

120th Meeting of the South Carolina Aquatic Plant Management Council

Attendance:

Council Members: Chris Page, Stan Hutto, Jeannie Eidson, Tammy Lognion, Dave Wannamaker, Bob Perry, Larry McCord, Stan Hutto, Bill Marshall

Guests: Daniel Hood, Matt Puckhaber, Casey Moorer, Emily Cope, Scott Lamprecht, John Morrison, Tom Kierspe, Ernie Guerry, Chip Davis

Location: Santee Cooper Environmental Resources Center, Moncks Corner, SC

Call to Order: 10:23am 12/03/15

Minutes:

Chairman Chris Page called to order the 120th Meeting of the South Carolina Aquatic Plant Management Council (APMC). Mr. Larry McCord was given the opportunity to lead the Council and Guests on a tour of the Santee Cooper Environmental Resources Center. Mr. Page asked Mr. McCord whether the Santee Cooper (SC) lab would be able to process samples for SCDNR if the need should arise. Mr. McCord responded that SC could process outside samples to a limited degree if ample time were given.

Mr. Page introduced Bill Marshall, as Marc Cribb's replacement, and gave him the floor to tell everyone about himself. Mr. Marshall stated that he grew up in Columbia, SC, and had been with the SCDNR/Water Resources Commission since the 1980's. Mr. Marshall stated that he worked with the State Scenic Rivers section of SCDNR. He stated that over the past six to seven years he has been working to assist FERC with hydro licensing. Mr. Marshall stated that he works with Mr. Perry as the SCDNR FERC coordinator. Mr. Marshall stated that he graduated from the School of Public Health at the University of South Carolina where he performed some research work involving aquatic plants. Mr. Marshall stated that during his time as a student at U.S.C. he spent time with Mrs. Eidson on Lake Marion sampling aquatic plants. Mr. Perry stated that Mr. Marshall brings a lot of knowledge to the council, and that the council is happy to have him as a member. Mr. Page stated that he met Mr. Marshall in the 1980's while working on the Edisto project.

Mr. Page brought the minutes of the 119th meeting before the council for approval. Mr. Page stated that the minutes had been sent out recently for everyone to review. Mr. McCord asked when the minutes were sent. Mr. Page stated that the minutes were electronically mailed during the previous week. Mr. McCord stated that he had not received the minutes. Mr. Page stated that he had also e-mailed the agenda and public notice along with the minutes. Mr. McCord stated that he had not received any of

those documents. Mr. Page offered a paper copy of the minutes to anyone who would like them. Mr. Page stated that he had sent the e-mail to Mr. Davis as well. Mr. Davis stated that he had not received the e-mail either. Mr. Page concluded that the SC firewall had most likely blocked the email from arriving. Mr. Page asked the rest of the council members if they had received the email. Everyone other than Mr. McCord stated that they had received the correspondence. Mr. McCord requested that he be given ample time to review the minutes. Mr. Page stated that he would need a motion in order to approve the minutes at a later time through a mail vote. Mr. McCord moved to approve the minutes at a later date after once he was given time to review them entirely. Mrs. Lognion seconded Mr. McCord's motion. Mr. Page called for discussion and none was brought before the council. Mr. Page called for a vote and the motion passed unanimously. Mr. Page stated that the recommendations for changes to the minutes should be sent to him. He stated he would then compile the suggested changes and send them to the council for approval through mail. Mr. Davis asked Mr. Page if the minutes are posted on the DNR website after approval. Mr. Page stated that the minutes are posted on the website periodically. Mr. Page stated that all of the changes for the Aquatic Nuisance Species section of the DNR website are performed by himself. Mr. Page stated that suggested corrections to the website should be sent to him. Mr. Page stated that he had not updated the website over the past six weeks due to being busy working on amendments to the Annual Plan. Mr. Page called for any public comments. No public comments were brought before the council.

Mr. Page moved to the next item on the agenda; the SCDNR and SC annual update. Mr. Page stated that he would give the SCDNR update first. Mr. Perry stated that a read receipt could be attached to future emails to council members in order to ensure everyone receives documents with ample time for review. Mr. Page began reviewing his report documents. He stated that they were listed by treatment site, and they were not all complete because DNR was currently treating. Mr. Page stated that DNR staff were currently treating on Samworth WMA, Goose Creek Reservoir, and Back River Reservoir. Mr. Page stated that DNR staff had been delayed by flooding and were now treating areas where problem vegetation had been moved. Mr. Page stated that DNR had treated 3,729 acres worth of herbicide treatment at a cost total of approximately \$635,000. 2,083 acres of treatment have been conducted since July 1st at a cost of approximately \$355,000. Mr. Page stated that other information contained in his documents included target species, treatment date, and treatment options. Mr. Page stated that there is also a breakdown of treatment sites into a category containing Santee Cooper WMA's and a category containing treatment sites managed by the SCDNR. Mr. Page called the council's attention to the SC WMA category. Mr. Page stated that work on the SC WMA's is conducted by SCDNR staff in order to alleviate lack of staff issues for Santee Cooper. Mr. Page stated that SCDNR staff conducts work on the SC WMA's in lieu of cost share. Mr. Page stated that 418 acres had been treated on SC WMA sites at

