

**MEETING OF THE NORTH CAROLINA
ENVIRONMENTAL MANAGEMENT COMMISSION**

**Raleigh, North Carolina
May 9, 2013
Minutes**

The North Carolina Environmental Management Commission met in the Ground Floor Hearing Room of the Archdale Building, 512 North Salisbury Street, Raleigh, North Carolina. Chairman, Stephen T. Smith presided. The following persons attended for all or part of the meeting.

COMMISSION MEMBERS:

Christopher J. Ayers	William L. Hall	Kevin Martin	Dr. Charles H. Peterson
Yvonne C. Bailey	Benne C. Hutson	Jeff Morse	Amy E. Pickle
Marvin S. Cavanaugh	Dr. Ernest W. Larkin	Mayor Darryl D. Moss	Clyde "Butch" Smith, Jr.
Tom Ellis	Steve P. Keen	Dr. David Peden	Stephen Smith
			Steve W. Tedder

DIVISION OF WATER QUALITY:

Tom Belnick	Karen Higgins	Jeff Manning	Jay Sauber
Ted Bush	Steve Kaasa	Susan Massengale	Kathy Stecker
Kevin Bowden	Evan Kane	Matt Matthews	Lois Thomas
Janice Bownes	Cyndi Karoly	Cam McNutt	Julie Ventalaro
Connie Brower	Elizabeth Kountis	Sarah Nienow	Chuck Wakild
Amy Chapman	Gary Kreiser	Robert Patterson	Debra Watts
Linda Culpepper	Keith Larick	Ken Pickle	
Richard Gannon	Annette Lucas	Diane Reid	

ATTORNEY GENERAL'S OFFICE:

Frank Crawley

DIVISION OF AIR QUALITY:

Sheila Holman
Joelle Burlison
Patrick Knowlson
Michael Pjetraj
Angela Terry

DIVISION OF WATER RESOURCES:

Tom Reeder
Tom Fransen
Sarah Young

I. Preliminary Matters

(Chairman Smith called the meeting of the North Carolina Environmental Management Commission to order at 9:05 a.m.)

Before we begin with our agenda I want to say a couple of things. First of all as some of you may know, under the current statutes, five of our presently sitting members' terms expire on June 30, 2013. That is Mr. Martin, Dr. Peterson, Mayor Moss, Dr. Peden and Dr. Larkin. Those five and in addition all six members who are General Assembly appointees, including Mr. Butch Smith, their terms of office expire. So that is eleven members under the present statute whose terms of office expire. We probably ought to acknowledge that with the coming of House Bill 1011 which is the prodigy of Senate Bill 10. It's depending on whether or not you're a betting man, it's a fairly good chance that all of our terms will expire on June 30th. Some of us may or may not be reappointed. But I would be remiss if I did not point out the exceptional service of a few people. Dr. Peterson is completing his 24th year on the Environmental Management Commission. Ms. Deerhake is completing her 18th year. Mr. Martin is completing 11 years and Dr. Larkin, 12 if you consider six on the EMC and 6 immediately preceding that on the Coastal Resources Commission. This is a statewide body, statewide authority and to the extent I, as the Chairman of a body with statewide authority can speak for the people of North Carolina. I say thank you for your exceptional service. North Carolina is a healthier, cleaner, prettier and more economically viable place because of your work, and it is much appreciated.

With that, let's move to consideration of our minutes of the March 14, 2013 meeting. Are there any amendments or edits?

Mayor Moss: Mr. Chair, did you forget your mandate?

Chairman Smith: I did. Mayor Moss reminds me that I should begin this meeting with a request whether any member knows of a conflict of interest or the appearance of a conflict of interest, if so, please signify that now or if you become aware of it as the meeting unfolds, let us know at that time.

Ms. Pickle: Mr. Chairman I will be recusing myself from action item #1.

Chairman Smith: Thank you. Any others? Then we move to the minutes.

(Mr. Tedder: made a motion to approve the minutes. Second by Mayor Moss. None opposed and the motion passed unanimously.)

Chairman Smith: We will move to our action items. Note that Dr. Peden has recused himself.

II. Action Items

13-13 Request for Adoption of Hearing Officers' Recommendations for Modification of Charlotte Mecklenburg Utilities Department's Interbasin Transfer Certificate

Chairman Smith: I will point out that Ms. Pickle has recused herself and will not participate.

Summary (Toya Ogallo): As Chairman Smith stated this morning I'll be presenting the hearing officers' recommendations for Charlotte Mecklenburg Utilities request from modification of its interbasin transfer certificate. Charlotte Mecklenburg Utilities provides water service to Mecklenburg County and has an interbasin transfer due to its two intakes in the Catawba River Basin, one in Lake Norman and one in Mountain Island Lake, its five wastewater treatment plants, four of which are in the Catawba Basin, one is in the Rocky River Basin which is a sub-basin to the Yadkin major river basin, and then they also have a contract for wastewater treatment with Cabarrus County which is also in the Rocky River Basin. This movement of water creates an interbasin transfer and Charlotte received a certificate from the EMC in 2002 that allows the transfer of 33 MGD from the Catawba to the Rocky River Basin.

This graphic shows the service area and highlighted portion in the yellow on the border of Mecklenburg and Union Counties. This portion is the Goose Creek watershed. Due to concerns that impacts to the Carolina heelsplitter, a federally-listed endangered species in the Goose Creek watershed, due to concerns that impacts cannot be properly evaluated at the time, the EMC removed the Goose Creek from the area to be served by the IBT. This graphic also shows the boundaries of the Town of Mint Hill. Within Mecklenburg County all the Goose Creek watershed is within the jurisdiction of the Town of Mint Hill. Specifically, Condition 3 states the Goose Creek sub-basin in Mecklenburg County is removed from the area to be served by the IBT. A moratorium on the installation of new interbasin transfer water lines into Goose Creek subbasin is in effect until the impacts of additional urban growth on the endangered species are fully evaluated. I'd like to point out that although this language says the Goose Creek sub-basin, the Goose Creek sub-basin is not a regulated IBT basin. It's rather a watershed within the Rocky River sub-basin and that is the regulated IBT basin. In 2002, when this certificate was issued, it was perceived that this would be a short term condition. At the time there were plans for Mecklenburg, Union and Cabarrus Counties to jointly develop a wastewater plant. It was thought that the impacts of additional urban growth could be evaluated and an environmental document to be prepared for that project. However, that project did not materialize. Instead since 2002 there have a number of other state and local initiatives that have occurred, most importantly the .2B .0600 Site Specific Water Quality Management plan for the Goose Creek watershed. As stated in the rule, the purpose of the act that's required by this management strategy is for the maintenance and recovery of the water quality conditions required to sustain and recover the heelsplitter. The rule then goes on to state specific actions that must be undertaken by governments within the Goose Creek watershed. In 2010, the Town of Mint Hill adopted its post construction ordinance to meet action items required by the site specific management plan. Some of those actions are: no new wastewater discharges, the control of stormwater for projects disturbing one acre or more. The town also had a maintenance provision for BMPs where they adopt ownership of Best Management Practices after a two year warranty period. The construction ordinance also requires 200 ft riparian buffers within the 100 year flood plain and 100 ft buffers elsewhere within the Goose Creek watershed. Based primarily on those measures that have occurred since 2002, last year Charlotte Mecklenburg Utilities developed an environmental assessment to meet the requirements of Condition 3 and request that the moratorium be removed. The EA received a FONSI from the Division of Water Resources based on the analysis of impacts discussed in the environmental assessment and the minutes to mitigative measures required by the site specific management plan. We did receive some initial comments during the internal DENR review process stating that although the actions undertaken

in the post construction ordinance are aggressive, even more aggressive actions could be still taken. However these comments were provided to the EMC in 2008 on deliberations of the rule. Therefore, the Division of Water Resources issued a FONSI. In March the EMC held a public hearing on Charlotte's request to modify the certificate. The public hearing is not required by the IBT process. We did not receive any comments during the review of requesting a public hearing. Rather the EMC felt that it was appropriate given the nature of the IBT and the fact that the SEPA process, in general requires a public hearing, that a hearing also be held on this modification. At the hearing there were 77 attendees, 10 speakers and the hearing officers received 24 written comments during the comment period following the hearing. All the comments were in favor of the moratorium being lifted. The speakers included the Town of Mint Hill, a representative for Senator Tarte and Representative Brawley and residents of the Ash Plantation subdivision within Mint Hill.

I have a few pictures here that were provided by residents of Ash Plantation that illustrate their concerns. This subdivision is served by groundwater wells in the Goose Creek subbasin. This system has been owned and operated by a number of companies over the years and while each has made efforts to address water quality, residents feel that the wells are no longer functioning reliably. They have reported and recorded muddy water from their faucets. Many state that they do not drink or cook with the drinking water. The groundwater in this subdivision is high in iron and manganese which are considered secondary contaminants under federal regulations, which means they do not affect human health. However, again all residents expressed concern about consuming their tap water. Instead many buy bottled water and even purchase filters for their homes to clean the water. This graphic shows a used filter in the center and a new filter on the left. We also heard a number of comments stating that water related appliances such as washing machines, hot water heaters, refrigerators; even coffee makers have to be replaced frequently due to the high mineral content and high hardness of the water. So those things also add to a high financial burden for residents in the Ash Plantation subdivision. Many of the speakers that we heard acknowledged the importance of protecting the heelsplitter, but they felt that the town has demonstrated its commitment to doing just that, and that the town has put in sufficient measures to be able to do that.

Commissioners Butch Smith, Yvonne Bailey and Mayor Darryl Moss served as our hearing officers for this hearing. After considering the record they have developed their recommendations. The IBT statute states that the EMC may grant a petition and hold in part or deny it, may require mitigation measures and in doing that is required to specifically consider and make findings of fact. The findings of fact are the necessity, reasonableness and beneficial effects of the transfer amount, the detrimental effects on the source of the basin, the detrimental effects on the receiving river basin, reasonable alternatives, use of impoundment storage, uses of a reservoir which do not apply in this case, and any other facts or circumstances necessary. With respect to the first findings of facts on the necessity and reasonableness of the amount of the transfer, the hearing officers find that the amount of water necessary to provide service to the Goose Creek watershed is reasonable and that the existing certificate provides sufficient capacity for Charlotte to provide service to this area. Charlotte is not requesting an increase from the 32 MGD already authorized by the certificate. They did do an analysis of the amount of water that might be used in the Goose Creek watershed through the year 2030. They predicted that up to 3.9 MGD might be required throughout the watershed; however, there are a number of water sources available. There are private wells, community wells and then, of course some of that would also be public water. So the existing certificate has sufficient capacity to meet water

needs in this area. The hearing officers did also find that the removal of Condition 3 would allow Charlotte to fully utilize existing infrastructure. Charlotte already provided service to some residents within the Goose Creek watershed due to their grandfather capacity to transfer water. The grandfather capacity exists based on infrastructure that was in place prior to issuance of the IBT certificate and prior to the IBT statute being adopted in 1993. Again, that existing infrastructure has capacity above its current use. With respect to the finding of fact on the effect on the source river basin, the hearing officers find that removal of Condition 3 does not impact the Catawba River Basin, because it would not change the amount of water that Charlotte is authorized to transfer. With respect to the finding of fact on detrimental effects in the receiving basin, the hearing officers find that the action required by the site specific management strategy will mitigate any impacts due to additional growth in the Goose Creek watershed such that removal of Condition 3 would not have a detrimental impact on the Rocky River Basin. Again, this finding is based on the requirements of the rule and also the fact that the environmental assessment received a Finding of No Significant Impact. With respect to the finding of fact on reasonable alternatives to the proposed transfer, there was really only one other alternative and that's not to provide service to the Goose Creek watershed. In that case, Charlotte would meet requests case by case exemptions from the Division of Water Resources which is what currently happens. Right now if there is a need for Charlotte to provide water to a residence for reasons of public health and safety, Charlotte sends a letter to the Division of Water Resources describing the need which is usually the person's well has failed and they do not have water, then requests permission to serve that individual residence. That's how things, approvals, happen now because of the way the Condition is written. Since 2002 there have been very few exemptions. I think we have approved six exemptions. So we would continue to do the case by case exemptions, and there would also continue to be concerns about the groundwater quality. With respect to the finding of fact on other circumstances that's necessary, the hearing officers find that Charlotte Mecklenburg Utilities has met the certificate requirement to evaluate the impact of urban growth on the heelsplitter. Charlotte has developed an environmental assessment that received a FONSI and local and state initiatives since 2002, have thoroughly evaluated impact and prescribed specific mitigations measures. Based on that, the hearing officers recommend that the Commission grant Charlotte's request to remove Condition 3 from the IBT certificate.

