TOWN OF SURFSIDE BEACH COUNCIL CHAMBERS
February 24, 2009 3:00-5:00 p.m.

STORMWATER COMMITTEE WORKSHOP MINUTES

WORKSHOP

Committee members in attendance: Chairman Sine, Vice Chairman Harbin, Strange, Mabry and Public Works Director Taylor. Council members in attendance were: Mayor Pro Tem Truett and councilmembers Johnson, Blair, Martin, Samples and Childs. Mayor Deaton was absent. The workshop was given by Nicole Saladin and the Coastal Training Program and was titled ***Issues, Solutions and Strategies for Better Stormwater Management.***

Chairman Dan Sine introduced Nicole Saladin adding that she has been instructing the stormwater committee on various "green" ways to take care of the town's stormwater and the reason for this workshop is to increase education.

Ms. Saladin thanked council for the use of space for the workshop and thanked Public Works and all of the guest speakers in attendance for being a part of the workshop. Ms. Saladin stated that she had handed out an agenda along with a handout that addresses the goals and objectives of the workshop and that she had also provided contact information of all of the guest speakers. Ms. Saladin stated that they are a grant-funded program and that they have performance requirements that they need to satisfy to fill the terms of the grant and asked if everyone could fill out the evaluations that she had provided to everyone. This will also help determine what types of programs are of interest and what kinds of technical assistance everyone needs. Ms. Saladin gave the PowerPoint presentation.

Speaker Nicole Saladin, Coastal Training Program

Ms. Saladin reported that Surfside Beach is required to fulfill federal stormwater mandates known as the Phase II National Pollutant Discharge Elimination System and two of the six minimum control measures in the permit are public education and outreach; and public participation and involvement and this has led Surfside Beach as one of the municipalities in the greater Myrtle Beach urbanized area to participate in the Coastal Waccamaw Stormwater Education Consortium which is a local collaboration of educators and trainers who help municipalities satisfy these two minimum control measures by hosting workshops, hands on public education events and rain garden installations. Ms. Saladin stated that members of the stormwater committee as well as Mr. Martin and a few others have come to the consortium meetings in the past and have recognized that there are many additional issues and needs in Surfside Beach, to not only comply with the stormwater mandates, but that there are many items that should be addressed regarding tourism and beach use with the recognition of the importance of the stormwater issues. Ms. Saladin stated that a group had gotten together consisting of herself, the Public Works Department, DEHEC and the Department of Natural Resources to do a tour of the ponds in town. Ms. Saladin stated that they had discussed what the priorities were and what some of the opportunities were that they could address from the tour. One of the items discussed was the need for bank stabilization and vegetation along the stormwater pond edges along with dealing with some of the algae blooms that the ponds were encountering. This meeting led them to Russ Britton to review some demonstration projects and ways to stabilize the banks by using alternatives to bulkheads. Ms. Saladin stated that in this case they used compost socks and native vegetation adding that these would get the town away from using bulkheads by creating a more natural space for a public park or public enhancement site. Ms. Saladin stated that they realized that there are many other areas they can place compost socks adding that this will entail a need for a lot of collaboration and a lot of input and this would depend on most of the people currently there at the workshop.

Ms. Saladin stated that some of the goals she feels the town would have would be: the protection of water quality, human impact limited on natural resources which include enhancement projects in town and on personal property, make the town more marketable by enhancing natural resources and the town would also need to be prepared for future regulations. Ms. Saladin stated that another purpose of the workshop is for everyone to have a common understanding of what the activities and recommendations are from the stormwater committee. Ms. Saladin stated that the workshop would also introduce the town to contact information on where to get some advice. Ms. Saladin stated that this educational workshop should allow individuals to respond to public inquiries by supplying them with the necessary information and answers they need to give out. The town should have the knowledge and ability to answer the requests from the residents regarding the town's future plan. The goal is not to provide perfectly manicured and landscaped areas but is to help contribute to the overall stormwater quality improvement projects. The ultimate goal is better stormwater pond management and water quality protection. Ms. Saladin stated that additional items to discuss would be the use of native foliage, providing educational signage and uses of pervious surfaces and discussing budget requirements. Ms. Saladin asked if there were any questions.

