DEPARTMENT OF THE ENVIRONMENT MEETING

PHASE II WIP INFORMATIONAL MEETING

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The above meeting was held on Thursday, August 2, 2012 at Washington College, Hodson Hall, Hynson Lounge, 300 Washington Avenue, Chestertown, Maryland 21620, commencing at 1:30 p.m., and was reported by Janet A. Brown, R.P.R., a Notary Public.

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ALSO PRESENT:

NANCY K. NUNN
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P R O C E E D I N G S

MR. EMMART: Good afternoon, everyone. My name is Paul Emmart. I'm from the Maryland Department of the Environment, and I want to welcome you here to this very beautiful hall. We're going to have a presentation on the Accounting for Growth policy. This is a new policy that the State agencies and the administration are trying to get up and working. And the purpose of this meeting is to explain a little bit about it to you, and to solicit your feedback, your input, and your suggestions. The policy is not finalized, so we're in the process of developing it, and we're looking forward to your input.

Before I begin, I just wanted to, to thank the sponsors of this public outreach campaign, especially the Town Creek Foundation. It's been instrumental in funding these series of regional meetings that we're holding. This is, I believe, it's the fourth or fifth meeting we've held out of a proposed dozen around the State. And

I'd also like to thank the Harry Hughes Agro-Ecology Center (sic) for their support, and the logistics, and the coordination of the meetings and, of course, my colleagues from the State agencies.

What we're planning on doing is, after we go through a brief PowerPoint, we will have a panel of State agency folks up here to lead and respond to your questions and discussion. So, with that, we will begin.

This policy is called an Accounting for Growth. It is just to give an overview of what we're going to look at -- Brigid, if you go to the next slide, please. Great. Just like to go over, very quickly, some of the context, the historical context for this policy. Then, because it has to do with calculating loads of new development of growth from -- we'll talk about how to calculate those loads, then we'll look at some of the economic implications of the policy and see how this policy integrates, or how it might integrate

with existing policies, like, the trading policy that was issued in 2008 in Maryland. We'll talk about protecting the local water quality, which is a fundamental principle in the policy, and the trading geographies of how the policy might work, and how it may, in fact, affect an existing trading policy. And, then, finally, we'll talk about implementation of the policy, or the effective data, and things like that, and what our schedule is for the rest of the outreach.

So, just to go over, very briefly, this, this history, of course, is probably very familiar to you and the audience, but I just want to make sure that the context is set, so that we know where this comes from.

Essentially, the Bay program, there have been voluntary agreements from 1983 between the Federal Government and the states that recognize that the Bay was degrading, the water quality was being impacted, and that there was a need do something. In 1987, there was the issuance of a 40

percent reduction for nitrogen that was issued. That should have been met by 2000. That, of course, wasn't. In 2000, there was the Chesapeake 2000 Agreement, the C2K, which had among its aims to eliminate the impairment by 2010. That 40 percent reduction applied to nitrogen and phosphorus, some nutrients. In 2006, it was very apparent to policymakers and scientists that the goals of the agreement wouldn't be achieved by 2010.

Next slide, please. In 2007, just to give an indication of how one feature of that failure to meet the agreement was discussed, an EPA Inspector General's report stated that, if communities do not sufficiently address runoff from new development -- so already they'd identified that it wasn't simply the existing loads that were an issue and that were leading to the degradation of the Bay, but that growth and the load that's generated from new development would also need to be dealt with.

And, so, that report stated that as a result, restoration costs will increase if that new growth load is not addressed.

And I think this is a central -- it's, it's a very important point in our policy, because what we're trying to do is not just address the new growth, but also to recognize that the cost will rise dramatically if it isn't addressed.

Next slide, please. So, in 2009 the Chesapeake Bay Foundation, and other organizations sued the EPA to take a more aggressive stance. The litigation was stayed by the Executive Order of the President and, then, in 2010, that litigation was resolved with the following action the EPA was required to make:

They, first of all, had to come up with a Federal strategy, and then designate allocations, meaning assigning the load to the states. And then there's a further breakdown of that within Maryland into what are called the major basins of Maryland. These are designated regions of Maryland. So the

six the -- follow on to the EPA strategy coming out. It was the states would also have to come up with their own implementation plans, watershed implementation plans.

