

MINUTES

AUGUST 11-12, 2004
4460 Long Hill Road
JAMES CITY COUNTY, VA 23607

The Marine Resources Commission met on August 11 and 12 at Lafayette High School in James City County with the following present:

William A. Pruitt)	Commissioner
C. Chadwick Ballard, Jr.)	
Gordon M. Birkett)	
Ernest L. Bowden, Jr.)	
S. Lake Cowart, Jr.)	
Russell Garrison)	Members of the Commission
J. T. Holland)	
Dr. Cynthia Jones)	
F. Wayne McLeskey)	

Steve Bowman	Deputy Commissioner
Carl Josephson	Assistant Attorney General
Wilford Kale	Sr. Staff Adviser

Andy McNeil	Programmer Analyst, Sr.
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Lewis Jones	Deputy Chief-Law Enforcement
Warner Rhodes	Marine Patrol Captain
Kenny Oliver	Marine Patrol Captain
Ray Jewell	Marine Patrol Captain
Bruce Ballard	Marine Patrol First Sergeant

Virginia Institute of Marine Science
 Roger Mann, Lyle Varnell

Jack Travelstead	Chief-Fisheries Management
Rob O'Reilly	Deputy Chief-Fisheries Management
Lewis Gillingham	Fisheries Management Specialist
Ellen Cosby	Fisheries Management Specialist

Bob Grabb	Chief-Habitat Management
Tony Watkinson	Deputy Chief-Fisheries Management
Randy Owen	Environmental Engineer
Tracy West	Environmental Engineer

Commission Meeting

August 11-12, 2004

Hank Badger	Environmental Engineer
Jeff Madden	Environmental Engineer
Chip Neikirk	Environmental Engineer
Jay Woodward	Environmental Engineer
Ben Stagg	Environmental Engineer
Ben McGinnis	Environmental Engineer
Justin Worrell	Environmental Engineer

and others.

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Commissioner Pruitt opened the meeting at 10:02 a.m. Members present were Associate Members Ballard, Birkett, Bowden, Cowart, Garrison, Holland, Jones and McLeskey. Commissioner Pruitt established that there was a quorum. Traycie West, Environmental Engineer Senior, gave the invocation and Commissioner Pruitt led the audience in the pledge allegiance to the flag.

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Commissioner Pruitt swore in the court reporter and then swore in staff members from the Virginia Marine Resources Commission and the Virginia Institute of Marine Science who were scheduled to testify during the hearing.

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Commissioner Pruitt thanked the staff of Lafayette High School for making the facilities available and noted the many efforts undertaken to accommodate everyone for the public hearing.

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Commissioner Pruitt said the Commission was ready to start this supplemental hearing that the circuit court has directed the agency to hold. In the appeal by the City of Newport News on the question of a formal hearing, the court ruled that we should have a formal hearing. After that, however, the applicant and the Commission attorneys got together and developed a proposal for an informal hearing. There were certain conditions, he said, that were part of the agreement. Commissioner Pruitt quoted from item No. 5 of the agreement:

"Under the terms of the agreement, all participants and commentators at this hearing shall be Limited to presentation of testimony and evidence regarding the potential impact of the proposed Mattaponi River raw water intake for the King William Reservoir project on the early life history stages of American shad that utilize that river as spawn in the nursery grounds and other fishery resources the Commission is entrusted to protect."

Commissioner Pruitt explained that the record of the previous public hearing in May, 2003 is still a part of the record and Commissioner members can refer to that record and ask questions, but other parties making presentations must adhere to the condition that he presented. He said best efforts would be undertaken to exclude irrelevant and duplicative testimony in evidence.

Also, under the terms of the agreement that, by the way, the circuit court agreed to, the City of Newport News will have four hours to present its case in chief including its opening statement. Public supporters of the City's position also will be heard, and that time will not be counted toward those four hours. Public commentators who oppose the project will be allowed collectively up to four hours, the time equal to that allowed to the City to present its responses, plus time taken by public comment in favor of the project. The exact time involved will not be known until the end of the day, the Commissioner said, indicating it was not known how many people would speak for the City. The City will have two hours for rebuttal at the end of the public hearing. There was an official timekeeper to keep everyone aware of the time constraints.

Commissioner Pruitt said the Commission's goal is to be fair to everyone and stressed that comments from both sides of the issue are very important. The public hearing, he said would begin with a staff report, followed by questions from Commission members. The Virginia Institute of Marine Science requested that their comments or questions to them be considered following the City's entire presentation.

Responding to the Commissioner's question, Scott Hard said he represented the City and there would be five witnesses, who were then sworn in by Commissioner Pruitt.

Tony Watkinson-Deputy Chief, Habitat Management, began the staff briefing of the case. He said the Commission's normal notebook included the settlement agreement, the report of the Virginia Institute of Marine Science, the City of Newport News' revised application, and the staff evaluation. Also available for the Commissioner member is the report of the fishery panel (assembled by the City) and copies of the public comments submitted in response to the advertised public comment periods.

In terms of the presentation order, Mr. Watkinson, using a power-point presentation, said he would review the project elements and locations and show photographs of the project sites. Then there would be a review of the City's efforts to address the project effects, including some of the information submitted last year. He said the findings of the King William Reservoir panel report would be reviewed, along with the assessment and findings of the Virginia Institute of Marine Science, whose scientists are available to answer questions later. He then would review public comments and conclude with a staff summary.

Mr. Watkinson said on April 1, 2004, the city of Newport News, on behalf of the Regional Raw Water Study Group submitted an amendment to their application. That

amendment included a report from the King William Reservoir fisheries panel assembled for the Regional Raw Water Study Group which is entitled "King William Reservoir - Mattaponi River Fish Impact Assessment and Mitigation Report." Mr. Watkinson then outlined the project as proposed, which primarily included the construction of a 75 million gallon per day raw water intake structure in the Mattaponi River at Scotland Landing. The reservoir itself does not require a Virginia Marine Resources Commission permit, only the intake structure and related distribution lines, crossing Cohoke Creek, the Pamunkey River and a discharge into Beverdam Creek. His presentation, including slides, is part of the verbatim record.

The changes proposed by the City's amendment to the permit application concern operation of the intake structure in the Mattaponi River to address effects on anadromous fish spawning through the establishment of a pumping hiatus—a seasonal shutdown of water withdrawal operations, Mr. Watkinson said. The shutdown triggers would use temperatures based on the results of a long-term preoperational ichthyoplankton monitoring program. The pumping hiatus and monitoring program were described in detail in the City's fishery panel report. The City's amended application also described proposed construction details, including the use of sheet-pile baffle structures and turbidity curtains during installation of the intake screens. There were no visible changes to the permanent facilities previously considered by the Commission, he added.

Mr. Watkinson also outlined the previously proposed avoidance minimization and mitigation efforts proposed by the City, including a time-of-year restriction that would preclude operation of the intake for 60 days each year during the shad spawning period, and that would have been through 2020 or for as long as the current American shad moratorium was in effect. The moratorium would hinge on the daily monitoring of temperature flow rate and salinity. The other mitigation measures included reservoir downsizing, withdrawal limitations related to the Department of Environmental Quality's minimum flow requirements and a wetlands mitigation plan. There were other items including hatchery improvements, riparian buffers and an ecological monitoring program.

Now, one of the biggest components of the plan is the "King William Reservoir—Mattaponi River Fish Impact and Mitigation Plan." The plan evaluated the intake design, construction and operation, the Mattaponi River ecosystem, the related fish community and the specific species vulnerable to intake effects.

Mr. Watkinson said the report offered a number of findings and addressed a number of issues. In terms of the potential for impacts to fish from construction, the panel considered the fact that the time-of-year restriction ran from February 15th to June 30th for construction and basically concluded that that protected the fishery resources during the construction phase of the project. The panel also looked at the potential for impacts to fish from intake screen effects. That includes the entrainment, the impingement and the screen contact, some of the more controversial issues associated with the project. They looked at American shad eggs and larvae that were identified as the vulnerable life stages.

Other species of concerns were also identified: The hickory shad, river herring, white perch and striped bass.

Mr. Watkinson said the report did not specifically set a time lime for the pumping hiatus, but again stressed it would be based on temperature triggers as a result of a proposed Mattaponi River study. The report used a surrogate Hudson River study since no study of the Mattaponi exists.

The panel identified eggs and yolk-sac larvae as the vulnerable life stages of American shad that require protection. Based on the analysis to the Hudson River data, the City has agreed to ensure through a pumping hiatus to maintain a minimum 97 percent protection of the standing crops of eggs and yolk-sac larvae in seven of eight years of study and no less that 95 percent protection of the standing crops of eggs and yolk-sac larvae in any signal year. The City also agreed to a minimum pumping hiatus of 12 degrees, beginning when water temperature reaches 10 degrees centigrade and continuing until the water temperature reached 22 degrees centigrade.

Mr. Watkinson, at that point, said the agency's staff evaluation used the term "maximum" there instead of "minimum" at that point in the report. That was an oversight, he said, that needed to be corrected. The issue was further clarified later in the staff report, but it is something that the City had called to the staff's attention and staff felt it needed to be clarified.

Similar levels of protection arising out of the pumping hiatus are anticipated for other vulnerable species' life stages including the river herring and striped bass and white perch. Based on the Hudson River data, the duration of the pumping hiatus determined by these temperature triggers would vary from 44 to 83 days, and average 61 days. According to the City, the Regional Raw Water Study Group has determined that if these same triggers are applied on the Mattaponi River, the King William Reservoir would still be capable of meetings its water supply objective with pumping hiatuses of that average magnitude during nondrought emergency years. As before, the City's proposal called for suspension of the hiatus during periods of drought emergency to protect public health, safety and welfare.

The fisheries panel report recommends the City and Regional Raw Water Study Group to commit to implementation of the pumping hiatus over a temperature range of at least 12 centigrade. While the results of the preoperational monitoring could lead to an expansion of the hiatus range beyond a 12 degrees centigrade range, there would not be a contraction of that range. The City believes this will allow for a Mattaponi-specific hiatus that could be initiated at a somewhat higher or lower trigger than 10 degrees centigrade if monitoring results indicate it would be appropriate. The fisheries report also contained considerable information on the protection offered by the wedgewire screen and reiterated their belief that the technology offered substantial protection for various fishery life stages.

As a continuation of the findings of the fishery panel report, they looked at the potential for impact to fish from water withdrawal, induced salinity changes. They looked at previous modeling and felt that was adequate and this was not an issue or significant factor. They looked at the potential for impact to fish from noise. They did some studies and analyses relating to intakes on Lake Gaston and, as a result, felt that noise should not be a contributing factor to the fishery impact. And they evaluated the other mitigation measures.

In the previously proposed mitigation measures identified, the City included a time-of-year restriction for construction and the intake screen design with 1-millimeter wedgewire screen. The City now has revised the through-slot velocity or the approach velocity to .15 feet per second as opposed to .25 feet per second. Even though the panel said hatchery augmentation was unnecessary, the City said the Regional Raw Water Study Group would adhere to its previous commitment until the Commission deemed otherwise.

As specified by the settlement agreement, Mr. Watkinson said, the Virginia Institute of Marine Science VIMS was asked to review and comment on the fishery panel report. The VIMS' report looked at the proposed study design, the applicability of the Hudson River demonstration exercise, the Hudson River data essentially, and the wedgewire screen protection efficiency. VIMS also looked at the potential effects of pump-generated noise and they also offered policy guidance.