Speaker Russ Bodie, Audobon Environmental was scheduled to appear but was unable to make the workshop. Nicole Saladin gave his presentation. Ms. Saladin stated that Mr. Bodie is with Audobon Environmental, which is a private consulting firm, and their basic goal is to promote science based decision making for sustainable resource management; something that balances the economic, social and environmental needs of communities. Audobon works in land planning, marketing assistance, creating resource management plans and perform community education projects. Ms. Saladin stated that they do a lot of international as well as local work with building communities from the beginning with the mindset of protecting natural resources and recognize that this can lead to economic and social benefits. Ms. Saladin stated that they then work to manage those communities by creating management plans and by having someone in charge of that management to make sure that the initial building designs and intents are satisfied. Ms. Saladin stated that they then work on educating individuals who live in these communities. Ms. Saladin stated that Mr. Bodie hopes to also get involved in some of the later projects that Surfside Beach may plan adding that some of Mr. Bodie's thoughts were to create a natural resource management plan for Surfside Beach. Ms. Saladin stated that she is aware that there is a beachfront management plan, a stormwater management plan and that there is opportunity to integrate those plans with perhaps the beautification committee having similar plans and the idea is to keep everyone on the same page; there should be a centralized resource plan and goals for Surfside Beach and to make sure that there is someone to oversee the plan and this may be something that the stormwater committee or another committee would be in charge of. Ms. Saladin stated that another concern is water shed association and Steve Strickland would be speaking about the different drainage basins and that different drainage basins have different issues attached to them and that organizing some kind of community association may be needed to specifically address the individual priorities attached to the different basins. Ms. Saladin brought up homeowner guides that they had previously discussed. Ms. Saladin stated that the benefits would be creating a unique sense of place adding that most people already comment on what a great place Surfside Beach is. Ms. Saladin stated that there are also many opportunities to reduce cost for multiple departments for the town as a whole and for individual citizens by improving natural habitats and providing clean water for fishing, swimming and drinking. Ms. Saladin stated that many of these items discussed are long-term sustainable solutions to some of the stormwater issues.

Speaker Russ Britton EcoExpress LLC

Mr. Russ Britton introduced himself. Mr. Britton stated that his company was started a few years ago and added that he feels that Surfside Beach has had a great attitude in embracing and becoming environmentally friendly. Mr. Britton stated that there are a few communities along the coast on North