So Phase I was developed in 2010, and EPA released the TMDL in December of 2010, then Phase I WIP's were published and, in 2011, for basically the last two years, we've been working toward developing more refined planning documents to account for the loads. These are the existing loads to some extent: So in 2011 the Phase II WIP's were developed and, then, finally, just in 2012, in March, March 30th, the State submitted a final WIP to EPA. There were local county comments, and plans, and modifications to that WIP that were just recently submitted this month -- of July 16 -- and those have also been provided to the EPA.

So the focus of Maryland's WIP has been two-pronged in terms of dealing with the restoration. First of all is to restore all the

sectors by reducing the existing loads and, secondly, is to maintain the quality as it is now by accounting for new loads that may impact it. Specifically to address new loads, the WIP just has discussions in the draft phase of one WIP -- that was in Chapter Three -- and the final WIP is Section, I believe it's 1.8. There's a discussion of growth of new loads.

Firstly, there's been an allotment for the large wastewater treatment plants, sometimes referred to as significant, that they will maintain nutrient caps. This is -- these caps were actually part of a strategy that was developed in, of course, the mid-eighties and the late -- and the nineties -- the tributary strategies, and the other portion is to identify new loads from new development, and to offset those. And the three types of loads would be wastewater, which was -- could occur where the nutrient cap has not occurred and there's not sufficient capacity; the second type is stormwater that would come from

development, and the third type would be from septic systems. And, so, all three of those types should be offset is the face and premise of the policy.

The policy, in terms of the timing of the policy right now, we did establish that we, that Maryland, would commit to making a policy. But the way that -- there was a date of 2013 that was given, and we had, I think internally, thought it would be later than 2013 -- but, as a result of the last sessions, General Assembly, the Septic Bill 236 required that offset provisions be proposed by the end of this year in areas that are called Tier III designated areas. And those Tier III, according to the bill, are generally served by septic systems, nonsewered areas, and where large lock development might occur. So we had a choice of whether we would develop these policies separately where we've decided to try to do them concurrently so, basically, we're aiming to have a policy proposed by December. And, at this stage,

the kind of the objectives of the policy that we've identified are the following:

First of all, we want to permanently offset the load which is generated. That is to mean, if there is a new development, and that development is going to produce either runoff from stormwater or wastewater that either has to go to a wastewater treatment plant or a septic system, we want that to be setoff -- offset, rather, for the entire length of the development. As long as that load exists it will need to be offset.

We are thinking that the policy will apply both to residential and nonresidential development so that the totality of the loads can be assessed and offset. We think that this'll further support Bay restoration preservation, because it will first minimize the pollution from the new growth and it -- we're hoping -- this is another aim of the policy -- that it will allow the public resources either funding or staffing any type of resources that go toward restoration to be

used wisely in the sense that the maximum amount of pollution will be reduced, but it will use the smallest number of offsets.

So one feature of the policy, we believe will happen is that local governments will have the authority, essentially, to develop the policy, develop the program at their levels, and that will encourage them, it will incentivize the county governments to optimize the use of their growth and, also, of whatever available offsets might be there. So we see this as being a fairly -- a policy which will encourage the efficiency of the use and also maximize the reduction of the pollution.

Okay. So concepts in the Phase II WIP. These are just four points, basically, of how the WIP tried to discuss what type of loads would need to be dealt with. So, for instance, development, new development even after it's met the applicable regulations, for instance, stormwater, so it would be following the Stormwater Management Act of 2007.

Even if all of those regulations were followed, which we assume, there's still some load discharge from the development, and that's the load we're aiming to offset.

We think as -- I mean, the general discussion has been that redevelopment should be encouraged. And, in that case, there would be a sort of provision that redevelopment would not be required to offset the non-point source load, so that's, essentially, stormwater offset.

And, then, for new on-site disposal systems, those systems, even if they were -- for instance, best available technology systems would still contribute some amount of nitrogen pollution, so we are hoping that that also will be captured by this policy so that septic load would be offset.

And, finally, point sources. The new loads, of course, would be either taken into a wastewater treatment plant, if there's capacity. But if there's noncapacity, then that load would have to be offset, as well. So there are some

significant differences, though, from what was thought at the time, in 2010 and 2011, and then published in 2012 of the WIP.

