

**Open Work Session  
Stormwater Management – Plan of Action  
November 7, 2017**

Mr. Dallas Baker, Director of Public Works, came before Council. Mr. Baker said it has been about a month since he first came before Council to discuss the drainage concerns throughout the County. He said, at that time, they talked about their approach to drainage being the 3-E's, which are Education, Engineering, and Enforcement. He said he knows there are still a lot of questions coming up about Pratt Road, and he wants Council to know that the discussion about Pratt Road will be covered under the Engineering section of the power point presentation.

He said the first E is Education. He said, to educate citizens about things they can do to aid in their own drainage issues, one of the aspects they are looking at is adding a page to the Public Works Website dedicated to stormwater. He said they looked around at a couple other agencies and jurisdictions that experience flooding. He said a lot of these concerns are mirrored in the Florida region with the flat topography, shallow marshlands, and such. He said he took a sampling of some of those locations, and is presenting them here. He said they will piece together the stuff they like, and throw out some of the stuff that does not really apply, keeping in mind that some of this is Florida, and put together a proposed website as a starting point to reference those citizens as to how they can aid in maintaining their swales, ditches, and storm drains. He said, as seen on the bottom slide, keeping those clear of pine needles is a big help, keeping it clear of debris and yard waste, and not just dumping it out into the gutter, maintaining their swales and ditches, and not killing off the grass, are some of the suggestions they have on these websites. He said they previously discussed sending out educational fliers in the tax bills. He said the one on the left is, again, from the Florida region. He said it is simple, straight to the point, and very customer friendly. He said there is a larger one over to the right that Anne Arundal County sends out. He said they have some different regulations on their swales, so, again, not all of that applies, but it is an example of the type of material that can be custom made to Wicomico County and sent out to help get the word out about what is going on. He said it would also be a good way to make residents aware of some of the regional meetings within the County that have been discussed, as far as going around to the different quadrants of the County, discussing what the community's drainage concerns are, and the problems they are seeing. He said this is a way for them to be reminded of when the scheduled meetings are for the quarter, or for the year, what locations the meetings will be at, and to help reiterate these concerns. Mr. Cannon asked Mr. Baker if he is planning to move forward with sending out these fliers, to which Mr. Baker responded, yes, nothing has been taken off the board yet. He said there is only so much they can get done in 30 days. He said, right now, he is not trying to reinvent the wheel, but he is trying to see what other jurisdictions are doing, and they will move forward from here.

Mr. Baker said their next E is Engineering. He said, starting off with Pratt Road, they put out an RFP for a drainage feasibility study. He said that was sent out on October 20, and the bids were due back on November 1. He said the low bidder for that job was \$34,500. He said, right now, they do not have money to cover the study. He said what they do have, though, is money to cover that engineering firm to potentially do grant applications. He said there were some various grants through DNR, MDE, and HUD they were made aware of through help of the various delegates back when the flooding was occurring. He said what he would like to do is pay this consultant to file their grant applications. He said he believes they open up in December. He said once the County is awarded the grant, they will use the money to then fund the rest of the feasibility study. He said they will use a little bit of the County's