a total cost of approximately \$100,000. Mr. Page stated that most of the treatments have been conducted in conjunction with habitat enhancement measures to promote waterfowl and fish population growth. Mr. Page referenced Sandy Beach WMA as an area that has shown great improvement and increased waterfowl harvests. Mr. Page stated that Hickory Top WMA was a new treatment site for 2015. He stated that some areas of Hickory Top were so overgrown that they were unusable for both waterfowl and sportsmen. He stated that SCDNR staff began treatments on Hickory Top in order to open areas for wildlife use. Mr. Page also stated that a backpack treatment was performed on the dike system at Hickory Top but was not listed on his handout. Mr. Perry asked if the majority of the Hickory Top treatments were drainage ditch areas. Mr. Hood answered that 10 acres in the Green Tree Reservoir were treated by helicopter in order to remove unwanted species. Mr. Page stated that the biologist in charge of managing Hickory Top directed the applicators as to which areas to treat. DNR staff and contracted applicators were careful not to impact mature cypress trees within the Green Tree Reservoir during treatment. Mr. Page stated that Sandy Beach WMA was treated for a variety of species including Lotus, Cutgrass, and Cattails. Santee Cooper WMA's and Potato Creek WMA were treated for hydrilla and primrose. Mr. Perry asked if this was the first time that crested floating heart has shown up in Sandy Beach WMA. Mr. McCord and Mr. Hood stated that the crested floating heart has been present in Sandy Beach WMA for several years. Mr. Page stated that CFH has been kept from spreading in Sandy Beach WMA by the other species which are already established. Mr. McCord stated that the CFH is mainly located in the small entrance way to Stony Bay and confirmed Mr. Page's statement of containment. Mr. Page stated that as one species is eradicated it is often replaced by another species. Mr. Page stated that after several years of treating Sandy Beach WMA lotus is still a recurring issue, but progress can be seen. Mr. Page stated that hydrilla had not shown significant re-growth in the Hatchery WMA during 2015. Treatments in the Hatchery WMA were limited to cutgrass, primrose, and CFH. Mr. McCord asked Mr. Page what DNR's long term plan for hydrilla management within Potato Creek WMA. Mr. Page stated that the long term plan is to restore the gate connecting Potato Creek with Lake Marion and stock triploid grass carp for hydrilla control. Mr. Page stated that the problem in the past has been failure of the gate due to flood debris. Mr. Davis stated that if the hydrilla is removed before the gate is replaced it will eliminate the issue of flood debris (hydrilla) causing a failure of the gate. Mr. McCord stated that during Santee Cooper's years of managing Potato Creek WMA grass carp were used to control hydrilla. Mr. McCord stated that since Potato Creek management was taken over by SCDNR, Santee Cooper was told that stocking grass carp in Potato Creek was not allowed. Mr. McCord stated that up until 2010 when SCDNR took over management of Potato Creek it was basically completely clear of hydrilla and being managed for native vegetation. Mr. McCord stated that Potato Creek is now 100% covered in hydrilla. Mr. Page stated that Potato Creek WMA is not currently covered in

hydrilla. Mr. McCord stated that although the hydrilla has been treated, it is not gone. Mr. McCord stated that during the recent flooding much of the hydrilla in Potato Creek was moved into Lake Marion. Mr. McCord stated that his concern with hydrilla re-growth in Potato Creek was that potential for introduction into Lake Marion during periods of high water flow. Mr. McCord stated that the council should note the amount of money required to treat hydrilla once it was re-established in Potato Creek. Mr. Page stated that SCDNR spent \$55,000 treating Potato Creek hydrilla this year. Mr. Page stated that DNR staff tries to time treatments of hydrilla so that two years of control can be obtained with one treatment. He stated that if the treatment site is allowed to recover for too much time, the site can quickly revert square one. Mr. Page stated that the timing during the past couple of years did not work out correctly. Mr. Page stated that because the timing did not work out, DNR staff had to use contact herbicides to burn the hydrilla back. Mr. McCord stated that while copper and diquat contact herbicides are known to be an effective burn back treatment, they are not an effective long term control. Mr. McCord stated that the verbal agreement with DNR for DNR to manage the SC WMA's was contingent on DNR staff managing the WMA's as SC staff had in the past. Mr. McCord stated that the agreement needed to be revisited by SC and DNR staff. Mr. McCord stated that SC staff could not allow impoundments directly feeding the SC Lakes to become filled with hydrilla. Mr. McCord restated the need for repair of the gate and introduction of sterile grass carp. Mr. Page suggested a meeting between SCDNR staff and SC staff in order to negotiate the terms of the agreement. Mr. Page stated that the discussion was not an issue for the council to deal with at the current time. Mr. Page stated that WMA treatments are mostly controlled by what the individual managers need or want. Mr. McCord stated that he feels the discussion is one that needs to involve the council because it directly impacts Santee Cooper's management of aquatic plants on the Santee Cooper Lakes. Mr. Page suggested that Mr. McCord wait to discuss the matter when the meeting arrives at "new items".

Mr. Page turned the council's attention to the second handout which was titled "cooperative invasive control operations with DNR". Mr. Page stated that this group of treatments includes DNR managed lands on the Santee Cooper Lakes as well as others managed by DNR. Mr. Page overviewed the treatment sites included and the species that were targeted. Mr. Page clarified that the term miscellaneous is used when several species were treated. Mr. Page clarified that some recent treatments were not yet represented on the table. He specified a recent hyacinth treatment at Samworth WMA which was not represented. Mr. Page pointed out treatments at non-DNR properties such as Whitehall Plantation to assist DNR's wood stork program. Mr. Page stated that wood stork populations have been on the rise in South Carolina in thanks to management of wood stork rookery areas. Mr. Page stated that the acreage totaled nearly 2,000 acres at a cost of approximately \$314,000. Mr. Page stated that much of the \$314,000 were funds provided by each individual property's account or program grants. Mr. Page asked for

any questions from the council. No questions were brought before the council. Mr. Page stated that some properties were treated with herbicides which were paid for by the managers. On these sites, ANS staff provided personnel, equipment, and expertise. Mr. Page stated that such cases are not represented on paper but are important to note. Mr. Page overviewed the amounts spent on each individual target species. Mr. Perry asked if SCDNR pays for treatments on Back River Reservoir. Mr. Page responded that DNR does not pay for everything on Back River Reservoir. He stated that it is cost shared with Charleston CPW and SCE&G. Mr. Page stated that Goose Creek Reservoir is also cost shared with CPW. Mr. Page briefly overviewed the additional work done on the Edisto River on Phragmites. Mr. Page stated that there is a concern the Edisto Phragmites may be native and is in need of genetic testing. Mr. Page stated that the average cost was also broken down on the page for Santee Cooper WMA's. The average cost was \$241.26 per acre. Mr. Page stated that Mr. McCord stated a good point earlier when he discussed hydrilla and its ability to re-grow. Mr. McCord stated that Potato Creek acts like a microcosm of the Santee Cooper Lakes. He continued to say that the only way to completely control hydrilla is through biological and chemical control. Mr. Page stated that he was finished with his overview of the annual SCDNR report.