And I want to draw your attention to just two major pieces that differ. This policy would address a, a nitrogen load. It would not address phosphorus. So, for instance, with septic systems, maybe, that's not a problem, because phosphorus is not really a discharge from septic systems. But the point is that we are -- in developing the policy we first of all want to make sure that it's a very straightforward, understandable and implementable policy. And one way to handle that is to narrow it somewhat. So we've chosen to go with offsets for nitrogen at this point, and not phosphorus.

The second point is that we are looking for 100 percent of the post-development load to be offset. This isn't, for instance, the difference between -- well, let me just begin in the beginning. If you were to develop or a developer

were to consider putting a new development on agricultural land, there would be an immediate drop, perhaps, from the level of nutrients that would come off of that land, of one acre, let's say, if it were a cornfield versus going down, for instance, residential or commercial as a type of land use. So there would be a load drop. That drop we are not considering. We don't want to give credit for that. That's a land conversion issue and, as a stated policy of the State Government, we want to preserve agricultural land and, so, that is not something we want to encourage. But even if it does occur, if the land use changes and the development is put in, the load that comes off of that new development is what we're after. We're trying to bring this policy to meet a zero discharge from a new development. So it would be a net zero load from any new development, which is -- it's different from the WIP, but it's also a very significantly different policy from any of the other states in the Bay watershed.

So, the next thing that we have tried to leave some thought to is, okay, how are we going to calculate this load? We're talking about a site specific load. And, generally, even using the Bay model, the scale is much, much larger and, so, there have to be, really, fairly good rules about how to calculate the load and how to know what the credit will actually be.

The type of load, as we've talked about before, is wastewater and stormwater. That's what we're calling the direct load. But there's also some indirect load that we'd like to capture in this policy. And this applies only to residential developments, not to commercial. We're trying to capture the emissions that come from vehicle miles traveled, that is, to have a component of the policy which addresses commuter traffic, essentially. And that -- those emissions from vehicle miles traveled come to the streams, the local waters, through air deposition.

I just -- the next new slides are just,

really, the numbers, what you would use if you're going to calculate whatever load you're going to create. And I should say right off the bat this -- I notice people taking notes -- this presentation is available on the MDE website, so it is possible for you to download it and, hopefully, that'll spare you writing.

In any case, first, the first component that is part of the policy is the load which comes from septic systems. So this is, just simply, the nitrogen load per household per year in pounds for a conventional system and, then, the best available technology upgraded system, which is rough -- roughly half.

The next consideration are the loads that come from wastewater treatment plants. Typically, secondary treatment in discharge is 18 milligrams per liter of nitrogen, BNR eight, and then ENR is four. Now the plans can operate at the lower levels, and do very frequently seasonally, but this is what we're going for as the actual

number to use for the calculation.

The next component of the stormwater, of course, these load numbers come from the Bay model. These are the most recent version of the model which is called Phase 532. And for the land use sites of impervious and pervious lands, the loads are in lbs/acre/year, 15.3 and 10.7, and for forest lands three pounds, roughly.

One important thing to note is that the footnote, is that if, for instance, environmental site design to the maximum extent practical is used, we estimate that there's roughly a 50 percent reduction from the impervious and pervious load. So these loads, these numbers that you see for those categories would be halved.

The third is the air deposition piece, the component which we're trying to capture. And in order to make this fairly presentable and fairly rudimentary, we've just made a simple cut in terms of population density. So up here on the slide you'll notice there's less than or greater than

10,000 persons per square mile. That's really what the dividing factor is between the offset for air. If you were in a Census Tract that was less than 10,000, you would need to offset one pound of nitrogen per year. And if you were in a very dense area, greater than 10,000 square -- people per square mile, it would simply be a half of a pound. And that's per household. So if there were more households, it would be -- it would mean more offsets.

All right. So this is a very busy slide -- my apologies -- but this slide and the next slide we want to present some very basic examples of what would this mean, how would you calculate the offset? So this first slide deals with residential development, and it presents three scenarios:

One that is low density residential, next which is medium, and the third which is high. And on the right-hand column, it presents the pounds of nitrogen that would need to be offset.