Based on the fisheries panel report and the available information, VIMS said it feels that the chosen intake location continued to pose some of the highest potential risks to juvenile anadromous fish populations in the area. They acknowledged that while use of a water withdrawal hiatus would reduce risk to larval shad populations in the Mattaponi River, effectively implemented, it could prevent the City from realizing its desired water yield. VIMS said that given the fact that the intake was in tidal water, the probability of early life stage impacts as a result of the intakes were significantly higher than estimated by the fishery panel report. VIMS said the flow and ebb tides would transport eggs and larvae past the intake multiple times under any river flow condition and that the result in multiple exposures would occur any time the intake operated affecting whatever happened to be in the river at those times.

VIMS also believed that there was insufficient information at the time to support an appropriate risk assessment of the proposed pumping hiatus. In VIMS opinion, the uncertainties cannot be properly evaluated until more is known about specific conditions in the Mattaponi River. In order to reduce the risk of undesirable impact to either the fishery resources or the City's safe water yield objective, VIMS strongly recommended completion of the monitoring program prior to any final permit decision.

In addition, VIMS also recommended that post-yolk-sac larvae be included in the proposed study and that the survey period be extended to at least the end of June or optimally to mid-July. VIMS further suggested that post-yolk-sac larvae be included in

the proposed protection strategy. If this were done, they felt the proposed hiatus would need to be expanded beyond the proposed 10- to 22-degree centigrade temperature range. A replicated sampling, extensive year sampling, and an expansion of the post-pilot survey to at least ten years were also recommended.

While VIMS suggested that the Hudson River data may successfully demonstrate the utility of the proposed monitoring program, it did not feel it served as a reliable estimate for the duration of the potential pumping hiatus for the Mattaponi River based on the significant physical difference between the two rivers.

VIMS concluded that the fishery panel report provided sufficient information to conclude that the frequency and duration of the noise expected from the intake operation would likely have a minimal influence on the fish and the littoral environment. Finally, VIMS reiterated a recommendation from its original 2003 report regarding the necessity for the Commonwealth to develop a comprehensive water allocation strategy that incorporated environmental, social and economic needs prior to consideration of any more large-scale reservoir projects.

Mr. Watkinson said correspondence received during the public comment period that ended May 12, 2004 showed support for the project from numerous organizations, local governments and individuals. A total of 45 letters, faxes and e-mails were received. Approximately 1,500 preprinted postcards in support of the reservoir project also were received. Various supports from the numerous organizations and from individuals said the operational and design elements of the proposed project were designed to minimize impacts. The supporters cited extensive operational and design elements of the project that were designed specifically to minimize the intake structure's impact on the Mattaponi River fisheries, particularly American shad. This includes the pumping hiatus recommended by the City's fishery panel and multiple layers of protection provided by the intake design including 1 millimeter screen mesh size, low pumping velocity and a mid-water intake location and the DEQ mandated minimum instream flow requirements.

Supporters also felt that the levels of protection for fisheries were sufficient to warrant Commission approval. The supporters maintained that with the operational and design elements the City had agreed to provide there would be a level of protection for the fisheries and ecosystem while accommodating construction of a reservoir that would satisfy the water needs of all current and future citizens of the Peninsula.

Mr. Watkinson said the Commission received numerous comments from people and organizations opposed to the project. A total of 711 protests were received in forms of letters, faxes, e-mail and also preprinted postcards. Many of the protests received by fax and e-mail were the same comments, just submitted by different individuals. In addition to comments from individuals, the Commission received protests from the Friends of the Rivers of Virginia, King and Queen County, Mattaponi and Pamunkey Rivers Association, Float Fishermen of Virginia, SaveOurRiver.org, Southern Environmental

Law Center, Rock the Earth, the Chesapeake Bay Foundation, Alliance to Save the Mattaponi, the West Point Hunt Club, the Sierra Club, Institute for Public Representation on behalf of the Mattaponi Tribe, the Coastal Virginia Waterman's Association, and the Izaak Walton League of America.

In general, those in opposition believed the project would result in adverse impact to American shad and other species the Commission was charged with protecting. Many also believed any monitoring and studies proposed by the applicant should be completed before the Commission makes a permit decision. More specifically, comments regarding the amended permit application and fisheries panel report included: those related to the intake design as located in the Commonwealth's prime American shad spawning habitat; that ecosystem effects were not adequately considered; the protection offered by the design features of the intake structure would be less than predicted; the hiatus temperature triggers may need to be expanded; suspension of the hiatus would result in fishery impacts; and that if the project were approved, independent monitoring and oversight should be required of any conditions imposed on the City.

After the VIMS' report was received, another two-week public comment period was provided. During that time, a total of 259 responses were received opposed to the project. With the exception of comments from the City and the fisheries panel, no other comments were received in support of the project.

Many of the comments on the VIMS' report reiterate that in spite of the concessions, the intake location would pose some of the highest potential risk to juvenile anadromous fish populations in the area, and the uncertainties still existed regarding the liability of the pumping hiatus given the differences between the Hudson and Mattaponi Rivers. There were further arguments that post-yolk-sac larvae should be protected considering their fragile nature and that the probability of interactions of eggs and larvae with the intake was greater than identified in the fishery panel report. The protestants believed that the VIMS' assessment provided clear evidence that the previous decision by the Commission to deny the project was correct. They also agreed that the Commission should require completion of the proposed studies and monitoring before making a permanent decision in order to be able to effectively quantify the project's impacts on the fishery resources.

Over the past month or so, Mr. Watkinson said, staff met with the City representatives to discuss certain stipulations and special conditions they were willing to make and abide by in the event a permit was granted. These conditions addressed the issues listed in the staff recommendation and included the proposed intake screens with 1-millimeter slot openings and a maximum through-slot velocity of .15 feet per second down from the previously proposed .25 feet per second velocity. This would require a slight increase in the length and diameter of the screens. The City also stipulated the screen assemblies would be made of standard Type 316 stainless steel materials without any special coatings, chemical treatments or special alloys.

Regarding the pumping hiatus, the City agreed to a springtime pumping hiatus, the initiation in length to be determined by temperature triggers arising out of an eight-year study. The pumping hiatus would be designed to protect no less than 97 percent of the standing stock of American shad eggs and the yolk-sac larvae in seven of eight years of preoperational data collection and study, and no less than 95 percent of the standing stock of such eggs and yolk-sac larvae in the eighth year.

Under the preoperational ichthyoplankton monitoring program, the City agreed to commence the eight-year ichthyoplankton monitoring program in 2006 or the first calendar year after the Corps has issued the required Section 404 permit, whichever is later. The monitoring program would be in accordance with Appendix D in the fisheries panel report, and data would be collected until the river water temperature reaches 28 degrees centigrade in order to document the presence of post-yolk-sac larvae.

The City agreed to align the intake structure in order to maximize natural current sweeping velocities. This likely would require an additional study. While the City wishes to preinstall a potential chemical feed system, that may be used to address bio-fouling from mollusks like the zebra mussel, the City agreed not to use any such system until the chemical or other proposed measures have been specifically approved by the Department of Environmental Quality and the Commission has granted expressed permission to do so.

For the preoperational monitoring reports, the City agreed to provide annual reports that would include the results of the spring spawning season monitoring and cumulative summary of all the data collected by September 30th of each year.

As for setting the hiatus triggers, at the end of the eighth year, the City will provide a final report and the analysis of all the data collected with their recommendations for the proposed temperature triggers for initiation and cessation of the spring pumping hiatus. The hiatus must adequately meet the 97 percent and 95 percent protection levels specified in the City's application. In no case would the temperature range be less than 12 degrees centigrade. The Commission must approved both the report and trigger values before any pumping may occur during the period March 1 to June 30 unless a water supply emergency has been declared. Basically the March 1 to June 30th condition would be the default mechanism whereby if an agreement had not been reached through all the studies and had not been accomplished to reach that agreement, the time frame established by March 1 to June 30th would be the deciding factor.

And finally, during water supply emergency years, the City agreed to conduct entrainment monitoring in the manner described in Appendix D of the fishery panel report. Entrainment monitoring will be determined for eleven species of fish, and they include American shad, hickory shad, gizzard shad, alewife, blueback herring, striped bass, white perch, yellow perch, longnose gar, Atlantic sturgeon, and common carp.

All of the City's efforts, agreements and concessions concerning the intake were designed to minimize the risk and impact to early life stages of American shad that utilize the Mattaponi River as a spawning and nursery area as well as several other fishery resources that the Commission was entrusted with protecting. While these agreements would undoubtedly lessen the potential impact of the intake, neither VIMS nor the City's own fisheries panel of experts can state that they have reduced the potential impacts to zero.

VIMS, the scientific advisor to the VMRC in its June 25, 2004, letter to Commissioner Pruitt regarding the City's fishery panel report stated, "There is insufficient information to support an appropriate risk assessment of the pumping hiatus proposal. It is our considered opinion that the uncertainties cannot be properly evaluated before more is known about the conditions in the Mattaponi River. In order to reduce the risk of undesirable impact to either the fish resources or the City's safe water yield objective, we strongly recommend completion of a monitoring program prior to any final permit decision."

While the proposed ichthyoplankton monitoring program may go a long way toward providing sufficient information for use to quantify the magnitude of the impacts on the fishery, the data and final report would not be available until 2014 at the earliest. Furthermore, although the differences of opinion exist between VIMS and the City's fishery panel regarding the probability of early life stages of fishes being impacted by the intake during periods when the proposed hiatus is not in effect, the fact remains that there would be some level of impact.

VIMS continues to maintain that the York River watershed is the most productive Virginia bay tributary for American shad and that the abundance of shad in the York River is more heavily influenced by production in the Mattaponi River than in the Pamunkey River. In fact, VIMS' data indicated that the region of the Mattaponi River where the intake is proposed is a highly productive area within the most productive Virginia river with respect to American shad. Nothing has been provided by the City or its fishery panel to refute this assertion. In addition, effects on other species such as alewife, blueback herring, and white perch cannot be entirely discounted. In fact, the fishery panel specifically stated that "VIMS' statement about the Mattaponi River being the primary location for shad production within the York River watershed reiterates information presented in their earlier communications. The panel's charge was to develop recommendations on monitoring, facility operation, and mitigation that would ensure that there would be virtually no impact of King William Reservoir's water withdrawal on whatever shad population was present. The panel did not assess the relative size or importance of the Mattaponi River shad stock to the broader suite of shad stocks, and thus the panel has no response to the specific VIMS' comments."

Mr. Watkinson said in light of the foregoing, and coupled with the uncertainty over the status of the U. S. Army Corps of Engineers Section 404 permit, as well as both pending and potential litigation, staff recommended that the Commission defer a final permit

decision on the City's application until the data and findings of the ichthyoplankton monitoring study and final report have been received, reviewed and agreed upon. Once the specific temperature cues and/or triggers have been determined for American shad that spawn or utilize the Mattaponi River in the vicinity of the intake as a nursery, a tailored pumping hiatus and mitigation strategy can be developed in order to truly eliminate most, if not all, impacts on the fishery. If all impacts cannot be eliminated, the data would allow us to accurately quantify the impacts in an effort to truly strike a balance between the City's needs and the withdrawal's impacts on aquatic resources to the maximum extent practicable.