and South Carolina that they work with and added that Surfside Beach has shown that they are very interested and open in learning new environmentally effective ways to do things and that they have gone about it all very professionally. Mr. Britton stated that many coastal communities are wondering how they can provide a nice community that meets all of the EPA requirements and feels that Surfside Beach has been heading in the right direction. Mr. Britton presented his PowerPoint presentation. Mr. Britton stated that Eco Express works with compost by maintaining and stabilizing soil and retention ponds, it grows grass and cleans up after larger grading companies. Mr. Britton stated that the best place to go to research the effects of fertilizers is to visit an archive with National Geographic and read about the Chesapeake Bay and added that our area does not want to have the issues that they have had. Mr. Britton stated that block compost is natural and creates soil life adding that this area is very sandy and there are not many nutrients in the soil and that there is a lot of dead soil in the area. Mr. Britton stated that it is much more beneficial to use natural fertilizer. Stormwater retention and infiltration is benefited by the use of compost; it slows down water and soaks up water allowing it to penetrate where it falls. When rain falls it is much better if it is absorbed into the compost material rather than have it flush into the ocean carrying contaminants. Mr. Britton stated that he had gone out to Oregon where they are using compost for a lot of their erosion control and was impressed by the results that had gone from 23 percent runoff in natural conditions to 3 percent run off after development comes in. Mr. Britton stated that organics and soil assist with infiltration. Mr. Britton explained micro activity and its benefits and how their compost soils are purchased from State facilities and are registered with the United Stated Compost Council and that it is put through testing from SCDOT and NCDOT. Mr. Britton stressed the benefits of compost in erosion control in retention ponds. Mr. Britton stated that going forward all areas that have matting in North Carolina DOT will be using compost and SCDOT just awarded his company a contract to do compost throughout the whole State adding that it has been accepted in the region. Mr. Britton stated that native grasses can be grown very quickly when they use compost adding that it has previously been difficult to grow native grasses and used Grand Dunes as an example where they originally had problems growing the native grasses where they are now growing and it is all being done with organic fertilizers; no other fertilizers are used. The compost does not cause algae blooms or nutrient overloading into the waterways. Mr. Britton stated that they found that they could pump compost into socks and use them as retaining walls. Mr. Britton stated that they had to build a 30-foot retention wall in Grand Dunes and built a living wall 33 feet tall and 300 feet long and filled it with plantings. Mr. Britton stated that they built a smaller but similar type of retention wall in Surfside on 14th Avenue North by the lake and will start another project on Dogwood Lake. Mr. Britton stated that this is also used in new construction and in ditches. Mr. Samples asked if it perpetuates itself and Mr. Britton answered that it absolutely does; it expands. Mr. Britton stated that they work along with engineers to get these products out on a lot of sites and this product has been tested and used by DOT and many of the large developers in the area. Mr. Britton stated that compost, whether used on a living wall as an edge savor or in a blanket only gives up about 5 percent of its nutrients a year; it is equal to "4,000 pounds of ten, ten, ten, per acre". Mr. Britton reported that they are in the process of doing a program with Furman University to top dress ballfields and amenity areas with compost. A study has proven there is a lack of fungus and disease when compost is used. Mr. Britton stressed that you cannot install this product and then walk away; it has been documented that in any native growing area it requires maintenance in the first two years and after that time period the native plants will take over and become dominant and his company would assist with maintenance within those first two years and added that it costs 20 to 30 percent less than standard bulkheading.

Speaker Steve Strickland, Earthworks Group

Steve Strickland introduced himself stating that he has worked with the town of Surfside Beach for quite awhile and accomplished a lot. Mr. Strickland stated that when he first came into town there were some issues in several places where there was flooding; flooding was a major problem and it was related to the

previous piecemeal approach with various pipes being placed as land was developed. Mr. Strickland stated that the area had a slow growth period and then in the 1980's when development grew, problems arose, because there was not a cohesive program in place and the effects were seen. Mr. Strickland reported on the water shed projects and low impact development. Mr. Strickland stated that there are a handful of watersheds that are completely contained within the town of Surfside Beach and they are Magnolia, Myrtle and Floral and that there are several not fully contained in town which are Caropines, Deerfield and Dogwood. In Ocean Lakes there is a portion that drains out of the town through the outfalls there. In Melody there are some areas in Horry County that drain through the town and then back out of the town into Horry County. The water quality impacts are seen with these. Mr. Strickland reported that there are outfalls that run into the Murrells Inlet Creek and go through Oceanside Village and also through the avenues in Garden City and that the town has an ocean outfall on 13th Avenue South which is part of the Melody basin and that there is a major outfall on 3rd Avenue South which is the outfall for Floral basin and there are also outfalls on Surfside Drive and 5th Avenue which are the outfalls for Myrtle basin and there is a large outfall on 11th Avenue North for the Deerfield/Dogwood basin. There is an outfall on 16th Avenue, which is where Magnolia basin goes out, and then there is an outfall that goes out of Ocean Lakes. Mr. Strickland reported that the Melody basin was designed in 2001/2002 and constructed in 2003/2004 and his company basically did a top down approach; they looked at the overall development patterns within the town of Surfside Beach and projected a "what if". "What if" every lot in Surfside Beach was developed based on the current zoning and "what if" those people that developed those lots did nothing to eliminate, reduce or manage their stormwater. Mr. Strickland stated that the goal was to look at where the water was coming from, where was it going to and what did they need to construct in order to move the water successfully through the watershed to reduce the flooding. Mr. Strickland stated that they worked with Horry County to complete the outfalls along Garden City, which was one of the largest bottleneck areas adding that there was significant flooding there. Mr. Strickland stated that since this project was completed he has not been made aware of any major flooding issues. Floral basin was the second watershed that was addressed; designed in 2003/2004 and constructed 2004/2005. Mr. Strickland reported on the NPDES requirements and how they needed to address the 9-point source pollution that was going out into the ocean. Mr. Strickland stated that infiltration systems were put in place especially along Ocean Blvd. Extra money was spent to implement infiltration practices that would help reduce the water quality problem. Mr. Strickland stated that with Floral basin they looked at the main lines and tried to make sure they had a good connection up in the watershed to successfully move the water through the system and get it out to reduce the flooding and again, infiltration was used. Mr. Strickland reported that Myrtle Basin was designed in 2005/2006 and construction started in 2007 with all of the phases except for the Phase I outfall and a small portion of Ocean Blvd having been completed. Mr. Strickland reported that the Phase I outfall is the biggest area that needs to be addressed and will be a problem just because there are bulkheads involved that are squeezed in between two condominiums and it will take some work. Mr. Strickland reported on the portion within the town limits that have not been worked on; Magnolia is the next watershed to the north and then the portion of the Ocean Lake watershed within the town limits will need to be worked on. Mr. Strickland stated that they had done a worst first approach when performing the stormwater improvements. The town had sent out letters to the residents to find where there were flooding problems and it resulted in a map which showed where the reported problems were and based on these comments the Stormwater committee chose to address the worst first adding that the south end definitely had a lot of lower areas and more problems with flooding.