money to seed these grant applications, to then turn around and get that to fund the larger study. Mr. Kilmer asked Mr. Baker, in reference to the drainage feasibility study, what exactly is he thinking, and if it is open-ended, to which Mr. Baker responded, right now what they are doing, specifically for Pratt Road, is to find out what the best way is to address the drainage. He said one big answer that was thrown out was to make all the pipes bigger, and it was talked about at the last meeting that they would have to make the entire system bigger. He said another possibility might be to re-route this to another drainage system, and find out if they need to disconnect more ponds further upstream. He said those are the kinds of questions the feasibility study will answer. He said, once they know if they need to increase pipe size, or re-route flow to another location, that is where they get into the hardcore design of what pipe size, what elevations, and what pathways they are looking at. He said, right now, the goal of the feasibility study is simply to tell them what the best pathway to follow is. For example, can they take this further down to Upper Ferry Road, or are they bucking grade too much, and really should continue on the existing pathway, or is there another route somewhere out there they are not even thinking of. Mr. Kilmer asked what the timeframe would be if they are going to use the County's money to apply for grants, get grants, and do the study. He asked if this is a two or three-year process, to which Mr. Baker responded, the grant applications open up in December. He said the websites indicate that they look to award in March and April timeframe. He said they would award that, and typically the study would be done within a year. He said that would come back and give them the information as far as what direction to go, and then use that to apply for more grants to begin the design of whatever improvement it is that is going to be made out there. Mr. Kilmer asked if Mr. Baker is not looking to have a fix by next summer for Pratt Road, to which Mr. Baker responded, a large-scale systemic by next summer, no. He said that is beyond their ability to accomplish within that short of a timeframe. He said, again, that system was sized for the storm the County requirements mandate, and the County just got more rain than it could handle. He said, if they are talking about going in and taking something that was designed from a two-year or a ten-year storm, and then designing it for a 100-year storm, that is a significant work effort in terms of design, and for construction. He said that is going to be a long-term process. He said it is not like there is a clogged pipe out there that they will just go and pull out, and that is their temporary fix. He said everything was open, everything was flowing full, and the system was working as intended. He said it just got more rain than it could handle. Mr. Matt Holloway said he disagrees with Mr. Baker's statement that everything was flowing full. He said, going back to their last conversation, when they put the culvert in to access the ditch for maintenance, water was higher on that side, and not level all the way down through, or through West Nithsdale. He said that was the bottleneck that was causing the backup in those houses. He said he also disagrees with the statement that they have not had this much rain since those houses were built there. He said they have never had flooding like this, and that flooding did not occur until that culvert was put in. He said, to him, the simplest fix is to put two pipes there, and double the flow that can go through there. He said, in the meantime, go ahead and do some studies, but do something immediately. He said at least try it, and at least do something to alleviate these constituents' concerns before the next rain season, to which Mr. Joe Holloway added, or, before they jump the gun and pass a bunch of laws they do not need. Mr. Matt Holloway said a bunch of farm boys with some tractors can really get some water moving, and they have done that for years. He said he has looked at the images, and he went out there, and the water was in everybody's yard on one side of the culvert, but on the other side the ditch was not full. He said it was lower, and it was within the banks of that ditch flowing all the way down towards West Nithsdale. Mr. Baker said he will certainly take a look at that. Mr. Kilmer said he understands this is more of a long-term solution, but Council has concerns of what happens next summer. He asked if they will be prepared for another possibility, which may not happen, but they know there are problems there, and this being possibly two years for a solution does not give much comfort to the folks in that area. He said he thinks they are hoping that at least something could be done to maybe alleviate, in the meantime,