Should such a delay prove unacceptable to the applicant, and more appropriately, should the Commission conclude that the project benefits outweigh the impacts and risks to fishery resources in the Mattaponi, staff would suggest that the permit conditions proposed by the City be accepted, including a reduction in the maximum through-slot pumping velocity to .15 feet per second, and with the further stipulation that the springtime pumping hiatus be extended from March 1 through July 31st with a goal of protecting 97 percent of the American shad life stages from eggs through post-yolk-sac larvae. While recent studies have indicated that post-yolk-sac larvae may not be as susceptible to impingement or entrainment due to the development stage, observed swimming/burst speeds and at reduced slot intake velocities of .15 feet per second, those studies are rudimentary and the results preliminary. The hiatus condition could be modified if it is clearly shown and documented that the post-yolk-sac larvae life stages are not impacted by the intake operation or if the hydraulic zone of influence surrounding the intake is much smaller than VIMS suspects.

As before, staff believed that the other mitigation efforts, identified by the City should also help offset effects on fishery resources through fish passage improvements and support for hatchery efforts for stocking American shad. The Commission may wish, however, to require an analysis of the potential reduction in genetic variation associated with a low number of breeders before implementing any additional stocking program.

Staff would also continue to suggest consideration of our previous recommendation, that the Regional Raw Water Study Group fund or endow a program that would ensure the Mattaponi River watershed is maintained as a viable and productive resource for future generations. This can include funding of an independent authority or organization with representation from each locality in the watershed and appropriate regional interest groups to oversee and manage this effort. We feel appropriate funding amounts could be based on the cost of mitigation, restoration or management efforts as might be identified in the Chesapeake 2000 agreement, various fisheries management plans, and Virginia's tributary strategies or other similar reports. Furthermore, such an independent authority might be able to act as an oversight organization to ensure permit compliance.

With the conclusion of the staff presentation, Commissioner Pruitt asked for questions from Commission members. Associate Member Ballard said several times there were

references to 97 percent protection of the standing crop and at another time the phrase “standing stock” was used. This clearly is not talking about 97 percent of all the shad larvae in the Chesapeake Bay, Associate Member Ballard asked. Are we talking about in the Mattaponi River or in a specific section of the Mattaponi River.

Mr. Watkinson responded that it was in that section of the Mattaponi River where there is an influence from the withdrawal structure. After another exchange, Mr. Watkinson said the 97 percent protection would be during the hiatus period in the area of the intake structure.

No information exists, Mr. Watkinson said, responding to another statement, on what percentage the eggs encounter the structure compared to all the eggs in the Mattaponi River or within the waters of the Commonwealth.

Associate Members Ballard and Cowart asked several other questions related to mitigation and the City’s proposed study prior to the filling of the reservoir and the pumping hiatus during the shad-spawning season. These are part of the verbatim record.

Associate Member Garrison asked if the city had ever discussed moving the intake to another location during recent discussions with agency staff? Mr. Watkinson answered no. He further discussed the pumping hiatus and Associate Member Dr. Jones also asked several follow-up questions on the percentage of shad spawning in the Mattaponi and ecosystem analysis. Their remarks and Mr. Watkinson’s comments and the response of Dr. John Olney of VIMS are part of the verbatim record.

Associated Member Birkett asked Jack Travelstead, Chief-Fisheries Management Division, to comment on the project. Mr. Travelstead said he had no prepared remarks but would be happy to respond to any questions. Associate Member Birkett asked if Mr. Travelstead had formed an opinion on the effects of the intake in the Mattaponi on the shad fishery. Associate Member Ballard also asked Mr. Travelstead what his views were on the competing strategy: VIMS and Staff want further studies and the City said it would perform studies after receiving the permit, but before filling the reservoir.

Mr. Travelstead said there at the end of the staff evaluation there was a statement that if the delay proved unacceptable to the applicant the project could proceed with various conditions. He said he was sure such a delay would be unacceptable to the city. There were a number of concerns that were expressed by staff during meetings with city officials. He said each of the concerns which fisheries management raised were met by the city. He said he felt that following the city’s eight years of monitoring there will be data to be able to set temperature triggers for the hiatus and that 97 percent of the eggs and yolk-sac larvae will be protected.

Mr. Travelstead stressed he wanted to make one thing clear: post yolk-sac larvae will be protected by the pumping hiatus. Toward the end of the hiatus there will be larvae still in

the water, but the other permit condition—the lower through-slot velocity—will protect those. He said those actions would be adequate.

Associate Members Birkett and Ballard asked several related questions and Mr. Travelstead answered. Those are part of the verbatim record.

There being no further questions from Commission members, Commissioner Pruitt thanked the staff for their presentations and recessed the meeting until 12:30 p.m. following a lunch break.

At about 12:45 p.m. the Commission resumed its public hearing. Scott Hart, representing the City of Newport News, made some opening remarks, reviewing how the project got to its current status.

He explained that the King William Reservoir was a regional project, so while Newport News filed the application, it was done on behalf of all of its regional partners, and this project will supply water to all of the communities in the lower Virginia Peninsula: Newport News, Hampton, Poquoson, York County, James City County and Williamsburg. It will also supply water to the host communities of King William County and New Kent County.

Last year the City made a permit application to the Commission that was denied because the intake was located in a shad spawning ground in the Mattaponi River. Since then, the City modified the project to address the Commission's concerns about the fisheries, and now wanted to present evidence on how the project as restructured will protect fish. Today's evidence will only regard fish in accordance with the agreement. He said in the Commission's decision a balance will have to be made between the public water supply need against the impact of fish.

Mr. Hart said the City came last year with a project that had the protections that had been mandated in our Virginia Water Protection Permit issued by the State Water Control Board. Primarily, at least as to protecting shad in the Mattaponi, those with the minimum instream flow conditions that set certain levels so that this river flow has to be above a certain level before any water can be taken. That prevents pumping at low flows when fish might otherwise be vulnerable. The other major protection in last year's permit was the wedgewire screens around the intakes. These were 1-millimeter wedgewire screens with a quarter of foot per second slot velocity. Those were state-of-the-art screens and meet the Virginia standards for intakes and there was uncertainty about how effective those screens would be.

During the proceedings the Virginia Institute of Marine Science suggested a pumping hiatus (of about 60 days) until a portion of the spawning season was over, but the Commission still had questions about whether the shad could be protected. Mr. Hart said

following the permit rejection, the city assembled a panel of fisheries experts from around the country and asked them to devise a strategy that would eliminate the uncertainty about whether the shad would be adequately protected.

The scientists told the City that 100 percent protection could not be afforded but a plan could be developed that would protect a sufficient number or percentage of the vulnerable early life stages of American shad so that the Commission could be assured there would be no significant impact on the shad fishery.

The panel's strategy was developed using data from the Hudson River because there is little data about shad in the Mattaponi River or any rivers in Virginia. In the Hudson River, data has been collected for 27 or 28 years it is very detailed and many samples have been taken through the years at many locations.

Mr. Hart said regardless of what hiatus data came from the Hudson, the city's proposed hiatus in the Mattaponi will span at least 12 degrees (centigrade) or whatever is necessary to protect 97 percent. VIMS suggested some monitoring protocols and the panel agreed. At the end of the eighth year the City and its consultants would use that data to develop triggers that they think would protect 97 percent of the shad. The only exception to the hiatus time, which would be developed, would come at a time of emergency declared by the governor or president to protect the health and welfare. Then the hiatus would be suspended.

Mr. Hart said that during the panel's consultations with VIMS, the VIMS report was discussed and the concern over whether post-yolk-sac larvae also needed protection. To cope with this concern the panel came up with the reduction of maximum slot velocities from .25 foot per second to .15 foot per second. This can be accomplished by making the screens slightly larger.

The panel focused on a whole program that is a package of protection with the protection having a cumulative effect. The whole package of city proffers are found in its permit application and most are discussed at length in the panel's report that are part of the public hearing record.

The City is required, Mr. Hart said, to report to the Commission annually on the results of its shad study in the Mattaponi and at the end of eight years to return with an analysis and proposal for the temperature triggers, which then would be approved by the Commission.

Mr. Hart said that the staff's recommendation to delay any final decision until all of the monitoring is done could prohibit a permit from U. S. Army Corps of Engineers. Virginia regulations require a VMRC permit before Virginia can give the necessary concurrence to the Corps. So there cannot be a Corps permit until VMRC issues a permit. And the Corps cannot put its process on hold for eight years and it won't and it's told the City that if the decision is postponed for eight years, either the Corps will be denied or the City will be

asked to withdraw it. The reality, he said, is that to withdraw would require the City to start the entire process over eight years from now.

Mr. Hart said that the City had developed a proposal that met all the goals the VMRC staff was trying to accomplish. The VMRC staff has said it only wants to strike a balance based on good science and not kill the project. The City agreed in principal, but disagreed with the VMRC staff on how to get there, he said.

Following those remarks, Mr. Hart said Dave Morris, natural resources manager for the City of Newport News Waterworks and project manager for the King William Reservoir would explain the physical and operational characteristics of the project, which will be followed by a report of the fishery panel describing the findings and conclusions.

Mr. Morris talked about the initial work on the reservoir project that began 17 years ago and discussed the various aspects of the project, including screen design. His presentation with slides is part of the verbatim record.

Regarding the location of the intake that has been the subject of staff concern, Mr. Morris said the intake needed to be where it was located because of the very sharp bend in the river. The water—the high flows of the river—scour the river bottom there. It is a deep place to put these screens. There are other places to locate it upstream or downstream, but there would not be enough water to put screens in that would meet the City's requirement for fish protection. It just happens to be also very close to the proposed reservoir.

The next speaker was Dr. William Richkus, a fisheries biologist with Versar, Inc., a national environmental engineering and operations manager for the firm's Maryland environmental services division. He is located in Columbia, MD and is an expert in estuarine and freshwater fisheries biology, ecology and management, Mr. Hart said. Among his many other duties over the last 20 years, Dr. Richkus has served as a plan writer for the Atlantic States Marine Fisheries Commission, and in that capacity, prepared the first interstate management plan for American and hickory shad and river herring.

Mr. Richkus said a major point to emphasize is that the whole issue revolves around what effects there would be to the adult population. He said the panel's whole approach was to try to eliminate effects to the early life stage, so the population dynamics arguments would not have to be encountered.

The panel was comprised of seven members from a broad geographical range along the East Coast. The panel members were: Stephen Amaral, director of fisheries at Alden Research Laboratory in Massachusetts and one of the premier institutions in the country as well as internationally in the study of fish protection devices; Dr. Charles Coutant, a distinguished research ecologist with Oak Ridge National Laboratory in Oak Ridge, TN; William Dey, a senior scientist with ASA Analysis & Communication; Dr. Greg Garman, a professor at Virginia Commonwealth University and the panel's local expert; Dr. Karin

Limburg, an associate professor of the State University of New York in Syracuse, NY, and a well-known expert on American shad and other anadromous-related species; Dr. Ken Rose, a professor at Louisiana State University and a fellow with the American Association for the Advance of Science and Dr. Richkus .

