

V M R C  
STATE  
REPORT

May 28, 2013

## HABITAT MANAGEMENT DIVISION EVALUATION

PCN, LLC, #12-1534, requests authorization for the use and development of tidal wetlands and for encroachment over State-owned bottom including the dredging of 1,144 cubic yards of State-owned bottom including a 30 linear foot temporary bulkhead for construction access, associated with the construction and installation of an approximately 2,654 linear foot steel sheet pile wall with riprap scour protection along Curles Neck Swamp tributary to the James River and extending from an existing earthen levee to a U.S. Army Corps of Engineers Dredge Material Management Area at Curles Neck Farm in Henrico County. The project will require a tidal wetlands permit and a permit for use of State-owned bottomlands. The project is protested by two adjacent property owners.

### Narrative

Curles Neck Swamp, the site of the proposed project, borders the historic Curles Neck Farm in the Varina district of Henrico County. Immediately adjacent to Curles Neck Swamp upriver is Jones Neck and immediately adjacent downriver is Presquile National Wildlife Reserve. Located along a tidal fresh reach of the James River, Curles Neck Swamp is a mix of tidal forested and tidal emergent wetlands, and non-tidal forested and emergent wetlands. Curles Creek runs within the main stem of Curles Neck Swamp. The Curles Neck Swamp encompasses approximately 1000 acres. The immediate project area is 11 acres with 9.5 acres of tidal forested wetlands and approximately 1,150 linear feet of tidal waters.

An existing levee system, which was constructed by the previous owner, runs along the eastern shoreline of the swamp comprised of a man-made 4,800 linear foot earthen berm with a 30-foot base width tapering to 15-foot along the top; approximately 800 linear feet of the berm spans the mouth of Curles Creek. Three hundred linear feet of the berm extends across state-owned submerged bottom of Curles Creek. The berm across Curles Creek has two 48-inch ARMCO tidal flapgate structures with two pumps to facilitate the manipulation of water levels within Curles Neck Swamp. The original purpose of the levee system was to cut off tidal flow to the swamp for regulating water levels for waterfowl management. Since the levee's installation in 1968 and 1969, numerous tidal inlets have developed along the southeastern shoreline of the swamp reestablishing the tidal connection between the James River and the interior of Curles Neck Swamp. These tidal inlets have existed since at least 1994. The existing water control structures are operable but less effective because of the reestablished tidal connection to the James River.

PCN, LLC proposes to extend the existing levee system by installing 2,654 linear feet of steel sheet pile wall with riprap scour protection along the southeastern shoreline from the existing levee to a U.S. Army Corps of Engineers Dredge Material Management Area. The sheet pile wall will close off the inlets and restore the property owners' ability to manipulate water levels

### Narrative (cont'd)

within Curles Neck Swamp. The stated purpose of this project is to optimize nesting and feeding habitat for waterfowl and to preserve and protect the existing tidal wetlands of Curles Neck Swamp from sea level rise. They also propose to create 0.5 acres of tidal forested wetlands as compensation along a tidal ditch that connects to an old borrow pit site on their property.

The existing levee has an extensive history pertinent to the current request to extend the levee system. In 1968 and 1969, Mr. Richard Watkins, owner of Curles Neck Farm and Dairy, Inc., installed the existing levee and water control structures to manage Curles Neck Swamp as a waterfowl impoundment. Beginning every July, the water within the impoundment was drawn down by opening the inside flapgates and closing the outside flapgates. This allowed water to drain out of Curles Neck Swamp during ebb and low tides and prevented water from reentering during flood and high tides; the pumps were also used to help lower the water levels. Lowering the water levels exposed extensive mudflats that were then seeded with millet and remained exposed to facilitate the growth of the millet and Smartweed (*Polygonum*). Every fall, beginning in October, the flapgates were opened to flood the impounded Curles Neck Swamp. Historical reports on the operation of this impoundment indicate that the flapgates remained closed and Curles Neck Swamp remained flooded until the following July when the cycle began again.

In 1981, upon receipt of a complaint about the levee, the U.S. Army Corps of Engineers (Corps) required the submission of a Joint Permit Application (JPA). Mr. Watkins, complied and submitted an after-the-fact JPA to retain the levee and to continue the water management.

