

CHESAPEAKE BAY COMMISSION
Virginia Beach, Virginia
Nov. 9-10, 2006

The Chesapeake Bay Commission held its fourth quarterly meeting on Thursday and Friday, November 9-10, 2006 in Virginia Beach, Virginia.

The following Commission members and staff were in attendance:

PA Chesapeake Bay Program Coordinator Pat Buckley
Assistant Secretary Jeff Corbin
Delegate John Cosgrove
Assistant Secretary Frank Dawson
Senator Brian Frosh
Senator Emmett W. Hanger, Jr.
Representative Arthur Hershey
VA Citizen Representative Irvine Hill
Delegate James Hubbard
Delegate Lynwood Lewis
Delegate Scott Lingamfelter
Senator Nick Rerras
Rear Admiral Rick Ruehe
Senator Mike Waugh
Delegate Mike Weir, Jr.
PA Citizen Representative George Wolff
Delegate John F. Wood, Jr.

Staff: Ann Pesiri Swanson
Suzan Bulbulkaya
Marel Raub
Pat Stuntz
Paula Hose

Members not in attendance:

Representative Russ Fairchild
MD Citizen Representative Bernie Fowler
Senator J. Lowell Stoltzfus
Senator Noah Wenger
Representative Pete Zug

Thursday, November 9, 2006

OFF-SITE FIELD TRIP

Commission members who arrived in Virginia Beach early boarded buses to the Norfolk Naval Base where they were given a guided tour of the aircraft carrier *USS Theodore Roosevelt (CVN 71)*. The Navy's environmental programs were highlighted, including the refuse recycling operation center and the oil-water separators onboard the carrier. Also, while touring command central members were briefed on the Navy's efforts to avoid impacting marine mammals during military operations.

OFF-SITE MEETING LOCATION

Thursday's meeting of the Chesapeake Bay Commission was held at the Oceana Naval Air Station where members were welcomed and given an overview of the Navy's Environmental Programs by Rear Admiral Rick Ruehe, Commander of the Navy Region Mid-Atlantic and Captain Patrick Lorge, Commanding Officer of the Naval Air Station Oceana.

CHESAPEAKE LIVING RESOURCES

Four local experts described the projects they have been working on in the waters of the Southern Bay.

Walter Priest, Restoration Specialist from NOAA's Chesapeake Bay Program Office in Gloucester Point, described some of the Navy's wetland restoration efforts in South Hampton Roads. Areas described included: Little Creek Amphibious Base, a construction debris landfill where 25,000 tons of debris have been removed and approximately 1.3 acres of tidal wetlands have been restored; Monkey Bottom, a 7.6 acre tidal wetland planted in 1984 that was used as mitigation for disposal area for Pier 10 dredging material; Salt Marsh Park, a 1.72 acre wetland restoration site constructed in 1997, which also houses a stormwater treatment facility; and other sites at Newport News Ship Yard. Commission members were also given the opportunity later in the day to participate in aerial helicopter tours of most of these projects, obtaining a birds-eye view of the restoration efforts.

Dr. Carl Hershner, Director of the Center for Coastal Resource Management at the Virginia Institute of Marine Science (VIMS,) shared a brief overview on the latest work at VIMS with different shoreline management strategies. He further explained how the living shoreline projects address shoreline erosion by providing for long-term protection, enhancement or restoration of vegetated wetlands and riparian areas. Dr. Hershner stressed that Living Shorelines don't work everywhere, they are more appropriate in more shallow areas interior of tidal waters. He also pointed out areas of examples of shorelines on a map of the helicopter flight plan so the members could observe them while participating in their aerial tour.

Dr. Mark Luckenbach, Director of the Eastern Shore Laboratory at VIMS, gave the members a synopsis of the latest developments in the restoration of native oysters and provided an update on the current status of non-native oyster introduction in the Bay. He stressed that any attempt to grow oysters in the Chesapeake Bay, whether native or non-native oysters, will need effective strategies to deal with diseases and predators. Dr. Luckenbach also pointed out a few oyster reef restoration sites the members could look for while participating in their aerial tour.