The panel's charge from the City was to evaluate the potential for the King William Reservoir intake to impact Mattaponi River fish species and provide recommendations on monitoring, operation and mitigation that would ensure virtually no impact on the American shad and minimal impacts to all other fish species. To a great extent, the panel used American shad as sort of our indicator species. And of course it was the species cited in the Commission's decision last year.

Dr. Richkus discussed at length several elements of the reservoir proposal including how the fishery plan met and its parameters and subjects such as mitigation. His comments are part of the verbatim record.

In discussing the panel's assessments, Dr. Richkus said the focus was on mode of impact, construction effect, salinity effects, noise effects, which is one of the committee issues, and then intake operation, probably the top issue and one that is still THE issue between the panel, VIMS and the VMRC staff. Regarding salinity, the panel did not conduct any new analyses, but rather relied on the VIMS' modeling report—Hershner, 1991. That found there would be very small changes in salinity in limited areas—small like .1 to .3 parts per thousand. The modeling was for the original reservoir design. The size has been reduced now and more stringent instream flows now have been put into place so the withdrawals currently proposed are one-third of what was modeled by VIMS. Therefore, the results would be even less than what was presented in the '91 report.

Regarding the effectiveness of the intake screens, Dr. Richkus said the panel started with an assessment of the vulnerability of 32 species known to be in the Mattaponi or perhaps anticipated to be, like Atlantic sturgeon that might occur there because there is good habitat. The assessments looked at various aspects of life history, biology, species that would spawn in the nest where the eggs and the larvae stayed in the nest, simply would not be exposed to any impact from the intake. Ultimately, the panel determined six species—American shad, river herring, alewife, blueback herring, white perch, yellow perch, and striped bass—were vulnerable because of their spawning area and they spread their eggs in the water column. These were the same species identified earlier by VIMS.

The panel focused on American shad because of the Commission's decision last year and also it was a major topic of concern expressed by the VIMS and VMRC staffs. Dr. Richkus said that the protective measures in place for the American shad also apply to the other vulnerable species. His discussion of their vulnerability is part of the verbatim record. He also showed a video to explain larvae swimming speed.

The pumping hiatus means there is no impact when there is no pumping and the additional protective devices, such as the screens, simply add to the potential success of the proposal, he explained. Again, his complete remarks are part of the verbatim record.

Dr. Richkus and Associate Member Dr. Jones had a question/answer exchange involving ecosystem effects and a thesis that the panel looked at for its report. The discussion is part of the verbatim record.

Mr. Gessler then spoke on the hydraulic zone of influence and Stephen Amaral discussed the proposed screen and its capabilities. Their remarks are part of the verbatim record. Mr. Amaral later presented some videos showing the affects on eggs and larvae using .25-foot per second slot velocity and the proposed maximum slot velocity of .15 feet per second and various sweeping varieties. Detailed comments are part of the verbatim record.

In response to a question from Commissioner Pruitt, Mr. Amaral said conclusions regarding protecting eggs and larvae with wedgewire screens were consistent with what was discovered in other similar tests. There was really noting new or different. The studies demonstrated that these screens are very protective of the fish eggs and larvae under certain conditions, flow conditions and sizes. The data have been used by the state and federal agencies to develop the guidelines that are considered highly protective of eggs and larvae. The proposed design and operation parameters for the King William Reservoir intake meet or exceed these established agency guidelines. One hundred percent exclusion will likely occur when larvae of most species reach lengths of 12 millimeters or longer, and this includes the American shad larvae.

Commissioner Pruitt then called for a 10-minute recess for the court reporter to take a break.

Dr. Charles Coutant then began his presentation on the proposed pumping hiatus, which is part of the first layer of protection. A hiatus is a period during which no water withdrawal would occur from the Mattaponi. It was suggested by VIMS to coincide with the time when most of the vulnerable early life stages are present, particularly the American shad. No withdrawal provides absolute protection.

How can an effective hiatus be implemented? Dr. Coutant asked. The panel said it would require a trigger that could accurately predict when the vulnerable life stages would be there in the river and when they would not be there. The trigger also has to be something That is easily measured; it is definitive; and is timely. As part of the sequence, one must know what are the vulnerable life stages of the American shad. Vulnerability, he explained, depends upon two things—the design and operation of the intake. Coutant then explained how the various tests were conducted and evaluated.

Officials were contacted up and down the East Coast where the American shad exists for information. The best-set data set was in the Hudson River. One of the points that came out in the scientific literature on American shad early life history in spawning was that it is very temperature dependent. The shad spawn in about the same temperature wherever they are in the range along the coast. The Hudson River does not function exactly like the Mattaponi but the panel felt the data would be useful because it extends over a 30-year period. There simply is not another record on the East Coast where they have that length of record for both temperature and early life stages, and that amounts to about 2,000 samples per year. Not only are there lots of years, but also there are lots of samples per year, he said. The data also included a number of other vulnerable species also identified for the Mattaponi.

The panel compared the Hudson River and Mattaponi River temperature trends to see if we could use temperature as a trigger. They confirmed that the patterns are similar, although the Mattaponi exhibits much greater short-term, day-to-day variability and There was about a one-month time lag. Dr. Coutant then went into detail as to how the data worked.

The pattern was pretty clear for the many years in the Hudson that temperate could be defined as around 10 to 22 degrees centigrade that would encompass the production of both eggs and larvae. Dr. Coutant said that temperature would provide high protection for other species in the river such as river herring, striped bass and white perch. These figures demonstrate as a surrogate that the Mattaponi would be just as predictable once the temperature triggers are identified.

The annual hiatus, if we assume we were to pick the 10 and 22 degrees centigrade for the Hudson, would amount from 41 to 83 days and average 61 days. That is, each year would be a little bit different when the triggers were implemented to begin it and end it, and that range, each year a little bit different, could be anywhere from 41 to 83 but averaging 61 days, he said. But, the Hudson is not the Mattaponi. The panel did determine, however, how the Hudson data can apply to the Mattaponi.

Dr. Coutant said the applicant proposed an eight-year preoperational ichthyoplankton study that is a study of eggs and larvae for an eight-year period before the plan would go into operation. He then explained how eight years was recommended; it is part of the verbatim record.

The initial study would extend from Beulahville, which is well above the tidal influence, but within the area where shad may be spawning to the Mattaponi Indian Reservation, about 35 or 36 miles by river. There would be four continuous temperature monitors within that area to obtain good temperature data at the same time that information on the egg and larvae is obtained, Dr. Coutant said.

Dr. Coutant stressed that the hiatus would be moot at a time of emergency or a severe drought situation. The applicant has agreed that during the periods of drought emergency when the hiatus would not be occurring and the pumps would be allowed to run, an entrainment study would be conducted to know exactly how many eggs and larvae were entrained in the water withdrawal. If the figures were too bad, a change in operation could be required. This would be additional protection, he said. Thus, the hiatus temperature span will be 12 degrees centigrade at a minimum and the protection criteria would be 97 percent of the standing crop of the vulnerable life stages and the other protection layers would also apply even if the hiatus is not in effect.

The last element of the applicant's presentation discussed the compounded layers of protection of the fish species in the river. Dr. Coutant also made that presentation.

The layers of protection include the hiatus, the minimum instream flow, the hydraulic zone of impact or probability of encountering the screen, and then the screen protection attributes. He noted that more and more is protected as one moved through the various layers of the system. So, in the end you have a very small vulnerability, he said.

The goal was to ensure virtually no impact on the American shad population and minimal impacts on all other species. The panel said it was essentially impossible to claim you were going to have zero impact from anything. Therefore, the intent was to have "virtually" no impact. He then reviewed the layers of protection and impact all of which are part of the verbatim record.

Dr. Coutant said the conclusions were that the multiple layers of protection offer multiple safety nets that ensure very low risks to the American shad eggs and larvae. The uncertainties of any layer are compensated by the protections of the other layers, so even if one of the layers of protection is knocked out, there is still a very high level of protection.

The panel believed that the project as currently proposed, including our monitoring and pumping hiatus trigger development recommendations, would not significantly impact the Mattaponi River American shad population or any of the other fish population or fish species found in the river, he concluded. Dr. Coutant complete comments are part of the verbatim record.

Associate Member Ballard asked if the Commission now could hear from the Virginia Institute of Marine Science regarding their analysis.

Commissioner Pruitt then called Dr. Roger Mann of VIMS, who said he did not have a formal presentation here, praised Tony Watkinson of the VMRC staff for his very comprehensive presentation that included observations from VIMS formal letter to the Commission.

In May 2003 when the Commission last left this debate, Dr. Mann said, what followed could have been very acrimonious debate between the applicant and everyone else. Rather, the applicant engaged this panel of fisheries experts—some superb people—and an important report was compiled.

VIMS' written response in the Commission's hands was in response to the document sent April 1st. Subsequently there have been additional meetings and added exchanges prior to this public hearing.

The city's panel looked at the layers of risk and then developed a compelling argument based upon a series of estimates. Where VIMS differs from the fishery panel report is how the estimates are developed and used versus how data is used. VIMS was asked about a resource issue and the Institute focused upon shad. In this process, he said simple science questions were asked. A principal fact is that the chosen intake location poses some of the highest potential risk to juvenile anadromous fish populations in the area. This factor remained unchanged.

VIMS responded to the fishery panel report, saying that "there is insufficient information to support an appropriate risk assessment of the pumping hiatus proposal. It is our considered opinion that uncertainties, uncertainties cannot be properly evaluated before more is known, Dr. Mann said. Therefore, VIMS asked for an in-depth study of the Mattaponi prior to any final decision on the intake plan. He also noted that the fishery panel had done some very good work and should be applauded, but the work was based upon estimates for the Mattaponi, not known facts.

Associate Member Garrison said he appreciated someone who says they do not know and are now sure and need more facts. Mr. Garrison referred to a Department of Game and Inland Fisheries document that indicated "understanding the life history and behavior traits at the species of interest so diversion structures are not located near critical fish habitat." Mr. Garrison comments are part of the verbatim record.

Commissioner Pruitt asked if there were further questions from the Commission. There being none, he proceeded to call persons from the audience who had signed up to speak on behalf of the King William Reservoir. He stressed that the speakers should address the impact of the intake structure on the fisheries.

Then, several Associate Members indicated they still had questions for City representatives. Associate Member Dr. Jones asked why there would be only four temperatures and whether they were going to use CTD's or Hobos.

Dr. Coutant responded that for the uninitiated a hobo is a very small temperature sensor that is very good, not very expensive and many more can be placed in the river than CTD's. He said the Hobo suggestion was very good, but he said the panel did not want to be totally inundated with temperature data and felt four sites would be adequate.

After a lengthy introduction which is part of the verbatim record, she asked if there was any evidence that shad up and down the coast get to about the same size at the end of the season and is there any reason to expect to see counter gradient growth?

Dr. Coutant responded that the panel had discussed that question, but everything discussed did not make the report. The panel felt the question of growth after the eggs and larvae was not pertinent to the hiatus issue. It was a very good question, he said, in terms of defining the early life history of many species, but part of the panel's philosophy with the hiatus was that many of these questions would be avoided by simply not pumping water over a large stretch of time. The growth question exchange between Dr. Jones and Dr. Coutant continued and is part of the verbatim record.