some of that flow before next summer. He said he would certainly encourage that, to which Mr. Baker responded, they will certainly take a look at adding a second pipe. Mr. Cannon asked Mr. Baker if he thinks he does not have enough staff on hand who are qualified, and enough staff on hand to go out and try to evaluate what the concerns might be, and to actually drive down these roads and recognize maybe where the problem is. Mr. Baker responded, he drove the entire path from Pratt Road down to the river and observed the flow. He said Mr. Cannon is talking about having enough staff, and he has one engineer besides himself to do a feasibility study, so, no, it is significantly beyond their workload. Mr. Cannon asked Mr. Baker if he is seeking out grants to pay for the \$34,500 for someone to do a feasibility study, or is he asking for somebody to do a feasibility study and at the same time seek out grants. He asked if he is looking for someone who is an engineer, as well as grant writer, to which Mr. Baker responded, yes. He said a lot of the firms in the area do that. He said they are hired to apply for grants, and then they do that. He said he can tell Council that when he worked in consulting services, a lot of the firms in this area help the rural communities, and help these local jurisdictions by going out and finding funds from USDA, HUD, Community Development Block Grants, to get that money, because they know the towns do not have the money to do these studies and do these improvements. He said they stay in business by finding the grants, and the low-interest loans for the municipalities, so they can in turn fund these projects. He said places like Hurlock, Delmar and Fruitland do not have the resources, so, yes, it is very common for engineers to do this type of work. Mr. Cannon asked if it is not a case where they could have staff do this, because they know right now just from reaching out to their local Eastern Shore Delegation, that DNR has grants, MEMA has grants, and at least two of them are feasible possibilities. Mr. Cannon asked why Mr. Baker cannot have County employees seek out those grants, to which Mr. Baker responded, he has one engineer, and he is swamped doing plan review, he is swamped doing stormwater inspections, he is swamped doing dam inspections, bridge inspections, and working with the landfill for their compliance. He said, so, to answer Mr. Cannon's question, no, they simply cannot do this in-house. He said, if he had four or five engineers, then possibly. Mr. Wayne Strausburg, Director of Administration, came to the podium. He said this is exactly what they did with Morris Mill. He said George, Miles, and Buhr did the grant writing, got the low-interest loans, got the grants, and at the same time were doing engineering. He said, when looking at trying to reengineer a County that was engineered for rainfall that is quite different than the rainfall they have been getting, and quite different than the rainfall they can expect, that is a large-scale undertaking that the County really does not have the expertise to undertake. He said, actually, in the long-term, they will make more progress more quickly if they export that to people who have the guns to do that type of work. He said he thinks they are really talking about two different issues. He said one is asking if there is an immediate fix that may help the situation at Pratt Road, but he does not think they want to focus on doing a band aid here and there. He said he thinks they have a large-scale stormwater issue in the County, and he thinks that really requires a comprehensive look, and to do that they really need arms and legs. He said they need a lot of expertise, which they do not have in-house. He said he thinks that is what Mr. Baker is trying to get across. Mr. Cannon said he agrees, but he did not realize they were so short-staffed to be able to address this. He said Morris Mill was a completely different scenario that came out of nowhere, and that was almost emergency relief that was needed for health concerns. He said stormwater engineering seems like part of what the County should be planning in their processes all along, year after year. He said he was surprised they would bring someone in to do a feasibility study, and he thinks it is long-term, and not just two or three years. Mr. Strausburg said the County was doing that. He said the County has been doing stormwater planning for the better part of four decades. He said it is not working, so they need to stand back, look at the type of precipitation they have been seeing in the past several years, and they cast that forward, he thinks they need to take a comprehensive look at what their stormwater infrastructure needs to look like in order to handle that kind of precipitation. He said, to Mr. Baker's point, they can make a change in one place that will have far-reaching impacts, perhaps downstream,