Mr. Page gave the floor to Mr. McCord for a discussion of the 2015 Santee Cooper treatment overview. Mr. McCord gave the floor to Mr. Davis for the Annual Review. Mr. Davis began by explaining that the Santee Cooper data is broken down based on each Lake and individual impoundments. He stated that the data is further broken down in submersed, emergent, and floating plant species. Mr. Davis stated that over 95% of the money spent for treatments were on Lake Marion and the majority of those treatments were on area of Lake Marion above I-95. Mr. Davis stated that the two major target species consisted of Crested Floating Heart (CFH) and Hyacinth. Mr. Davis stated that the impoundments did not contain much in the way of problem plant species other than algae and a few emergents. Mr. Davis stated that Lake Moultrie did not have many problems but that the CFH was now on Lake Moultrie as well. Mr. Davis stated that SC had a large aerial treatment scheduled for October but the flood event prevented them from carrying the plan out. Mr. Davis stated that S.C. had been working with the University of Florida to conduct a study using Aquathol K to treat CFH. He stated they treated a one hundred acre plot in August and saw great results. He stated that they planned to expand the treatment site to 1000 acres but were delayed by the flood waters. Mr. Davis stated that SC's acreage was down a little bit from last year. Mr. Davis directed the council's attention to a tab showing total amounts spent to control each individual target species. He stated that CFH accounted for the majority of the budgetary expenses at around \$300-\$400 per acre. Mr. Davis stated that the flood waters caused the Lake levels to rise four feet over about ten days, resulting in very turbid waters. Mr. Davis stated that treatment sites for CFH were prioritized with those effecting lake usage at top priority.

Mr. Davis overviewed the impoundments, stating that the Taw Caw impoundment had a lot of smartweed. He stated that smartweed is not treated unless it is impacting access. He stated that Taw Caw impoundment had seven acres of hydrilla, and the others had none. Dean Swamp impoundment was predominantly Lyngbya. Mr. McCord stated that the one acre of treatment for smartweed shown was in an area where the plants were effecting boating access for homeowners. Mr. Davis stated that the treatment needed to be updated to read "Aquasweep" as opposed to "Aquathol". Church Branch impoundment was not in need of any major treatment. Mr. Davis stated that Fountain Lake showed an emergence of milfoil, primrose, and CFH. Mr. Davis stated that a total of 64 acres of treatment at a cost of approximately \$11,000 was spent on the SC impoundments.

Mr. McCord stated that the water levels at the Lakes were still high as of date. He said that when the council had scheduled a tour of the Lakes, the drought had caused many of the key areas to become dry. He then stated that shortly after the drought the flood waters came through resulting in high water levels and spilling. Mr. McCord stated that due to the flood waters and turbidity no aerial survey was conducted, and boat surveys were very limited. Mr. McCord stated that due to a lack of surveying he does not have any acreage numbers for submersed aquatic vegetation (SAV). Mr. McCord stated that hydrilla was found all around the lakes during the drought, in areas where it had previously been growing. He stated that hydrilla growth was taking place along the shoreline in areas where the water depth would normally be around four feet deep. He stated they also found growth around the Jack's Creek area. He stated hydrilla was also found near the Potato Creek area. On Lake Moultrie hydrilla was seen near Black's Camp and Angel's Landing, and on the North and West sides of the lake in multiple coves. Mr. McCord stated that as the lake levels dropped they exposed areas of growth. Mr. McCord summarized by stating that hydrilla was found in several areas around both Lakes in small amounts.

Mr. McCord stated that a similar level of hydrilla growth was noted in 2006, several years before the large scale stocking took place. Mr. McCord voiced his concern that the decision could be made to delay stocking of grass carp, resulting in a repeat of history. Mr. Davis stated that Taw Caw impoundment is open to the Lake system, and that SC staff has noted evidence of grass carp feeding in the area. Mr. Davis stated the same case was true in Dean Swamp. Mr. McCord clarified that carp were stocked in Dean Swamp around 2006. He stated that they were never stocked in Taw Caw due to the concern they would enter the main Lake and affect the numbers of the Lake population.

Mr. Page stated that 2015 was demanding of science based programs because of the issues it caused with surveying. He stated that on Lake Murray hundreds of grass carp were killed when they were pulled through the spill gates and swept down the

Saluda River. Mr. Page stated that the numbers of carp now present in the Lake systems would have to be roughly estimated because of the unknown mortality caused by the flood. Mr. Page stated that the council would have to rely on institutional knowledge while moving forward with management decisions. Mr. Page stressed the importance of relying on past information as opposed to "gut instincts" when making future management decisions. Mr. Page stated that decisions need to be made to avoid large scale stocking like has been needed in the past. He said he believes that early stocking of smaller numbers of carp would be less detrimental in the long term to the Lake system. Mr. McCord stated that he would like to add to Mr. Page's comments and promote a proactive approach to hydrilla control through carp stocking. Mr. McCord stated that all of the financial burden of stocking the SC Lakes lies on Santee Cooper alone. Mr. McCord stated that he feels the council is being swayed by political and personal interest groups in lieu of making scientifically based decisions.

Mr. Page stated that he would like to report on the 2015 season. Clemson University now has the authority to list species instead of the Department of Agriculture. Clemson created an invasive species advisory committee which mainly deals with terrestrial species. Mr. Page stated that he will serve as a member on the advisory committee to represent the aquatic invasive species. Mr. Page stated that his recommendation was to list Crested Floating Heart. Mr. Page stated that the recommendation will move straight to legislature without the need for attachment to any other item. Mr. Page stated that one of the members recommended de-listing Phragmites, and Mr. Page educated them as to why that would be a poor decision. Mrs. Lognion stated that Mr. Page's participation in the advisory committee is greatly appreciated by Clemson staff. Mr. Page overviewed the organizations which are represented by the advisory committee. Mr. Page expressed his approval that Clemson will now be solely responsible for listing/de-listing of species. Mr. McCord state that he would like everyone to keep in mind that the listing of species has been partially the responsibility of Clemson University for some time. He expressed his frustration with the amount of time at which he has contacted Clemson concerning the listing of CFH without the discussions ending in a new listing for CFH. Mr. McCord expressed his concern that if the listing of CFH is delayed for many more years the spread would be too great for listing to make any difference. Mr. Page stated that the advisory committee was created by legislative action, specifically for the purpose of maintaining, adding, and subtracting species from the list. Mr. Page explained that the committee is totally different from what it has been in the past. Mrs. Lognion explained that the decision for listing or de-listing was chaired delayed in the past by an individual and that it will now be a joint decision. Mr. McCord offered to give the committee a tour of the Lakes so that he could personally show them the nature of CFH and why he believes it is so important to get the species listed. Mr. Page stated that the issue of listing CFH does not matter at this point. He indicated that SC staff will continue to treat CFH whether or not it becomes listed. Mr. McCord stated

