Virginia Marine Resources Commission
Blue Crab Management Advisory Committee Meeting
VMRC Conference Room

April 19, 2012

Members Present
Hon. Joe Palmer
Marshall Cox
Ty Farrington
Chris Moore
Peter Nixon
Tom Powers

VMRC Staff
Rob O'Reilly
Joe Grist
John Bull
Joe Cimino
Renee Hoover
Allison Watts
MPO Steve Holliday

Members Absent
H.M. Arnold
Jim Casey
Jeff Crockett
Dan Dise
Wayne France
Pete Freeman
Johnny Graham
Paige Hogge
Ronnie Jett
Hon. Rick Robins
Ken Smith

Others Present
Dr. Rom Lipcius
Danielle McCullough
Michael Seebo
Ken Diggs, Jr.
James Diggs

The minutes were recorded by Allison Watts.

I. Introductions/Announcements

Mr. Joe Palmer called the meeting to order at 6:10 pm. There were not enough members present to have a quorum and therefore the meeting was for information and discussion purposes. Mr. Ty Farrington requested that staff review the Crab Management Advisory Committee (CMAC) absentee rolls of recent meetings, and he recommended that members who are continually absent without a proxy be replaced.

II. Minutes from the March 20, 2011 meeting.

The minutes were not approved, as Mr. Farrington pointed out that three CMAC members had been left off of the "Members Absent" list.

III. Results of 2011/2012 Winter Dredge Survey.

Mr. Rob O'Reilly presented the results of the 2011/2012 Bay-wide Winter Dredge Survey (WDS), and first explained that surveys are referred to by the year in which

the survey ended. The 2012 WDS estimated 764 million total (all sizes) crabs, which is the fourth-highest total abundance estimate of the 23-year survey. Of those, 587 million crabs were juveniles (less than 2.4" in carapace width), which is the highest record of the survey. Spawning-age crabs were presented as females and males separately. The 2012 estimate of spawning-age female crabs (females that will spawn this spring and summer) was 97 million crabs. Mr. O'Reilly explained that while this is a large drop from the 2011 abundance estimate of 194 million age-1+ females, the 2012 estimate is the median estimate of the survey (11 years with more spawning-age females and 11 years with fewer). The estimates of spawning-age males have been steady over the past three years.

Mr. O'Reilly reminded everyone that the 2011 blue crab stock assessment established female-specific reference points (targets and thresholds). The new reference points are based on Maximum Sustainable Yield, which was not available in earlier blue crab stock assessments. The new abundance target was established as 215 million age-1+ female crabs, which replaced the interim target of 200 million age-1+ total (male and female) crabs. The threshold is defined as 70 million age-1+ female crabs, and an abundance estimate under this threshold (as in 1999, 2001 and 2002), is considered 'unsafe'. He explained that the removal rate is the fraction of the stock that is removed by fishing in any year, and is based on female crabs of all sizes. The threshold removal rate is 34% of females, above which is cause for concern. The target removal rate of female crabs is 25.5%. The 2011 removal rate estimate (24%) is just below the target. Mr. Marshall Cox asked about the change from the previous target abundance of 200 million spawning-age crabs, and Mr. O'Reilly explained the 200 million was an interim target that included both male and female crabs.

Mr. O'Reilly stated that the 2011 Bay-wide crab harvest estimate of 67 million pounds is preliminary because of delinquent data. Mr. Cox asked if the term 'Bay-wide' refers to Maryland and Virginia, and Mr. O'Reilly responded that the Potomac River is also included. Mr. Cox then inquired if managers are taking effort (number of harvesters) into account when looking at percentages of female crabs removed. Mr. O'Reilly explained that crabs have a patchy distribution, and crab availability also plays a role in catch rates. Even if excess effort is removed, catch can still be high. Mr. Cox asked if staff knows how many crab pot harvesters were active in 2009 and how many pots were fished. Mr. O'Reilly responded that staff does know the number of active licensees, but due to incorrect reporting, the actual number of pots fished cannot be known.

Mr. Farrington asked about regulations put in place in 2001, and Mr. O'Reilly listed those regulations as the increase of the spawning sanctuary, the establishment of the

eight-hour work day, and the reduction in the number of peeler pots per licensee. Mr. Farrington suggested the regulations put in place prior to 2005 (when the WDS estimated the highest total abundance since 1998) were not spectacular, which indicates that the crabs follow a natural cycle. Mr. O'Reilly pointed out that 2005 cannot be considered a banner year for crab abundance, though it was an improvement. However, the period from 1998-2008 was mostly problematic (high removal rate, low abundance), and the regulations put into place in 2008 were necessary. Mr. Cox asked when mandatory reporting began, and Mr. O'Reilly stated it began in 1993. Prior to 1993, harvest was buyer-based. Mr. Pete Nixon asked about the current low abundance of spawning-age females in contrast to the high number of juveniles. Mr. O'Reilly responded that warm temperatures were thought to have affected the WDS sampling this winter. Mr. Nixon asked if crabs could have moved out of the Bay in the fall, and Mr. O'Reilly said that managers do not know for certain what caused the low spawning-age female crab abundance estimate.

Mr. O'Reilly closed his presentation by explaining that the 2011 estimate of crab harvest, using trip and harvester data, is 31 million pounds. Dockside value has been steadily increasing since 2006, but there is no estimate of the 2011 dockside value.