Associate Member Dr. Jones then asked about minimum instream flow calculations and at what point their would be a curtailment of pumping. Dr. Coutant responded that the permit establishes a rule based upon how much water is in the river. If the river gets so low that the agency [Department of Environmental Quality] says no more pumping—then that's minimum instream flow and there is no more pumping. That would be a hiatus in itself, he added. There followed another scientific exchange between Dr. Jones, Mr. Hart and Dr. Richkus over instream flow that is part of the verbatim record.

Mr. Daniel told Commissioner Pruitt that 45 persons had signed up to speak in favor of the permit. Associate Member Ballard proposed that the Commission adopt time limits for speakers in order to try to be fair to everyone. He suggested three general categories of speakers: elected officials, people speaking for groups and people speaking as individuals. He said he felt those representing groups should have ten (10) minutes while individuals would get three (3) minutes. Associated Member Ballard said, if adopted, this should be the same format for those in opposition to the permit.

Commissioner Pruitt said Associate Member Ballard's suggestions would be adopted by consensus. No one objected.

Newport News Mayor Joe Frank was recognized. He said he had a list of elected officials and he would call upon them to speak.

First, he said he had some brief remarks. He thanked the Commission for its patience and tolerance given to this public hearing. In the 16 years on Newport News City Council, he said he has participated in hundreds of meetings on the reservoir project. He focused his remarks on several simple but very important issues: we cannot protect every shad egg and larvae; we can provide a level of protection that makes certain there will be no significant impact on the shad population; and the hiatus will provide 97 percent protection, sufficient that the fishery will not be harmed by the project. The Commission must weigh the pros and cons. This proposal has been modified substantially as the project has been before you to ensure additional protection for the environment. This is truly the gold standard for fish protection, he added. He said as he listened to the

presentations he believes the body of science has been increased and will add material for future such projects and the desires to protect waters and fish populations in the Commonwealth. He said the city needs a permit decision now so that the Corps of Engineers can render its decision. An eight-year wait cannot be allowed because we can move forward and continue the process, the study can be accomplished and the technological data will be available for the hiatus. He urged that the permit be granted at the close of these hearings.

Mayor Frank read into the record a letter from Ross A. Kearney II, the Mayor of Hampton. The letter is part of the verbatim record.

Charles Allen, Vice-Mayor of Newport News, spoke in favor of the project, noting that this regional water system serves localities and military installations on the Peninsula that adds a homeland security element to this process. His comments are part of the verbatim record. Councilman Joe Whitaker was also recognized.

Tom Shepperd, Chairman, York County Board of Supervisors, accompanied by Shela Noll and Jim McReynolds, county administrator, who came forward. Mr. Shepperd said York County has been a partner in the project since 1987. Two things are going to affect us in the future: drinking water and air. This project is for drinking water for a population that will exceed 500,000 in the next 50 years. The combination of intake screen design and pumping hiatus will result in the protection of the American shad to a level of about 99 percent. His comments are part of the verbatim record.

Commissioner Pruitt asked everyone who is in favor of the project and who will speak to stand. He swore in the entire group.

Col. Robert Reardon (USACOE retired) said he was the District Engineer from 1995-1998 and the permit was a major focus of his command tour. He listened to the concerns of the Indian tribes and the needs of the city, regional raw water study group and the U.S. Environmental Protection Agency. The Indians were concerned about the lack of details on the impact of the intake facility on the shad population. He said an expert had to be found who was acceptable to everyone involved. The best-known expert was Dr. Greg Garman of Virginia Commonwealth University, who could give a fair, unbiased look on the impact of the intake on the American shad. He developed a report, which said the flow of water into the facility was so slow that it would be impossible for the larvae to be sucked into the screens.

Shela Noll, member of York County Board of Supervisors, asked the Commission to consider the good science work and to recognize the need for adequate water in the future. Her remarks are part of the verbatim record.

James McReynolds, York County Administrator, said the intake design and springtime withdrawal would provide the needed protection for the American shad.

Sanford B. Wanner, James City County Administrator, said he was uniquely qualified to speak before the Commission since he was director of the Ware Creek project when the EPA vetoed the reservoir. The county believes that the plans now are protective to the shad in the Mattaponi River.

Jeff Bliemel, director of engineering and utilities, City of Poquoson, said the project is vital to the city to attract new businesses. His comments are part of the verbatim record.

Jim Walski, director of public utilities, City of Chesapeake, explained that the project partners had developed strong environmental safeguards for the American shad. His comments are part of the verbatim record.

Albert Moore, director of public utilities, City of Suffolk, explained that the city supported the project. His comments are part of the verbatim record.

Bruce Goodson, chairman, James City County Board of Supervisors, said he believed the proposed hiatus and new screens would protect the American Shad. He also urged the Commission to understand the impact of the reservoir on human life: water equals jobs for the county. His comments are part of the verbatim record.

Jean Zeidler, Mayor of Williamsburg, said the city has been a partner of the project since the beginning. National fisheries experts have worked to prove that the American shad in the river will be protected and the city urged them to approve the project.

Jackson Tuttle, City Manager, City of Williamsburg, said the city owns the other municipal water system on the Peninsula, but the city relies on Newport News' water to supplement the city's water supply. The work this year to assure the protection of American shad in the Mattaponi has been vital to the project.

Tom Leahy, acting director of public utilities, City of Virginia Beach, said the same type intake screens have been used at Lake Gaston, and that they will protect the American shad. He said in all the years of operation no movement is seen around the screens. Newport News' velocities will be one-third of what Virginia Beach uses and that also will add to the protection of the shad. His comments are part of the verbatim record.

Sen. Marty Williams, R-Newport News, said he was a member of Newport News City Council in 1990 and the city was two years into the reservoir project. He said he was convinced that the project was needed. As chairman of Senate Transportation Committee and the Water Committee, he asked that the Commission remember that the city has come back with a 97 percent guarantee of protection for the American shad. His comments are part of the verbatim record.

Commissioner Pruitt swore in another group of speakers.

Sen. Frank W. Wagner, R-Virginia Beach, said he strongly supported the project because he had a business on the Peninsula. He said a reservoir needed to be built to take a small portion of that water at the high flow period and save it to be used when necessary. His comments are part of the verbatim record.

Del. Mamy E. BaCote, D-Newport News, said she served as a member of Newport News City Council for 7 ½ years and strongly supported the project. The city stayed ahead of the growth curve for years and with their regional partners prepared studies to ensure that shad are protected. Her comments are part of the verbatim record.

Del. Phillip A. Hamilton, R-Newport News, said he hoped that the reservoir was the first step in developing a water supply for the long-term. With the protection presented today on the intake, he said he was confident the project would be environmentally safe. His comments are part of the verbatim record.

Sen. Mamie E. Locke, D-Hampton, said she previously served on Hampton City Council and as Hampton Mayor. She said her support of the project had not wavered. Her comments are part of the verbatim record.

Del. William K. Barlow, D-Isle of Wight, said that after reviewing the environmental aspects he supported the project. He said he believed the project would be carried out in an environmentally safe way. His comments are part of the verbatim record.

Del. Glenn Oder, R-Newport News, read comments from Del. Jeion A. Ward (D-Hampton) who strongly supported the reservoir. Her comments are part of the verbatim record. Del. Oder brought to the hearing “old faithful”—a water pump—a mechanism that always worked. Today, water is always available, he said, but the day is going to come when water is not going to come if the system is not renewed. His comments are part of the verbatim record.

Sen. Kenneth W. Stolle, R-Virginia Beach, said Sen. Thomas K. Norment, Jr., (R-James City) forwarded a letter, which he would like to make part of the record. Sen. Stolle clearly supports the application and being from Virginia Beach understands the problems, which were alleviated by the Lake Gaston pipeline. He said the Code of Virginia states that public water should be considered as top priority. His comments are part of the verbatim record.

Former Del. Alan Diamondstein of Newport News said he has supported the reservoir for years and believes the project should not be denied because of actions taken by the State Water Control Board in 1997 when it approved the project. It is in the public’s interest to issue the permit, he stressed. His comments are part of the verbatim record.

Caroline Martin, Chairperson, Citizens for Fair Play on Water, said the project would minimize the impact on shad and other fish. She said her group is diverse and realizes that

the project can be accomplished and still protect the environment; it is a strong risk management plan. The regional partners have gone to lengths to ensure that shad will be protected by good, sound science. Her comments are part of the verbatim record. Two speakers, she said, were not able to stay: George Philips of Riverside Health System and Col. Lee Diamant, board member of Patriots Colony in James City County. She said both support the project.

Commissioner Pruitt asked how many people still wanted to speak. He said the main item in a public hearing is to make your point and be relevant.

Jennifer Boykin, Director of Facilities and Waterfront Support, Northrop Grumman, Newport News, said as a nation at war it is vital to consider all elements on the Peninsula including a dependable water supply. The facility needs 600 million gallons per year, she said. The company is an excellent steward of the environment. Her comments are part of the verbatim record.

Barry Marten, Manager of Engineering, Siemens Automotive, Newport News, said his company understands the concerns regarding the impact of the intake facility on the American shad. The issues have been studied and we agree that the intake will not significantly impact the shad and other fish in the river. His comments are part of the verbatim record.

Kelly Caccetta, Associate Director, Jefferson Laboratory, said that an accelerator requires 56 million gallons per year and a proposed plan to increase energy of the machine and will require 72 million gallons of water per year. The Laboratory strongly supports the project and believes that Newport News has solved the problems of the shad. Her comments are part of the verbatim record.

Jim Dahling, CEO, Children's Hospital of the King's Daughters in Norfolk, spoke for the children on the Peninsula and the need for good water. The hospital supports this project.

Alvin Anderson, attorney in Williamsburg, said he has no political or financial interest in this project. He said many of the transportation issues that each of us face could have been ended if this decision were made positively earlier. His comments are part of the verbatim record.

Harvey Lindsey, real estate developer, said his company is involved in a major project on the Peninsula. He said he believed a fair balance has been made to protect the shad and provide for good water.

Clyde Hoey, Executive Director, Peninsula Chamber of Commerce said the Commission has heard about new science and new concepts for handling the American shad on the river. Please think about them when you make your decision.

Capt. David Lindall, U.S. Navy retired, said he was representing the military affairs council of the Chamber of Commerce. He explained that the military needs are strong in their requirements for good and safe water sources. Military installations on the Peninsula support the reservoir. His comments are part of the verbatim record.

Richard Weigel, President, Peninsula Alliance for Economic Development, submitted written comments for the record. He said he strongly supports the project.

Paul Garman, Virginia Peninsula Associate of Realtors, said his group has supported the project since "Day 1" in 1987. His comments are part of the verbatim record.

Robert Duckett, Director of Public Affairs, Peninsula Housing and Builders Association, said his group's membership strongly supports the project. Large-scale supplies of new water will be needed in this region and Newport News and its partners have now agreed to protect the American shad at the 97 percent level; therefore, the Commission was urged to support the project.

Herman Heyn, resident of James City County and member of Powhatan Shores Homeowners Association, said his group is very concerned about water sources if the reservoir does not go forward. Seven nationally recognized fish experts believe shad and other fish will not be impacted based upon the multi-levels of protection proposed by the city and its partners. His comments are part of the verbatim record.