Two primary issues arose during the review of the after-the-fact JPA: 1) the issue of ownership over Curles Creek and public access; and 2) the impact of the levee on anadromous fish and wildlife using the creek. In 1982, the Virginia Institute of Marine Science (VIMS) and U.S. Fish and Wildlife Service (FWS) conducted studies evaluating the levee system's impacts on anadromous fish and waterfowl utilization of Curles Neck Swamp, respectively. The FWS study found the levee had no impact, beneficial or adverse, on the waterfowl utilization of Curles Neck Swamp. The VIMS study confirmed that river herring, both blueback herring and alewife, transited the 48-inch pipes when the flapgates were open and subsequently spawned in Curles Neck Swamp. This study led to a proposed special condition to require that the tidal flapgates remain open from March 1 to July 7 every year during the anadromous fish spawning run.

Ownership and subsequently, public access, were primary issues when this matter went before the Commission in the 80's. In the original JPA submission, Mr. Watkins claimed ownership over the submerged beds of the tidal Curles Creek based on a Crown grant traced to a 1691 grant to Mr. Richard Cocke. The JPA cover letter stated the subaqueous bottom of Curles Creek was not owned by the state, thus the applicant did not require a permit from VMRC for the levee. Commission staff believed, and still do, that the subaqueous bed of Curles Creek is state-bottom. It is generally believed grants of land in the Tidewater area by the English monarchy during the colonial era did not include the submerged beds of tidal waterways as these areas were held in

## Narrative (cont'd)

common. As such, staff advised Mr. Watkins to obtain a VMRC permit for the levee system. In 1983, staff presented a draft permit to Mr. Watkins to address the after-the-fact nature of the levee. Mr. Watkins found the permit unacceptable because of a special condition that preserved public access to the state-owned bottom of Curles Creek.

On June 26, 1984, staff took the matter before the full Commission to resolve the issue of ownership and to approve the after-the-fact permit. The Commission ultimately compromised with the applicant and agreed to accept a Consent Decree if the applicant received a VMRC permit. This arrangement postponed litigation on the ownership of Curles Creek but preserved the right of public access, until a documented need arose. Although legal counsel for Mr. Watkins entered a Bill of Complaint with Henrico Circuit Court on behalf of Curles Neck Farm and Dairy, Inc., to seek an injunction against VMRC for requiring and pursuing permit proceedings it was believed this matter could be addressed with the Consent Decree between the Commission and Curles Neck Farm and Dairy, Inc.

The finalization of a Consent Decree took four years for the applicant's legal counsel and the Office of the Attorney General to resolve. However, in 1988, prior to the finalization of the Consent Decree and permit, Mr. John Wyatt submitted a letter of opposition to the after-the-fact permit. The application with the finalized language for the Consent Decree and permit document went back before the Commission on February 7, 1989. Mr. John Wyatt spoke in opposition to the project citing concerns about the after-the-fact nature, the environmental and fisheries impacts, and public access and navigation. Mr. Wyatt also submitted a petition with 54 signatures in opposition. The matter was tabled until the March hearing. At the March 7, 1989, hearing the matter was again tabled due to legal questions and the possibility of additional permit conditions. The matter was continued at the April 4, 1989, hearing by request of Mr. Watkins' legal counsel as they worked to address the Commission's question about additional tide gates for enhanced access for anadromous fish.

On May 4, 1989, the matter went before the Commission a final time. The legal counsel for Curles Neck suggested to the Commission that additional tide gates for enhanced anadromous fish access would be very expensive and the cost was not justified based on the original studies that indicated the existing tide gates provided sufficient access for fish usage of the swamp. Mr. Wyatt again spoke in opposition reiterating concerns about environmental impacts in the form of declining fisheries, poor water quality, and habitat deterioration. Mr. Kirk Havens, representing the Mid-Atlantic Paddlers Association, spoke in opposition citing concerns about excluding public access to Curles Neck Swamp. The Commission ultimately authorized issuance of the after-the-fact permit in conjunction with the Consent Decree that preserved the property owner's rights to litigate ownership in the future should the need arise. The permit would authorize Curles Neck Farm and Dairy Inc. to retain the 800 foot earthen berm that extends across 300 linear feet of State-bottom of Curles Creek. However, as a result of the review for the current permit request, staff has discovered that the after-the-fact permit authorized by the Commission at the May 4, 1989, hearing was never executed. Based on historical documentation, two permit documents for review and signature were sent to Mr. Watkins care of his counsel on July 25, 1989, and again on November 8, 1989. The record