Mr. Strickland reported on low impact development. Mr. Strickland stated that there are basic building blocks with conservation and minimization and trying to reduce paved areas. Mr. Strickland stated that getting rid of or reducing impervious surfaces is going to be key in reducing flash run-offs during heavy rains. Mr. Strickland stated that the town is in good shape and it has been limiting how much pervious

surfaces anyone can have in the residential areas and addedrted that another item to address is storage and how to capture the water, use it and reuse it for irrigation. The third item is conveyance, moving the water through the system. Mr. Strickland stated that the preference is grass swales and channels as opposed to pipe systems but in some places because of slopes it may not be practical to have open channels and one thing that the compost socks can offer is the ability to have steeper slopes. Mr. Strickland stated that landscaping is a big deal when talking about low impact development; it is the bacteria and micro organisms that will help to break the soil down to accept more water and would give a little bit of treatment to the oils and greases that run through and would help reduce the impact to water quality. Mr. Strickland stated that rain gardens and bio retention is the newer more popular way to go. Mr. Strickland reported that there are opportunities the town has by selecting proper procedures and encouraging pervious pavement for new projects and incorporating lower impact development techniques and introducing public projects with an education component. Mr. Strickland stressed that educating the public would be very beneficial to the town. Mr. Strickland stated the cost of these water quality improvements can be considered an investment adding that the towns investment is the beach and the money spent now to improve the water quality is just a fraction of what returns the town will get from it later. Mr. Samples asked if the Myrtle basin project that was designed would be considered to be shovel-ready. Mr. Strickland stated it is shovel-ready. There was a question regarding the economic stimulus package. Mr. Strickland stated that with the economic stimulus package they are looking at spending funds on projects that are designed, permitted and ready to go; projects waiting for funds and added that the Myrtle basin project has been designed and permitted and added that the current outfall at 5th Avenue North has wooden bulkheads that wind between projects and go out onto the beach and the proposed outfall was to tie into Myrtle Lake with pipes going under Ocean Blvd and out to the beach with a combination of round pipes and box culverts and once it got to the baseline it would basically go to a bulkhead with a wooden deck on top of it so the town would still be able to maintain the public access and once the new outfall was in place then the current outfall could basically be backfilled with sand and then there would be two public accesses as opposed to one swash and one public access. Mr. Strickland stated that the problem is the cost was another million to a million and a half dollars above the cost to completely replace it. The structure concern was that the bulkheads have been in place for 20 plus years and the materials are starting to reach the end of their structural life and with a good hurricane they are gone and the buildings on either side are 10 to 15 feet from the edge of the bulkheads so having the room to get in and work was an issue.