So immediately -- and those are cumulative. So if you notice on the right-hand column, just under the word pounds, ww is wastewater, sw is stormwater, and then air. Each one of those components would be totalled up to find out what the complete offset required would be.

So you can see, just at a quick glance at this slide, the low density residential results in total offset of 17.7 pounds, its medium results in 8.8, and high, 1.2. So what that should tell you right away is that, okay, there's going to be less offset required in more densely area -- populated areas. And, if you look at the scenarios in terms of the inputs, basically, the -- for instance, under low density residential, it's a two-acre lot, and medium it's a .5-acre lot, and high density, it's a tenth of an acre. That, again, indicates that it's going to be higher -- it will be smaller lots, it will be higher density.

And, then, the question will be, okay, well, what type of wastewater treatment system does

it have? For the low density, it's on a BAT system, then there's -- there is, in fact, a wastewater component that needs to be offset. Medium density, where there's a BNR treatment, however, it does not have enough capacity.

There's, again, a wastewater component. But, for instance, in the high density residential, the last scenario, that one is on an ENR plan so, essentially, it's the highest level of treatment wastewater and, therefore, because it's in a very dense and -- area, there is no offset required for that one.

(WHEREUPON, a cell phone sounded.)

MR. EMMART: Oh. We'll just keep going. The next slide is a similar setup. It has to do with commercial development and mixed use development. This is a very basic three examples. But, again, what's trying to be shown is that where there is, for instance, a commercial development that is in green fields, as opposed to in, let's say, a redevelopment situation, the green fields

are going to result in a need for a greater amount of offset. So, for instance, this first example is a warehouse on 30 undeveloped acres, 80 percent impervious. It has 10 EDU's on BAT. There is not -- first I should just point your attention to it -- there is not an air component offset. This one is a zero there for the air component, and the reason is because it's commercial. We're trying to limit the air component, simply, to residential.

UNIDENTIFIED MAN: Why?

MR. EMMART: That -- that's a good question we, we were asked. Just on Tuesday someone brought the question of well, wouldn't commercial air have a lot of vehicular traffic, trucks, things like that, wouldn't they generate pollution? And we fully agree that they would, but at this point it's simply we haven't. We've decided to leave it out. I mean, if that's --

UNIDENTIFIED MAN: Just arbitrarily?

MR. EMMART: Well, it's not arbitrary in the sense that we don't understand there's

pollution that's generated from there. It's more that we want to make the policy simple. And that may not be a very good reason but, on the other hand, in order to get the policy working and understandable with people, we want it to be fairly clear-cut and dry. It's, it's possible, of course, we could add that in. It's not a new development. I'm going to, if you don't mind, we can ask questions through the discussion. I was hoping to hold them until the panel -- but I just like to introduce David Costello and Brigid Kenney of the Office of the Secretary at the Maryland Department of Environment.

MR. COSTELLO: Yeah, why don't I hold off. I can answer that question a little bit further.

MR. EMMART: Yeah. And I'm hoping that my colleagues will give me some help with these answers. But if you don't mind, we'll wait for that one.

Going back to scenarios. The ideal

scenario is, essentially, one where you would not need an offset. And that's presented in the bottom row. It's essentially redeveloped and underutilized urban site, it's commercial, it would be served with wastewater treatment plant, and it would have capacity, it would be below its cap. This is a case where you would have zero wastewater offset because there's capacity, you would have zero stormwater offset, because that we have, we have basically decided to waive, and there would be no air because of the things we just talked about.

So those are very simple examples, on the MDE website there is not only this PowerPoint, but there's also a spreadsheet tool, which is a -- sort of a very basic calculator that will help you go through various different scenarios, and that can be downloaded, as well. There are far more scenarios on the spreadsheet than I've presented here, but you can also, you know, change the numbers and make it whatever scenario you'd like to do.