## Narrative (cont'd)

contains no documentation indicating that the permit was signed or returned to VMRC for the required counter signatures. In addition, the current applicant was unable to produce a signed copy of the after-the-fact permit. As a result, the existing berm over State-owned submerged lands has never been authorized and continues to be an illegal structure. This is an important issue because the current proposal hinges on the previous authorization for the existing berm. Furthermore, staff questions if the Consent Decree is still valid for the current owners of Curles Neck Swamp because Curles Neck Swamp has changed ownership. The Commission entered into the Consent Decree with Curles Neck Farm and Dairy, Inc. It is unclear if the Consent Decree extends to PCN, LLC. In addition, the Consent Decree was conditioned on Curles Neck Farm and Dairy, Inc. accepting the Commission's permit. Since the permit was never executed, this possibly invalidates the Consent Decree.

## Issues

PCN, LLC's proposed project requires both a subaqueous permit and a wetlands permit from the Commission. Since Henrico County has not yet adopted the model Wetlands ordinance, the Commission is charged with acting as the local wetlands board pursuant to Chapter 13, Subtitle III, of Title 28.2 of the Code.

Staff's review of the project, the public interest review and state agency comments identified several areas of concern including the existence of unauthorized structures installed along the tidal wetlands and submerged lands of Curles Neck Swamp, the question of public access and use of Curles Creek, as well as the lack of details addressing important questions about the potential impacts of the project on living resources within the area.

The unauthorized structures include several walls, one of which is described in the current application information along with others that are shown on elevation survey drawings, and sandbags. These structures have been placed within the various tidal wetlands and inlets along the shoreline. The sandbags were observed during a site inspection on August 6, 2012. Placement of the walls and sandbags appears to have been an attempt to close off the tidal inlets. The applicant has not addressed the unauthorized structure issue other than to explain that the previous owner installed the largest wall over State-bottom sometime in 1999. Staff feels that all of these unauthorized structures in tidal wetlands and on State-bottom should be removed.

ILLEGAL  
ACTIVITY  
AND UNBAGGED  
WATER

In response to the public interest review, staff received four letters in support of this project. Written support letters were submitted by The Honorable Walter Stosch, Virginia State Senate, Dr. Leonard Smock of Virginia Commonwealth University's Rice Center, Henrico County Manager John Vithoulkas, Mr. Thomas Brown and Ducks Unlimited. The supporters of the project commend the applicants for taking steps to preserve the marsh. Each letter stresses the importance of Curles Neck Swamp habitat for migratory and resident waterfowl. Several letters laud PCN, LLC for privately funding a project that will result in public benefits through the preservation of marsh habitat for waterfowl.

## Issues (cont'd)

Staff also received two letters of opposition. Mr. George Little and Mr. William Rhoades, who live in the project vicinity, submitted written protest letters opposing the current project. The protestants oppose the exclusion of public access to State-owned waters. They both believe approval of the berm extension will continue to exclude public access and use of Curles Creek. Mr. Rhoades expressed his protest to an existing unauthorized wall across State-bottom in a tidal breach currently blocking access to the creek. He also questions the legal precedence the Commission's decision to approve the extension will set, expressing concern over the ability of other property owners to put up their own barriers along state bottom. Mr. Little contends that public access to Curles Creek should be restored through some means.

Staff maintains that Curles Creek is state-bottom, as are the tidal inlets that have since formed along the shoreline. Theoretically, the public has a right to access and use the waters of Curles Creek either through the main stem of the creek or through the formed tidal inlets. The Commission's action in 1989, however, would seem to preclude public access as they authorized a berm structure physically barring any access from public waters of the James River to Curles Creek. At the May 4, 1989, hearing Associated Member Hayes spoke on the matter of public access, stating "... the Commission was in agreement that nothing that the Commission would do to approve or disapprove the Consent Decree would impede any right [citizens] would have to use the creek or to challenge the owners claim to the creek." The unexecuted after-the-fact permit contained a special condition that permitted the Commission to reconsider the public access issue upon the occurrence of a "...full and complete public interest re-evaluation, including one or more public hearings, ..." Based on this historical information, staff feels that the issue of public access can once again be opened for discussion and debate by the Commission for the currently proposed project at Curles Neck Swamp.