Chairman Smith: Thank you ma'am. First of all any questions of Toya Ogallo?

Ms. Deerhake: Thank you. I wanted to make sure I understood that the watershed management plan measures that were implemented the initial action was taken by the EMC, they will stay in effect?

Toya Ogallo: Yes absolutely.

Ms. Deerhake: ok.

Chairman Smith: I have a couple of questions about the Ash Plantation. Do you know how long ago that subdivision was built?

Toya Ogallo: I don't know when it was built. But I do know that, I think we had residents at the hearing that had lived there for over a decade. . They had been on groundwater and again

there have been several companies over the years that have provided treatment service to that subdivision.

Chairman Smith: Are they all on individual wells?

Toya Ogallo: No. It's a community system. The Plantation operates a green sand filter, a filtration system that provides service to the whole community. There are some individual homes that are on wells but the comments at the hearing were from residents who receive water from the community system.

Chairman Smith: That's a well-based community system.

Toya Ogallo: Yes.

Chairman Smith: So the photographs we saw, all of that dirty water comes from the well based community system rather than individual wells.

Toya Ogallo: Exactly.

Chairman Smith: How long has the water been of that quality?

Toya Ogallo: I don't know exactly how long there have been problems. There have been several operators over the years. Those pictures were taken and I believe at the end of last summer. I spoke with the Regional Office and residents acknowledged that in Ash Plantation, that Aqua, in particular who is providing service has been taking measures trying to address problems that may have been inherited from a previous operator. They had been taking measures but residents felt that the measures have not been enough to where they felt comfortable with the drinking water.

Chairman Smith: So we can assume that when people bought those houses the water quality was better than it is according to those photographs.

Toya Ogallo: We heard during the public hearing that there is.....we heard a lot of folks saying if they had known water quality is what it was, but I got the impression that it is deteriorated over the time. That was my impression.

Ms. Bailey: That was my impression too, that they built knowing that there was a community water system and they expected that the community water system water would be good water. It doesn't have contaminants. It's just the secondary drinking water standards that are a problem, I think. So they bought knowing they were going to hook up to a community water systems.

Chairman Smith: So they bought lots and then built individual houses rather than having bought in to a built house subdivision.

Toya Ogallo: No. I believe it was a mixture.

Tom Reeder: It was a mixture, sir. It's got iron and manganese but as Commissioner Bailey said, it's a secondary pollutant that's in the groundwater well. But it comes and it goes. It has been bad for about the last two years now, and what the Regional Office staff is trying to do is have them alternate wells. They have a couple of wells available and the Regional Office is, trying to get them to alternate wells to try to find which one has the lowest manganese and try to use that one. But it's a really huge problem right now. So maybe a couple of years ago it wasn't this bad, but if you go further back it was bad, and it comes and it goes. Right now it has been bad for about two years now.

Chairman Smith: Part of what I am trying to get at is do you know whether or not the well or wells degraded or whether the demand on the wells exceeded the wells ability to supply?

Tom Reeder: It's not a demand problem. The water is there. The problem with the water is iron and manganese. Historically the problem has encountered it from time to time. It doesn't seem to be going away now so the residents want to connect to CMUD so they can get clean water.

Chairman Smith: Do you have any sense of what made the well quality degrade so?

Tom Reeder: It's just something that was in the water, the groundwater they started pulling. They created the cone of depression that eventually this water with iron and manganese came into the depression and was withdrawn.

Chairman Smith: Thank you.

Mayor Moss: I don't have a question. I was going to make a motion. Mr. Keen looks like he has a question.

Mr. Keen: Just a question on the monitoring on the system oversight and inspecting the systems. How is it able to get this far? You said two years. Then is there a regulation over the system itself.

Toya Ogallo: The system meets water quality standards. There's no federal standard for iron and manganese or hardness. State requirements do require that if iron and manganese exceed a certain amount that certain measures be taken to address them. But it's not considered a health issue.

Mr. Keen: Seems to me that when citizens purchase properties within a system, then if there's no oversight of the system the citizens are somewhat in limbo as they drink the water they have to, I guess believe that what they're drinking is appropriate, that the system's providing the right water.

Tom Reeder: No, it doesn't work like that Steve. All public water systems are regulated under the Federal Safe Water Drinking Act and this is a community water system which has the highest level of a regulation of the Safe Drinking Water Act. The pictures that you're seeing there of that horrific water; a lot of those are taken right after the lines have been flushed and things like that. I mean it's not always that bad, and like I said they've tried to alternate wells to minimize

the problem. But the problem is the groundwater there is high in iron and manganese which is a secondary pollutant, a secondary standard under the Safe Drinking Water Act. It's not a primary maximum contaminant level pollutant. But anybody that drinks water from a community water system or public water system in North Carolina can be sure that water meets the Federal Safe Drinking Water Act requirements, and it's below the maximum contaminant level for the proper pollutant.

Mr. Keen: I think it was the two years that threw me. It's been that long and there's another side of the system.

Tom Reeder: They've been switching wells around and they've been trying to come up with a permanent solution, but they just can't find one because they're using groundwater, and the groundwater is high in these contaminants. What they really need is they need to use the water from CMUD which is perfect, but they have this restriction in their IBT. So that's a simple long term solution for these folks.

Mr. Keen: Thank you.

Chairman Smith: Any other questions before we go to Mayor Moss and his motion.

Mayor Moss: Mr. Chair, before I make the motion though, I think, and Toya you may have said it and I just wasn't listening closely. I think it's important to note that there are water lines that run past this property today which would allow folks to hook up and solve this problem. Having said that Mr. Chair, I'd like to make a motion that we accept the recommendation to remove Condition 3 from the CMUD IBT certificate. (Second by Mr. Butch Smith.)

(Chairman Smith: asked for discussion.)

Mr. Crawley: Can I interject a second? Did your motion include the hearing officer's findings of fact as stated in your written report?

Mayor Moss: Yes sir. Thank you.

Ms. Deerhake: Thank you. I think Dr. Peterson and I with previous Chairman Moreau were working on this back in 2005. Is that right Dr. Peterson?

Dr. Peterson: Yes, more or less.

Ms. Deerhake: I just want to make sure I understand that if there are any proposed modifications to the water quality watershed management plan that could impact this Carolina heelsplitter, that it comes back to the Commission, that the Commission will have the responsibility of reviewing and making decisions upon that. I just want that assurance. Could you tell me about your procedures for that?

Toya Ogallo: Well the post construction ordinance is what dictates the actions locally, how they will be implemented. That ordinance is in compliance with the NCDENR rule. I believe the

Division of Water Quality has approval and oversight of the post construction ordinance. So if there were any changes to that, it would have to go through and be approved by DWQ through their stormwater program. So there are absolutely checks and measures in place if that was ever to be changed, it would have to go through approval to DWQ.

Dr. Peterson: Or is the issue whether the heelsplitter, its habitat and its health as a population is going to continue to be monitored? Because there was extreme interest in U.S. Fish Wildlife in that organism and it seemed likely that they would continue to look at it and even if there aren't monitoring built into this by the municipalities, we'd probably hear of problems if they emerged. I would hope that we hear of problems and not hear after they'd long since exterminated the species that was trying to be protected. But that was really a question that I was going to ask, whether there's any obvious monitoring of the organism that caused this decade long delay in the first place.

Toya Ogallo: I'm not aware of any monitoring on the heelsplitter. I do want to point out, however, that this condition of the certificate only applies to essentially the Town of Mint Hill, which the whole Goose Creek watershed is between Mecklenburg County and Union counties. This condition does not apply to the entire Goose Creek watershed as it exists; only this small portion that is in the Town of Mint Hill.

Mr. Phillips: Could you clarify that because I was going to ask a question to confirm that the entire area that could be served by this additional water would be within the Town of Mint Hill planning. Is that right?

Toya Ogallo: It's this map. The Goose Creek watershed in yellow is in Mecklenburg County and Union counties. So the majority of Goose Creek is not under the jurisdiction of the Town of Mint Hill and is not affected by this IBT certificate. It's just a portion of it that falls within the CMUD service area. A large portion of it is not under the certificate. So the whole watershed is what is regulated by the Division of Water Quality rule that the EMC implemented. The whole area in yellow is affected by the EMC rule. Only the area in Mecklenburg County within that dotted line of the Mint Hill boundaries is affected by this IBT certificate. So this condition does not affect the entire Goose Creek watershed.

Chairman Smith: Other questions or comments? Discussion? Mr. Phillips you look like one that is not quite satisfied.

Mr. Phillips: Well, I was just confirming in my mind that none of this water would be going down in Union County. Is that basically true?

Toya Ogallo: Well it doesn't, because CMUD doesn't provide water service in Union County. But I was trying to point out the fact that the Goose Creek watershed is a much bigger watershed than what we're discussing for this modification. This is just a single portion of it within this town jurisdiction that's affected by the certificate.

Ms. Bailey: I just had one other comment and I think Toya covered this. But we do get, well the division gets requests from individuals who want to be hooked up to the system, and based on

different hardship factors. So they come in and they're hooked up to the system on an individual case by case basis. There's people that will live on the street where one person is hooked up to Charlotte's water and one person isn't. What this does is this gives the opportunity for everybody to have the good water but it's not like people are not getting hooked up already.

Toya Ogallo: Exactly. Charlotte has existing customers. What's happening now with the condition is that it's becoming more and more fractured because if someone's private well expires they have to request that they be connected and they're without water during that time. It's a case by case approval process at this point.

Mr. Phillips: I don't remember and now know these facts well enough to really reach any conclusions about this, but just as some background I recall working on this. This is one of the first big projects we had when I came on the Commission. I remember that the sense at the time was that (I talked to one of the people that had done some of the environmental studies) the heelsplitter in the Goose was already pretty well cooked and the duck was barely surviving. So it was tenuous and you know that this is going to bring presumably additional development and a rapidly developing area generally. It's probably going to have some adverse impacts notwithstanding these measures but all these things are balances.

Chairman Smith: There's no question that it's a huge demand in this part of the world.

Mr. Martin: I just wanted to follow up on what Dixon just said. You're inferring that, you're talking about what we're going to do today would cause an increase demand and additional development?