All right. The next slide that we wanted to -- we've been getting a lot of thought and implications of this policy. It's been commented very many times that, you know, in terms of environmental work, we often neglect the, the examination of costs, which we should not do. But in terms of this policy, because it would be linked to the trading policy, we're especially cognizant of the fact that if the offsets, for instance, are not as plentiful as the market would like to have them, then they may rise in cost, they may become scarce. And we are hoping that this policy will encourage redevelopment, it will concentrate the development in areas that are served by the best wastewater treatment plants and, therefore, it will protect the Bay to a larger extent because of the treatment of that waste. And it'll also, at the same time, consume the fewest credits. As was shown in the last commercial example, there were no credits required. So if they are scarce and that development occurs in highly developed areas, then

the credits would be used very efficiently. So we we hope that that -- that is incentivizing of where the credits should be used will also determine that fewer credits are actually needed and will allow population growth, as well as the protection of the Bay to be maintained.

This is a slide that looks at how much growth there is, and where does that growth occur. It tries to develop a relationship between the density and the discharge, let's say, of nitrogen in pounds, but in relation to jobs and residences. So, on the left-hand column, you see that there's a dominant type of development. And, again, it's a very -- it's the same three scenarios, really -- a high density, a mixed non ENR density, which, which development -- which is on septic and, then, large load development on septic. The middle column, pounds per nitrogen per job resident, tries to show, essentially, how much nitrogen would you get per capita if you were in that high density area. And the range, I think, is 2.5 to three pounds. As

you go into more diffuse areas, where the development is spread out, you literally -- you produce more nitrogen for that same number of jobs and residents.

The third column is sort of the converse of that. It's, essentially, if you had to get 100 pounds of nitrogen credit to buy offsets, let's say, you know, how much would you get for that? And, essentially, in the higher density, you would get a per capita ratio of jobs per residents of 38 to 44 for that same 100 pounds, whereas, as you go into less dense areas, a less concentrated, like, mixed developments that are on septic, non ENR second area treatment, you got 12 to 13. And, then, finally, in large lots, it becomes very diffuse, and for the 100 pounds you would simply get four to five per capita.

One of the vehicles that we're hoping this policy will integrate with is the trading policy, the current trading policy that was issued in 2008 -- which is a point source to point source

trading policy -- and, then, also in 2010, the point source to non-point source policy. These are just these four bullets are, basically, some of the rules, governing rules of the policy. A unit of trade is called a credit equals one pound of nitrogen and phosphorus per year. Immediately you'll notice the trading policy considers phosphorus, and this policy, the offset policy, does not. So it may be required that the, either the trading policy is somewhat modified or that the trading policy has some very distinct features that the offset policy will not at this stage, that is, if the offset policy stays simply with nitrogen.

In the trading policy all nutrient trades or offsets must comply with any local TMDL-based allocations and must not cause or contribute to any local violations of water quality standards. The trading policy does apply delivery factors, and it does account for the differences. For instance, if you go to NutrientNet and you calculate, okay, what type of credit do I need and, and where will I

get it from, it will calculate it using a delivery factor. Those delivery factors are -- at this point, the offset policy doesn't use delivery factors, it uses a statewide number. But it would, it would have worked very closely with the trading policy treatment in a similar manner.

And, again, the monetary value of the credits will be determined by the market. That's what we expect will happen with the offset policy. Any credits that need to be obtained will be purchased according to the, the rate at the -- at that time.

In terms of Bay water quality, that is, tidal, the -- obviously, the effect of the excess nitrogen and phosphorus will affect the Bay main stem and does then deprive of oxygen, eventually, after the unification occurs. We think this policy will reduce nutrients, that is, both nitrogen, and phosphorus, and sediment, to reaching the main stem and, therefore, this policy is protective of Bay water quality.

Similarly, with non-tidal water, non-tidal stream, fresh-flowing streams, we generally think that, by using nitrogen as the parameter for this trading policy, we will also limit the, the impact of pollution to the local streams. Normally, when we're describing the impairments to local streams, there's an analysis that goes on that describes what the relationship is between nitrogen and phosphorus. You have to have both in order to have an output bloom. But, normally, what controls that bloom is what we call a limiting factor, and in non-tidal streams, that's generally phosphorus. So phosphorus, if it's reduced, obviously, it is a good thing, but if nitrogen is added and phosphorus is not, then the impact is what we consider to be minimal. So we don't think by -- or, rather, let me phrase it in a causative manner -- we think that by using nitrogen as this parameter in the trading program, we will not impact any local water quality beyond its state.