In comments dated received, December 11, 2012, the U.S. Fish and Wildlife Presquile National Wildlife Refuge, an APO to the project site, requested time a time-of-year restriction on construction from late March-early June and early September-October to minimize water based disturbance to migratory birds in late fall and winter. They also requested the permit require the implementation of safety measures for boat operators of construction due to the public boat tours and waterborne education programming within the main river channel between Presquile NWR and Curles Neck. They recommend a no wake zone within the area adjacent to the project.

In comments dated received November 16, 2012, the Department of Conservation and Recreation (DCR) documents the presence of the Northern harrier (*Circus cyaneus*) in the project vicinity. This is a state species of special concern. They do not offer specific recommendations concerning this species other than to make the applicants and reviewing agencies aware of the possible inhabitation of the project site by the Northern harrier. They note the applicability of the Chesapeake Bay Act and recommend the implementation and strict adherence to erosion and sediment control and storm water management measures. In revised comments, dated received May 22, 2013, DCR identifies Turkey Island Creek Stream Conservation Unit in proximity to the project site and documents the presence of the natural heritage resource, Atlantic Sturgeon in the project vicinity. They recommend coordination with DGIF and U.S. Fish and Wildlife Service (USFWS) given the endangered status of Atlantic

## Issues (cont'd)

sturgeon. DCR also identifies the proximity of the Curles Neck Conservation Site to the project area. "Conservation sites are tools for representing key areas of the landscape that warrant further review for possible conservation action because of the natural heritage resources and habitat they support." DCR documents the potential existence of sensitive joint-vetch, a federal and state endangered plant. They recommend a survey for sensitive joint-vetch in the project area conducted between August 15 and October 15. Upon receipt of the survey results, they can better assess the potential impacts of the project on this resource and provide specific recommendations for protection of this species. They also recommend coordination with USFWS. ←

In comments dated received May 3, 2013, the Department of Game and Inland Fisheries (DGIF) acknowledges the historical use of Curles Neck Swamp as a waterfowl management impoundment, the current project purpose to continue managing water levels to protect the swamp from inundation with sea level rise, and the benefit of this management scheme to waterfowl habitat and resident and migratory wildlife. DGIF categorizes Curles Neck Swamp as an Anadromous Fish Use Area and expresses concern over the potential adverse impacts to anadromous fish use by blocking the tidal inlets. DGIF recommends maintaining connectivity to the James River and Curles Neck Swamp during in-migration, spawning, and out-migration to address this concern. DGIF is unable to provide "specific recommendations for the protection of affected species" because of the lack of "design specifications and operation protocols for the existing and proposed structures." They request the applicant continue to coordinate with their agency on the implementation of water management scheme to reduce possible adverse impacts on anadromous fish. DGIF also documents the federally endangered Atlantic sturgeon in the project area but does not anticipate adverse impacts from the project. They recommend, however, coordination with NOAA Fisheries Service (NOAA) regarding possible impacts to Atlantic sturgeon. DGIF also documents the presence of Bald eagle nests and colonial waterbird colonies in the project area. Though they do not anticipate project-related adverse impacts, they recommend coordination with U.S. Fish and Wildlife Service (USFWS). DGIF approves of the wetland mitigation site and general plan as compensation for the loss of primary tidal wetlands. As a final recommendation, DGIF proposes the applicant work in close coordination with oversight agencies and institutions with research programs to facilitate research and monitoring of Curles Neck Swamp, the mitigation site, and the associated environs.

In their comments dated received May 17, 2013, the Virginia Institute of Marine Science (VIMS) raises several concerns about the potential impacts of the proposed berm extension on tidal wetland habitat and fishery resources. VIMS identifies the existing wetlands as forested hardwood tidal wetlands and outlines the important functions these wetlands provide. The installation of the wall will alter the function of this unique wetlands habitat along the shoreline by disrupting the natural processes of groundwater exchange, tidal inundation and flooding patterns, and fish and wildlife movement. VIMS notes that the removal of trees for construction

## Issues (cont'd)

and the wall could fundamentally alter these shoreline wetlands by altering the sunlight and temperate exposure. VIMS also identifies the existence of emergent wetlands habitat within the impounded area. They could not assess the possible impacts, however, because of insufficient details about the elevations and conditions of the existing tidal wetlands within the impounded area.