Mr. Phillips: Yea. That's acknowledged.

Mr. Martin: That's not my understanding of what was presented.

Toya Ogallo: No.

Mr. Martin: So that is an incorrect statement.

Toya Ogallo: This is an issue of providing water to an existing community. Of course, there is some growth in the area and in the town. That growth is occurring any way. The groundwater is available under private wells and the community systems. The issue is that the restriction for CMUD not to provide water service into this one part of this one town. First of all that was a temporary condition that the initial intent was that once the impacts were more fully evaluated it would be removed. That condition is what caused the snowball that resulted in the Goose Creek rule which resulted in the protective measures that are in place now. So it resulted in a lot of protections that are in place and it was only intended to be a temporary stop so other things could happen. It really is not an effective control of growth in the area and I don't think that was out of the intent to control growth in the area. I think the intent was to get a good look at what can be done to protect the heelsplitter.

Mr. Phillips: Well let me do the finding in the EA and secondary impacts that says the provision of water conveyance infrastructure may lead to more intense land use, types and density there are currently possible unlimited capacity private systems.

Chairman Smith: I don't think there's any doubt at all that the intent of what we did was not to control growth. But it did have an impact on the ability of various aspects of the community to increase development and I'm in favor of what we are doing here this morning. But I don't think there's any doubt at all that one of the results of what we do is going to be increased growth in this area. Because you're going to have basically an unlimited supply of clean water and they don't have that now.

Tom Reeder: You've got to remember Mint Hill is fairly well developed already, but you're right, you're exactly right Mr. Chairman. This is going to create some secondary growth like Mr. Phillips said. But the fact of the matter is, remember now, the EMC developed and approved the site specific management plan to allow growth, it minimized the impacts on the heelsplitter, and that's the Goose Creek site specific water management plan. Mint Hill has not only adopted all those regulations; they've gone in exceedance in a lot of cases of what the EMC's minimum requirements were. So, there's going to be some growth from this but remember they're going to go beyond what the EMC said they needed to do to minimize impacts to the heelsplitter.

Chairman Smith: Thank you sir. Ms. Deerhake and then Mr. Martin and back to Mr. Phillips.

Ms. Deerhake: Just one question about in the future: if the Town of Mint Hill decides to physically grow and annex additional property in the watershed, how is that treated with this particular certificate condition?

Tom Reeder: You're eliminating a certificate condition to not provide water to Mint Hill so if Mint grows they will have access to this water. But remember that municipalities growing is pretty difficult these days.

Ms. Deerhake: But there is the potential that spatially it could consume more of the watershed.

Toya Ogallo: Well, it's bordered by Union County.

Tom Reeder: Right.

Ms. Deerhake: You're showing the water is the dotted line, the watershed?

Tom Reeder: No. The dotted line is the Town of Mint Hill.

Chairman Smith: I think that with different ones of us are using the word growth with different definitions. What I hear Mr. Reeder referring to is the boundaries of the Town of Mint Hill increasing. That's one form of growth. A second form of growth is more intensified development within those boundaries. That's the form of growth that I am anticipating within the excepted restricted boundaries of the Town of Mint Hill, which is fine.

Mr. Reeder: This is all going to be done under the EMC site specific management plan.

Chairman Smith: Exactly. The Town of Mint Hill's exceptional ordinances, all of which leads me to be comfortable with what we're doing here. I'm like Mr. Phillips which rose to the statement that there's not going to be any additional growth as a result of what we're doing.

Mr. Martin: All I wanted to say is thank Dixon for bringing that up because I totally misunderstood it until you clarified that point. So thanks.

Chairman Smith: Any other discussion or comments? We have a motion and a second. (The motion passed unanimously with no further discussion.)

13-14 Request for Approval of Proposed Rule Amendments to Phase II Stormwater Requirements in Accordance with S.L. 2011-220

Summary (Bradley Bennett): The only thing we have today as Chairman Smith has already mentioned, is to get your approval for amendments to the Phase II stormwater rules and this is in compliance with Session Law 2011-220. Just to give you a little bit of information on the background on this, a lot of you were involved in the process in 2006 and 2008 when phase II and coastal stormwater rules were developed by this Commission and ultimately came into effect as part of session laws that the General Assembly put in place. Those session laws allowed the EMC and encouraged the EMC to go back and put those session law requirements into your rule, and that's what we have done over the last couple of years. We've moved forward to make changes and put those session law requirements back into the stormwater management regulations. While that was happening while we were in the process over the last couple of years there was another bill that was introduced and it became Session Law 2011-220. It did change those requirements and also required that we put those specific requirements into our rules if we had any rulemaking for that process. Just to give you a little bit of information on that change, Session Law 2006-246 the Phase II requirements set up some provisions where certain counties, whole counties were tipped into the post construction water management requirements. Those were based on the amount of the area of the county that was already covered by stormwater requirements and also there was a provision for growth rate. If that county had a growth rate that was over the state average for a certain period of time, then the whole county got tipped in. Seven or eight counties were tipped in that manner. With Session Law 2011 there was a modification made to that tipping provision in that bill to base that not on growth rate within the whole county, but if that growth rate had actually occurred within a small portion of the county to say that their growth was really occurring in a really small area. Then that county should not be considered and should not be tipped in under the program. Once that was changed or we went back and evaluated that and one county did actually drop out based on that change in the session law, so we are trying to make those adjustments today to add that in. Once the session law became effective we actually started implementing that requirement. So since it's already in the session law we're implementing that provision today and have excluded the one county that fell out. That was Davie County. The slide just shows you what happened there. We just end up with a portion of Davie County up in the northern part of the county that still is covered by Phase II stormwater requirements and the rest of the county is dropped out of the Phase II provisions.

One thing that is missing on this slide that I'll point out. Davie County does implement water supply protection programs so there are two or three water supply watershed areas probably 30 or so percent of that white area in Davie County which does have post construction measures that are still in place that would be the water supply protection program. This just shows the piece that is continuing to be phase II covered.

The action item that we're asking for today, obviously we're requesting approval of those amendments, two parts of our rule 2H 0215 and 2H 1016. You received those in your packages. This provision, we did come to you last year with this and we noticed the change in regulations. It appeared in the January version of the North Carolina Register and the comment period was open until March 4, 2013. We didn't receive any comments on the proposed change and as we have already indicated it really isn't a change to what we are implementing today because we've already dropped Davie County out of those post construction requirements. So what I request today is for you to approve that so we can go ahead and move forward with finalization of that amendment change.

Dr. Peterson: Bradley I remember the great fun we had with Phase II and implementing it, and a lot of that was federally driven. My question is because I don't recall. This provision that we're changing here relative to a portion instead of to the whole of the county, I presume that doesn't violate whatever the federal mandate was that we were using to guide us in many of these ways in which we wrote the rule.

Bradley Bennett: Yes. As Dr. Peterson mentioned, a lot of the requirements were federal. This particular piece was one to recognize that growth was happening outside of census designated urbanized areas near these developing towns, so this is not a specific requirement to tip in a whole county under the federal requirements.

Dr. Peterson: Thank you.

Chairman Smith: Other questions or comments?

Dr. Peterson: I would make a motion that we approve the request by staff. (Second by Mr. Tedder.)

Chairman Smith: Discussion? ((The motion passed unanimously with no further discussion.))

Let me backtrack to the Goose Creek IBT matter. I neglected to do one thing and that is to thank Mr. Butch Smith, Mayor Moss and Ms. Bailey for serving as hearing officers. I appointed three hearing officers just in case it was controversial since everything else that we've done in that part of the world has been controversial. So I appreciate the three of you serving.

13-15 Hearing Officers Recommendation on Proposed Modifications to the Consolidated Buffer Mitigation Rule

Summary (Dr. Larkin): I'm going to do a brief introduction before Eric's talk. To tell you a few things, this rule that we're considering is 15A NCAC 02B. 0295. Its purpose is to consolidate buffer mitigation rules and to present alternatives to the restoration and enhancement for buffer mitigation as was enacted in 1999 in GS 143-214.20. We will also then, assuming that

the rule is passed in some form, repeal the relative portions of the buffer mitigation rules for the Neuse, Catawba and Tar-Pamlico Rivers, and the Randleman, Jordan and Goose Creek watersheds which are consolidated into this rule that we will consider. The rule has been developed with a public stakeholder process for several years and a formal process for about four years. The Water Quality Committee has been working on it for about four years. I'm sure there was work done before that. It was approved by the Commission for public hearing last year. We had two hearings: on February 6 in Raleigh where there were 13 attendees but no speakers; and on February 12 in Greenville where there were six attendees and two speakers. We did, however receive 11 written comments, some of which were very extensive as you've seen in the package. They covered the gambit, both ends of the spectrum were covered well and had a lot of different opinions in between those ends. I then met with Eric Kulz and Karen Higgins primarily at multiple times. Matt Matthews joined us for one of those meetings. Eric really did a lot of the work on this rule, all through the writing and the word-smithing, and going back and forth, and all that sort of stuff. I really thank him for his job all the way through. I would ask you when we are considering this rule to consider the rule as a whole. I know that's hard to do when we get sort of focused down on a particular thing that each of us cares about. But there are a series of compromises in the rule as it's written now, as is the hearing officers' recommendation. Some of those compromises ended up agreeing with those at one end of the spectrum, some agreed with those at the other end and some are in between, many of them. So with five different options it's unlikely that everybody is going to agree with every one of those options. But I think it's a reasonable process. Obviously, I think that because that's what I'm bringing forward and I recognize that there will be debate and discussion about these options which is why they were submitted as options in the first place for us to consider and the public considered them fairly extensively. The process I'd like to use for the next little while is just ask to Eric to give a presentation. The slide presentation will be similar for what he did at the hearings and also the presentation that the Commission got when we approved the rules to send out to public hearing. Then I'd like to begin the hearing officers' recommendations by going through each of the options individually and asking for discussion. I will make a motion and ask for discussion and a vote on each of those five separately. Then, if we confine the discussion to each option then after we get through those options, we can then have a motion to accept the rule as a whole and then discuss other issues that are not in the options, but that there's still a fair amount of other substance to the rule that some of you may want to talk about; then to vote on that rule as a whole. If that passes that rule in some form we would need then to have a motion to repeal the relative portions of the current buffer mitigation rules in each of the six areas that we're talking about. Finally, after the rule has passed, if it is or even if it's not when the discussion is finished, I have a couple of other recommendations for further study that I'd like to make. So that's the plan.

Eric Kulz: Just a recap. A lot of you have seen these slides a bunch of times. The original statutes required the EMC to adopt rules concerning construction of an alternative measure of buffer mitigation that reduces nutrient loading as well as or better than the riparian buffers lost. That never made it into the rules that we have currently in place. We also consolidated the rules to make them easier to understand to be consistent between the various buffered watersheds and provide greater flexibility for compliance. How we do that is introducing some of these various alternatives would actually increase the opportunities for buffer mitigation as opposed to simply finding buffer streams that do not have trees and traditional buffer mitigation. It also makes

existing rules consistent with the principles and Executive Order 70 and session law. As Dr. Larkin indicated we had the public notice for two months. We had two public hearings, February 6 in Raleigh and February 12 in Winterville. We got oral and written comments and those are all summarized in the hearing officers' report. I'm going to go through some of the changes and additions. As Dr. Larkin indicated there are some options that we wrote into the rules that we're asking for guidance and recommendations on which should appear in the final rule. We received a number of comments regarding the location of mitigation relative to the impact site. Option A is the way that we currently do mitigation. You calculate your mitigation requirements and then you simply either replant that much buffer or purchase available credits from either a mitigation bank or the EEP. Those that are one to one regardless of where the mitigation is, although if we go to an adjacent eight-digit HUC we apply it to the one multiplier, although we have not had anybody do this. Option B gives an incentive for onsite mitigation. It reduces the mitigation requirements a little bit and then within the eight-digit HUC not onsite, it's a 1:1 ratio. Within the eight-digit HUC it basically increases the required mitigation, kind of as an incentive to get the mitigation closer to the impact site. Option C is similar to Option B in that it gives incentives for onsite or within a 12-digit HUC, but it doesn't provide that multiplier within the eight-digit HUC. So we'll be asking for which of these three should appear in the final rule.