Mr. Tommy Leggett, Virginia Oyster Restoration and Fisheries Scientist at the Chesapeake Bay Foundation and a working waterman, talked to the members about shellfish, wild versus aquaculture and where the balance lies. Mr Leggett's presentation indicated that there are three key elements to balance a wild oyster fishery with aquaculture: (i) aggressive ecological restoration coupled with sustainable management of existing resources; (ii) increased hatchery based commercial restoration, including a remote setting or spat on shell production for a put and take fishery; and (iii) intensive aquaculture. Mr. Leggett pointed out to the members an area where aquaculture is currently taking place that they could view during their aerial tour.

AERIAL TOUR OF NAVY RESTORATION SITES

The Navy provided Commission members with a helicopter overflight of Naval installations in the south Hampton Roads area. The purpose of the flight was to familiarize the members with installations where restoration activities such as living shoreline work, shoreline repair, and wetland creation and enhancement are occurring. The overflight provided the members with a

perspective on these and other activities, and also on growth and encroachment in the area, that they could not obtain from the ground.

WHEN SCIENCE MEETS POLICY

The preceding four Living Resources speakers/presenters were joined by additional experts for a roundtable discussion with the members to further explore the implications of emerging scientific findings and to determine what steps, if any, need to be taken by state or federal leaders in the next three to five years. Additional expert guests included: “AJ” Erskine, Aquaculture Manager & Field Scientist at Bevans Oyster Co. and Cowart Seafood; Rom Lipcius, Ph.D., Marine Crustacean Ecologist at the Virginia Institute of Marine Science; Mark Mansfield, Chief of Planning and Policy Branch with the U.S. Army Corps of Engineers; Bill Street, Executive Director of the James River Association; and Jack Travelstead, Deputy Commissioner of the Virginia Marine Resources Commission.

Discussions centered on the Bay’s living resources, with a majority of the conversation spent on oyster restoration and aquaculture. Mr. Mansfield provided an update on the progress of the Environmental Impact Statement that is being prepared by ACOE, along with many partners from Maryland and Virginia, on the introduction of *ariakensis* to the Bay. A draft EIS is expected to be released in spring 2007, which takes a comprehensive look at oysters Bay-wide and will contain eight different risk-based alternatives for oyster restoration efforts. Aquaculture of native oysters, sterile native oysters, and sterile *ariakensis* oysters may have the potential to provide a steady source of oysters for industry, helping to balance restoration efforts with economic concerns for the industry. Aquaculture does not however come with without obstacles. User conflicts may arise from competing waterfront interests. Meanwhile, oyster studies are continuing, with some research concerning fecal coliform issues, hydrodynamics and water quality modeling, where and what type of structures do oysters do best on, submerged aquatic vegetation, and the effect of human actions on oysters.

Another issue raised concerned phragmites abatement efforts in Virginia. Mr. Priest said that the Navy has an abatement program where they spray annually for this specific foreign species. Dr. Luckenbach added that through Virginia’s Natural Heritage Program there are targeted efforts to eradicate phragmites to protect certain critical habitat, especially on the seaside of the Eastern Shore. However, Dr. Hershner added that in Europe phragmites is preferred flora in some instances because it stabilizes shorelines, takes up nitrogen, and is easily sustainable.

Mr. Hill asked to learn more about the recent reports on the local oyster restoration success stories. Mr. Leggett said that the recent oyster restoration in the Lynnhaven and Elizabeth Rivers was due to collaborative efforts of many groups including VIMS, VMRC, NOAA, ACOE, and CBF. Their outreach efforts to educate the public, build oyster reefs, and partner with homeowners has shown signs of success.

Conversation then turned to predators of oysters, mainly the cow-nosed ray. The rays not only feast on juvenile oysters but also destroy seagrass beds, critical habitat for the Bay’s living resources. The rays are being intensely studied to determine an appropriate management strategy for this voracious predator, including a baseline stock assessment. These rays have low birth rates of one pup per year after reaching maturity at age 6, so they are easy to over fish. Some possible reasons the rays seem so ubiquitous were suggested, such as the lack of availability of soft shell clams (their preferred meal) and the decline of near shore sharks (their natural predator).