and can even have impacts upstream, because water does not understand that it is crossing a jurisdictional boundary, but it goes where it wants to go. He said they literally are saying they need to stand back and re-engineer the County's stormwater network, and that involves not only public infrastructure, but perhaps private infrastructure. He said he thinks, when doing that, they really need experts focused against that, and that is the point they are trying to make. Mr. Cannon said he agrees with Mr. Strausburg completely, but he is just wondering as to what length they address this through just a feasibility study, or whether it is something more systemic where they really need to look at their staff as a County. He said, when they want to expand a ballfield, they do not necessarily do a feasibility study. He said they look at what the options are, they work with the other partners and other vendors who are suggesting, for example, if they bring in three more fields, they are going to have so much more money. He said they do not do a feasibility study every time they try to approach a larger problem in the County. Mr. Baker said, in that scenario, if they are looking to put in ballfields, and they want to increase the capacity of the ballfields in the County, the first question is where do they want to put them, where is the best logical location. He asked is it plopping everybody down in the same centralized area, to which Mr. Cannon responded, they have done that, and it was done without a feasibility study. Mr. Strausburg then said they really did have an engineering study done. He said what he is hearing from Council is that they need to proceed with a sense of urgency, and they understand that. He said, but, in proceeding with the sense of urgency, he thinks they need to be certain at the same time that they are taking a long-term view, so they will not come back later and redo things they have done because systemically they are not working. Mr. Cannon said, in doing this feasibility study, he has not seen the RFP, and he is not quite sure what they are planning to review, but he thinks they already had one bite out of that apple when they did it for the fire service and they paid for a study of a fire service that they absolutely could not use, and it was a waste of money. Mr. Strausburg said it led to a pretty good agreement, to which Mr. Cannon responded, he does not think it had much to do with that agreement. He said, his point is, he has not seen the RFP on the feasibility study. He asked Mr. Baker if the feasibility study is going to tell them whether or not they need to add more staff, will it tell them where they have to address infrastructure problems, will it tell them how they might address their problems through ordinances, and the management of possible ordinances. He asked how broad a scope is the feasibility study, to which Mr. Baker responded, the feasibility study is looking directly at Pratt Road, and how to eliminate the flooding on Pratt Road. He said it is talking about putting the pipes in the ground, and what is the best direction to take those pipes. He said it will tell them if they just simply go in the existing drainage pathway and increase everything to a four or five-foot diameter pipe, or is it more cost effective to take this the other direction down Pratt Road to Upper Ferry Road, and then take it to the river, or will they get more bang for their buck by disconnecting the systems that drain across Nanticoke Road, and take them over to Anderson Mill Pond, or some other area. He said there are different options here, and to simply proceed with just making everything downstream bigger might not be the right answer. He said the right answer might be to disconnect Hunter's Mill and send it in another direction. Mr. Cannon said he understands that, but what he is trying to avoid is the same thing that happened in the study for the fire service. He said the County paid around \$30-35,000, and it came back and said "Well this is a good start, I just don't have all of the information I would need in order to give you a broader perspective of what your solutions might be." He said his concern here is that they bring in somebody who does the study, and they say "Well this is Pratt Road, but that goes to Hunter's Mill, and that goes to Delaware, and this goes down to Nithsdale, and this goes to the Wicomico River, and this goes down to Eden," but that is not what we are hiring them to do. He said he is trying to figure out the realm of this feasibility study, where it starts and where it ends, and what Council has requested. Mr. Baker said he can certainly forward Council a copy of the scope, and a copy of all of the proposals they received. He said they received three bids back, and this was the lowest one. He said the next one was in the mid \$40's, and the next one was in the upper \$40's. He said, again, these are local firms to

Wicomico County that know our drainage system, and have been here working for years. He said maybe reviewing over the scope will help alleviate concerns, to which Mr. Cannon responded, it would be nice to know. He asked, again, if this is specifically infrastructure, and they are not going to go as far as to say "You have a working ditch here, you don't have a working ditch there," and it has nothing to do with infrastructure, but it has to do with the fact you have some homeowners who are not digging out their ditch, and you have others who do, to which Mr. Baker responded, no. He said this is a hydraulic and hydrology study. He said this is not recommending policy changes. He said the stuff they are talking about here in this 3-E approach, are some policy things that they are approaching, but that is not part of the scope of what the engineers are looking to do. He said the engineers are sitting there with their pens, papers, and calculators saying "If we take it this direction, how much is it going to cost, or if we take it this direction, how much is it going to cost, and which way are we going to spend the least amount of money to get Pratt Road to stop flooding." He said they will then come back and present these options to Council, and say they have options A, B, and C, here are their costs, and what does everybody think. Mr. Cannon said, when Mr. Baker says Pratt Road, he is talking Hunter's Mill, and he is talking Nithsdale as well, just in the immediate. Mr. Baker said the area that drains to Pratt Road, and eventually downstream to the river, has a 470-acre drainage shed, so, yes. Mr. Cannon asked if they are going to take into consideration the breadth of this for how large the project can get, to which Mr. Baker responded, yes, and they are fully aware of that.