Mayor Frank said he understood that the Commission wished to conclude by 6:30 p.m. He said he did not want to keep people from speaking, but he said many more people are in favor of the project. Commissioner Pruitt wanted to know how many more people wished to speak. He asked those persons in support to come forward and identify themselves:

Skip Morris, representing company of over 100 people
Andy Landrum, executive committee, Citizens for Fair Play on Water
Selma Bebe Peacock, resident of Newport News, Citizens for Fair Plan on Water
Jim Smith, Executive Director, Peninsula Airport Commission
Amy Reineri, Newport News businesswomen
Jack Massie, James City County contractor
Jose Simone, Virginia Natural Gas representative
Karen Rice, local college student
Robert Yancey, representing Greater Peninsula NOW
Ralph Goldstein, attorney from Newport News and Williamsburg
Arthur Kamp, former member Newport News Planning Commission
Gordon Gentry, Jr., Newport News banker
Tom Shrouts, representing Christopher Newport University
John Carlock, representing Hampton Roads Planning District Commission
Delva Wright, Newport News resident and educator

Commissioner Pruitt thanked all of the speakers. He asked Jay Woodward how much time Newport News and the proponents had used. Mr. Woodward said six hours and 10 minutes.

Commissioner Pruitt said the Commission would begin at 10:00 a.m. Thursday (August 12th) and would break at 12:45 p.m. and return at 1:30 p.m. The opposition would have six hours and 10 minutes to present its case and then the applicant would have two hours of rebuttal. Following those presentations, the Commission would then discuss the issue and render a decision or set a time to render its decision.

The meeting was recessed until 10:00 a.m.

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Commissioner Pruitt called the meeting on August 12th to order at 10:04 a.m. He asked Traycie West to give the invocation.

There was a technical problem and about one minute of the proceedings were not recorded

The Commissioner swore in persons anticipating on speaking.

Roy Hoagland, executive director, Chesapeake Bay Foundation in Virginia, said speakers have been identified and the opponents expect to use only about three hours.

Del. Albert Pollard, D-Lancaster, said he was sorry that there were only a few elected officials to speak. He asked the Commission members to listen carefully to the testimony of Michael Siegel. Del. Pollard said he also was disappointed that his remarks needed to be limited to remarks on the American shad and other fisheries. Clearly, he said, he supported the staff recommendation of deferral until the study data and findings had been reviewed. The intake pipe is in the most productive area of the most productive river in the Commonwealth. He said the city's needs should be weighed against the overall impact that has been placed into the record.

The opponents have more to lose. He said in May 2004, the city's fisheries adviser, said the fisheries can be protected because 75 million gallons per day, or 23 million gallons less than six months ago. The City acted as if this were the only water supply available to them, but later it acknowledged that it could get additional water through other sources and the reservoir was only one component. Denying the permit can protect the fishery and the City will not be denied any water because it can get it elsewhere.

Del. Pollard reminded the Commission that the decision is not made on what has been heard over the past two days, but the record now and earlier last year. He urged the Commission to deny the permit.

Roy Hoagland, representing the Chesapeake Bay Foundation, said some overarching concerns should be addressed. Two Commission members were not part of the Commission during the first hearing in 2003. He said the Commission's earlier vote to deny the permit was based on wide-ranging reasons and not just related to the American shad. Nowhere does the record reflect that the denial was exclusively on the American shad issue. Additionally, there was much testimony yesterday that extended beyond the scope of the hearing. Much of that testimony now has another side to it. The Corps of Engineers would shut down its permit, the Commission was told yesterday, but that is simply not true. Much evidence was introduced yesterday. He said the Virginia Health Department did not mandate the reservoir, but issued a trigger to start water supply planning. He said Sen. Stolle did not cite the implementation section of the Code—the definitional section has no operative effect on what decision is made today. The Code asked that the Commission look at a balanced view, consider the full array of subjects presented. The Commission, if you are to safeguard the public trust, under the cumulative information presented, the Commission should deny the permit. His remarks are part of the verbatim record.

Chief Carl Custalow, Chief of the Mattaponi Indian Tribe located in King William County. The Tribe opposes the permit, he said. The river is still the heart blood of the tribe; the river is its spiritual and cultural base. Chief Custalow said the tribe's shad hatchery was built in 1916; in 2000 the tribe's state-of-the-art, hatchery opened. In 1998 the Tribe signed a memorandum of agreement on the tagging and marking of shad with the Commission and other state and federal agencies. The hatchery produces between 4 and 6,000,000 fry annually. Chief Custalow said the Tribe takes great pride in return fish when it takes fish from the river. Without the hatchery many members of the Tribe would be forced to work off the reservation. The reservoir will have devastating effects on shad in the Mattaponi. Shad do not start spawning on a certain date or stop on a certain date, he said. The Tribe struggles to keep the shad population at sustainable levels. The time and money spent will be in vain with the operation of the reservoir. The Commonwealth has spent millions of dollars in shad restoration. It would be a shame, he suggested, for that to happen if the reservoir were built.

Chief Custalow stressed that the Tribe had never agreed to any report by Dr. Garmon, as was suggested yesterday. They agree that there have not been enough studies for a decision to be made at this time. Another item, he said, was the presentation that mitigation could be utilized by giving money to the tribes for their hatcheries. He said there are certain things that cannot be mitigated—the loss of shad is one of them. He said the reservoir would violate a treaty between the Tribe and the Commonwealth because the Tribe would not be able to fish in its accustomed way.

The Tribe must take a stand now. It will not back down over this threat and will not compromise their treaty. The Tribe would appreciate a vote against this destructive project. His comments are part of the verbatim record.

David Bailey, counsel for the Mattaponi Indian Tribe. He said he was presenting argument not factual evidence. He said the Tribe's legal posture for this hearing—has several pending appeals. One is the Norfolk's court's denial of the Tribe's opportunity to present its case at the first public hearing. The Tribe has challenged the legality of the settlement that allowed for this hearing. For that reason, the Tribe and it's counsel appear here today, he said, reserving all its objections to this hearing and the processing by which the hearing today was established and does not waive its objections.

Mr. Bailey said he had six points:

1) The Mattaponi Indian Tribe is a sovereign entity and a signatory to a treaty with the King of England, which guaranteed the Tribe certain rights, Mr. Bailey said. The Tribe asserts its rights and believes the reservoir will damage those rights. The Tribe expects the Commission to protect its fishing rights, he stressed. It is the Tribe, in cooperation with the Commission that has done everything for the past 100 years to replenish the shad stocks. The Tribe views any further grant that continues to take shad from the river while shad stocks are already low to be contrary to fishing management and contrary to the Tribe's right to maintain shad stocks. The Mattaponi simply cannot go elsewhere to obtain its shad. For that reason the Tribe asserts that the permit cannot be granted without the consent of the Tribe. The legal status between the Tribe and this Commission is also in litigation, Mr. Bailey said. The Commission's decision does not determine property rights; this is a treaty between the Commonwealth and the Tribe. The Commission, by Code, must consider the effect on nearby property owners and the public trusts.

2) The City has said the shad can be protected to a 97 percent level. The Mattaponi River is the most important for the production of all shad with 60 to 70 percent of all shad entering the Bay having originated in the Mattaponi. The site of the intake facility is the very spot where the Tribe fishes most. The spot is also the most important location in the most important river for shad reproduction. In the end, the city will protect 97 percent of what is left. It is not 97 percent of the total, Mr. Bailey said. The two numbers are very different. There are no shad left to offer to the City because existing shad stocks are so low. This species is in decline and all efforts to restore the American shad fishery have not succeeded, he added. The protection cannot be achieved.

Commissioner Pruitt said that as speaking for the group, they are giving their time for you.

Mr. Bailey said the opponents have outlined about three hours and that I was assigned about 15 minutes.

Commissioner Pruitt said he did not want 20-25 people coming up at the end asking for their time to speak.

3) Mr. Bailey said the city has stressed the 97 percent level, but noted that there is no way to enforce that level. All the Commission can do is set the time limits for compliance, but only after studies. This is a speculative permit, he said. It is a permit that invites challenge.

4) The City said everything must happen now. That is simply not the case, Mr. Bailey said. The Commission, in endorsing this permit, cannot take it away eight years from now if conditions change because it would have gone too far down the road.

5) The recommendation and opinion of the Virginia Institute of Marine Science does not support the City. Mr. Bailey said he could not say more than what VIMS stressed.

6) The Department of Environmental Quality's minimum in-stream flow levels provided another level of protection of the American shad. The DEQ permit allowed the City to withdraw enormous amounts of water during the shad's spawning time. He showed a page from DEQ permit. Mandatory drought provisions, he said, show that the City can draw much, much more in the late winter and spring. Therefore, the hiatus would not apply.

The Tribe asked the Commission to follow its trusted advisers—VIMS that cautioned against granting a permit on speculative data and agreements that cannot be enforced. Mr. Bailey's comments are part of the verbatim record.

Dr. Ed Cheslak, a scientist who has observed the river, said he would comment on the levels of protection—pumping hiatus and in-stream flow, etc. The success of the pumping hiatus for one year will not be known until future years. Regarding in-stream flow, he said the average annual flow is determined and certain percentages are assigned for the scale. He said 70-80 percent puts the project in the optimum range. Scales are different for each locality, he stressed. He said he would not consider the protested index to be very protective. He also discussed the screen being proposed for the intake and noted that the flow across the surface is vital to the protection of larvae, etc. He also discussed the slot-velocity coming into the screen. His comments are part of the verbatim record.

Commissioner Pruitt asked about the official timekeeper and then asked him to come forward so the time can be kept better.

Doug Jenkins, representing Twin-Rivers Watermen's Association, requested that VMRC focus on the permit process. Once the permit is granted it cannot be taken back. Once you give the permit, you have given the City the right to take water always. Mr. Jenkins said he had been involved in various permits and explained how various EPA permits are handled. Violations against EPA permits cannot be challenged because Judges tend to side with those who have obtained the permits, not the ones who challenge the permits. An example, he said, was the Charles City landfill, where garbage comes in from outside Virginia. The Commission's decision on this project is easy. There is plenty of water

around. Marine life and its habitat are shrinking every year. He asked the Commission not to approve the permit. His comments are part of the verbatim record.

Ray Kellam, commercial waterman, said back in the 1970s and early 1980's the York River had an abundance of shad, and then suddenly they were gone. Seven years ago, VIMS scientists asked him to set up an experimental net, he said. The first year, Mr. Kellam said he caught 38 shad; this year in a day he caught 137 shad. The shad population is still down and nowhere in the seven years that he has set nets for VIMS has not been a consistent improvement. Hundreds of thousands of dollars have been spent to replenish shad and to approve this permit now would be wrong, very wrong.

Dennis Waxmunski, representing Upper River Watermen's Association, said the Mattiponi and Pamunkey are the two best nurseries for fish spawning activity. American shad spawns in this river and the intake site is a major spawning site, also for hickory shad, white perch and other species. He said he has seen great changes in the fluctuations of these fish. He said the herring population also is severely down. He asked the Commission not to approve the permit. His comments are part of the verbatim record.

Kelly Place, a waterman from the Williamsburg area, speaking for several watermen's association, offered a copy of his previous comments because the typed statements were inaccurate. He cited numerous reasons why the permit should be rejected. He said the proponents have not addressed many questions posed by the opponents. He said the chemical piping elements were not included in any descriptions of the intake facility. He said the intake operation would damage nearby wetlands. He said the City could not have picked a worse place for the intake. His comments are part of the verbatim record.