Incentives for living shorelines were also discussed. Some suggested recommendations included creating economic incentives such as tax breaks for state approved preferred shorelines or state

dollars to help cover the cost of installing living shorelines where appropriate. Also, the permit process could be streamlined, establishing living shorelines as a state priority where appropriate, providing a public benefit. The idea would be to make it easier to do what is beneficial and make it more difficult to do what is not beneficial

Friday, November 10, 2006

MEETING CALL TO ORDER

The business meeting was called to order by Chairman Emmett Hanger at 9:00 A.M. Following roll call, the September meeting minutes and the agenda were adopted as proposed.

CHAIRMAN'S UPDATES

2006 Chesapeake Executive Council Meeting

Chairman Hanger announced that at this year's Executive Council meeting in September, four policy initiatives discussed at the September meeting were adopted: The Farm Bill Directive, which was signed by the EC members; The Forest Conservation Directive which calls for a goal to be established by next year for the protection and maintenance of contiguous forests; A Memorandum of Understanding with Scott's and Preen Fertilizer Companies to remove 50% of the phosphorus out of home lawn care fertilizers; and an agreement from the six agricultural secretaries of the region to meet periodically to develop recommendations to enhance the role and voice of agriculture in the Chesapeake Bay partnership, especially regarding funding, innovative technologies, and farm viability. The Alliance for the Chesapeake Bay will staff this meeting. Secretary Bloxom indicated that he would seek the Commission's assistance in these meetings.

Captain John Smith Water Trail

Chairman Hanger referred the members to the maps in their packets of Captain John Smith's adventures on the James River prepared by the Virginia Department of Conservation and Recreation. The set of three maps traces a water trail and an auto tour following Smith's journeys on the James River. Assistant Secretary Jeff Corbin added that they were also working on a similar map for the York River.

Agriculture Incentives Project

Executive Director, Ann Swanson briefed the members on a new project which will be looking at state incentive programs for agricultural conservation practices. This will be a comparative study to inventory current incentive and regulatory programs that support agricultural conservation and preservation. The study will look at both state and federal programs and identify policy gaps. The Commission members directed staff to move forward with the project.

THE SHIFTING ECONOMIC PICTURE OF THE BAY'S LIVING RESOURCES

Dr. Doug Lipton, Marine Resource Economist at the University of Maryland Department of Agriculture and Resource Economics, told the members of his current findings concerning the changing economics of the Bay's living resources. Although a recent article in the Washington Post predicted gloom and doom for the world's fisheries, Dr. Lipton was more optimistic in his forecast of the future. Dr. Lipton began by separating society's changing values of fish into three categories: commercial, recreational, and ecological. He explained that the commercial value of

the Bay's fish has declined over time due to substitutes such as globalization and aquaculture. The demand for seafood is up, but imported seafood is playing a greater role and aquaculture is increasing in supply. The iconic species in the Bay are still valuable fisheries, including the blue crab, oyster, and striped bass. The future of commercial fisheries in the Bay relies on a restored ecosystem, sustainable aquaculture, and a limited specialized market getting a premium for the iconic species. The recreational value of the Bay has increased in recent years, with the value of the trip experience being more important than the keeping of the fish caught. The ecological value of the Bay's living resources is more difficult to measure and includes the direct use value of fishing (commercial market value and recreational non-market value), plus the indirect use value (prey supply, habitat, ecosystem health, and non-fishery Bay uses such as boating, swimming, and waterfront property), plus the non-use value (society's value). Dr. Lipton noted that through ecosystem management a balance can be found for allocation of fish between its role as seafood, recreation, and as a contributor to ecological health.