Mr. Farrington asked for the definition of dockside value, and Mr. O'Reilly explained that it is the first-sale value, which is obtained by directly asking buyers what they pay harvesters. Mr. Farrington questioned the accuracy of staff's method for estimating dockside value, and Mr. O'Reilly suggested CMAC offer a new approach. Mr. Tom Powers clarified that legally, no one can require harvesters to provide financial information. Mr. Cox asked if Maryland buyers are surveyed, and Mr. Grist responded that they are not.

Mr. Palmer asked Dr. Rom Lipcius if he had any comments to add. Dr. Lipcius presented the results of a blue crab phase analysis, and explained that the mathematical modeling approach is used to examine population dynamics over the longterm. Dr. Lipcius explained that there have been two general regimes within the blue crab population since the late 1980's: high abundance of female crabs and juvenile crabs (from the late 1980's to about 1996), and low abundance of females and recruits (from 1996 to 2008). Following the 2008 regulations put into place, the crab population shifted back to the first phase of high female abundance by 2009. Female crab abundance in 2012 was low, but VIMS staff does not find this unusual. The warm temperatures did not affect the catchability of crabs in the WDS, but females probably migrated out of the Bay. Staff must assume that the offspring of any crabs that migrated out of the Bay will not recruit into the Bay. The population is not in crisis, but managers must be cautious in terms of relaxing existing regulations.

Mr. Nixon asked if crabs were detected in the lower Bay because of a migration out of the Bay, and Dr. Lipcius responded that he hoped that some of the tagging results will answer that. Mr. Cox asked if the regime shift in the phase analysis was caused by the onset of mandatory reporting requirements (1993), and Dr. Lipcius responded that it was not. Independent trawl survey dates back to the 1950's, and the crab population was in the first regime from then until about 1996. Mr. Powers clarified that the trawl surveys are scientific and effort-independent. Mr. Farrington asked if crab abundance has been tied to water quality. Dr. Lipcius said that water quality hasn't improved greatly, though the crab population has rebounded. Management actions since the early 2000's averted a total stock collapse.

IV. Discussion: Possibilities for 2012 blue crab fishery season

Mr. O'Reilly explained that there has been interest over the past several years in extending the crab pot season into December, and last September, staff analyzed the possible catch for a December 2011 pot season by assuming the same harvesters that were active in November would remain active in December. Mr. Nixon asked if female crab harvest would be permitted in a December pot fishery, and Mr. O'Reilly said that the female prohibition beginning November 21 would be lifted. In order to consider an extension of the crab pot season in December 2012, staff must consider the exploitation rate throughout 2012 in relation to the target. Mr. Nixon expressed his belief that if the potting season had been extended in late 2011, the industry may have been able to harvest the crabs that moved out of the Bay due to high temperatures. He added that he was concerned with the current spawning sanctuary, which shifts the problem from the mainstem Bay to upriver tributaries where males are heavily harvested. An extension of the crab potting season must allow female harvest to target female crabs that are moving out of the Bay.

Mr. Cox asked about the future of the crab dredge fishery. Mr. O'Reilly responded that CMAC must present a plan for conservation equivalency if the dredge fishery season is to be reopened. Mr. Palmer stated that this topic would be added to the agenda for discussion at the next CMAC meeting.

Mr. Chris Moore asked about moving beyond the idea of the 34% reduction in female crab harvest and toward managing for the new targets and thresholds. Mr. O'Reilly responded that staff has moved beyond that reduction initiated in 2008, but the regulations remain similar.

Mr. Farrington stated that all discussions on reopening the crab dredge fishery or eliminating the November 21 through 30 prohibition on female crab harvest have involved tradeoffs. However, when these regulations were established in 2008, tradeoffs were not mentioned and regulations were worded as short-term. Mr. O'Reilly said that staff would have to look into the actual wording from past Commission meetings. After three years of interim reference points, the new 2011 stock assessment changed the landscape of blue crab management.

Mr. Marshall asked if CMAC should consider conservation equivalency measures prior to the fall. Mr. O'Reilly explained that once June harvest data are complete, the 2012 total harvest can be projected. Until then, CMAC can produce ideas. Public perception remains against a reopening of the crab dredge fishery, but there are discussions about an experimental crab dredge season. A subcommittee must convene on the development of this experimental fishery by late summer, and CMAC members can submit input on this to staff. Mr. Nixon asked if this experiment would allow better understanding and management of the fishery and allow its reopening. Mr. O'Reilly stated that learning to operate with less crab waste would lead toward a possible reopening, and staff would participate in on-board monitoring during the experimental fishery. Additionally, staff is examining the possibility of bushel limits should CMAC propose those as a means of conservation tradeoff.

Mr. Palmer asked if the committee had any further questions. Mr. Moore asked about Maryland's regulations in 2012. Mr. O'Reilly responded that Maryland is considering a decrease in bushel limits in both August and late fall (September and October), through a cooperative process between Maryland Department of Natural Resources and industry members. For bushel limits to work, they must be enforceable which is difficult. Mr. Moore asked if there is any information on the number of people who attain the bushel limit each day, and Mr. O'Reilly explained that Maryland has mandatory reporting and staff-observers to calculate harvest estimates, but staff does not have current Maryland data.

V. Next meeting: To be determined.

Mr. O'Reilly stated that the dredge subcommittee should meet prior to the next CMAC meeting, which may be in June and will be determined later.

VI. Adjournment

The meeting was adjourned at 7:58 pm.