that he completely disagrees with Mr. Page's statement. Mr. McCord stated that the purpose of listing plant species as legal vs. illegal is to create a situation in which it is illegal for any individual to move the illegal plant from place to place. Mr. McCord stated that listing will stop some individuals from moving CFH. He stated that if listing is irrelevant, then the State should not have an illegal plants list. Mr. McCord voiced his frustration that the council seems to believe that CFH, present in SC since n 2005, is not of great concern. Mr. McCord stated that he feels SC is being singled out as unimportant because he feels that the council has the attitude that SC staff will handle its aquatic plant issues on its Lakes. Mr. Page stated that the committee had the ability to create an emergency exemption for a species. An emergency exemption would make it illegal for anyone to move, sell, or possession said species under penalty of law. Mr. Page stated that the committee did not feel it was necessary to create an emergency exemption for CFH. He stated that the committee is also responsible for proactive prevention by creating watch lists for species which are likely to find their way in S.C. waters. Mrs. Lognion stated that she feels AFIS's involvement in the committee will give it more power. Mr. Page clarified that although AFIS is involved, plants which are not federally listed will be out of the committee's purview for action. Mrs. Lognion stated that she will speak to Clemson staff in order to create expedited action. Mr. McCord stated that he not be pleased until action is taken.

Mr. Perry stated that he would like to hear from Mr. Lamprecht pertaining to his 2015 data. Mr. Page stated that he would like to hear from Mr. Lamprecht during the "new items" section. Mr. Perry voiced his approval of Mr. Page's recommendation. Mr. McCord stated that he was in favor of hearing what Mr. Lamprecht has to present. Mr. McCord stated that he had yet to see any of Mr. Lamprecht data. Mr. Page stated that he would allow Mr. Lamprecht to present his findings at this time.

Mr. Lamprecht stated that he was prepared to conduct grass carp collection last year with the help of volunteer bowfishing collectors. Mr. Lamprecht stated that although volunteers had voiced their willingness to aid in collection by bowfishing, when the season arrived none of the volunteers held true to their word. Mr. Lamprecht stated that there were no grass carp collected via archery collection methods. Mr. Lamprecht stated that their efforts to collect grass carp through electrofishing were successful until water temperatures reached 70 degrees F, at which point collection became too difficult and inefficient. Mr. Lamprecht summarized that he had no grass carp collection data to present.

Mr. Lamprecht stated that he would like to "mirror" what Mr. McCord had stated pertaining to re-growth of hydrilla around the lake. He stated that a viable tuber base remained present and when provided with favorable conditions growth was occurring. He stated that protection was another key factor pertaining to re-growth of hydrilla from tubers. Mr. Lamprecht stated that he noted re-growth of hydrilla in areas with large

amounts of boat traffic and shallow water areas which were difficult for carp to enter. Mr. Lamprecht stated that around Angel's Landing in approximately three inches of water he noted growth of hydrilla sprigs. Mr. Lamprecht stated that in protected deeper areas of the Lake, he has not seen any significant re-growth of hydrilla. He stated that any place where hydrilla can be found growing to the surface of the water will be very shallow areas or areas with high boating traffic. Mr. Lamprecht stated that he agreed with Mr. McCord's statement that the potential for re-growth of hydrilla still exists. Mr. Lamprecht cited an instance in which he was surveying a cove on Lake Moultrie, near Cross in which he saw 13 grass carp in a shallow cove which had recently began to fill with water due to the October flood waters. Mr. Lamprecht stated that the carp were feeding on recently flooded vegetation. He drew the conclusion that the fish were looking for plants to feed on because of a lack of other food sources. He cited that the vegetation on which they were feeding consisted of mainly terrestrial species which do not reside on the list of most preferred food species for carp. Mr. Lamprecht stated that his observations indicated that the carp population in the SC Lakes were actively feeding. He stated that he believes that estimation models used for the SC Lakes are swayed to promote over stocking. Mr. Lamprecht stated that he did not believe that population levels compared to hydrilla acreage was anywhere near levels present during 2006. Mr. Lamprecht stated that he did not advocate waiting until levels reached those of 2006 before taking action. He stated that "when we cross that line" we should proceed with maintenance stocking, but that at the current time there is no indication that the system is at the point at which stocking is needed. Mr. Lamprecht stated that the council should wait until significant re-growth is noted before stocking is administered. He stated that we should rely on the model we have to monitor carp populations. He stated that if at any point significant re-growth is noted, then we should take action to stock carp.

Mr. McCord requested that he may please respond to Mr. Lamprecht's comments. Mr. McCord cited Mr. Lamprecht's observation of thirteen grass carp in one cove and stated that in all of his time on the Lakes in 2015 he saw very few grass carp. He stated that he has covered a tremendous amount of the Lake and has seen what he estimates to be less than ten total grass carp. Mr. McCord stated that there may be coves with several grass carp present. Mr. McCord stated that hydrilla growth was noted during the drought during low lake levels in depths of water ranging from 2-0 feet of water. Mr. McCord stated that the wide spread growth was not new growth which had been inaccessible to grass carp during mean Lake levels. He stated the vegetation had been present, inundated, and accessible to grass carp for some time. Mr. McCord called on Mr. Morrison for his comments as to the condition of the SC Lakes.

Mr. Morrison stated that his observations had indicated the importance of low lake level situations as they pertain to growth of SAV. Mr. Morrison stated that for a period of two years the lake levels remained high and the water remained turbid. He stated that during this two year period little to no SAV growth was noted. He stated that

during the end of last year light transmittance levels allowed for growth of eel grass and other species. Mr. Morrison stated that shortly after the areas with the largest eel grass populations became infested with hydrilla. Mr. Morrison stated that the conditions on the Lakes have been unusual for the past 3 years, but that SC Staff are starting to see hydrilla re-growth occurring in shallow areas.