Speaker Scott Lamprecht, South Carolina Department of Natural Resources

Mr. Lamprecht stated that he is a pond manager and is a fisheries biologist and has a great deal of experience in managing small ponds like the ones in Surfside Beach. Mr. Lamprecht stated that he came out this past Spring and looked at the facilities and wrote some recommendations on long-term management for the ponds. Mr. Lamprecht stated that managing a pond is a lot like farming, soil and the number and kind of fish you put in makes a difference adding that prevention and weed control is also very important. Mr. Lamprecht stated that an integrated pest management plan is also important. Mr. Lamprecht reported that common misunderstanding regarding ponds is that clear water makes a good and productive pond when in reality clear water means low fish productivity and it also gives the opportunity for rooted and aquatic plants to get started in deep water and create problems. Mr. Lamprecht stated that another misunderstanding is that fish absolutely need rooted vegetation when in fact they do not need it as much as people believe; native vegetation helps but a lot of vegetation in ponds is exotic and not food for the fish. Fish do not need deep water in the summer time to keep cool; they usually live in the top 3 to 4 feet of the water in the summertime. Mr. Lamprecht reported that Crappy and Highbred Sunfish are not good to stock in small ponds. Mr. Lamprecht reported that once a pond is supplied with the correct type of fish it would never need to be restocked unless there was some other factor such as the pond becoming unbalanced or if there was a large fish kill. Mr. Lamprecht reported on the various types of recreational

fish they would recommend stocking in a pond. Mr. Lamprecht reported that fertilizing a pond is a proper balance between phosphorous and very little nitrogen and potash. When there is an uncontrolled introduction of nutrients from lawns and animals, ponds would tend to have bad algae blooms and bad plant problems; if the proper balance of phosphorous is used fish production could be boosted without having all of the other problems especially if organic fertilizers are used. Mr. Lamprecht reported that unwanted species are Crappy, Golden Shiners, Gizzard Shad, Bullheads, Mudcats, Grass Carp, Green Sunfish and Hybrid Sunfish. Mr. Lamprecht reported that a weed is just a plant that is out of place and many times they create a lot of problems. Mr. Lamprecht stated that they want to discourage people from introducing plants to local ponds just because they feel that they are pretty, however, some aquatic plants do provide some habitat and food producing areas for the pond and protect against shoreline erosion. Mr. Lamprecht stated that a problem they have with domestic hand raised water fowl is if they come into a pond they will eat away at the bank and destroy the shoreline. Mr. Lamprecht reported that plants put more oxygen into the water than can possibly dissolve in through photo synthesis and more than can mechanically be put in with aerators adding that the right plants are important parts of a pond. Aquatic plants become weeds once they take over the entire water column and nutrients are then unbalanced. Sometimes foreign plants are introduced and they do not have the foreign mechanisms in place that control them and they become out of control. Mr. Lamprecht reported that prevention is the best control of weeds and one of the ways to control excess weeds and plants is by dredging lakes that the town has recently done. Planting buffers is also very important and recommends that homeowners do not mow their lawns to the edge and recommend having a 10 to 20 foot buffer of native plants between a lake and a lot. Mr. Lamprecht stated that bushes and trees can be pruned so that people can see the lake and if they need access they can cut some areas but recommended that most of the trees and bushes be left alone. Mr. Lamprecht reported that it is important to integrate a management control effort on maintaining and controlling weeds. Mr. Lamprecht stated that the advantages of biological control is permanence; it lasts much longer than other methods, there is a low maintenance cost and there are no chemical residues and it is more palatable to the public. Mr. Lamprecht reported on the alligator weed flea beetle that was introduced in Florida to control alligator weed. Mr. Lamprecht reported on introducing Tilapia and Triploid Grass Carp to the ponds to control weeds. Mr. Lamprecht stated that in order for the town to stock Grass Carp they would need to purchase them from a licensed dealer adding that they could live up to ten years and costs less than a regular herbicide treatment and added that the town may not see results the first year and may still need to use an herbicide but after that first year the conditions would improve.