We also think, in terms of using nitrogen, that the BMP is -- the best nitrogen practices which are applied to the land -- normally, the nitrogen efficiency is less than the phosphorus so, as a result, when you put on BMP's and you prevent nitrogen from being input to local streams you're also, at the same time, preventing phosphorus. So we do see that this policy will be protective of local water quality.

And, then, in terms of the development, we see that, obviously, new development's going to follow the existing regulatory framework. It's going to follow environmental site design to the maximum extent practical, and that has benefits in itself which will benefit habitat, as well as water quality, and will reduce the amount of stormwater.

And we think, finally, that in being consistent with the trading policy, that requiring sellers to meet their WIP baseline reductions before they can generate a credit for sale will also drive water quality improvements.

This is a slide that tries to get at the, some of the inconsistencies between what we're proposing, and what does exist in the trading policy. Right now, trades under the trading policy can exist within, but not between three major basins -- the Potomac, the Patuxent, and then the rest of the state. The offset policy that we're trying to introduce we're hoping will be consistent with the five major basins that the EPA has established. And, if it comes to it, in the future, if there are interstate trades, that that will be a feature that will be resolved between the two policies so that they'll be consistent. At the moment, I don't believe there's interstate trading in the current trading policy.

So there's -- while we're on the subject of trading geographies -- there's a very important distinction that we're trying to introduce in this policy, very different from the trading policy. And that is that new development should be encouraged in targeted growth

revitalization areas. These are areas which Maryland Department of Planning is identifying they are usually served with NR wastewater treatment plants, and they fall within the priority funding areas, So they're a subset of those EFA's. In order to encourage those areas, we would like to see the policy -- whoever needs to buy a credit, who needs to offset some load, we would like to give them the freedom to buy that credit anywhere -- from anywhere in the State if that development is going to occur in a target of growth and revitalization area. However, the opposite of that is that if the development will not occur in one of those areas, then the purchase of the credit must be done and obtained within the county where the development is occurring.

All right. We're almost to the end. In, in essence, one of the ways that we think of this proposal being implemented would be that it would be promulgated through a regulation, an Maryland Department of the Environment regulation,

using existing statutory authority -- there wouldn't be any further legislative action needed -- and that it would be issued through a general permit for offsets. We would anticipate that the developer would be responsible for calculating a load, obtaining the permanent offsets, and then submitting the information to the Department in order to obtain this permit that would demonstrate that the offset has been certified, that it does exist, and that it is existent, that it's on the ground. So that's a significant high bar, in a sense, that the offsets should be present before the permit would be issued. And we can discuss that a little further.

What we are hoping, as a result of these outreach meetings, is to gather your stakeholder input. We really value what you have provided us for feedback and, so, these questions that are here are suggestive of areas where we know we need some feedback, but they're not, not comprehensive.

So, the first one, should the policy use nitrogen loads only, that's a very basic question. Should it apply phosphorus or not.

The, the second question, is there a better way to calculate post-development load? We are interested in knowing what alternative approaches you might have in mind.

Should the annual practices be approved as offsets for development? If so, what protections should be in place to assure that the annual practices continue? This refers to, if I were to go out, let's say, as a developer and try to purchase a credit, and even if I were developing in that target growth and revitalization area, I could buy my credit anywhere in the State. I would have to show that that credit does, in fact, exist. So the easiest one for me, maybe, to purchase would be, let's say, if I purchased the benefit of a wet pond in Frederick County somewhere. That wet pond can be verified. I can take a picture of it, I can send it to the Department, I can attach information

with it that goes to the Department to get my permit. But it might be that the credits that are available on the market are cover crops, they're annual practices, they're not permanent structures. So the question is, how do we handle that? You know, if there were, for instance, a broker who -- an aggregator who basically would maintain a pool -- this is one thing that's been suggested -- a pool of available credits that might be an annual cover crop, is that person responsible, that broker responsible for guaranteeing that annual crop -- not, maybe, the specific one, but one among a pool -- that would be there and verifiable every year into the future?

And, then, the question is, how would they be verified? What about the maintenance, operation of the maintenance of certain things. Where it began with structural BMP's, it's fairly clear.