Some alternative buffer mitigation options that we have included in the rule, non structural or vegetated options. We have planted buffers generating buffer credit from coastal headwater stream mitigation sites. These are not traditional stream restoration projects. They don't involve creating a bed and bank. They're kind of wetland/stream hybrid projects. Non-subject stream buffer restoration enhancements – the way the buffer rules read are a stream is subject to the buffer rules if it appears on either the USDA soil survey map or the USGS topo map. There are some streams that do not appear on these maps and may provide opportunities for buffer restoration enhancement. Narrower buffers on urban streams – we've got a lot of input from municipalities that they would like opportunities to do buffer mitigation but very often can't find fifty feet. Enhancement of grazed forest riparian areas – we have sites in the state that have cattle within them but they have trees and the exclusion of the cattle from those buffers, we recognize would give us water quality improvement. Buffer preservation – the buffers are obviously protected by the buffer rules but there are a whole table of uses by preserving buffer and putting it within conservation easement it gives it a maximum amount of protection. We propose preservation of non-subject streams and those are streams that don't show up on the maps are not subject to the buffer rules at a 5:1 credit ratio which is not applicable in the Randleman because the Randleman has a kick-in clause. Then for preservation of subject streams, we have two options. Option 1 would simply be to credit them at a 10:1 ratio. Again, we have gotten input from municipalities and counties regarding opportunities for mitigation on urban sites. Option 2 would be 10:1 credit ratio in rural sites and 3:1 in urban sites. Another one from municipalities was if a sewer easement is present – the way we do it right now is Option 1 if there is an easement present in Zone 1 or Zone 2, then the area with an easement is not suitable for mitigation. The site may get credit for narrower buffers if it's an urban site under the urban buffers of the rule. But Option 2 is allowing for credit to be generated within the managed portion of the easement in Zone 2 so it would not have to be trees. It could simply be grass, you know vegetated, managed vegetation and the fuse flow has to be maintained. So we will be looking for a recommendation for which of these should appear in the final rule. We have structural or BMP options – the use of things like constructed wetlands or other types of water

quality BMPs that remove nutrients and pollutants. For using these structural BMP options we have a 1:1 restoration requirement for the footprint of the actual impact prior to using structural options to satisfy the remainder of the mitigation requirements. If the BMP is required by the local, state or federal rules or regulations, it cannot generate mitigation credit. Retrofitting or expanding an existing BMP would be allowed and the balance of the nutrient removal could be used to offset buffer impacts. Again it's not required by other local, state or federal rules. The BMP must provide at least 30% total nitrogen and 35% phosphorus removal and must follow the DWQ BMP Manual. Then finally, the BMP would require bonding and endowment for long-term maintenance of the structure. We have a section in here that's other alternative buffer mitigation options. There may be something new out of the box, you know some alternative that we have not considered. We would consider these on a case by case basis. They must meet our exceedance removal function of the buffer for nitrogen and phosphorus obviously. It would have to meet other requirements related to bonding, maintenance and long-term endowment. Any alternatives that people bring to us would be put out to public notice and comment. DWQ would then, based on the public comments, present recommendations to the EMC. Because of the length of time it has taken us to get this rule in place, we have some requests by mitigation providers to allow projects that are already in the ground, but not generating buffer mitigation to credit, to be able to provide those credits. Option 1 is the projects however constructed, if they are within the required monitoring period, which is generally five years, those sites would be eligible for use as alternative buffer mitigation. Option 2 provides a 10 year period from the effective date of the rule. It doesn't take 10 years so we're looking for guidance on those options. Finally, credited counting on mitigation sites – I got comments on a wide variety of these options. Option 1 is the way we are currently doing it. Buffer and stream mitigation on a stream site – the buffer and stream credits are independent of one another and are sold independently. Option 2 would tie stream and buffer credit together so if someone impacted a stream with associated buffer impact that could be offset on a stream mitigation site that had fifty foot buffers. But any additional buffer mitigation need would have to be acquired elsewhere which could potentially result to stranding stream credit if somebody were to sell buffers on a stream site. So Option 2 basically says that anybody needing mitigation would likely have to go to multiple sources for it. Option 3 – if a site is constructed to generate stream mitigation credit, you can't generate riparian buffer credit. We're looking for a recommendation for options here. For Options 1 or 2 any wetlands within the fifty foot buffer can be used as wetland credit or buffer credit but they cannot count as both. Dr. Larkin is going to present his recommendations.

Dr. Larkin: Thanks Eric. That was masterful. I think you probably could have done that without the slides. His knowledge has been very helpful. What I may do then is proceed with the series of five options starting with the first one which I thought would be a good place to start, which is the zonal multiplier. We called them multipliers and that sort of terminology we were asked by a commenter to be consistent with what we called these multiplier or ratios and all that, so we decided to go with ratios. We will be calling them ratios.

Mr. Morse: When you present them can we have them back on the screen, each one that we talk about? Are they available?

Chairman Smith: The powerpoint is available online.

Dr. Larkin: This is in paragraph e(1) if anybody wants to look at the recommendation.

Chairman Smith: It's on page 3 of the written rule.

Dr. Larkin: Or on page A185, which is in the written report. Option A as Eric said you can see the numbers, there's no incentive to put mitigation any closer to the buffer impact. Option B again you can see what the numbers are. There is incentive for onsite or for onsite mitigation but in this instance there's a penalty for the current eight-digit HUC at location. Option C has more incentive to put the mitigation as close to the impact as possible. But no penalty for the current requirement for eight-digit HUC. Option A was favored by one commenter, Option B by one commenter and Option C by three commenters. The hearing officers' recommendation is Option C. The rationale I've just kind of been through.

Dr. Larkin: I would make a motion that we incorporate Option C in the rule with the language that's in paragraph e(1) on page A185 of the hearing officers' report. (Mr. Morse seconded.)

Mr. Martin: Steven, I got a call from someone who misunderstood the .75 and thought it would result in a net less than 1:1 mitigation, but they had forgotten that in our buffer rules in the various counties impacts to Zone 1 required 3:1 mitigation and Zone II 1:05 to 1. So those multipliers applying the permitting before this does, so none of this would ever result in less than a total 1:1.

Dr. Larkin: Good point.

Chairman Smith: Other comments or questions?

Mr. Smith: How does this, Dr. Larkin, go as far as what is required by the feds. Are we adding another stimulation to it to where we are adding more to it than what the feds are doing? They've introduced that House Bill Senate 781 a while back and they've got a couple of other things in the general election they've done. I just wondered if this is running with the federal regulations or are we adding something more to it?

Dr. Larkin: I'm not sure.

Mr. Smith: On the mitigation on buffers, is that also a federal?

?? No.

Dr. Peterson: There is no federal counterpart that matches this directly or indirectly as far as I'm aware.

Chairman Smith: I see a general shaking of heads "no" indicating agreement with what Dr. Peterson just said. So I think the answer to your question, Mr. Smith, is it doesn't increase the federal standard because it's not a federal standard. Is that roughly correct?

Mr. Martin: I think to clarify it more is we're not adopting anything new to require mitigation. This is only about how the mitigation is done. The rules are already in effect that require stream

buffer mitigation. Now the legislative could decide to do away with those rules but what we're doing today does not adopt new buffer rules. It just adopts the way you do the mitigation for impacts for buffer mitigation that's already required by existing rules.

Chairman Smith: It makes those mitigation provisions and existing rules consistent with one another. Whereas now Tar-Pamlico rules have one set of considerations, the Neuse and so forth. Other comments, questions or discussion? Then we have a motion to adopt Option C and rule in e(1) of the rule. (The vote was one "No" and the remainder voted "Aye". The motion carried.)

Dr. Larkin: The second option has to do with sewer easement within the buffer. It's paragraph g(10); it was originally when it went out. We've moved it to k2e, the non structural alternatives because we thought it would fit better there. Option 1 – it's written up there, says that if it is in Zone 1 or 2 then that site is not suitable for buffer mitigation. That is one of two of the proposed mitigation site. Option 2 says that if the sewer easement is in Zone 1 the site is not suitable for buffer mitigation. But if it's in Zone 2 it is suitable if several conditions are met. The easement is 30 ft. wide, it's maintained and in Zone 1 has been restored. There were two commenters who favored Option 1, three commenters favored Option 2.

Dr. Larkin: The hearing officers' report favors Option 2 and recommends that. The rationale being that with the first 30 ft. of buffer restored we get some hard to find areas of urban mitigation which can be closer to the impact. So the motion is that we include Option 2 in the rule using the language in paragraph k2(e) on page A192 of the hearing officers' report. (Second by Dr. Peterson)

Chairman Smith: Discussion?

Mr. Smith: What about water lines, power lines and all of those? They're like buffer zones that you know also like sewer. Is this all municipalities or agencies in water and sewer, they maintain the right of ways? That's what I'm wondering, just sewer. There's only one mentioned instead of water lines and towns that have their own power lines and everything else. They are maintained and I was just wondered why just sewer?

Dr. Larkin: Could somebody just help me with that question?

Eric Kulz: We were specifically requested for sewer. That's where all of the discussions lie during these stakeholder meetings. Again, we got a lot of input from municipalities and they were very specific on sewer. Very often that's where the sewers are, down along streams and valleys.

Mr. Martin: Personally I would be fine with expanding to the other easements. But I think because of what you just said, Eric, the gravity sewers follow the streams that the others are usually perpendicular crossings that are not near the stream. So it is going to be so limited as to any effective mitigation. I doubt they would be used but if that was proposed as a change, I don't see how it's a problem. I just question if it's going to ever be applicable. But it could be.

Mr. Keen: Just a thought though in municipalities versus rule. Perhaps was it thought that there might be offsite drain fields for subdivision development?

Mr. Martin: That was not my understanding. It was pretty much like Eric. The municipalities requested it specifically for sewers because I think that's where they felt like they had a place that they could actually get some credit and they didn't suggest the other ones. I'm assuming because they didn't think it would be that much opportunity there.

Dr. Larkin: That has not been part of the discussion.

Chairman Smith: Good question Mr. Smith. Almost stumped them.

Dr. Peterson: My view is that this is likely not to be something that would play a role because of the inappropriateness of it. That is to say the low lying areas of sewers are there because of gravity, and that doesn't apply to the other utilities. But more than that to make a change at this stage would go beyond of what we took out for comment. So if we had an interest in this I think we would want to take out that specific issue and solicit comments from municipalities and other interested parties.

Chairman Smith: That's a good point. It may be the thing to do is to make a note here and make inquiries about whether or not there is any demand on the part of the municipalities for water and power lines. If so, then that's a consideration for the future Commission to put out to public comment period.