Mr. Lamprecht reported on herbicide requirements stating that there are approximately 8 to 10 herbicides that are registered for aquatic use and in order to apply these it is necessary to have a Category Five applicators license and if they are being applied to a private pond or where people are swimming a Category Five Aquatic License is required. Obtaining the license will give all of the necessary training and added that town employees could get trained and acquire this license and then all of this could be done in-house Mr. Lamprecht stated that many people like to feed domestic ducks but reported that they cause numerous problems by eating away at the banks and they are a source of excess nutrients adding that a goose will provide 2.5 times as much coliform bacteria as a human being in a given day. Mr. Lamprecht reported that the wildlife department does not manage domestic ducks however if Canadian Geese become a problem a nuisance permit could be obtained and the USDA will come down and have a roundup when they molt and cannot fly. It was confirmed that 40 geese would be considered a problem. Mr. Lamprecht stated when the eggs are oiled the birds continue to try to incubate them and they do not lay more and this keeps them more controlled. Mr. Lamprecht stated that there is a big difference between domestic ducks and wild ducks adding that most wild ducks do not like the urban environment and will only stay a short time but the hand raised domestic ducks tend to be a real problem and would recommend limiting the number of them.

Speaker Ted Ambrose, Department of Health and Environmental Control- Beach Monitoring

Mr. Ambrose stated that he works for Region Six, which covers Horry, Georgetown and Williamsburg Counties. Mr. Ambrose stated that he came to report on beach monitoring issues. Mr. Ambrose reported that the town of Surfside Beach has seven beach monitoring sites up and down the coast that begins at 16th Avenue North by the Holiday Inn and then goes down to 13th Avenue South. Out of the seven, five of them have stormwater outfalls on the beach and two do not and those two or more of a general indicator of beach water quality. Mr. Ambrose stated that 3rd Avenue North and 8th Avenue South are the only two that do not have the stormwater outfalls. Mr. Ambrose stated that they have been sampling for over ten years in coordination, at times, with Coastal Carolina University adding that Coastal still does some for North Myrtle Beach and Myrtle Beach and is not sure if they have done it for Surfside or not. Mr. Ambrose stated that the reason they sample is to determine the ambient bacteria levels and it is known that high levels of bacteria gives an increased risk of gastro enteritis and the symptoms include nausea, vomiting, stomachache, diarrhea, headache and fever. Mr. Ambrose reported that they are sampling for a bacteria that is generally associated with fecal contamination and is used as an indicator organism to give an estimate of fecal contamination in surface waters adding that another common indicator organism is fecal coliform and that is used primarily in fresh water; it is not a good indicator in salt water because salt water kills fecal coliform. Mr. Ambrose reported that DHEC is currently doing a pathogen indicator study that is fairly involved and they are monitoring it throughout the State. Mr. Ambrose reported that for the purpose of beach monitoring they have short-term standards and long-term standards and for the purposes of the advisory 104 CFU's (Colony Forming Units) per 100 mills is the standard for issuing an advisory. Mr. Ambrose reported that their advisory is based on that standard in single samples. Mr. Ambrose stated that they perform two types of sampling, one is a routine sample that was just started in 2008 and is done to try to get a better indication of overall water quality adding that in past history DHEC sampled worse case only; they sampled after rain and at low tide and were not necessarily interested in ambient water quality; they wanted to know how bad it was and when it was bad. Mr. Ambrose stated that this is not how it is done statewide or nationwide; ambient or routine monitoring is used adding that they sample between May 15th and October 15th and with routine sampling there is not consideration for rainfall or tidal stages. Mr. Ambrose stated that last year they chose one day of the week and started the route at a given time of 10:00 AM and this gave them the ability to see what the water quality was at high tide, low tide and rainfall during the course of the summer. Mr. Ambrose stated that if they get a hit during the routine sampling then they will go out and re-sample and they would continue to re-sample until that result comes below the 104 CFU's. Mr. Ambrose stated that one of their employees in Columbia created a rain model and what this does is it takes all of the rainfall data history and bacteria level history they have and then it takes into account the last 24 hours of rainfall and compares it to case histories and makes a prediction on bacteria levels. Mr. Ambrose stated that DHEC now issues advisories on that history and once the rain model suggests that the bacteria levels are less than 104 they go out and perform the event sampling to confirm the rain model; the EPA would not allow them to lift a swimming advisory based on a computer nor would they want to. Mr. Ambrose reported on the averages of Surfside beginning in 2005 adding that it shows where the problem areas have been in the past and where they currently are. Mr. Ambrose stated that everyone would want to keep in mind that the statistics shown indicate