Mr. Baker said, in addition to the feasibility study, they are doing surveying at seven different locations for possible drainage improvements. He said they have seven areas that were flooding during the storm outside of Pratt Road. He said this is not to say these are the only areas, but they are areas they need surveys and topography on to find out more information. He said people have driveway pipes on the side of the road. He said some people have replaced them over the years, they have put them back at the wrong elevation, or they put them back tilted the wrong direction. He said the County is looking at them, and these are the locations where they need to re-put driveway pipes in, or re-channelize some of these swales, and what elevations do they need to be at. He said, to do that, they need to know what elevations they are at, and what elevations they need to be, and that is what this survey work will cover. He said this is through their on-call surveyor contracts. Mr. Cannon said, at the last work session, Mr. Baker included Kaywood Drive, but he is not putting Kaywood Drive in this survey here, to which Mr. Baker responded, no. He then said, in the case of Kaywood, they had the design drawings. He said this is for alleviating the flooding along County roads that they do not have design drawings for, and this will tell them, for example, what elevation a pipe is supposed to be. He said it is through a lot of the older subdivisions and random streets that just do not have that. Mr. Cannon said he does not understand. Mr. Baker clarified, Kaywood Drive has an engineered storm drain system, and they have the drawings showing what elevations everything is supposed to be at through the pipes, through the swales, through the inverts, and the grates, etc. He said for the roads that are listed here, for instance, Douglas Road, they do not have any drawings showing what those elevations are supposed to be at, or what elevation they actually even are at. He said there are flooding spots along Douglas Road, and when they go out and start digging a ditch to alleviate some of the flooding, or they go out and try to revise some of the grading, they need elevation shots to figure out what direction they need to send it. He said they cannot go out and say "Well we think it should go in that direction," and then turn around and flood somebody else's property. He said that is what this survey data will give them. He said that is the information they then use in-house to go out and increase ditch sizes, or modify some of the drainage patterns. He said they need to know what direction to send it. Mr. Joe Holloway asked if the two bids were from the same company, to which Mr. Baker responded, no. He then said the first one was a large enough scale project that was bid out. He said, for the other locations, again, they use on-call survey contracts for local firms who are on call. He said they have three surveyors on call, they got pricing from all three, and this was

the lowest one. He said the next highest was almost double this price. Mr. Matt Holloway asked if this is purely just going out and taking elevations, and reporting back, to which Mr. Baker responded, yes, things they cannot do in-house. Mr. Cannon said, in light of the fact they know that Pratt Road and Kaywood were two that were discussed the last time, is Mr. Baker saying he is already quite aware of where they need to make the improvements on Kaywood, to which Mr. Baker responded, again, Kaywood is a location where they simply got more water than the system could handle. He said the pipes were flowing full, and the water was going down. He said there are areas behind some of these houses where neighbors have built driveways across, put tiny pipes in, and they basically let yard waste and debris build up in their rear swales. He said, again, this is all private, and that is a potential fix for the flooding on the back of these properties. Mr. Cannon said he thinks the homeowners need some type of an answer from the County as to where they are going to leave off with that, as to whether they feel it is the County's responsibility, or whether it is the homeowner's responsibility. Mr. Baker said, again, the stuff behind the house is clearly the homeowner's responsibility. Mr. Cannon said, when a homeowner puts a pipe in that is not the correct size so they can put a driveway there, is that a violation, as far as what the County is trying to accomplish, or is there nothing to regulate that, to which Mr. Baker responded, in the case of the driveway behind the house, Public Works has no jurisdiction over that. He then said, if someone wants to go in and throw a pipe in a private Swale, and put a driveway over the top of it, Public Works has no jurisdiction over that. He said, as far as they can tell right now, the County does not either. He said, further in the presentation, he will present some example legislation from other jurisdictions on ways they have been able to address it. He said, right now, they do not have any teeth to make either HOAs or property owners clean out their ditches, or to not put stuff in there, or not pave them over, and they do not have any way to make them clean them back out afterwards. Mr. Cannon asked if they know if the problem is further down, as he knows Mr. Baker is putting together a large study on Pratt Road. He said a lot of the comments made by people who live there were that they did not have this kind of flooding until the culvert was put in, and now they have that problem, and there is a \$34,000 study coming out. He said, yet, a more simplistic solution is that there was not a problem there before the culvert was put in. He said, in the same sense, on Kaywood Drive, do they know whether or not the problem is the actual backyards, or is it where that water goes into underground pipes to Parker Pond, and those pipes might be clogged. Mr. Baker responded, it was two-fold. He then said there was clogging in the swales along the backside of these properties. He said, in the front, where it was draining into the road, and going directly into these pipes, there was so much water that the outfall of those pipes were not clogged, they were simply under water. He said where these pipes go into the pond, the outfalls were underwater, so the water had no place to get out. He said it was not until those pond levels dropped that they started seeing the water levels drop along these roads. He said that is why, when there is the assertion of a clogged pipe, they went out there 12 hours later, and that road was no longer flooded. He said if that pipe was clogged, that water would not have continued on down, and that is what they saw across the board. He said he understands there have been some locations where people will say maybe it is not clogged, but it is restricted. He said, again, it was through the entire community. He said, if it was a restricted pipe for the entire community, that is just not the case. Mr. Cannon asked how he knows it was not a restricted pipe, to which Mr. Baker responded, because when the pond level dropped, the water level on the roads dropped. He said it was not like the pond level dropped and they were seeing the water level go into the communities. He said the pond levels dropped, the water had a place to go, and it left. Mr. Joe Holloway said the comment was made that they did not have these problems at Pratt Road until they changed the culvert, but they did not have these problems on Pratt Road until they had excess rain. Mr. Cannon said, in previous excess rains, there was not a problem, to which Mr. Joe Holloway said they had not had an excess rain that large, though.