Mr. Morse: Mr. Chairman I'm not speaking on behalf of the League, but I know the League has thoroughly reviewed these buffers and I don't think they had an interest in dealing with electric city or electric lines. I'm sure that the utility companies, if they had a concern they would have voiced it by now anyway. I just don't believe that's a pertinent issue at the moment.

Chairman Smith: Ok. Other comments or questions? We have a motion and a second. The motion is for adoption of Option 2 under g(10). (The chairman asked for a vote and the motion carried unanimously.)

Dr. Larkin: The third option has to do with projects completed and released as of the effective date of the rule. The first option is written here such that projects that have been constructed that are within the monitoring period are eligible. It does not say but implies that those that are outside the monitoring are not eligible. I'll refer to the language in just a minute. Basically, in Option 1 these projects are not eligible if they've already finished their monitoring period. In Option 2 they are eligible for 10 years from the effective date of the rule. One commenter favored Option 1 and four commenters favored Option 2. The hearing officers' recommendation is Option 2. The rationale being that the law directing the EMC to prepare these buffer mitigation alternatives to buffer restoration and enhancement was enacted in 1999. There had been people who have acted since then on the basis of the law and it has taken us a fair amount of time to catch up with the law. So that's the reason that Option 2 is favored.

Dr. Larkin: My motion is that we include Option 2 in the rule using the language in k1(b) which is on page A-190 and 191 of the hearing officer report. (Dr. Peterson seconded.)

Chairman Smith: We have a motion by Dr. Larkin and a second by Dr. Peterson that we adopt Option 2 Rule k1(d) using the language that is now in k1(b) which is clear if you're looking at all these documents.

Mr. Phillips: I'm sorry. I really don't understand what these are likely to apply to. These would be projects that would be done for mitigation purposes but not otherwise been used as credit anywhere else or they would not have been eligible is the idea, where they would not have been allowed previously? But why would they have been done if not credited previously?

Dr. Larkin: I think there's a rule earlier that says that is the case.

Eric Kulz: One of the things that this is pertaining to is, we have some sites that are out there now that the way the buffer rules read in buffer mitigation is restoration and enhancement of a non-forested buffer. These sites actually have canopy. They have large trees. These are some of the ones that we're talking about with excluding cattle and the projects areone of them is five or six years old already, and the others are all about four years old. The way the buffer rules read now is they can't be used for buffer credit. But if we start going with the cattle exclusion and then allow this time period, those sites would be usable for buffer credit.

Mr. Phillips: But would those exclusions have been done under some other program that they're required to do such as the nutrient reduction program?

Eric Kulz: No. They couldn't be used for nutrient buffer. It would have to be one or the other. They were done and the rules as they were written at the time were not interpreted properly by those providers.

Mr. Keen: So if I have a (PUD) planned unit development in process, how would that affect more time?

Dr. Larkin: Can you repeat the question?

Mr. Keen: If I'm a developer and have a Planned Unit Development over a 10, 15 year period and this all of a sudden comes to pass.

Mr. Martin: I think the confusion is the use of the word project instead of mitigation project. This is exclusively related to mitigation projects that were done in the last 10 years, not like a subdivision project or development project. It's exclusively to that unless I'm misinterpreting the rules.

Dr. Larkin: That's right.

Mr. Martin: So I don't think it would affect the PUD or anything at all because it wouldn't be normally a mitigation site. But if you had a mitigation site within the PUD that met this criteria it would apply.

Mr. Keen: That is correct. Ok.

Chairman Smith: Other comments or questions? We have a motion and second that we adopt Option 2 in k(1) d. (The vote was unanimously and the motion passed.)

Dr. Larkin: The fourth option has to do with the preservation ratio in urban areas. It's k2(c) on page 191 and 192. Option 1 says that the preservation site must be 10 times larger than the mitigation area required on all sites. Option 2 says the preservation site must be 10 times larger than the mitigation area required except in urban areas where it's a 3:1 ratio. Two commenters favored Option 1 and four commenters favored Option 2. The hearing officers' recommendation is Option 2, the rationale being that similar to the second option, I think. Option 2 would incentivize preservation to be done in urban areas where green space and buffer function are probably more threatened and needed than in non-urban areas. In addition it would have incentivized mitigation closer to an impacted urban buffer.

Dr. Larkin: The motion is to include Option 2 in the rule using the language in paragraph k2(c) on page 191 of the hearing officers' report. (Mr. Morse seconded.)

Chairman Smith: We have a motion by Dr. Larkin and a second by Mr. Morse. Comment by Mr. Martin?

Mr. Martin: I'm not going to propose any change. I just wanted to comment that I understand the 3:1 ratio on the urban. It makes sense to me. Unfortunately, I think only one commenter (I hadn't heard from anybody else on the EMC)...to me the 10:1 credit for preservation I think you should get more credit on subject streams. I think there's a lack of understanding of what you can do within the buffers under our current rules. For example on a property for timber management you can basically go in and pretty much remove just about everything within the buffer once every 20 years of high value trees. You have to leave certain ones and stuff. But if you saw a picture of what is allowed under the rules you might think that there was a better value to preserving those buffers without allowing them to be cut voluntarily and given the incentive to someone that wants to do that to protect a resource rather than give a high credit for an urban resource that's already degraded and try to come back and recover it. Not that I disagree with the urban. But it's like if we could prevent it from happening in the first place I think we should. I'm just going to make that comment. I'm not proposing a change but I would have thought something in the 7 or 5:1 ratio would have been more appropriate. I don't think that with 10:1 you're going to have a whole lot of takers unless they've got huge tracts of land.

Ms. Bailey: I was going to say I was actually thinking the same thing. I'd be interested in seeing what the current rules would allow and because I was imagining the same thing that a lot of it could be developed or taken out, whereas the greater value is a natural buffer and it should have more credit.

Dr. Peterson: I don't like to derail this direction because it sounds interesting and perhaps profitable. But in that regard whether the buffer that you create is partnered with other buffers in a single stream to me would make some merits to incentivize as well. But that makes this even more complicated. I just wanted to mention it just in case we have a vision of something even bolder and better for the public interest in the future.

Chairman Smith: Mr. Keen said that's what amendments are for. That's true. We can also make a note of that and make inquiry and anybody brave enough could come back with some fine tuning. What's your pleasure, my friends? We have a motion and a second. Any further discussion? The motion is for Option 2 of k2(c). (There was one opposed and 16 favored the motion. The motion passed.)

Dr. Larkin: The fifth option that we considered is to deal with the question of whether we allow a buffer and stream mitigation on the same site or not. Option 1 says that buffer mitigation credit can be generated on stream mitigation sites. Option 2 is sort of a hybrid and says that if streams and buffers are both impacted then a single site can be used to mitigate both. But if only buffer impact needs to be mitigated the mitigation can be done for the impacted buffer only, not for any stream and not only any stream mitigation site. Option 3 says that the buffer and stream mitigation credits are not available on the same site with the exception of the coastal headwaters stream mitigation sites. We'll talk about that in a minute. There were three commenters who favored Option 1. Nobody favored Option 2 and three commenters favored Option 3. The recommendation of the hearing officers is Option 3, that we not allow the mitigation credits on the same site. The rationale is that this option is clearly defined and would result in the most environmental benefit. Its cost is offset by the alternatives and by accepting coastal headwaters stream mitigation sites. The exception to allow the coastal headwater stream sites is because they would otherwise not be allowed in the rule if we go with this option. They were in the rule as it went out to public hearing. They were included in the original rule as a non-structural option. The reason to include the headwaters of coastal streams, but not those in other areas of the state, is that these coastal headwaters are generally so diffuse as to be difficult to define and identify before restoration and that therefore they may not be subject to buffer rules as opposed to those in upland areas which are more clearly subject streams and do have buffer requirements.

(Dr. Larkin: So the motion is to include Option 3 of this fifth option of the rule using the language in L3 on page A194 which includes the exception for coastal headwater stream mitigation sites which could be used for buffer credit as in k2(a) which is the paragraph for the coastal headwater streams on A191.

Chairman Smith: We have a motion by Dr. Larkin and second by Mayor Moss. Discussion?

Mr. Martin: I think Dr. Larkin has done a great job on this. I wouldn't have wanted to undertaken this thing the way we had it structured for him. But on this one I do disagree and I am going to propose a substitute. I prefer Option 1 and I'll tell you why. As you mentioned, the commenters were evenly split. But at least one of the commenters was either confused or misrepresented what they referred to as stacking. I've heard it referred to as double dipping that you could get buffer credit for the same square foot of area that you're also getting stream credit for, and that's not correct. The stream is here and the buffer is measured from the edge of the stream. The buffer program stream mitigations are two totally different programs, buffer mitigations under the buffer rules, stream mitigations under the 401/404 program. I'm concerned that we're going to incentivize people who have, for example a ditch, straighten out a stream in the middle of a cow pasture to say, "Hmm I can make more money doing buffer restoration. I'm going to do the buffer restoration. I'm going to leave that stream alone and not

restore it because I can't do both." There's nothing that would prevent us from doing that. It's also a lot cheaper to do buffer mitigation than it is to do stream restoration. As hard as mitigation sites are to find, I think that it's a huge mistake if we cut that out.

Mr. Martin: I would propose a substitute motion that Option 1 be adopted with the caveat that was at the bottom of the screen that I do agree with that was double dipping as it you cannot get wetland restoration credit and buffer restoration credit on the same square foot of property. You could do one or the other. That was in Eric's presentation and Dr. Larkin's information as well. So I would agree with that caveat that you can't double dip there as part of my motion.

Chairman Smith: Motion by Mr. Larkin and second by Dr. Peterson. Motion to make a substitute motion by Mr. Martin seconded by Dr. Peterson that we adopt Option 1 of L5.

Dr. Peterson: To explain a little further, I think Kevin had incorporated this in his explanation which I agree with. But I think there is potential synergy and value in having on the same site the stream restoration and the buffer added to it. So I think we gain by having them done together and I don't think it's double dipping. You're getting separate programs and you're doing separate things.

Mr. Phillips: Clarify this for me if you would please. In the stream restoration there is no requirement to have a buffer?

Mr. Martin: By who?

Mr. Phillips: Well, under the 401 program.

Mr. Martin: I think mine is a converse. Whether or not if you do stream restoration credit you do the buffer. It's sort of the converse logic. I would choose not to do the stream and I would only do the buffer because the buffer is cheap and you can get a lot of money. The stream's very expensive, very risky as if it fails, then you have to redo it. So whether or not if the Corps or somebody else want you to do buffer restoration. Some places you can and some places you can't. My concern is not that. My concern is that people will elect just not to do it because for doing a mitigation site, and I'm not talking about the guy permitting; I'm talking about the mitigation banker doing a site, making a financial decision. I'm going to do the buffer instead of the stream. Why do both?

Chairman Smith: Mr. Martin, I understand your point but I thought stream restoration entailed buffers as well, that you could not restore a stream without also including buffers. That is not just changing a straightened out stream back into its meandering crooked path but it also includes buffer restoration. My understanding is that if you do stream restoration and you get credit for that you have to do buffer along the way or you don't get credit for stream restoration. Why should you, in addition, get credit for buffer restoration when in order to get credit for the stream restoration you're required to do the buffer. I understand your converse point.