problems prior to the routine samples that are now being taken. Mr. Ambrose reported that the chart shows a problem that exists by the Melody watershed.

Mr. Ambrose reported that the number one thing impacted in stormwater and out on the beaches is the tourists and added that marketability is very important. Mr. Ambrose stated the town of Surfside Beach has one site on the 2008 impaired waters list and that is 5th Avenue North and added that the 2008 list is comprised of data from 2002 to 2006 and beginning in the Fall of 2009 they will begin on gathering the data for the 2010 list which will drop two years and add two years so it would be through 2008. Mr. Ambrose stated that the town had one site on "the waters of concern" list and that it may be looked at very closely. Mr. Sine asked about the recent improvements made through the dredging and Mr. Ambrose stated that since this was done recently it would not show up on the reports for a few years. There was some additional discussion regarding the data being outdated since the improvements made would not be indicated for another 4 years. Mr. Martin questioned how the 13th Avenue South project could not be reflected in the 2008 numbers and it was confirmed that recent projects have not been calculated into the numbers. Mr. Ambrose added that they are using a geometric mean and not an average and the new reports will be calculated in the Fall on the 303D list. Mr. Ambrose stated that Ann Clark would be a person to address MS4 issues with. It was confirmed that the EPA approves the calculations performed by DHEC. Mr. Samples added that in the future the reports would show improvements. Mr. Ambrose reported that there are links to some reports on the website. Mr. Ambrose stressed that the town will still be benefiting immediately from the water quality improvements even though it will not show up on the reports immediately. Mr. Ambrose stated that the flip-up signs recently installed in town do not count as permanent signs being that they need to be flipped up to see that the bacteria levels are high; it is a convenience issue and a permanent sign needs to be placed in the ground that states not to swim in certain areas. Mr. Ambrose added that permanent signs would need to go in the low area swashes on the beach where kids should not be swimming. Mr. Ambrose stated that the town is the eyes and the ears and needs to be aware of any sanitation or failing septic systems and used the recent situation as an example. Mr. Ambrose suggested that the town schedule their pond maintenance in the off-season if possible adding that DHEC does not sample in the off-season and that the pods are not used in the off-season and when work is going on there are usually high levels reported because sediment is being stirred up. Mr. Ambrose reported that SCDHEC.net is the site to find any links one might need regarding the information he just provided.

Nicole Saladin stated that she will have all of the presentations available on her website www.northinlet.sc.edu/training.

There was a short discussion regarding water quality, flooding, improvements and opportunities to restore the natural system. Nicole Saladin stated that there are also volunteer opportunities available for anyone interested and asked for recommendations on where the committee would like to see improvements. Mr. Sine stated that the committee would next be looking at the Floral Villas situation and how to filter where the swash meets the ocean. Mr. Harbin stated that he feels that it is important for the town to decide where they want to be in five years rather than figure out what they are going to do next week and added that the town has found that quick fixes are not usually the solution and it is important to plan. The town does not have man made

problems but animal waste and fertilizer problems and Mr. Mabry added that educating the public is very important. Ms. Donevant suggested using the newsletter as an information tool. Nicole Saladin suggested providing hands on educational training.

This was the end of the workshop.