovery Program starting with a summary of the last testimony given to this body, a report on actions conducted by the Corps and others since that testimony was given, and plans for the next time frame. I will also present a brief overview of another facet of the program that involves the proposed introduction of a non-native oyster species to the Chesapeake Bay and its tributaries.

On 22 October 2001 my predecessor, Colonel David Hansen, District Engineer of the Norfolk District and LTC Scott Flanigan, Deputy District Engineer of the Baltimore District provided this subcommittee testimony on the Chesapeake Bay Native Oyster Recovery Program. A copy of that testimony is provided to you as an exhibit.

In 1995 Congress directed the U.S. Army Corps of Engineers to improve the Chesapeake Bay's native oyster population and appropriated funds to initiate a project. Congress directed this action due to the rapid decline in the Bay's native oyster population that had reached a level of less than 2% of what it was 100 years earlier. In addition, oyster harvests in the mid-1990's were only 1/8 of the harvest of a decade earlier. The precipitous decline is attributed to over harvesting, sedimentation, pollution, and disease. Not only has the region's water based economy been impacted, but the Chesapeake Bay has been depleted of natural filtering organisms that are critical to the sustenance of a healthy and vibrant marine ecosystem particularly in the major tributaries such as the Potomac, Rappahannock, Patuxent, Choptank, Chester, Lynnhaven, Great Wicomico, and James Rivers.

The Corps authorization for the current native oyster restoration program is included in Section 704(b) of WRDA 1986 (Chesapeake Bay Oyster Restoration), as amended. Originally the authorization was limited to the Maryland portion of the Chesapeake Bay, but was later modified to include the Virginia watershed. The Federal funding authorization limit is currently \$20 million. Cost sharing is required under the program, with the non-Federal sponsors providing 25 percent of the project costs. The sponsors may meet their cost sharing responsibilities through in-kind services. The program's non-Federal sponsors are the Maryland Department of Natural Resources and the Virginia Marine Resources Commission

As previously testified, the Chesapeake Bay Oyster Recovery Program was formulated based on coordination and consultation among many project partners and stakeholders, Federal and State resource agencies, watermen, the Chesapeake Bay Foundation, the academic community, interested citizens, as well as non-profit groups such as Oyster Recovery Partnership, VA Seafood Council, Lynnhaven 2007, etc. The oyster restoration plan includes the creation of new oyster reefs, rehabilitation of non-productive reefs, development of seed producing reefs, planting of disease tolerant seed oysters, and follow-on project monitoring. The use of disease tolerant strains of the native oyster such as DEBY and CROSBreed will be used.

Subsequent to the Corps October 2001 testimony, the Norfolk District completed the Tangier/Pocomoke Sound project in Virginia waters. This involved the construction of 158 acres of oyster reefs and the seeding of 30 million disease tolerant spat on shell. This is the largest single seeding to date for ecosystem restoration within the Commonwealth of Virginia. Total cost for construction, seeding, and monitoring in the Virginia portion of the project area to date is \$2.9 million. We are currently monitoring these sites to determine sustainability of the young oysters and to determine if changes in management of newly created reefs are necessary.

The next restoration area within the Commonwealth of Virginia is located in the Great Wicomico River, a tributary on the west side of the Chesapeake Bay. The scope of work for this project includes the construction of new reefs and the seeding of the new and existing reefs with 5-million disease tolerant large adult brood stock oysters. These reefs will become "breeder reefs" producing hundreds of millions of disease

tolerant spat-on-shell oysters that will be used for seeding future projects within the Chesapeake Bay. The decision document has been approved and the Project Cooperation Agreement is now being coordinated with the Commonwealth of Virginia. We anticipate the start of reef construction and oyster seeding during the spring/summer of 2004. The cost of the Great Wicomico River project is currently estimated at \$2.4 million.

Future projects planned within the Commonwealth of Virginia include the Painkatank and Lynnhaven Rivers. We are currently coordinating project scopes of work with the sponsor, VIMS, Chesapeake Bay Foundation, Lynnhaven 2007, and others.

Since the October 2001 testimony the Baltimore District has been funding oyster restoration at a cost of approximately one million dollars a year for 2002 and 2003. Our focus in the Maryland portion of the project area is mostly towards the development of sanctuaries. In addition, the Baltimore District has directed funding towards harvest reserves that will allow limited harvest. During 2002, the total area planted with shell was 95 acres. This included 15 acres of sanctuary and 60 acres of harvest reserves in the Choptank River and 5 acres of sanctuary and 15 acres of harvest reserve in the Patuxent River. During 2002, the total spat planted was 35 million. In 2003 the area planted with shell totaled 85 acres. This area included 20 acres of sanctuary and 15 acres of harvest reserves in the Chester River, and 35 acres of sanctuary and 15 acres of harvest reserve in the Choptank River. The total spat planted in 2003 was 120 million. The Maryland Department of Natural Resources is our local cost-sharing sponsor and is doing similar activities to the extent of \$350,000 per year.