THE BAY'S LIVING RESOURCES: PRESENT-DAY CHALLENGES

Fish Kills in the Shenandoah River

Mr. Steve Reeser, Fisheries Biologists with the Virginia Department of Game and Inland Fisheries updated the members on the latest findings of multi-agency efforts to discover the source of the 2004-2006 fish kills in the Shenandoah River. The Shenandoah River Fish Kill Task Force was created to investigate the repeated spring time fish kills in the Shenandoah River where an estimated 80% of the adult smallmouth bass and redbreast sunfish have died. Recommendations for future actions of the Task Force are to compile and analyze existing data and identify data gaps and future research needs.

Intersex Fish in the Potomac and Shenandoah Rivers

Dr. Vicki Blazer, Fish Pathologist at the United States Geological Survey, National Fish Health Research Laboratory talked to the members about the occurrence of the current phenomenon of intersex fish and their prevalence in the Potomac and Shenandoah Rivers. Increasingly there are reports of wild fishes with intersex, which is a general term for gonadal abnormalities such as female immature eggs occurring within a predominantly male gonad. This event is most often associated with exposure to estrogen compounds, or endocrine disrupters, and has been reported in a number of fish species, primarily smallmouth and largemouth bass in the Potomac and Shenandoah Rivers. Intersex poses serious problems for fish including immunosuppression, infections, lesions, and fish kills. Causes are linked to rising levels of contaminants, such as estrogen and other chemicals in human wastewater, agricultural runoff, industrial and atmospheric deposition. Dr. Blazer concluded by identifying further research needs: continuing to document the extent and causes of intersex fish in the Bay watershed, identifying the contaminants and sources, producing a risk assessment of various land use influences, understanding exposure time and routes, and the ability to understand that intersex is just one part of a larger complex issue.

Blue Crab Ghost Pots

Dr. Kirk Havens, Assistant Director at VIMS Center for Coastal Resource Management, presented interesting data and images from field surveys in the York River regarding "ghost" crab pots. Through a survey of 33.5 kilometers in the York River using NOAA's side scan sonar equipment, over 676 derelict crab pots were located. The cause of crab pots breaking away from their attached buoys is usually due to storms or boat propellers severing the line. Ghost pots can last over a year and catch a variety of species during that time, creating a self-baiting phenomenon.

Estimates of blue crabs trapped by derelict pots in the Lower York River are over 60,000 crabs per year, or 600 to 1000 bushels. Just as alarming is the amount of fish killed in these ghost pots; over 40,000 per year. VIMS intends to continue its research on ghost pots and develop a Baywide removal plan.

CHESAPEAKE BAY COMMISSION WORK SESSION

Chairman Hanger opened the session explaining that the mission was to designate a block of time at each meeting where members could address any future issues or follow-up action items that may need to be addressed by the Commission. Several were raised:

Acid Mine Legislation - George Wolff noted that there was a possibility that the Federal Acid Mine Reclamation Fund legislation could be tacked on to the Tax Extender Bill or some other piece of legislation during the Lame Duck session of the U.S. Congress. Ann Swanson was asked to investigate the matter and take action on behalf of the Commission if there was a possibility for passage.

BBCAC/ Living Resource Task Force - Delegate John Wood suggested that the BBCAC or a broader Living Resource Task Force be re-established to address fisheries issues that required amplified interstate coordination. Staff was directed to consider options and bring a recommendation to the members at the January meeting.

Name Branding/Public Relations - Irv Hill and others discussed how to improve the public image of the Commission. It was recognized that while our work is significant, the Commission is not well known to the broader public or legislative community. State Directors were asked to work with their delegations to come up with ideas to improve our “branding” and report back at the January meeting.

Scotts Fertilizer – members agreed that a letter from the Commission should be sent, asking Scotts to continue to press forward for strong measures related to the reduction and proper stewardship of nitrogen in lawn fertilizers.

ADJOURN

The meeting was adjourned at 12:00 P.M.

The next meeting of the Chesapeake Bay Commission
will be held at the Chesapeake Bay Foundation Headquarters
in Annapolis, Maryland on January 4, 2007