Mr. McCord stated that they have seen this situation historically. Mr. McCord stated that the driving factor for SAV growth is light penetration to the substrate. He stated that during periods of high water SAV is lost. He stated that high water has a particular impact on native species of SAV due to its low light penetration qualities. Mr. McCord likened the situation to shading of terrestrial species. He stated that all plants when shaded completely will not grow and shade tolerance varies from species to species. Mr. McCord reiterated his statements of hydrilla growth and lack of evidence of grass carp feeding. He restated Mr. Morrison's observation of eel grass (*Vallisneria*) during the time of low flows and low turbidity. Mr. McCord stated that all of these cases replicate what has occurred historically. Mr. McCord stated that he was in agreement with Mr. Lamprecht's statement that neither hydrilla nor carp populations are at the point at which they were in 2006. He stated that they do not wish to arrive at the situation they were in during 2006 before taking action. Mr. McCord stated that their target is to keep what happened in 2006 from happening again. Mr. McCord stated the need for an action trigger before the populations reach those of 2006 levels. Mr. Page stated that he would like to move to the committee reports at this time. Mr. Lamprecht requested that he be allowed time to respond to Mr. McCord's comments. Mr. Page denied Mr. Lamprecht's request. Mr. Page stated that further discussion would be allowed later in the meeting or after the meeting had adjourned.

Mr. Page called on Mrs. Eidson for committee reports. Mrs. Eidson stated that she had been working with dam related issues caused by the historic flooding. She stated that she did have a few comments to make known. Mrs. Eidson stated that at the last meeting there was a discussion of the council's by-laws and how the council was first structured. She stated that when Land and Water joined the SCDNR, the equal division amongst agencies that constitute the council was thrown off balance. Mrs. Eidson stated that she spoke with their attorney and arrived at an answer concerning statutes and bylaws visited at the 119th meeting. Her attorney informed her that a statute will overrule bylaws. Mrs. Eidson asked several questions in hope of finding a method of balancing the council. She first asked if the bylaw could be changed so that a simple majority vote for approving the plan would pass. Next, she asked if the council could implement a quorum of nine members in order to vote on the plan. Finally, she asked if the chair member could be removed from the voting quorum. Her attorney informed her that any of those changes could be made, but that an appeal could be based on the statute. Mrs. Eidson clarified that the statute essentially states two items: the chair member is a voting member and in

the event of having a less than 2/3 majority vote the decision is diverted to SCDNR. Mrs. Eidson stated that her attorney's opinion was that the statute was written in favor of SCDNR. Her counselor then stated his concern that if the council were to take legislative action to amend the bylaws or statute, then the legislatures may make the decision that no council is needed. Mrs. Eidson stated that the council should take this concern into consideration. Mrs. Eidson stated that the last meeting was the first she had seen in her many years on the council where members abstained from voting. Mrs. Eidson indicated that she felt these members abstained in order to create a block vote for SCDNR. Mrs. Eidson stated that if SCDNR is able to block vote, then the council only serves for the purpose of advising. Mrs. Eidson stated that if she were to think of the council in a purely advisory sense, that the purpose was still valid in her opinion. Mrs. Eidson stated her concerns that if restructuring is revisited the council would be dissolved. Mrs. Eidson stated that she has seen SCDNR members voting against one another and that she felt that was a healthy opposition of opinion. She stated that when SCDNR members begin abstaining it "gave her pause".

Mr. McCord stated that his opinion is that SCDNR division members could be influenced due to the fact that they all reside under one agency. Mr. McCord stated that he believe differing votes between SCDNR members at the 118th meeting compared to abstain votes at the 119th meeting regarding the same issue indicates biased influence. Mr. McCord stated that if the council is indeed influenced by outside means, that he questions the significance of Santee Cooper's involvement in the South Carolina Aquatic Plant Management Council (SCAPMC) or the South Carolina Aquatic Plant Management Program. Mrs. Eidson stated that she understands Mr. McCord's concerns. Mrs. Eidson stated that she shared the same concerns but felt that issues which could be blocked by DNR would have to be argued effectively in order to sway the voting members. Mr. McCord continued by stating his history with the council and with the South Carolina Aquatic Plant Management Society (SCAPMS) before the council was formed showed him that the formation of the council was specifically to keep legislature and personal interested groups from running the aquatic plant management control operations in South Carolina. He stated that the council was created so that several agencies were responsible and represented from all parts of the state. Mr. McCord stated that in 2006 when Miller White retired from SCDNR, Scott Lamprecht was named as his replacement for the Freshwater Fisheries section. He stated that one meeting later Scott Lamprecht had been replaced. He stated that all members of the council up until that point were people actively engaged in their field management programs as opposed to executive office. Mr. McCord stated that Mr. Lamprecht was replaced by Mr. Perry and that SCDNR no longer has a council member who represents the freshwater fisheries division. Mr. Perry stated that Mr. McCord was incorrect in his assessment as he serves as a member for Mrs. Cope. Mr. McCord stated that Mr. Perry's seat no longer represents the freshwater fisheries section of DNR. Mr. Perry stated that he sits for Mrs. Cope as a representative