Mr. Martin: And I agree with what you and Dixon said. That's not my concern that if you do the stream restoration you have to do the buffer. That's all well and good. My concern is losing

good mitigation sites where you choose not to do the stream restoration, just financially because it makes sense and you're picking between buffer and stream, and you just choose to give up a good site. Then as Dr. Peterson said you don't get the synergy of having them both done which is an environmental benefit, and I'd rather incentivize somebody to do them both than to do what's just financially best for them on that one project.

Mr. Phillips: Isn't stream restoration driven by stream impacts? So if there's stream impacts you have to do stream restoration.

Mr. Martin: I'm not saying somebody won't do it somewhere.

Mr. Phillips: But you're suggesting that somebody would come in and do stream restoration just as a way of them generating credits even though it's not required stream impact offset.

Mr. Martin: No. I'm suggesting if I had a site that I was doing mitigation on and this rule passes with Option 3, I would choose to plant the buffer which is cheap as dirt, make my 96 cents a square foot and walk away, and leave the stream degraded. Instead of restoring the stream. Because there's no incentive for me to do the stream and the buffer, I'm better off doing just the buffer.

Mr. Phillips: There's not a market demand for....

Mr. Martin: There's a market demand but I'm looking at it on a project basis. I mean there may be a market demand for two million dollar houses but that demand is this big, and with the buffers you've got buffer impact demand and nutrient offset credit demand.

Chairman Smith: I understand Mr. Martin's point very well and I think it's a good point. I think there are instances under Option 3 in which people will choose to do the buffer rather than the stream restoration. The reason I support Option 3 is the overall water quality impact. There will be some loss of stream restoration coming from our adoption of Option 3, but I think if we adopt Option 1 the greater negative impact on the overall water quality is by allowing the credit for the same stream section in effect twice. I understand the different aspects of that same stream section which means that there's that much more impact that is offset, and that impact that is offset has negative impacts on water quality. So I think overall the negative impact on water quality is greater without Option 1 than it is with Option 3. I may not have said that as artfully as I wanted to, but that's why I support Option 3 for what that's worth.

Dr. Larkin: I think that was our primary rationale that was in our mind in this discussion.

Dr. Peterson: I appreciate both of these arguments and I wonder if Eric or someone has evidence, data or some kind of notion of which of these two is more likely to be applied and which effect, the good one or the bad one is more likely.

Eric Kulz: Option 1 is the way that we're doing it now. Bear in mind that when there's buffer mitigation requirements there are the multipliers that are applied to the Zone 1 and the Zone 2 impacts. So we're still getting a net gain of buffers any time we have a mitigable impact.

Option 3 is going to significantly increase the cost of mitigation projects and obviously, with the current discussions of the economy and so on, so forth I'm not sure that would be taken favorably or be a significant increase in the cost of mitigation. That's certainly a concern.

Mr. Morse: I'm not sure I understood what you just said. If we choose Option 3 it's going to increase the cost?

Mr. Martin: That's in the fiscal note.

Mr. Morse: So we choose Option 1?

Eric Kulz: In Option 1 it would stay the exact same as it is now.

Mr. Morse: Why are we increasing the cost?

Eric Kulz: Because if you cannot do buffer mitigation on stream mitigation sites, you either have to start doing what Mr. Martin was talking about on choosing between either doing stream mitigation or buffer mitigation, it's going to result in using up sites faster and mitigation sites are already very expensive. Potential mitigation sites are already very expensive. By allowing there to be both buffer credit and stream credit, it provides an incentive to do both the stream and the buffer, and it also gives added funds to perhaps purchase a bigger or better project.

Mr. Morse: That sounds to me like Option 1 is the best option.

Chairman Smith: Mr. Morse, I think Mr. Martin is right. He is hesitant to ask that question because that's our job and not his job. But what we're being asked tothe question before us if I'm saying what I think is a simpler way, maybe an oversimplification is: This is one of those situations in which we are called upon to balance cost and water quality. I don't doubt, having looked at the fiscal note, that in one sense the cost of Option 3 is greater. There are some of us that believe the water quality benefit is greater and that's just a personal call on how you go about balancing that.

Mr. Morse: A lot of times I like to hear from the staff what their recommendation is and I know we make the ultimate decision but I'm not sure we have never or had not asked staff what their recommendation would be on an option. What would the professional staff feel would be the best option? We weigh theirs versus what we feel collectively as a board. My asking the staff what he felt would be the best option – why would that be inappropriate?

Chairman Smith: I don't say that it is inappropriate. I was just explaining his hesitation in answering it. But it's ultimately our decision.

Mr. Morse: I realize that. Ok.

Ms. Deerhake: I wonder if it might be possible to resolve this by phrasing Option 3 a bit differently. What I am leading up to is that perhaps there's a traditional amount of buffer that goes along with the stream restoration, but sometimes there can be benefit by putting additional

buffers stacking it on top of that. So if you had a phrasing that would permit additional buffers beyond what traditionally happens with stream mitigation, would that be helpful phrasing it that way? Because there could be added nutrient removal that way.

Mr. Martin: There is potential under these and the existing rules to make the buffers wider than what's required. But I'm kind of going back to Dr. Peterson. We've hashed this around for two or three years. These are the three options. I think we need to choose one of them and if we wanted to do anything like you suggest, we'd have to send it back out, start over again and maybe that's something to consider for another day. I don't think at this point we can make...I think that would be a significant change.

Mr. Cavanaugh: I want to dig back in for just a minute. As I understood we had the same favorable comment from Option 1 and Option 3. But then I heard an input, I think from you Kevin that one was confused, which side was confused? Three or one?

Mr. Martin: In my opinion one of the commenters at least on Option 3 was either confused or misstated regarding the double dipping and stacking comment by indicating that for the same square foot of land you would get both stream and buffer credit, which is wrong. If you've got a ten foot wide stream you don't get any buffer credit for that ten foot wide of stream. It's the fifty feet or beyond on each side. I agree with Dr. Peterson that if there happens to be wetlands in that buffer that you restore, you should not be able to get buffer and wetland credit. You should only be able to get one of those. Because in that case it would be the exact same square foot of land. I hope I didn't confuse you.

Mr. Cavanaugh: If we chose Option 1 and there was the existence of the two things, is there anything in Option 1 that rules that out, that you couldn't double dip?

Mr. Martin: Yea, at least in the stuff that I saw that went to public hearing and it was on Eric's slide. It referenced that if Option 1 was chosen you would not be able to get wetland and buffer credit on the same square foot. You would have to choose one or the other and that would be part of my motion.

Mr. Cavanaugh: Thank you.

Dr. Larkin: I think in terms of the commenters and who's mistaken, misspeaking or whatever Kevin correctly said in his opinion. These are opinions and people do point fingers and you don't understand, and that sort of thing. So I don't think that's an automatic one way or the other with this. Similarly I don't think the economic issue is an automatic "Let's do this because it's cheaper" sort of thing. There is a value judgment to be made. Not only in terms of the return on the investment, say of clean water and clean streams and all that sort of stuff, but also in terms of looking at the rule as a whole. One of the different options when you look at the fiscal analysis some things are more expensive. Others we save money on. There's a tradeoff in that. I made the comment earlier and I'll make it again. I'd like you to consider the rule as a whole, not saying that amendments can't be made because obviously they can. But I think particularly from the fiscal perspective it's worth looking at the entire rule.

Mr. Phillips: So Kevin, from just an economic standpoint for a banker going out to do projects to banks is having an opportunity to do stream restoration even though you don't have an immediate contract to generate stream restoration. Are the economics under number one such that you might likely decide to go ahead and do stream restoration as well as the buffer?

Mr. Martin: Absolutely. No question about it.

Chairman Smith: Other comments or questions?

Dr. Peterson: I get the feeling that we're going much more towards banking as a business in the context of how we get our restoration. Is that a fair characterization of where this has gone?

Mr. Martin: About legislative mandate you've got to go there first.

Dr. Peterson: Ok. I take it you are not compelled to change your mind. You think that the Option 3 is preferable from the basis of the total package of how you've made your recommendations.

Mr. Martin: One thing I'd just want to say. Some of the things I said were opinion but as far as the commenter being confused or misinterpreting there's no confusion in this statement. "Credit stacking is proposed in Option 1 of the proposed rules, provides no environmental benefit. As written Option 1 would allow a single square foot of property to provide a mitigation credit for both stream restoration and buffer mitigation or nutrient offset." That is completely false. That's not an opinion; that's the fact. So I don't know if they misinterpreted, misunderstood but they were wrong in that comment. That's my point. Some of the other things I said were opinion.

Mr. Phillips: Isn't that true to the extent that as a part of restoring the stream you have to also restore the buffer so that you would get credit, to that extent you would be getting credit to some extent for the same square footage?

Mr. Martin: No.

Mr. Phillips: You wouldn't get credit for the area of the stream but there would be some buffer that you'd be getting credit for.

Mr. Martin: If you do stream restoration you get credit for the linear feet of stream restoration. You get new additional credit for the buffer. If you choose not to do the stream you get credit for the buffer restoration. You get no credit for that piece of stream in the middle so the exact square foot of property is not providing stacking or double dipping. That's my only point. It's not what's required when you do stream restoration. It's that statement of the same square foot of property getting double dip is a non-factual statement. Whereas, in Dr. Peterson's concern if you do wetlands and buffer within the buffer that is double dipping and you do get credit. That would be stacking, to which I am opposed.

Mr. Phillips: But the point is as I would understand it is that we're talking about environmental. We're talking about what actually happened on the ground. When you restore a stream you've got to restore some buffer as I understand it. You have to do some buffer. It has to be a buffer, says here with a stream. Right?

Mr. Martin: You have to do which?

Mr. Phillips: Don't you have to ensure that there's buffer on that restored stream?

Mr. Martin: It depends. Sometimes there's no area that's adequate for the buffer so you do what you can. In a perfect site you would hope to have fifty feet or more for stream restoration. But there's very many stream restoration sites that are due to damage and urban streams are hurt where there is no area to do buffer cleanup. Clean Water Management Trust Fund funds a lot of those.

Mr. Phillips: Well I think that would be a different case because there wouldn't be any buffer to get credit for either there.

Mr. Martin: Unless they volunteer to do it. There's a benefit to restoring streams. Sometimes when you don't restore the buffer, the property owner is not willing to do that.

Chairman Smith: I think what we have here is a semantic difference rather than a substantive difference. In my assessment, in order to do a stream restoration almost all of the time, except for the exception that Mr. Martin just mentioned and there is no land available to do buffer. But part of the definition of stream restoration is buffer restoration as well. You don't get full credit. You don't get credit for the stream restoration unless it includes good buffers to filter the water. It's true that your stream restoration credit is linear feet of the flowing stream. That stream restoration credit of linear feet includes whatever buffers come along with those linear feet. The reason some of us maybe carelessly think of that as Option 1 as stacking or double dipping is that in order to, under Option 1, you get your linear, you get your credit for the linear feet of the flowing stream for stream restoration which must include buffer restoration. In addition to that in my thinking, on top of that you get credit for the square footage of the buffers of the linear feet of that flowing stream that you've resolved. You've made your point there effectively. You see those as totally different things because one measures by the linear footage and one measures by the square footage. A number of us see that as double credit and a negative water quality impact.

So we have a motion to substitute Option 1 and a second that we substitute Option 1.

Mr. Keen: Mr. Martin made it very clear for clarity. Thank you.

Chairman Smith: The first thing we do is vote on whether or not we're going to accept the substitute. If we do accept the substitute then we vote on the substitute as the primary motion on the merits. If we don't accept the substitute we go back to the original motion.