The application only quantifies and proposes mitigation for the direct impacts from the steel wall, riprap scour protection, and construction access. The applicant has not addressed or quantified the secondary impacts to tidal wetlands as a result of blocking Curles Creek. VIMS anticipates secondary impacts to tidal wetland habitat within the impoundment from the reduction of tidal exchange associated with active water management. The altered hydrology will expose the wetlands to temperature extremes and other stressors which could lead to reduced plant production and affects on the aquatic food web. The National Oceanographic and Atmospheric Administration National Marine Fisheries Service (NMFS) also provide similar comments, dated received May 9, 2013, discussing the altered hydrology and the potential shift in wetland plant community. Comments received from the Army Corps of Engineers, dated received April 2, 2013, also request the applicant to address this same concern.

VIMS comments also provide extensive technical discussion on the potential adverse impacts of this project on blueback herring, alewife, and American eel. This is a prime concern because NOAA Marine Fisheries Service (NMFS) is currently reviewing these three species for listing under the Endangered Species Act. River herring (blueback herring and alewife) were a concern in the 1980s when the Commission considered the original levee system but are a greater concern today. According to the most recent Atlantic States Marine Fisheries Commission (ASMFC) stock assessment, river herring stocks are at historic lows. In 2012, ASFMC placed a harvest moratorium on river herring, shutting down the fishery. Thus, the potential impacts of this project on river herring populations, as well as American eel populations, cannot be ignored.

According to VIMS, the proposed water management schedule poses considerable threat to river herring and American eel and their habitat. The proposed draw down of Curles Neck Swamp in July and August overlaps with the river herring juvenile and larval life stages using the swamp for nursery habitat. The drawdown will reduce available habitat by 80-94% and will alter the water quality by severing tidal exchange with the James River. Larval and juvenile fish will be trapped in a "highly unnatural system." According to VIMS, this will result in increased competition for limited resources amongst blueback herring and alewife larvae and juveniles, thus reducing growth and production. The timing of the tide gate closures will also disrupt American eel behavioral activities due to overlap with important developmental life stages and migratory phases that occur in the spring and the fall.

Finally, VIMS comments on the "migratory barrier" the steel wall and the culverts and tide gates, create, potentially preventing access to spawning habitat and disrupting the life history of river herring originating from this swamp. VIMS also notes that extremes in water quality parameters (e.g. temperature, pH) can create intangible migratory barriers that preclude fish passage. Such water quality variations can be anticipated around Curles Neck Swamp given the

### Issues (cont'd)

unnatural conditions created by the impoundment. VIMS notes that barriers to fish passage "represent one of the most important factors in the decline of anadromous alosine runs." They note that the design of the tide gate channels is critical and must allow easy access for spawning adults and passage of larvae and juveniles. They reference the intent of the Interstate Fishery Management Plan (IFMP) for Shad and river Herring and the IFMP for American eel to protect stocks and improve conditions to restore these stocks. According to VIMS, "This proposed project is inconsistent with the objectives of the IFMPs and runs counter to initiatives in all coastal states, including Virginia, to remove obstruction that effect access to spawning and nursery habitat." Likewise, in their comments, NMFS also addresses the migratory barrier concern recognizing the national efforts by NMFS, U.S. Fish and Wildlife Service, and other Federal and State agencies "to protect, restore, and enhance anadromous fish migration, spawning, rearing, production, and nursery habitats." NMFS' comments state they believe this project runs contrary to the ongoing restoration objectives and may possibly contribute to the continued decline of local anadromous fish stocks.

In summary, VIMS believes the renewed connectivity of Curles Neck Swamp with the James River has benefited tidal habitats and fishery resources, despite the altered nature of the system from the original levee. They offer the following as recommendations should this project receive a VMRC permit. A permit condition requiring long term monitoring and assessment addressing river herring and eel utilization of Curles Neck Swamp and contribution to the James River system. Pre-construction monitoring is preferred but if that is not feasible, they recommend a 3-year monitoring period after construction but prior to implementation of water management, in an effort to create a water management plan that accommodates herring and eel spawning and migratory patterns, with continued monitoring after implementation of a water management plan. They also recommend permitting an adaptive water management plan to address changes in fish spawning and migration patterns as a result of climate change and sea level rise.

### Summary/Recommendations

PCN, LLC's proposed extension of the levee system through the installation of a steel sheet pile wall is fundamentally a request to continue to manage Curles Neck Swamp as historically been authorized for waterfowl management. On the surface, this request appears reasonable given the past Commission's approval to manage this site for waterfowl habitat. In the over 20 years since the previous Commission's approval, however, environmental conditions at the project site and natural resources management goals and objectives have changed. Such conditions cannot be ignored in light of the extreme uncertainty this project may have on living resources within the James River. The Commission should evaluate PCN's current proposal in the context of today's environmental and regulatory regimes and not rely solely on the historical precedence from the previous Commission.