of Wildlife and Freshwater Fisheries. Mr. McCord stated that Mr. Perry works in the executive office as SCDNR and is therefore not a representative of Freshwater Fisheries. Mr. Perry stated that while he works in the executive office, his seat on the council is as a representative of Wildlife and Freshwater Fisheries at the request of Mrs. Cope. Mr. McCord stated his concern with Mr. Perry serving because the bylaws read "a member of the Freshwater Fisheries" division. Mr. Perry stated that he was appointed by Breck Carmichael during his term as deputy director of Wildlife and Freshwater Fisheries. He stated that when Mrs. Cope took over Mr. Carmichael's position, he asked her if she would like for him to continue serving on the APMC at her pleasure. He stated that Mrs. Cope indicated in favor of him remaining the representing member. Mrs. Cope stated that the purpose of having Mr. Perry as her representative member was due to Mr. Perry's knowledge of Freshwater Fisheries, Wildlife, and licensing. Mr. McCord stated that he felt that Mr. Perry's involvement with the council coincided with what appeared to him to be influence by special interest and political forces outside of the council. Mr. McCord stated that he would like an explanation of how the status of the council in 2006 changed to where it is during the current time in reference to his feeling of bias by special interest and political entities. Mr. Perry inquired as to how Mr. McCord came to the conclusion that the council was being influenced by special interest groups. Mr. McCord stated that he came to that conclusion based on comments made by Representative Lowe. Mrs. Eidson intervened to state that she had spoken with Representative Lowe. Mrs. Eidson stated that she believes Mr. Lowe contacted her based on her past votes in opposition to grass carp stocking. She said that she believes he viewed her as an ally. She stated that her conversation with Representative Lowe indicated he felt the need for more member opposition to stocking. Mrs. Eidson explained that the council has always conducted healthy discussions of issues in order to reach an agreed upon point. Mrs. Eidson told Mr. Lowe that members of the council representing OCRM and the Governor's Office who choose not to attend meetings results in an unbalanced council in favor of SCDNR. Mr. Lowe reportedly asked Mrs. Eidson if there was a need to revisit the statute. Mrs. Eidson asked Mr. Lowe as to the nature of his question. Mr. Lowe reportedly stated that he showed interest in leaning power of the council more toward the SCDNR. Mrs. Eidson stated her wish to allow the council to discuss the matter further before any action is taken to revisit the statute. Mrs. Eidson suggested that Mr. Lowe contact the Governor's Office and have their representative attend the meetings. Mr. Lowe reportedly responded that he would. Mrs. Eidson indicated that she would contact OCRM to encourage their member to attend. She stated that followed through and that the member planned to attend but retracted the day before. She indicated that the member stated that after speaking with a supervisor he was unsure if he was allowed to attend. She stated that they reported they would revisit to decide whether or not OCRM should serve as an active council member. Mrs. Eidson stated that she would encourage council members to send OCRM an email stating that not only is their chair secured by

statute but that they feel OCRM's representative is of great value to the council. Mrs. Eidson stated that she feels that Mr. Perry is a great resource to the council. She stated that she would like to encourage no more abstain votes. Mrs. Eidson stated that she feels every member should make a decision on each issue and inform the council of why they came to the decision. Mr. Page agreed with Mrs. Eidson that he would vote. Mrs. Eidson stressed the importance of a ten member council in order to prevent bias and promote scientifically based decisions.

Mr. Page stated that he spoke with Representative Lowe as well. He stated that Mr. Lowe showed an interest in adding citizens to the council. Mr. Page stated that Mr. Lowe expressed an interest in residing on the council. Mrs. Eidson stated that her conversation with Mr. Lowe included many comments by Mr. Lowe concerning the "benefits of hydrilla". Mrs. Eidson stated that she believed Mr. Lowe understands that hydrilla cannot be controlled but must be managed. She stated that she encouraged Mr. Lowe to shy away from using the phrase "benefits of hydrilla" because of its polarizing nature among aquatic plant managers. Mr. McCord stated that Mr. Lowe's use of the phrase "benefits of hydrilla" does not surprise him. Mrs. Eidson stated that she believes that Mr. Lowe understands hydrilla management but that his phrasing could be construed in a negative manner. Mr. McCord stated that he would like for Mrs. Eidson or Mr. Lowe to explain to him how Mr. Lowe understands hydrilla management other than through "a limited experience and a collection of his own anecdotal comments". Mrs. Eidson stated that she believes he is thinking of management of the SC Lakes in terms of a homeowner and hunter who has utilized the lake for decades.

Mr. McCord stated that the state has thousands of concerned members of the public with differing opinions. He stated that just because Mr. Lowe is a member of a legislative body does not increase his understanding of the issue. Mr. McCord stated that he does not remember the date of the last amendment to the statute but he remembers that in the previous statute the Water Resources division was responsible in the case of a failure to obtain a 2/3 majority. Mr. McCord stated that he does not understand how the statute was amended to give SCDNR authority as a whole as opposed to Land Water, and Conservation division. He stated his concern of who would be responsible for making the final decision in terms of leaders within DNR who may or may not have heard the discussions during the APMC meetings. Mr. McCord stated that his concern lies in the chance that leaders within DNR will be tasked with making the final decision on stocking without input or advisement from the entire council. Mr. McCord stated that many of the comments included in the plan referred to Mr. Lamprecht's study, as well as "the agreement" and "how many acres of SAV are supposed to be in the system". Mr. McCord stated that his concern lies in the possibility that uninformed members with a misguided understanding of the SC and DNR agreement will be relied upon to make the final management decision. Mr. Perry stated that he would like to make sure that Mr.

McCord understands one thing, stating "you are wrong". Mr. McCord asked Mr. Perry for an explanation. Mr. Perry stated that Mr. McCord was wrong in his idea of how the decision was made. Mr. Perry stated that representatives present during council meetings including himself and Mrs. Cope as well as others including Breck Carmichael, explained the information "dispassionately" to Director Taylor. Director Taylor arrived at a decision and "dispassionately" presented his recommendation to the SCDNR Board of Directors. Mr. Perry explained that the information presented to Director Taylor was the same scientific information that was reviewed by the council. Mr. Perry assured Mr. McCord that no discussion was had concerning Representative Lowe or any other constituency. Mr. McCord stated that the information presented to the council was in part disputed as scientifically flawed. Mr. McCord asked Mr. Perry if the science based information included Mr. Lamprecht's December grass carp collection data. Mr. Perry confirmed that it did include Mr. Lamprecht's data. Mr. McCord disputed the scientific validation of Mr. Lamprecht's data. Mr. Perry stated that he respectfully disagrees with Mr. McCord that Mr. Lamprecht's data is not valid. Mr. McCord called for a peer review study to be conducted on Mr. Lamprecht's data. Mr. Perry stated that they made decide to peer review the data in the future, but that at the time it represented the best information available.