Madeline McMillan, member Newport News City Council, said she is opposed to the reservoir project. If the proponents were concerned about the environmental impact and the American shad, they would have been willing to do anything at whatever cost of time and money to prove that this project would not have a negative impact on this river and the life it sustains. They did not do that, however. Politically they are afraid to do that. In all the information given by the City of Newport News that there will not be an adverse impact on the shad or other species. This river belongs to the people of the Commonwealth of Virginia and no one locality should be allowed to endanger it and the environmental systems it supports. It is the Commission's responsibility to see that this does not happen. Her comments are part of the verbatim record.

Ron Hachey, County Administrator of King and Queen County, said his county opposes the reservoir. He said the county has problems with the amended application, especially concerning the withdrawal plan. The county is concerned about future sewage problems because of the intake location. His comments are part of the verbatim record.

Jerry Cox, resident of King William County, speaking for the business association in the county, said the association believes the project is bad for the county. He said the

environment is being hurt piece by piece. When the entire fishery has been finished, what will the Commission tell the working watermen? What will farmers be told when they need water from the Mattaponi in the future? He worried about the future of fishing in Virginia. His comments are part of the verbatim record.

Billy Mills, speaking for the Mattaponi and Pamunkey Rivers Association, said previous speakers had made a number of his points. He said the group opposes the reservoir scheme. He questioned the city's mitigation plan and the multi-leveled safety plan for shad. MPRA agrees with the VIMS comments that studies need to be accomplished prior to any decision on a permit. He said the City's amended application opens many new areas of questions. He said the City has been concerned about financial levels and not the safety of the environment. This is the wrong pipe at the wrong place in the wrong river. His comments are part of the verbatim record.

Deborah Murray of the Southern Environmental Law Center, stated she was representing a number of environmental groups. She said locating the intake structure in the primary shad spawning ground was fundamentally wrong. The fundamental concerns of the Commission in denying the permit last year have not changed. The lack of actual data on spawning conditions in the Mattaponi have not changed and that is why VIMS and the Commission's staff have recommended a delay in going forward with this permit. The Hudson River temperature data cannot be compared because of conditions in the river and temperature is just one of several elements that cannot be compared between the two rivers. There is a fundamental conflict between Newport News' pumping hiatus and dry-year yields. The Commission must balance risks against benefits, but the risks now are not known. Her comments are part of the verbatim record.

Dr. Richard Seaby, director of Crisis Conservation, said he had already submitted comments for the record. He said not enough was known now regarding the permit in order to approve it. He said the Hudson River was not an appropriate comparison with the Mattaponi River. He spoke about water temperature comparisons and noted that a dam restricts the Hudson fish, while the Mattaponi does not. He also questioned the wire screen data or lack of data presented. His comments are part of the verbatim record.

Mike Siegel, public and private finance consultant hired by several environmental groups regarding the King William Reservoir, said he had questions about the protection of shad. He said the experts report said there would be no withdrawals in Mattaponi during spawning season, but in looking at those statistics there would be major withdrawals during every hiatus in every year. He said the experts did not model the hiatus; rather, they modeled the "no" hiatus. He said working with the various tables in the reports he was able to calculate the hiatus periods and those periods are not the same. His comments are part of the verbatim record.

Michael Towne, Director, Sierra Club of Virginia, said the Club urged the Commission to deny the permit. He felt the evidence was compelling to deny the permit. He agreed that

information from the studies will not be available for years and no decision should be made until that information is available. He agreed with Mr. Siegel that the proposed “safety nets” offered by the City are not true; information to support their contention also is not available. His comments are part of the verbatim record.

Garrie Rouse, consulting botanist, said he owns and operates a company that provides water-based environmental education on the Mattaponi River. The river was selected for its pristine condition. His primary concern is liability—the flows of the river. Upriver the Mattaponi can be very small and blocked by down trees. He said he has tried to keep a finger on the pulse of the river over the past eight years. Looking at the flows, he said the cubic feet per second (CFS) there are many times when the flow is below 100 CFS. The amount of water coming down the river in early spring could be the time of year in some of the hiatus. He wondered how Newport News would honestly fill the reservoir because of the hiatus situation. He said it is incumbent upon the Commission to determine if the hiatus proposal is truly workable. His comments are part of the verbatim record.

Tom Miller, representing Friends of Rivers of Virginia, said the group questioned the need for the reservoir and hoped the commission would move with the utmost of caution in approving such a project. In fact, the group supports the recommendations of VIMS and the Commission’s staff—to delay in making a decision until more information has been obtained. His comments are part of the verbatim record.

The Commission recessed for lunch.

Commissioner Pruitt called the meeting back into session with all Commission members present.

Donald Phillips, representing West Point Hunt Club, Inc., questioned the maximum velocity of water on the face of the screen from the Newport News scientists’ study. His comments are part of the verbatim record.

Tom Rubino, co-chairman of the Alliance to Save the Mattaponi, spoke supporting the findings presented earlier by Mike Siegel. He said Mr. Siegel has discovered a primary error in the Verser Report. Therefore, the conclusions and analysis of many scientists’ stand in error. The level of risk to the vulnerable early life stage is several times more than had been started. It understates demand and overstates availability. He asked the Commission not to approve the permit.

Frances Broaddus-Crutchfield, representing grassroots effort Save Our River.Org, said her son, Henry Crutchfield strongly opposed the permit. Please do not compromise our regulatory process by succumbing to political pressure. Her comments are part of the verbatim record. She said all the fish species in the river are endangered by the reservoir intake facility. A guaranteed 97 percent protection is a stretch in the truth, she said. Her poetry comments are part of the verbatim record.

Beverly Hayes, wife of Tim Hayes, former Associate Member of the Commission, questioned whether Newport News had seriously looked at another location for the reservoir. She said the best solution was to follow the expert's advice and undertake the eight years' study. Her comments are part of the verbatim record.

Dori Chappell, who lives on Mattaponi River. She said she understood that the Commission did not make decisions without data and stated that she believed there was no data available now. She asked landowners along the river to stand to be recognized. She asked the Commission to continue its opposition to the permit.

Warren Mountcastle, who lives on Mattaponi River, said the intake location is at the worst possible location. The curve in the bottom is deep. It is a location where fish like to spawn. He would hate to see such a natural feature changed. He asked the Commission not to compromise, not to take a tradeoff.

Karen Westermann, a property owner on Mattaponi River in King William County, said the truest experts on this project are the Mattaponi and Pamunkey Indians. They have respected the river and the workings of nature; they do know about fish. Please heed their words.

Kitty Cox, resident of King William County, said she and her husband continue to support the Commission's earlier denial of the permit. She said it is impossible to look at the shad alone without looking at the entire ecosystem of the river and the Chesapeake Bay. Please look at the big picture when making your decision. Her comments are part of the verbatim record.

Lou Johnson, citizen of King William County, said concentration has focused on the intake, but no one talked about the fact that shad are in danger. Shad cannot be fished now. Shad have a short growing season in the north and would be very different from the shad in the Mattaponi River. She then offered an alternative: Newport News and Hampton should join the 21st century and new technology—desalinization. The people of the Peninsula have looked only at King William and a reservoir. Look to the future; fresh water is at your front door. Her comments are part of the verbatim record.

Ann Brummer, an effected property owner, said the pipeline would traverse her property. Other members of her family own property on the river and would be affected by the proposed reservoir. Without the intake, 100 percent of the shad can be saved. Please deny the permit.

Anne Talley from Gloucester County asked the Commission to deny the permit because it would be detrimental to the health of the Chesapeake Bay.

Chris Hager, a master's and doctoral degree graduate from VIMS, said there would be losses of shad and that can be minimized. There are several truths that anything put into

the river will biofoul, he said. Estimates have shown to be not good enough. Do not approve the permit. His comments are part of the verbatim record.

John Dowson of Newport News said the Commission had been charged with examining the shad at this hearing. Upon review, the Commission should remember the legislative end-run that the City of Newport News tried to take on the Commission. This is the largest attack on our wetlands in the state. Please deny the permit, he said. His comments are part of the verbatim record.

Mr. Hoagland asked if anyone else would like to speak.

Shawn Brown of Newport News said she supports denial of the permit. The City, regarding the American shad, has provided additional information upon which this hearing has been based. VIMS recommended that an eight-year study be undertaken before a permit is issued. She questioned whether the King William solution solves a water problem or causes other problems? Her comments are part of the verbatim record.

Mary Helen Morgan, president of Middle Peninsula Land Trust Board, said she did not represent the board specifically. While Newport News brought out numerous elected officials, it was obvious that missing were elected officials from King William and King and Queen counties. The Commission has not received complete information from the city. Please deny this permit. Natural wetlands, not storm drains, flow into the Mattaponi. Newport News plans to flood and change those wetlands. She questioned whether the city would next go after breeding grounds for other fish and shellfish. The Commission is the only body to protect the marine environment.

Barbara Smith explained she was very interested in the local Indians. She said they have not gotten fair treatment from the beginning of the United States and when we think of them we should consider all elements—mentally, physically and spiritually. The Indians have their culture all around this site and everything points to the fact that the Commission needs to look deeper at the patches that have been made to the permit. She said she was opposed to the reservoir. Her comments are part of the verbatim record.

Kay Slaughter of the Southern Environmental Law Center praised the Commission and VIMS' staffs for their expertise and the way the hearings have been conducted. She said she knew what it means to be on "the hot seat," and is thankful for the Commission member's time and effort. The City claims that construction and withdrawal of up to 75 million gallons of water per day will not harm the shad fishery and that the withdrawal hiatus will protect the shad. But other experts, she said, do not agree. Mike Siegel (who spoke earlier) said the proposed hiatus would threaten the core mission of the project because the reservoir cannot produce the amount of water Newport News claims to need. She reminded the Commission that Dr. Roger Mann of VIMS had said that the intake facility was at the wrong site. She urged the Commission to continue its process of never voting on an issue when it does not have the data and in this case you do not have data.

Her comments are part of the verbatim record.

Del. Harvey B. Morgan, R-Urbanna, said that State Sen. John Chichester, who could not appear because of an illness in his family, had sent a letter stating his opposition to the project and recommended that the Commission deny the permit. Del. Morgan said he wished to draw a few conclusions from the two-day proceeding. He stressed that once the project was permitted and constructed there was no turning back. The intake facility will create a precedent with regard to the future of our fisheries resources, inter-basin transfers and disputes between rural and urban jurisdictions and wetlands preservation. The City's proposal to conduct eight years of study after the permit is issued, rather than before as VIMS and the VMRC staff have recommended, is merely a license to go forward. There would be no turning back. He also said that desalinization proposals are not part of Newport News' thinking now. The City also has no plans to move the intake facility even though VIMS and the VMRC staff, as well as many others, have said it is the worse possible site.

While this proceeding focused on American shad, he said, the Commission's prior decision was based on a larger picture. The Commission works and reacts to data and you have no data upon which to support this project. He urged the Commission to uphold its prior decision and deny the permit.

Tony Watkinson of the VMRC staff read Sen. Chichester's letter into the record.

Commissioner Pruitt asked Mr. Hoagland if all the persons in opposition had spoken. Mr. Hoagland answered in the affirmative.