Our plans for future activities, in the Maryland portion of the project area, will be to pursue restoration opportunities throughout the bay with our focus being the Chester and Choptank Rivers to help meet the oyster habitat goal of the 2000 Chesapeake Bay Agreement (which calls for a 10-fold increase in oyster biomass by the year 2010). Previous project activities have been in the Chester, Choptank, Severn, Magothy, and Patuxent Rivers, and the Smith Island area.

We are currently developing a Master Plan for the Chesapeake Bay Oyster Restoration Program. The draft plan will be completed in FY-04 with approval in FY-05. The purpose of the master plan will be to guide future development of oyster restoration efforts in the Bay, provide a focus for policy and decision-making, and to map the way for oyster restoration of the Chesapeake Bay.

My assessment of the Chesapeake Bay Native Oyster Recovery Program is positive. Data collected from monitoring and analysis of this program indicates that native oyster restoration is working. We are seeing historical record setting spat set on new constructed reefs seeded with disease tolerant oyster seed. We are also seeing increases in the survivability of young oysters that indicates the new breeds of native oysters are increasing their disease tolerance. These are the beginning metrics for success.

My testimony will now focus on the non-native Suminoe oyster, *Crassostrea ariakensis*.

In the Spring of 2002, the Virginia Seafood Council applied for a permit under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean water Act, to introduce a million, non-native, triploid, (sterile) Asian Oysters (*Crassostrea ariakensis*) into the waters of the Chesapeake Bay and the Ocean. After a thorough multi agency evaluation of the proposal, which resulted in some major changes to the project, a permit was issued to the Virginia Seafood Council, in the Spring of 2003 authorizing the deployment. The permit contains 15 rigorous conditions that minimize the risk of an accidental release of a reproducing population of non-native oysters. The oysters are now in the water and are being raised by 8 experienced seafood growers using a variety of aquaculture grow-out methods.

During the permit evaluation process, the Corps agreed with other Federal, state and private agencies to prepare an Environmental Impact Statement (EIS) under the National Environmental Policy Act (NEPA) to evaluate the impacts of future large-scale introductions of Asian oysters into the Bay. The State of Maryland and Commonwealth of Virginia have proposed to introduce and establish a reproducing, self-sustaining population of non-native oysters into the Chesapeake Bay to improve the ecological health of the Bay and to revitalize the oyster industry.

Opinions vary with regard to the idea of introducing Asian oysters into the Chesapeake Bay. At one end of the spectrum are those who are opposed to any introduction of non-native species, based on the history of unintended, and sometimes disastrous consequences associated with introductions of other non-native species over the years. This group believes the obvious safe choice is to not allow the Asian oyster to be introduced but to continue and augment native oyster restoration efforts. At the other end are those who believe that the Asian oyster is the last best chance for not only reviving the commercial oyster industry in the Chesapeake, but also for restoring the Bay's historic water quality. To this group, introduction of reproductive Asian oysters is the obvious answer for both economic and environmental reasons, and every day of delay while additional studies are conducted represents another wasted opportunity.

The Chesapeake Bay is an economic and ecological asset of national importance. Decisions affecting the Bay are too important to be made precipitously. Right now we simply do not know what the long-term effect of introducing reproductive Asian oysters into the Bay would be. This was the conclusion of the recently released study of the National Academies of Science (NAS) and their recommendation was for additional study. The report indicated that proposals to offset the decline of native oysters in the Chesapeake Bay by introducing a reproductive population of oysters from Asia should be delayed until more is known about the potential environmental risks. In the meantime, carefully regulated aquaculture of sterile Asian oysters could help the oyster industry and generate information necessary for assessing the risks of future

large-scale introductions. The NAS report and the Federal Agencies Committee of the Chesapeake Bay Program has validated the approach the Corps has taken to date by its authorization of a strictly controlled aquaculture project designed to not only help an ailing oyster industry but generate valuable scientific research to help answer future questions. The National Academies of Science recommended that additional study is needed before a decision is made whether or not to introduce reproductive Asian oysters into the Bay.

In closing, the Corps of Engineers, with the help of our sponsors, federal, state, and local agencies, and many stakeholders, is committed to aggressively restoring the native oyster to the Chesapeake Bay per existing Congressional authority and funding.

Mr. Chairman, on behalf of the Corps of Engineers, I would like to thank you, the committee, and Congress for the opportunity to testify today on these important issues.