Mr. Page turned the attention of the council back to committee section of the agenda. He stated that he had convened with Director Taylor to send a letter to OCRM and the Governor's Office concerning their representing council members. Mr. Page indicated that no reply was received from OCRM. He stated that a reply was received from the Governor's Office indicating that they have no environmental employees on staff. Mr. Page stated that the Governor's Office has two members which are available to attend meetings and that one of them would be at the next meeting. Mr. Page stated that no representative was present at the current meeting, but he hopes they will be present at future meetings.

Mr. Page stated that an ad hock committee had been formed to revisit the agreement between SCDNR and Santee Cooper concerning the agreement for goal acreage of beneficial aquatic plant species. Mr. Page stated that Mr. Perry was tasked to begin action on the topic. Mr. Perry stated the Mrs. Cope had some information to present on the topic. Mr. Perry stated there is a need to meet with SC staff to revisit the agreement in the near future. Mrs. Cope stated that she was still receiving comments from her staff members and would like to schedule the meeting at some time during January. Mr. McCord stated that he and his staff had many issues to discuss pertaining to the agreement and its referral in past discussions. Mr. Perry stated that he agreed that the meeting should occur before the end of January.

Mr. McCord stated that he recalls in the 119th meeting when SCDNR stated that they would utilized DNR staff members in order to act as additional survey members

pertaining to vegetation on the SC Lakes. Mr. McCord stated that comments to his staff concerning DNR staff member participation in such surveys concluded that many of the DNR staff present on the SC Lakes were unaware of any such survey. Mr. McCord stated that he believes it is paramount that DNR and SC staff cooperate in the future. Mr. McCord stated that he believes changes need to be discussed and made to the current agreement before it is renewed. Mrs. Cope stated that she would like to convene with SC staff to schedule a date for the meeting. Mrs. Eidson asked Mr. Perry if the agreement for additional survey measures had been officially discussed by the Board. Mr. Perry indicated that it had been discussed with Director Taylor but not officially with the Board. Mr. McCord stated that the level of involvement with the agreement was limited to a group of those people directly involved with aquatic plant management. Mr. McCord stated his concern that the involvement of those discussing the terms of the agreement is now being elevated to members of executive offices. Mr. McCord stated that he believes discussions should remain at the manager level at which they have been in the past, after which the agreement and agreed upon decision can be passed to executive members for approval. Mrs. Cope stated that her first action upon receiving the agreement was to send it out to managing members of her staff for recommendations. Mrs. Cope stated that she will be present at the meeting in order to educate herself on the issues. Mr. McCord stated that his executive staff have also been invited to attend the meeting to observe. Mr. Perry asked Mr. McCord as to the exact date in which the five year agreement will expire. Mr. McCord stated that the agreement is scheduled to expire in March of 2015. Mr. Perry stated that the last time the agreement was revisited it was discussed amongst many of the same staff at DNR and the decision was made to only change a few words. Mr. McCord stated that he believes that was correct.

Mr. McCord stated that part of the agreement lists periodic meeting between DNR and SC staff to discuss issues. Mr. McCord stated that he would like to stress the importance of conducting said meetings so that cooperation between groups is fully attained. Mr. McCord stated that he believes "on-going" cooperative efforts will decrease the amount of issues which have to be resolved by the council. Mr. Perry stated that he believes caution must also be used so that members of the council outside of DNR and SC do not feel ostracized from the discussion of important management issues. Mr. Perry stated that he feels it is important to not lead members of the council to believe that DNR and SC are conspiring to form decisions alone. Mr. Page stated that there were only a couple of instances in the past in which council members voiced concern that DNR and SC might have conspired without consulting the entire council.

Mr. Page stated that the agreement states that Santee Cooper and SCDNR will convene annually to discuss the Santee Cooper management plan. Mr. Page stated that after the meeting occurs the information is to be presented to the council. Mr. Page stated that while he believes discussions are an important part of council meetings, he will

enforce Robert's Rules of Order in the future. Mr. Page stated that any members who choose to not follow Robert's Rules will be asked to sit down or leave the meeting. Mr. Page voiced his disapproval of the lack of order seen at APMC meetings. Mr. Page stated that in future meetings he will place his vote. Mr. Page stated that he did not have an opinion last year as to either side of the vote. Mrs. Eidson stated that last year was an "odd" year. Mr. Page agreed with Mrs. Eidson. Mr. Page stated that he tries to let the council members, other than himself, make the decisions. Mr. Perry stated that in accordance with Robert's Rules the chairman is allowed to abstain from voting, even if a resulting tie defeats a motion. Mr. Page agreed with Mr. Perry's comment. Mr. McCord asked if the Robert's Rules overrule legislation. Mr. Page and other members clarified that Mr. Perry was simply stating that the Chairman is a voting member, capable but not required to vote. Mr. McCord stated that the council proved that no member is required to vote, as was proven at the 119th meeting. Mrs. Eidson stated that she agrees with Mr. Page's statement regarding a maintenance of order concerning debates. Mr. Page stated that he appreciates healthy discussion. Mr. McCord asked as to why Mr. Cribb decided to resign for his position as a council member. Mr. Perry stated that Mr. Cribb resigning from member status was a "DNR internal decision". Mr. McCord thanked Mr. Perry for his answer.

Mr. Page called for any preliminary 2016 recommendations. He noted that many of the issues that may fall into this category had already been discussed. Mr. Page stated that the only changes for the APMC annual plan other than the Santee Cooper section was to add a couple of State Lakes. Mr. Page also mentioned that he will be adding "Reservoir 1" directly above Lake Bowen. Mr. Page stated that Reservoir 1 has had an infestation of bladderwort and MIB's, resulting in taste and smell issues in the drinking water supply. Mr. Page stated that the MIB issues were being handled independently. Mr. Page stated that he was creating tables and reorganizing the plan so that it will be easier to read in the future. Mr. Page stated that the 2016 plan will be essentially the same as the 2015 plan with those exceptions mentioned earlier. Mr. Page stated that the law states that on the second portion of the Management Plan must be approved and modified annually. Mr. Page stated that he removed all of the water body maps from the plan to simplify its nature. Mr. Page stated that the NPDS permit was due to be renewed this year for the DNR. Mr. Page stated that he sent in the appropriate paper work and has not heard anything in response apart from a confirmation of receipt. Mrs. Lognion and Mrs. Eidson stated that the confirmation receipt should be all that Mr. Page should expect in response.