Commissioner Pruitt said the City had two hours for rebuttal. The Commission took a 10-minute recess while the City's witnesses came forward.

Upon returning into session, Commissioner Pruitt said that Del. Leo Wardrup of Virginia Beach and State Sen. Thomas Norment, Jr. had called his office to say that they favored the project.

Commissioner Pruitt said the Commission had strived to be fair to everybody. He said that in the end, the Commission realizes everyone will not be happy—There is no way the Commission can win, but the Commission is not here to win. It is here to do the public's business to the best of its ability and that is what it is doing here today.

Commissioner Pruitt recognized Mr. Scott Hart from the City to begin the rebuttal. Responding to previous comments by Mr. David Bailey, he said that experts believe that 60-70 percent of the shad in the Chesapeake Bay originated in the York River system and not specifically the Mattaponi.

He discussed the withdrawals under drought conditions and those comments are part of the verbatim record.

Randy Hildebrandt of the Newport News staff stressed that the North Atlantic Division, U.S. Army Corps of Engineers has stated that its position is that if the City cannot obtain a permit and a Coastal Zone Management Act certification within the near future, they will ask the City to withdraw its permit without prejudice—meaning the entire process would start again. Therefore, he said, the City cannot continue the process if the Commission denies the permit.

Dr. Gessler spoke about the issue of sweeping flows and the intake being located in a bend of the river. His comments are part of the verbatim record.

Mr. Hart discussed at length about the screen alignment. He also noted that the water supply from the King William Reservoir would last the City and its customers through the year 2050. He reminded the Commission that the need for water could be shorter if the demand is greater.

Brian Ramaley, director of the Newport News Waterworks, explained how the hiatus would work. His remarks are part of the verbatim record.

Associate Member Dr. Jones asked several questions regarding instream flow and declarations of emergency that would end a hiatus. Her remarks and the corresponding answers are part of the verbatim record.

Associate Member Garrison asked about the City's desal operation. Mr. Ramaley's answer and other exchanges are part of the verbatim record.

Dr. Coutant responded to statements regarding the river's ecosystem and the data available regarding water temperature, etc. He said there were a vast range of literature about shad and the relationship of spawning to temperature all up and down the East Coast. Some of that data was summarized in the City's report, he added.

He said other fish species in the river were mentioned and the fishery experts in their report for the City examined the vulnerability of them and ranked them. His remarks are part of the verbatim record.

Dr. Coutant and Associate Member Dr. Jones had several questions to which he responded. Those exchanges are part of the verbatim record.

Mr. Hart told Commissioner Pruitt that all of the City's planned witnesses had testified. He made final remarks, asking the Commission to approve the permit. Mr. Hart said the U.S. Army Corps of Engineers' North Atlantic Division had sent a letter to the

Commissioner reflecting its position. The letter was read into the record. His remarks are part of the verbatim record.

Following all of the presentations, Associate Member Garrison asked for a 10-minute recess, which was granted.

When the hearing resumed, Commissioner Pruitt said Commission members had some questions regarding testimony.

Associate Member Cowart asked whether the City could keep the reservoir full under the withdrawal permit from the State Water Control Board and the 120-day hiatus proposed for the VMRC permit?

Mr. Ramaley said the reservoir could not be kept completely full under all conditions. He said the City modeled a hiatus for the 1930's drought at 60 days. If the drought were longer the City would have to make up for it at other times and that could prove difficult.

Associate Member Cowart asked about seepage, but Mr. Ramaley said he could not answer that question because he did not do the calculations.

Associate Member Ballard said he had a disclosure to make. He said during the years this project has been before the Commission individuals and groups, both for and against this project, have approached him in person, by mail, by e-mail, and by telephone. The information received in those meetings and in this correspondence is substantially the same as the information in the public record and he believed he could fairly consider this matter.

Commissioner Pruitt asked each of the other members of the Commission if they could agree with Mr. Ballard's statement. Each member responded in the affirmative.

Associate Member Garrison thanked the City for this second hearing, noting that he had learned a lot more than had previously been communicated. He asked several questions regarding wetlands and mitigation. Kate Sweeney of Malcolm Pirnie, a consultant for the City, responded. That exchange is part of the verbatim record.

Associate Member Bowden asked if any of the land for the reservoir was part of the Mattaponi land or directly in front of Indian land? Mr. Hart responded in the negative.

Associate Member Bowden asked if the City was willing to work with the Indians to preserve cultural sites and identify and move any identified artifacts from the area of the dam? Mr. Hildebrandt responded in the affirmative. He asked several more questions that are part of the verbatim record.

Associate Member Bowden asked Jack Travelstead of the VMRC staff if he knew of any fisheries management plan that offered a 97 percent protection rate. Mr. Travelstead responded in the negative. Responding to another question, Mr. Travelstead said he believed additional information could be obtained from an eight-year study.

Associate Member Garrison then made a motion that the request from the Regional Raw Water Study Group be denied for these reasons:

The reports given to this Commission by RRWSG relied almost completely on general information from literature, mostly using studies conducted on other systems, species and life stages, and theoretical analyses to support the panel's recommendations. What was lacking in this proceeding was the critical site-specific kind of studies that could address the large suite of unanswered questions with sufficient accuracy that a truly informed decision could be made. In his opinion, the RRWSG should stop funding these theoretical, paper-based studies that leave so much unresolved issues and rather support designed, science-based field studies to properly address project impact.

If the Commission approved construction of the project now, then the procedures, political, social and economic, to operate it after it was complete, no matter what the consequences would be too overwhelming to revisit. It is the project proponent's, the RRWSG's responsibility to prove that a pumping hiatus, or any other mitigation, would sufficiently protect the natural resources before the project is approved and constructed. If present information is insufficient to make a reasonable determination without assuming undue risk to these resources, such as continued decimation of the shad population, then the RRWSG is obligated to obtain that information before a decision to construct the project is finalized.

Associate Member Garrison then cited statements from VIMS, Col. Carroll of the U.S. Army Corps of Engineers and the Virginia Department of Game and Inland Fisheries regarding the project.

In conclusion, he said that undoubtedly the King William Reservoir project was the most significant subaqueous permitting decision to come before this Commission, or any other Commission, and is the first decision ever for a substantial municipal water intake structure in Virginia's tidal water. He urged Commission members to carefully consider the permanent harm this structure would bring to the York River system and their public trust resources. He urged denial of the Newport News permit. He stated that the record clearly reflects that issuance of a permit in this matter violates Title 28.2, Chapter 12 of the Code of Virginia, and the public trust doctrine, and Article XI, Section I of the Constitution of Virginia.

Associate Member Cowart seconded the motion. He said his decision was based on the Commission's responsibilities articulated in Section 28.2-1205 of the Code of Virginia, the public trust doctrine, and Article XI, Section I of the Constitution of Virginia, and

Section 28.2-1205, the requirement of the VMRC to consider the public and private benefits of this project.

Obviously the public benefit of this would be those citizens of Newport News and the surrounding areas, but there are those citizens from the same area who opposed the permit. He said he thought the rights of the citizens of the Commonwealth, especially in the three counties bordering the Mattaponi—Caroline, King William and King and Queen—the riparian rights of the landowners that border the Mattaponi, the rights of the Mattaponi and Pamunkey Indians, and the rights of those who use and enjoy these public lands also should be considered. He said he had fully considered the complete written record, the testimony provided during the two or three hearings and the testimony presented in these two days of additional hearings. He also considered the recommendations presented by the Commission staff and VIMS on the impact of the proposed project to Virginia's marine and fisheries resources. His additional reasoning for the second is part of the verbatim record.

Associate Member Ballard asked to offer a substitute motion. He moved that the request by the City of Newport News for a permit on behalf of the RRWSG be granted. He said that in making the motion we was considering the voluminous testimony the Commission had heard over two years, the analysis and presentations by VMRC staff and the VIMS scientific advisers, all the protestants and the correspondence received about the project.

He said he based his motion on the fact that the application had substantially met the requirements of Section 28.2-1205 of the Code of Virginia. In making this finding, he said the Code requires the Commission to consider the public and private benefits of the project and to exercise its authority consistent with the public trust doctrine in the Constitution of Virginia. The public benefit is a safe drinking water supply for 600,000 citizens who are also beneficiaries of the public trust. He said he was not aware of any private benefit deriving from the proposal.

In analyzing the proposal from the standpoint of the Constitution and the public trust doctrine, he could see no conflict. He noted that the applicant has agreed to an eight-year monitoring program to evaluate how to determine temperature triggers for a pumping hiatus and provide absolute protection for 97 percent of the shad eggs and larvae in the Mattaponi. As a further protective measure, Associate Member Ballard said that after proper notice and opportunity for a hearing, this permit could be reopened by the Commission to modify one or more of its conditions if the circumstances on which the permit was granted materially and substantially change, if the Virginia water protection permit has been modified, or if studies conducted by the Commission or the permittee show some material, substantial and adverse change in the condition of the Mattaponi fisheries or the Commission's jurisdictional habitat had occurred as a result of the permittee's operations.

Associate Member Ballard said his motion also incorporated all of the special conditions outlined by both the VMRC staff and the application in the presentations and correspondence as well as the special condition that was offered in the motion.

Associate Member McLeskey seconded the motion and noted that the permit contains all of the safeguards one could ask for and even goes beyond.

Associate Member Dr. Jones asked for an explanation as to why the endowment of an independent panel to oversee the studies was not in play in the motion.

Associate Member Ballard said he did not know exactly what the panel would do, or what would be the cost.

Associate Member Bowden offered reasons for his support of the motion. His statements are part of the verbatim record.

Associate Member Ballard said he handed Associate Member Dr. Jones a note regarding the endowment saying that as an amendment the applicant would implement a program to ensure that Mattaponi watershed is maintained as a viable and productive resource for future generations, and that such a program would have to be approved by the Commission. In other words, such a program would be the subject of further discussion.

Mr. Hart of the City said the City would probably not favor an endowment as was discussed because currently the VMRC and DEQ would oversee the implementation and administration of the project. Why would an additional group be required? Also what would be the cost of such an endowment?

Associate Member Cowart asked Associate Member Ballard for the specific dates of a pumping hiatus. Associate Member Ballard said his motion would require a hiatus of March 1 through July 31st.

Mr. Hart and Commissioner Pruitt discussed aspects of the endowment, which the Commissioner stressed as not in the motion and was just a discussion concept.

Associate Member Ballard said he would amend his motion with an added condition that the applicant enter into good faith negotiations with the Commission to fund or endow a program that would ensure the Mattaponi watershed is maintained as a viable and productive resource for future generations and any agreement coming out of these negotiations would have to be mutually agreed to.

Associate Member McLeskey seconded the amendment. Hearing no discussion, Commissioner Pruitt called the question on the motion. All eight Commission members responded in the affirmative.

Commission Meeting

**12889
August 11-12, 2004**

With the acceptance of the amendment, the substitute motion was placed before the Commission for a vote. The Commissioner called the roll. The vote was five (Ballard, Bowden, Holland, Dr. Jones and McLeskey) in favor of the motion and three (Birkett, Cowart and Garrison) against the motion.

Commissioner Pruitt ruled that the substitute motion had been adopted and the permit would be granted. The meeting was immediately adjourned.

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William A. Pruitt, Commissioner

Wilford Kale, Acting Recording Secretary