Mr. Baker said, outside of studies, their engineering efforts have been working all over the County. He said these are just a sampling of the few they have been working on with State Highway to clear out some of the ditches in places where they were holding water. He said the pictures on the left are a clear location of a clogged pipe. He said the picture to the immediate left is Snow Hill Road looking back towards Cardinal and Meadowlark Drive. He said, just to the right of that in the same spot, just turned around, looking down towards Nutters, that water is not going through the pipe underneath that driveway. He said part of Cardinal and Meadowlark drain to that ditch, and that is why they are getting that area cleared out. He said this is an example of a clogged pipe, where there is water on one side of the pipe, and not on the other. He said, again, State Highway has actually already gone in there, they have cleaned out that section since this picture was taken, and they are continuing on further down. He said, when going out to look now, the water is sitting on just this side of Nutters. He said they are still working with State Highway, and they know the issues. He said they have had flooding along Old Ocean City Road for those communities between the railroad tracks and Old Ocean City Road, due to problems with Peggy Neck Branch. He said the railroad company has done work out there, the utility companies have done work out there, and they have been working with all of them. He said, as seen on the before picture, where there is a big pile of stone that was dumped out, they assume by the railroad, they have since gotten that out. He said the folks who took over the railroad have been very responsive to the County, and they have gotten that area cleaned out. He said the County has taken their equipment out there for the places they could not get to, and afterwards they have swales that are flowing free. He said the bottom set of pictures is Forrest Grove Road. He said they have had problems with beaver dams out there for quite a while, and they are going in, busting out those dams, and getting that water level down. He said, again, they are not just saying "Spend money, spend money, do studies, do studies," but they are doing what they can in-house with their staff to clear out these areas where there are flooding issues.

Mr. Baker said, on the enforcement side, they have been working with the Legal Department to come up with some example legislation. He said this is not meant to be a presentation of what they should do right now, but just an example of some of the things they have been looking at, as far as getting the teeth to get these clogged ditches and swales cleaned out, and working with the homeowners' associations. He said there are other locations that have nuisance ordinances. He said there are also stormwater utilities, stormwater drainage districts, and they have talked about the Urban Service Districts for some of these drainage issues. He said there is also the public drainage, or the tax ditch areas. He said, again, in the truest sense, tax ditches are run by the Maryland Department of Agriculture. He said they hire a farmer to keep them cleaned out, and everybody who has water that drains to them pays a certain price, and if their water works its way to there, they pay another price. He said it is a potential model that could be applied to the County on some areas. He said, again, what they plan on doing is seeing what makes the most sense for Wicomico County. He said maybe it is one, maybe it is a couple, and, again, they are not looking for a one-size-fits-all. He said they are looking at what folks have the willingness to do. Mr. Joe Holloway asked Mr. Baker to back up to the second paragraph, in reference to disruption of ditch or natural drain and standing water. He said they have a situation on the East Side of the County, and further into Mr. Baker's paragraph, he is talking about redirecting standing water for breeding of mosquitos. He said they have a situation where the Nature Conservatory bought about 700 acres of land. He said they took the farmland and actually redirected the water, and they dug shallow water pools which the residents call mosquito ponds on that side of town. He then asked, if they do legislation, what would be done about dealing with situations like that. He said he knows Mr. Baker is talking about having people make sure they clean out their ditches and such, but how would he deal with making those residents do that, when somebody comes along and does a large-scale project like this. Mr. Baker responded, in theory, they should be getting plans to review what changes they propose.