Mr. Page asked the council their opinion on the need for some of the tables and several years' worth of public comments in each annual plan. Mr. Perry and Mr. McCord stated that they felt only the current year's public comments should be included in the annual plan. Mr. Page called for any other items within the annual plan that members

would like to change or see presented in a different manner. Mr. McCord stated that he would like to suggest a recommendation. Mr. McCord searched the plan in order to find a passage discussing grass carp stocking which he would like to change. Mr. McCord stated that the plan states "triploid grass carp if needed to be released later in 2015 March through October." Mr. McCord stated that he read through the plan and saw no mention of Santee Cooper not being allowed to stock grass carp. He stated that if he had read the document more closely, then he would have tried to stock grass carp. Mr. McCord stated that no decision was made by the council that Santee Cooper would not be allowed to stock grass carp during 2015. Mr. McCord stated that previous minutes should indicate that SCDNR, not SCAPMC, made the final decision that Santee Cooper would not be allowed to stock grass carp during 2015. Mr. Page agreed with Mr. McCord that the statement that "the council with recommendations from SCDNR made the decision" needed to be changed. Mr. McCord asked Mr. Page if the council did indeed agree to the adaptive stocking plan. Mr. Page answered that they council had agreed to an adaptive stocking plan based on the monitoring of hydrilla for any significant increase. He stated that if any significant increase was noted, that stocking could be implemented in response. Mr. McCord clarified that the term adaptive stocking plan had also been used in reference to the plan to stock 6400 grass carp in the SC system. Mr. Page stated that that use of the adaptive plan was in response to an effort to return to "maintenance stocking levels". Mr. Page stated that he agrees that the terminology is in need of clarification. Mrs. Eidson stated that she does not have any issue with the terminology of involved in Mr. McCord's second objection. Mrs. Eidson indicated that she did feel the need to change the wording of the first objection to clearly stated that the council did not reach a 2/3 majority and the decision was deferred to SCDNR. Mr. Perry stated that he felt that the first statement regarding the council's decision read correctly. Mr. McCord stated that he felt that it needed to be clarified that no grass carp stocking was to be allowed during 2015. Mrs. Eidson disagreed stating the as she recalled that decision was never reached. Her understanding was that continued monitoring for significant growth of hydrilla would dictate whether stocking would occur in 2015. Mrs. Eidson asked Mr. Perry if her recollection was correct. Mr. Perry stated that the plan was to monitor throughout the growing season for regrowth of hydrilla. He stated that if any grow indicated a potential issue, then the council would reconvene to consider stocking as an adaptive management strategy. Mr. McCord stated that while all of those things were stated, the final decision which was deferred to SCDNR was whether or not to stock grass carp in 2015. He stated that the decision was made to not stock grass carp but was never included in the plan. Mr. Page stated that the plan needs to read so that it is clear that the council did not reach a 2/3 majority so the decision was deferred to SCDNR. SCDNR chose to proceed with an adaptive management plan. Mr. Page stressed the need for communication between SCDNR and Santee Cooper before meetings so that such issues can be resolved and presented to the council for review.

Mr. McCord stated that he would like to stress the need for council members to become familiar with the Santee Cooper system. He stated that the Santee Cooper system has been responsible for the vast majority of issues with which the council has had to deal with in the past. Mr. Page stated that as a section of the plan, the Santee Cooper Lakes section is the most debated and discussed section within the plan. Mr. McCord stated that he wished to see more interest in opportunities for field visits and educational sessions on the Santee Cooper Lakes. Mrs. Eidson fielded a comment that she might be responsible for the presence of the OCRM representative by stating that it was never her responsibility to make them attend nor is it her responsibility to do so now. Mr. Page stated that OCRM had not responded to his correspondence.

Mr. Page called for any new items to be brought before the council. Mr. McCord stated that he would like to discuss the reimbursement (cost share) situation between SCDNR and Santee Cooper. Mr. Page stated that the reason Santee Cooper does not receive cost share from SCDNR is that state law state that in order one state agency to give funds to another state agency they have to justify why they can do the job at less cost than the other. Mr. Page stated that he cannot justify that Santee Cooper can conduct work at a price less than that of SCDNR's state contract. Mr. Page stated that he has filled out the paperwork to discover that he cannot justify the reimbursement and can therefore not legally give Santee Cooper more than \$25,000. Mr. McCord stated that zero money is currently given to Santee Cooper. Mr. Page stated that he is allowed to conduct work for Mr. McCord for a total of approximately \$30,000 to \$60,000 equivalent. Mr. McCord stated that he does not understand how the SCDNR provided a cost share in the past if the law has always been in place. Mr. Page stated that in the past Santee Cooper was able to conduct work for SCDNR at a rate less than that of SCDNR.

Mr. Perry stated that outside discussions with Santee Cooper management have led to an agreement to discuss cost share amongst executive staff of both agencies. Mr. Perry stated that the discussion should be carried out at a level above that of the council. Mr. McCord stated that he agreed with that discussion. Mr. McCord stated that statute states that one of the purposes of the council is to administer funds. Mr. McCord stated that to say that the discussion was not one that needed to be discussed by the council was ridiculous. Mr. Perry stated that the only agencies providing funds for the operations are Santee Cooper and DNR. He stated that he believed the discussion should remain between the two agencies and that the council should be informed of a decision at a later date. Mr. McCord restated that appropriation of funds is a core function of the council. Mr. McCord and Mr. Perry agreed to delay the discussion of reimbursement until the next meeting.

Mr. Page called for other new items and none were brought before the council. Mr. Page moved to the calendar item of the agenda. Mr. Page suggested a council meeting in late January to allow for SC and DNR to conduct their appropriate meetings

before hand. Mr. Page called for input on the dates for the next council meeting. Discussion was had and the council decided to meet on the 20th of January, 2016. Mr. Page stated that the meeting would be held at predetermined location. Mrs. Lognion moved that the 120th meeting of the APMC be adjourned. Mrs. Eidson seconded Mrs. Lognion's motion. Mr. Page called for discussion and Mr. McCord recommended a couple of restaurants. The 120th meeting of the APMC adjourned at 13:25.