Mr. Cavanaugh: Before we take a vote I'm still a little confused. The purpose is what I'm looking at. Is Option 1, if it wasn't broken then Option 3 seems to be that we're fixing

something that's not broken. I'm a little confused on that. Since they seem to be so close together on what the end result is, am I missing something?

Dr. Larkin: I think the chairman talked about that pretty well. They're just two different opinions as to whether the current situation allows people to get both credit for the linear feet of a stream that's restored and to go off and destroy buffers somewhere and get buffer for credit on that piece of stream. Some people think that is not appropriate, that's getting two sites for the same, you're getting two credits for the same action. Others don't. Kevin, I think pretty eloquently presented the other option.

Mr. Cavanaugh: So basically Option 3 has been put in. But we've been doing the current status Option 1. The current status is Option 1 and we've been doing that. Option 3 is put in as I'm hearing that there is a danger of double dipping. How does that change the water quality?

Dr. Larkin: What it does is in Option 3 there is the buffer that's impacted is mitigated on another piece of stream. That's one reason it's more expensive. It does require more stream restoration or buffer restoration or both of those. There's more activity on other streams to mitigate what the damage has been.

Chairman Smith: I think the answer to try to say the same thing. On Option 3 there is no change in the water quality impact for the stream mitigation site itself. But if you allowed Option 1 somewhere else somebody could take those buffer credits and have a negative impact on another stream because they've got the buffer credits from the stream mitigation site that we're looking at here.

We have a motion to substitute Option 1 (and we have a second on that. Eleven voted in favor of the substitute motion and 6 opposed.) The substitute motion is accepted and becomes the primary motion. We have a motion and a second that we adopt Option 1 of L5. Any further discussion?

Let me ask a procedural question. If a person seconds a motion and then votes against it does that nullify the second?

Various: No.

Mr. Phillips: I'm frustrated by this because I'm impressed by Kevin's argument that if we move away from what we're currently doing that it's going to dis-incentivize stream restoration. What I don't know is what the data actually is as to what extent that would actually happen. It's also concerning to say generally we're going to greatly increase the cost of mitigation stream and buffer mitigation given the pressures that this overall program is under. So that leaves me in a state of some consternation about what to do here.

Dr. Peterson: That's exactly my position as well, consternation.

Ms. Deerhake: After we had the incident a few years ago the so called stacking incident, didn't the Commission act on that to disallow it. So why is this reappearing? Did we not act on it? Or was there legislation forbidding?

Chairman Smith: Can somebody help us out that has a better memory than me? I've got a great file on what Marion is talking about but I can't piece that together in my mind right now.

Eric Kulz: I think we had a situation a few years ago where we accepted buffer mitigation credit on sites with wetlands. That was the bill. That was the double dipping.

Chairman Smith: Other comments or questions? Dr. Larkin's original motion was for Option 3. Mr. Martin made a motion to substitute Option 1. We have accepted the substitute motion. It becomes the primary motion. We're now voting on the merits of Mr. Martin's motion that we adopt Option 1 to L5. (Eleven voted in favor of Option 1 of L5 and six opposed.) Option 1 carries.

Mr. Martin: Did the section on the preservation credits for non mapped streams, did you just now go over it and was I asleep?

Dr. Larkin: No. It wasn't an option.

Chairman Smith: It wasn't one of the ones where there were multiple options. We voted on the five that had multiple options. Now we're come back to do an umbrella motion to cover everything else.

Dr. Larkin: We're not through yet. What I'd like to do now is to move that we accept this rule including the options as we voted on them before, that is the first four as in the hearing officers' report, the last one with a substitute motion for Option 1. That's a motion.

Chairman Smith: We have a motion by Dr. Larkin. I'll call it the umbrella motion. Seconded by Mr. Cavanaugh. Discussion? (The motion carried unanimously.)

Dr. Larkin: One more motion. That motion is now that we have a consolidated mitigation rule we need to repeal the mitigation portions of the other. I move that we repeal the following sections of 02B.0242 which is the Neuse River, .0244 Catawba, .0260 Tar-Pamlico, .0252 Randleman, .0268 Jordan and .0609 Goose Creek, that we repeal those sections. (Mr. Martin seconded.)

Chairman Smith: Motion by Dr. Larkin to repeal those various sections and seconded by Mr. Martin. Discussion? The motion carried unanimously.

Dr. Larkin: My comments have to do with two other alternative mitigation options that we discussed during the course of the comments and discussions that were not included in the material that was sent out to public hearing. Therefore, we couldn't add them to the rules. They were also not vetted by the Water Quality Committee or the public. There are two of those. I'll mention one that has been mentioned and that is to allow wider buffers to be used to generate mitigation credit than the standard fifty feet we use now. The suggestion was made to add another twenty-five feet beyond the standard fifty feet buffer to give some mitigation credit for restoring that portion of the buffer. The second is similar and that is to allow buffer mitigation credit for buffers on ephemeral channels or other conveyances of surface water draining into the

streams. We're talking about ditches and other things that are not now protected by buffers. The thought was that we would...I guess I will recommend that we look into those things, do the research and come back to the Water Quality Committee with some thoughts, recommendations. The Water Quality Committee can then move those on to the Commission to rulemaking if they want to or not. They might as well in the same breath mention a couple of other things that maybe you were going to speak to that were mentioned during this discussion. One is to change the buffer ratio for preservation to make that 5:1 or 7:1 or whatever. But to look at that ratio again in the Water Quality Committee. The other one I wrote down somewhere but I can't find it right now. There was one other that we said that I think we were going to work on. Well, if it comes to somebody's mind we can look at that at the same time.

Dr. Peterson: It could be added. Even if something is a total loser coming to water quality it shouldn't take long to identify it as such. Just having the suggestion from anybody is always welcome for the committee agenda.

Dr. Larkin: I found it. It was the issue of power lines and whether we should include those easements like we did for sewage, and others. That's a suggestion. It's not a motion or anything.

Chairman Smith: I understand. Anything else Dr. Larkin?

Dr. Larkin: I think I'm done.

Chairman Smith: I want to say some of this you've already heard. This has been a multi-year project, more than four years but intensely for the last four years. It has involved literally scores and scores of people. I'm not going to undertake the names of everybody in the Division of Water Quality staff that has contributed heavily to this. But you have and it has been very much appreciated. The Water Quality Committee has labored on this repeatedly as have various members of the Environmental Management Commission, both the ones present and some who have come and gone. Particularly, I want to (as they say) lift up Dr. Larkin. As I look back on this, this is probably a three hearing officer job. It could not have been done better by a committee that it was done by Dr. Larkin singularly. It was a bear to begin with. He, with a lot of good help, worked through a lot of complicated issues, struck multiple compromises that pretty much satisfied or placated everybody, that proved to be acceptable to everybody, with the one exception that we just debated at length and resolved. But that's part of our job. Not only that, he organized this in such a way that we were able to get through it effectively and thoroughly in less than an hour, maybe a little over an hour. But for his and staff's organization of the multiple issues and decisions that we had to make, we would have been floundering and foundering all day long. I highly commend you. If you've got to go off the Environmental Management Commission after eight years you certainly went off with an outstanding job. So thank you.

Mr. Martin: You said I could say my thing about the non-map stream. So I just wanted to add that to the Water Quality Committee wish list. I feel like the ratios on that are not adequate. I mean the streams are totally unprotected and we're giving them 5:1, whereas on the urban streams it's 3:1. I want to add that to the wish list. I wanted to ask one dumb question and it's a

big picture question. Do these rules apply to buffers for mitigation regardless of whether it's for buffer or for nutrient offset, or with the nutrient offset has to be handle through a similar process?

Eric Kulz: There is not a whole lot in our rules that dictate how nutrient offset mitigation is done. But we would probably consider, you know projects like these to be able to be used for buffer or nutrient offset, which is the way we've been handling the banks for a number of years. They have a nutrient ledger and a buffer ledger. As long as the same square foot of land doesn't appear on both of them, that's fine because in some areas there's more need for buffer, and other areas more need for nutrient. But I would think we would apply this stuff the same way to those because they're all part of the nutrient management strategy.

Mr. Martin: That's what I thought. It's kind of mentioned in the report and everything else, but it's not explicitly stated so I wanted to be sure that staff didn't have any question if it came up. Is it or isn't it? It sounds like it is.

Chairman Smith: We move to our single information item which is an update on the North Carolina Nutrient Criteria Development Plan, speaking of a long running project. Ms. Reid is not with us today. She is with her ailing Father. We have an able substitute in the form of Ms. Stecker.

Dr. Peterson: I would just like to mention the role that Leo Green played in a lot of the work and he's not up here to send himself a reminder, but he was exceptional in his guidance in that process on the buffer consolidation.

13-07 Update on the North Carolina Nutrient Criteria Development Plan

Summary (Kathy Stecker): I'm going to give you a quick update on this draft North Carolina Nutrient Criteria development plan and its currently out for public comment until May 24th. It is also included as an attachment to your agenda item. We put in this map and this tape as reminders on the good work that's already been done and is currently underway in North Carolina in order to manage nutrients in lakes and estuaries. This slide is the beginning of a reminder of what's prompting us to look for improvements. Around the year 2000, over the course of several years, EPA published numeric, nitrogen and phosphorus criteria under Section 304A of the Clean Water Act. With the expectation as with other criteria that states would adopt this federal criteria or make a plan to develop different criteria of their own. So in 2004, North Carolina submitted its first nutrient criteria plan to EPA and this was under the Clean Water Act, Section 106 grant requirements for us, that we had to submit this plan. It had to be mutually agreed upon by EPA. In 2011, EPA nationally reiterated its expectations that states adopt numeric nitrogen and phosphorus criteria in what's commonly known as the Stoner Memo because it was written by Nancy Stoner. Also in 2011 North Carolina committed to update its plan under the Section 106 grant requirements and that update to the plan is due June 30th of this year. In 2012 I'm sure you all have heard about what happened in Florida with EPA and the State of Florida. Florida now has numeric nitrogen and phosphorus criteria. In addition, we worked with you in recent years to propose modifications to our existing chlorophyll-a criteria.

Those are currently being considered as part of the Triennial Review. At the same time we brought forward chlorophyll-a thresholds. Those were not adopted. During that discussion we were instructed by the Commission to conduct a nutrient forum, and we did that in May 2012. I think most of you were at that forum. At that forum we heard from national experts on various aspects of nutrient management including the ones that I listed here. At the close of the forum, the panelists, which included two Commission members, gave us guidance for moving forward and that's summarized here. We convened an internal DWQ workgroup and with input from the public we considered EPA's and the Commission's recommendations along with information from the forum. We developed this list of mostly response variables to consider for development of criteria for flowing waters which would complement our existing criteria. We also developed this list for surface drinking water supplies to be considered for additional criteria development. The schedule shows what we've done including the public meetings and public input before the plan was drafted. The draft is out for comment right now and we'll take those comments into consideration, make revisions accordingly and bring the plan back to you or whoever is on the Commission in July for approval before we submit it to EPA for agreement. Only then would we begin the analyses necessary to develop criteria. This entire process could take as long as seven years. That's just a real quick summary. I'd be happy to try to answer any questions that you may have.

Chairman Smith: Thank you ma'am. Questions?

Ms. Deerhake: Thank you. Has EPA previewed this at all? Will they be commenting during this comment period at all?