Public access to Curles Neck Swamp is an issue the Commission evaluated and decided in the 80s. The previous Commission's action to authorize an after-the-fact permit precluded public access in as much as the berm created a physical barrier to access. However, the Commission

### Summary/Recommendations (cont'd)

felt that their actions did not negate the public's right to access the creek or to challenge the owner's claim to the bottom of Curles Creek. Authorization for the issuance of the after-the-fact permit was conditioned on allowing the Commission (or the property owners) to reconsider public access in the future if the need arose. As such, staff believes the Commission can entertain reconsideration of the matter in light of the protests received.

Regardless of the ownership of Curles Creek, this project still requires a permit from our agency for the use and development of tidal wetlands. As such, litigating the ownership of Curles Creek may only eliminate the need for a subaqueous permit for certain aspects of the project. Staff should point out that the tidal inlets along the shoreline have formed through erosion. Under general common law concepts of accretion and erosion, erosion is to the benefit of the State. That said, the Commission would assume jurisdiction over any encroachments below mean low water in the tidal breaches.

The Commission must address the illegal status of the existing levee system. Staff feels the Commission has three options. The Commission can authorize the execution of the original after-the-fact permit in the name of the current owners. Alternatively, the Commission can decide to issue a new permit that authorizes the old levee system and the proposed additional wall. Finally, the Commission can execute the old after-the-fact permit and issue a new permit for the proposed addition with the understanding that any new permit may modify conditions of the old permit and use of the original levee system.

Based on our own review and comments received from our advisory agencies, staff feels that many questions are left unanswered. The scope of the project and possible adverse effects on the living resources within the James River warrant additional time to review and consider the project impacts. The advisory agencies have requested additional information to better evaluate the benefits and possible adverse effects of this project. The ultimate goal of the applicant is conservation. Accordingly, it is assumed they desire to ensure that their project does not create inadvertent harm to the surrounding resources and that they understand the Commission's hesitation to permit a project with unanswered questions. Additional items to review should include, but are not limited to:

- 1) Monitoring efforts and studies of the diadromous fish use, spawning and migratory patterns related to Curles Neck Swamp. These efforts should be done in coordination with experts and advisory agencies. The resulting data and information should be used to analyze the possible effects of the berm on river herring and American eel and propose mitigative efforts to reduce possible adverse impacts.

### Summary/Recommendations (cont'd)

- 2) A clearly outlined and detailed timeline for the proposed opening and closing of the tidal gates and the associated water levels. This schedule should be approved by anadromous fish experts to ensure the swamp is open during the times of year that will not adversely impact migratory and spawning patterns of river herring and American eel. The schedule should be devised in coordination with advisory agencies to ensure consistency with ASMFC IFMPs and current living resources regulatory goals and objectives. The schedule should also be flexible to accommodate new science and changing environmental conditions if necessary.
- 3) A tidal wetlands survey quantifying the extent and existing conditions of the emergent and forested tidal wetlands along the shoreline and within the impounded area. This data should be used to better quantify the effects of active water management on the wetlands within the bermed area, the potential recovery of shoreline wetlands after construction, and the appropriate mitigation and compensation requirements. Mitigation efforts should clearly explain how the loss of tidal forested wetlands will be compensated.
- 4) An applied analysis on how the wall will prevent inundation of tidal wetlands at Curles Neck Swamp. This should include, among other items, a discussion on sedimentation patterns within the swamp and surrounding James River.
- 5) Monitoring study of benthic habitat conditions and water quality within the bermed area to quantify the effects of the levee system on the benthic environment and water quality. This data should be used to discuss the proposed impacts of impounding the area on benthic habitat and organisms and to modify the water management plan to reduce adverse impacts on water quality and the benthic environment.

Accordingly, after evaluating the merits of the project, and after considering all of the factors contained in §28.2-1205(A) and §28.2-1302 of the Code of Virginia, staff recommends the Commission table their decision on permit issuance indefinitely to allow the applicant time to collect the necessary information and the applicant must waive the right to a decision within 30 days pursuant to §28.2-1302(7)(C). If the applicant is unwilling to waive this right, then staff recommends denial of the application and recommends the applicant reapply after a year submitting the requested additional information and coordinating with the advisory agencies to address the questions raised.