He said he is not sure if they received plans from the Nature Conservancy or not, and that is a unique situation. Mr. Joe Holloway said it affected the drainage along their roads, it affected drainage from other people's properties, and they even had to go back and clear out some of the ditches they moved, because they flooded people's yards. He said he thinks this problem is a lot bigger than just making somebody clean the ditch out behind their house. Mr. Baker said, in theory, they should be getting copies of the plans. He said, in hindsight, they should have copies of what they have done, and should have asked if they have a drainage plan set out, are they checking whatever their design was to see that it was being constructed properly, looking at the hydraulics and the hydrology behind their proposed changes. He said, looking at that math, it does not add up if they are getting flooding on locations they were told they were not going to get it. He said he does not know what the hammer would be to get them to come to the table, and he is not saying they have not come to the table before, but having that discussion with them, asking what is going on, asking to see what changes they have made, what their grades are, and what their elevations are with all of the construction that has been going on out there. He said it starts with just a dialogue. Mr. Joe Holloway said they did it before they talked about it. He said, in the next slide, in reference to passing an ordinance to impose taxes for new stormwater drainage, is that talking about countywide, or is it talking about just places where they have had the problems. He said he has heard both, to which Mr. Baker responded, this is presented as to what legislation is out there already in places, and what makes sense for Wicomico County. He asked, do they want to pass an overall reaching tax for everyone, or do they want to keep it more localized to the folks who are actually impacting these potentially new swales, new pipes, and new storm drains, to alleviate the flooding. He said, if they are keeping it localized, that does get more into the tax ditch scenario of just having the people who are draining to that ditch be the ones who help contribute to the maintenance and construction of it by paying for it. He said, right now, he is not suggesting any of these, he is just presenting them to Council. He said, again, within 30 days, this is what they have come up with. He said they have looked at some example legislation to start chewing on it mentally, and see what makes sense for the County, as these are what has been done elsewhere. He said the premise behind a lot of the work they have done over the past 30 days is what other places have done to alleviate their flooding, and what has the County done in the past to alleviate their flooding, and how can they move that forward. Mr. Joe Holloway said, in looking at examples of legislation, it is pretty vague on how it would be enforced. He said he can hardly imagine going in on someone's property and telling them they have to clean their leaves out, and somebody else is on the other side of the ditch, and they will be arguing on whose leaves they are, and who has to clean what side out. He said he thinks there is a lot of work to be done on this before they go any further, to which Mr. Baker responded, absolutely. He then said this is not an endpoint, this is just the beginning. He said this is a discussion on moving forward, and, again, it is a three-pronged approach. He said Council is seeing a month's worth of work on three separate topics. He said it has to be a systemic approach to drainage in the County, it is not going to be a silver bullet, and it is not going to be done in a flash. He said, again, they can go out and put a second pipe in there and make that culvert, but that does not address the large-scale issue of the possibility that they are going to start getting these larger rain events, and they are seeing greater volumes more frequently, and how do they, as a County, address that. He said that is what these slides are about, the systemic approach to get those done, but also provide Council with some specifics as far as certain areas.

Mr. Taylor said he would like to add one thing. He said he sent Council a blurb on this a week or so ago, but the County is going to be coming under new State stormwater regulations around the first of the year, or shortly thereafter. He said he knows Mr. Baker and Mr. Strausburg are somewhat tuned into this, but they do not know what they are yet, because they have not issued them. He said, based on the Counties that have commented on it, it is going to be a big expense. He said he will not take any more of