Kathy Stecker: I know that they've seen it. I don't think they submitted any formal comments yet. They could. They do plan to submit comments during the comment period.

Chairman Smith: Other comments or questions? Thank you Ms. Stecker. Good job filling in at the last minute. That completes our information items. We now go to the status reports by committee chairs.

II. Status Reports

A. Water Allocation Committee Mayor Darryl Moss, Chairman

The Water Allocation Committee did meet and we had one action item which this Commission has already acted upon. That was the Charlotte Mecklenburg Utilities IBT transfer request so that's been handled. Yesterday we also received an update from Nat Wilson on the central coastal capacity area. Assessment of that is still in process and that is our report.

Chairman Smith: The Water Quality Committee met and Dr. Peterson had to leave. He delegated that responsibility to Mr. Tedder.

B. Water Quality Committee Steve Tedder Acting, (Chairman)

The Water Quality Committee did meet. There were two items that we discussed. One was another after the fact for a major variance for the Neuse River, riparian protection rules which had considerable discussion on that. There was not an action. That was basically sent back to

staff for further evaluation and consideration based on comments of the members of the Water Quality Committee. The second issue was really an update by John Huisman concerning the model progress rate for existing development out of the Jordan, Falls nutrient strategies. Those were informational items and that was it.

IV. Concluding Remarks

Dr. Larkin: Since this my last day I want to take a little privilege in just to talk a little bit. First, I'd like to say it really has been a privilege to me to be on this Commission, to be a part of and to observe democracy in action which is pretty exciting. Working with dedicated people both on the Commission and on the staff has been a highlight as well. I've seen a common purpose develop among people who come from different perspectives. That's pretty nice too. The Commission is sort of, those of us who are going to be rotating off the Commission will go back to our jobs and our porch swings or whatever. The staff however has to live with all the stuff we've done over the last few years and those who come before us. I think there's a challenge for those of you who are going to stay. That is to have a Commission/legislature/executive branch management who may not agree with all the rules that are here. That will be pretty tough to navigate but I have confidence you can do that. I would like to mention two things that would help you in that regard. One is to have the courage to point out the science of environmental protection to those who may not care about it. That will be a tough thing to do but I think it is going to be your job to do that. The second is to have the persistence to give the best customer service to your other customers, the people of North Carolina. They will now depend on you, I think more than ever for the clean air and water that they deserve. Good luck. Thank you.

Chairman Smith: Thank you Dr. Larkin. Other comments by Commissioners?

Ms. Deerhake: Thank you. I don't know my destiny. Officially I have at least a couple of years left, I think. But I would like to say it's been a pleasure. The Chairman excluded himself in recognizing years of service so I'd like to thank the Chairman for his service, and also for those who have been participants on the Air Quality Committee over the years that I've chaired it. I've enjoyed working with you. I appreciate all of your continued service on that and thank you very much.

Mr. Phillips: I, too don't know what my fate is, although I expect this may well be my last meeting after seven years or so. I want to first express my high regards to the staff such as you who are here and many of whom I've worked with over these years. I'm continually and always impressed by their competence and dedication. I encourage whoever is left on this Commission, the new folks to recognize their professionalism and their ability to do an extremely difficult job well. As to anyone who is still on this Commission, I just want and also say that I very much enjoyed working with all of you here, those of you who are here and also the folks that used to be here. I just want to leave a word to ask that everyone remember, whoever remains on the Commission, that protecting the water, air and wildlife of the state are worth paying for. It's part of the important thing that makes this state attractive for one thing to businesses and other folks. That's a big reason why people are moving here. But even if they were not economically beneficial it's worth paying for. I remember someone challenging the federal designation of the

Brown Pelican as an endangered species back when it was about to die off. Of course now, that has been a great success and we see them in great masses along the coast. The challenge was what's the value of a pelican and the answer back was what's the value of you?

Dr. Peden: I also just wanted to thank the Commission for giving me the opportunity to work with all of you. This has been a really interesting learning perspective for me given what my day job is. This actually intersects with my day job. I hope that we also remember the impact of the environment on human health. Oftentimes, health effects of environmental contaminants are both immediate but also insidious and oftentimes take time to see. The science is essential and there are at times unknown. I would ask that when they are unknown that you err on the side of protecting health and protecting long term health.

Chairman Smith: Thank you.

Mr. Cavanaugh: As one of the newest members to this Commission and one that may well be out the door shortly, I want to say to the members around this horseshoe what a wonderful job you do. How you have made this person feels extremely welcome, guided me when I needed it and never chastised me when you didn't agree with me. For the staff, what they have given to this Commission so that we could do the job we do, I thank each and every member of the staff and each and every member sitting around this horseshoe. God speed and good luck and I hope some of us will be back here with some experience, because I know how lost I felt the first couple of meetings and realized I was sitting in total awe of you who have sat here a long time. Thank you for everything that you've done. Thank you staff.

Mayor Moss: Mr. Chair I was sitting here thinking. I actually made my goodbye speech several meetings ago, but being an elected official it's kind of hard not to speak. I do feel like I am in kind of a unique position along with Mr. Keen. We get to go back home and implement the work that's done here, pretty much immediately. I will say, Mr. Wakild, when I get those NOV's from DWQ I do take a little bit closer look at them now. So that's definitely one of the things that I've learned. I didn't get one today which is actually a good thing. Seriously it has definitely been my privilege to work with all of you. We got to see Dr. Moreau last night at dinner and I can say at most meetings I have felt like the weak link in the chain. I'm not an attorney, I'm not an engineer or scientist or anything like that so I've had to try just to bring some common sense to how I go about looking at the decisions that we get to make here. But it has definitely been a pleasure and a lot of fun and I wish all of you great success in the future. Thank you.

Mr. Keen: I wasn't going to say anything. I would like to just throw a little bit in to this journey that I have witnessed for the last two years which has been, as one of the new appointees and probably the youngest. Each person here, even the staff has had an impact on all of us. We have recognized our individual gifts. Each gift only is limited to what it is and it takes others to collaborate with those to get those gifts out in the open and to be used appropriately. I think that in the last two years that's what I have experienced in the Chair, Vice-Chair. All the comments that have come from this room is that, not missing the moment and I felt like I'm an elected official from a county, County Commissioner being put in with the expertise that I've been exposed to, it certainly had a great impact on me. Not only just me, but my family, the county,

the region, Eastern North Carolina and those parts of the other pieces of North Carolina that I've traveled to in the last two years to recognize the environment, the water and the air, just all about how we live in North Carolina and how blessed we are. So with saying that, I leave this day whoever comes next or in these seats that with that I have found a greater vision. I'm sure each one of us have. Even in the staff as we laymen are coming here for two years, four years or twenty years that the staff of the State of North Carolina work hard. They're in the trenches every morning, every night and all through the weekends. It's their job and they do it well. So I want to thank you for what you've done to help me to get through these last two years. Thank you Mr. Chairman.

Mr. Hall: I don't know my fate either even though I have a couple of years left on my appointment, but that may not mean anything. I've had the pleasure of working with staff for almost 40 years as a consultant for municipalities throughout the state focusing on water and wastewater issues. I would have to say this staff is commendable. I've worked in other states and I'd put this staff above any other state staff that I've worked with. We have a lot to be proud of in the state to have the staff that we have accumulated over the years and the heritage they give this state in building to protect water quality issues and air quality issues. I also have the honor of having served with this team here because we, as a Commission, have a great heritage to preserve, because the people that came before us have done a darn good job. I hope the people who come after us will be able to do the same high quality job and protect the water quality issues and air quality issues. They are in pretty good shape across the entire state. It would be a real shame to see them to become deteriorated.

Ms. Bailey: I just want to thank the staff for everything. I think they've done a great job in helping us understand what we're doing. They have to do the background work writing everything up, working through the comments and doing a lot of leg work, listening and answering a lot of questions. I appreciate that effort and I've learned a lot being on the Commission just how government is carried out and the public is listening too, how we have to balance the issues. I think that's been very valuable for me personally. I feel like we do a good job. I was looking around the table and you know who's going to be here is Frank Crawley. I thank Frank Crawley for doing a great job. So thank you everyone and thank you Frank for being our advisor. It's been a real pleasure.

Mr. Morse: One thing that hasn't been mentioned that I have benefitted from and all of us, and all of you will as well, is once we do leave this Commission if we leave, the long lasting friendships that have been developed around this table. I know when I served back in the 90s and then got a chance to come back the friendships that I developed from my first term are still there and I know that friendships and relationships will continue even after we serve with these fine people around this table. That's what I really enjoyed and being a member of the EMC.

Mike Abraczinskas: I am humbled to be here. After all the kind remarks and be able to appreciate the opportunity to be here to hear your remarks. Ms. Deerhake had asked that I remind everyone, first of all, the arsenic AAL changes in the public hearing that's upcoming on May 14 with the public comment period ending on June 13. She wanted me to make everyone aware that the USEPA is undergoing a review of risks from arsenic including inhalation risks. It's our understanding at this time that the study of inhalation risks would begin sometime in

2014 and be completed sometime in 2016. That's our understanding at this time. If there is an opportunity to share any information that we can find related to that review at EPA, we'll put that on our website and potentially provide the hearing officer with that information to provide to the public as part of the public hearing process on the changes that we recommended to the arsenic AAL.

Mr. Wakild: First let me thank Dr. Larkin for really outstanding work on these rules today. These have gone on and on as you've already said, and to pull it together like you did today was really outstanding. We really appreciate it and you are so good to work with on this. It's very helpful. Then more generally thanks to every one of you for all of your work on the Commission and I hope some of you are back for continuity and other reasons. But it has really been a pleasure working with and getting to know all of you and the exchanges back and forth have really helped us as staff. You've just made it an extremely good working relationship and there is no doubt that the work you've done has made a real difference in the protection of water and air quality in North Carolina. So thank you all very much. I was sorry to see Pete leave early because I worked very closely with Pete for a lot of years so I'll call him, but thanks to you Mr. Chairman and all of the various hearings you've done and other work you've done to help us through a lot of really difficult issues. We all appreciate it. I wish everybody well. Thank you.

Frank Crawley: Just to repeat what I've heard. Accurate and most sincere statements of the members of the Commission, it's been a privilege for me to represent you and attend your meetings and observe the outstanding quality of work and the outstanding effort each of you have made during your terms. This is more like a commencement for me. I've been a student sitting here for a number of years and I want to thank each of you professors for educating me about air, water and groundwater, USTs and everything. The personal relationship that I've developed with each and every one of you means more to me than I can express at this time. Thank you for your efforts as members of the Commission and your service to the state.

Chairman Smith: I'll say that when I came on the Commission it was unbelievable how little I knew. I'd never heard of a FONSI. I'd never seen an environmental impact statement. I didn't know what a 303(d) list was or an AAL or anything else. That's not an exaggeration. It has been a rich and rewarding eight year chapter in my life and I treasure it, and always will. I am particularly moved by my appreciation and admiration for what the employees of the Department of Environmental and Natural Resources do, have done and will continue to do after we're gone. Petition under adverse circumstances, budget constrictions, whatever the coming and going of citizen Commission members, political office holders, you persevere and I have the upmost admiration for you. We are adjourned.

(With no further comments the meeting adjourned at 11:34 a.m.)

(NOTE: Attachments are on file in the Division of Water Quality with the Official Minutes.)

Lois C. Thomas, Recording Clerk

By Commission Members
By Directors
By Counsel
By Chairman

Adjournment AG05-09-13