Council's time on it, but there is going to be something coming down the pipe that is going to be significant in terms of cost and effort. Mr. Baker said, Mr. Taylor is talking about the MS4 Permit, the Municipal Separate Storm Sewer Permit. He said it has been happening in Maryland forever, and Salisbury already has their program up and running. He said one of the things he was tasked with when he first came on board was to get the County's running, because, while the permit has not been formally issued yet, they know when the first submittal is. He said MDE wants to see a map of all of the impervious area in the County, and what they are going to do to reduce that. He said the overall picture is how much impervious area the County has, and how is the County going to reduce that by a certain percentage that MDE dictates. He said the first step in that is mapping out all of their impervious area, mapping out where their stormwater ponds are, where all these BMPs and WIPP projects are, because they get credit for that, and they actually get credit for all of the things they have been doing back to 2006. He said between 2006 and today, they will get credit for anything they have done for reduction in impervious area. He said they are already getting spun up on that, and they are working with SU and ESRGC to get some of that baseline mapping done. He said he has done extensive work on this with the City of Salisbury, who just had a recent EPA audit last year of their system. He said he sat down with them and talked about what EPA was digging Salisbury on for problems with their system, so he can learn from those lessons, and apply it to the County. He said, eventually when EPA comes in, this way they are not going to get dinged for the same thing. He said what is nice, also, is there is a lot of overlap between Salisbury and Wicomico County because they are all in the same area, and they share a lot of the same drainage sheds. He said they are fully aware of it, and they have projects proposed in the upcoming CIP, they have money in this year's budget to start seeding some of that and doing some of that work, and they are moving forward with it. He said he is more than confident they are not hitting the ground running, but they are already running with the ball. He said he has talked with MDE, and, again, the first submit to them is in September 2019. He said they are looking on schedule to probably have all of that mapping done in the early part of 2019, so they are probably looking at having their work done in March or April of that year. He said they are in good shape. Mr. Taylor said it involves more than mapping, to which Mr. Baker responded, it involves a lot more than mapping. It involves outreach, illicit discharge detection and elimination, going out and doing water sampling, and there are multiple aspects to the permit. Mr. Taylor then said, Cecil County has estimated it will be \$50 million, to which Mr. Baker responded, he does not doubt that in some of these larger areas it is going to be significant, but he has some good partners and they are, again, piggybacking off some of the work that has already been done. He said they are going to do their best to minimize these costs and take credit where they can. He said, he can guarantee Council, a lot of these stormwater projects that would eventually be proposed for these improvements will include some portion of water quality so they are getting a bang for their buck, because then not only are they improving the drainage, but they will make sure they tag water quality, and just by doing that, not only are they helping with their MS4 permit, but then they can tap into grant monies that are available for these projects. He said it is all very synergistic. Mr. Joe Holloway asked Mr. Baker, if his prior employer was the State, to which Mr. Baker responded, the State, and then before that the City of Salisbury, and before that local consultants. Mr. Joe Holloway asked, when working with the State, did he have any opportunities to work along with the State of Delaware on drainage issue problems, to which Mr. Baker responded, not drainage in particular. Mr. Joe Holloway said there is a problem on Line Road, which Mr. Baker is probably aware of, where Maryland's water will not go to them because their ditch is full. He said he has contacted the State of Delaware. He said, in fact, he put a couple calls in this week and has not had them returned, and he was wondering if Mr. Baker had any contact information of anybody. Mr. Baker said he can dig around and try to see if he can find some. Mr. Joe Holloway said he has been working with Mr. Weston Young on it, and they have been talking to the folks, but the Delaware ditch will not get cleaned out and it is blocking the water up

on the Maryland side. He said they have a pretty significant problem up there that has been ongoing for a long time. Mr. Baker said he will certainly ask around.

Mr. Matt Holloway said he just asks that the County, to the best of its ability, tries to address these hot spots of flooding as soon as possible. He said it is great to have the long-term plan, but on Pratt Road there are three houses now for sale in that area that were not for sale before the flooding. He said he just feels like they are letting their residents down if they feel like they have to move because of an issue like this. He said he is not saying it is the County's fault, but it is something they need to move on as quickly as possible to try to address, to which Mr. Baker responded, absolutely. There was no further discussion.

  
John T. Cannon; President

  
Absent  
Larry W. Dodd, Vice President, District 3

  
Ernest F. Davis, District 1

  
Marc Kilmer, District 2

  
John B. Hall, District 4

  
Joe Holloway, District 5

  
Matt Holloway, At-Large

  
Laura Hurley, Council Administrator