And, then, the last question is about the aggregators and brokers, who should those

1 people be? One suggestion we've had, which is
2 similar to the Wetlands Program, is should there be
3 a fee-in-lieu option. Let's say, for instance, if
4 there were very few credits available or, as an
5 alternative in certain cases, is that a program
6 that we want to have attached to this policy as an
7 option and, then, would that somehow affect the
8 price of the off -- offsets?
9 The next bullet relates to
10 grandfathering. This is something that came up
11 during the Stormwater Management Act legislation.
12 It was of great concern to many of the public to
13 have a grandfathering clause for the Stormwater
14 Management Act. It -- would that be an appropriate
15 feature to have in this policy, is a good question.
16 And, then, the third bullet is, what is
17 the role of local and county jurisdictions; should
18 they assume responsibility in some way? For
19 instance, if there is a developer that creates a
20 development, intuitively, one would expect that the
21 developer would no longer have any responsibility

for that development after it's constructed, and sold and for -- offerable. Would that responsibility then fall to, for instance, homeowners association, or would it fall to the county, or would it become -- would it be a State responsibility? These are things that we're trying to work out, and we have not come to any conclusion about it at this stage.

And then, again, the final one is, what about the trading geographies? We talked about that.

This is the, this is almost the final slide. It's a schedule. This schedule is to essentially set out what are, what are the benchmarks we have between July and December. And essentially, we're in the July to September phase of outreach. We have had a couple of regional meetings. We're scheduled to have many more. We've made some documents available on the website at MDE. When you go to the main page of MDE, there's a Watershed Implementation Plan Tab, and

when you go to that you'll come directly to the offset link where you'll find the discussion draft, which is about a 10-page narrative, you'll find the spreadsheet that I referred to earlier that helps calculate the loads, and then you'll also find a copy of the PowerPoint and, hopefully, within the next month or so, we will have draft regulations prepared that you can review, as well.

In October, we're thinking that the policy will go to the Attorney General for review and approval by the MDE Secretary. In November, according to the requirements of SB236, the proposal would have to be shown and the full briefing of the Environmental Manners Committee. And, then, in early December, it will go through the ADLR and DLS, which are legislative review bodies for new regulations. If they find it is satisfactory, in December it would be published in The Maryland Register, and then it'll be promulgated as a regular -- in the regular process for regulations.

So, at this stage, we're doing the outreach. We're soliciting your comments; we will be able to accept comments all the way up to October 1st. And you may submit your comments by e-mail to a special e-mail address called afg, which stands for Accounting for Growth, at the MDE website.

If you'd prefer to send a hard copy, you can send them directly to me. And when these comments are received, we don't anticipate having the time to do a full comment response document that, normally, we would do -- we did it with the WIP, with Phase I, and Phase II where, when the public comment's received, we write responses, and then publish what our responses are on the web. In this case, we will receive the comments that you have, and consider them. And if there are modifications to the policy that we will make, they will be incorporated into the regulation. And, then, once the regulation in draft form comes out through the regular process, there's -- there's a

public process involved in that, as well. So you'll basically get a second chance -- one chance to see a draft, and one chance, then, to comment upon the final draft as it's put through the promulgation process.

And, with that, I'm going to invite the panel to come up to the table, and to open the floor for discussion and questions. One thing I wanted to ask, just as a courtesy, if you could please state your name and affiliation if you have a question to ask, or a comment to make. We'll be happy to give you the microphone so that everyone can hear clearly what you're asking. And I'm going to, I'll let the panel introduce themselves.

MR. TASSONE: I'm Joe Tassone from the Maryland Department of Planning.

MR. RHODERICK: John Rhoderick from the Maryland Department of Agriculture.

MS. LEVELEV: Marya Levelev, Maryland Department of the Environment.

MR. COSTELLO: Dave Costello with the

Maryland Department of the Environment.

MR. EMMART: All right. Are there questions? Sir, in the back.

TOM HUGHES: On Page Five, at the top, you said --

MR. EMMART: Excuse me. Would you mind just, tell us your name, please, and affiliation.

TOM HUGHES: Tom Hughes, Talbot County. Planning Commission.

MR. EMMART: Okay.

TOM HUGHES: On top of Page Five, you list the pounds per year conventional individual septic system, 9.86 pounds of nitrogen per year. I was under the impression that it was about nine pounds per person per year. Now, that number seems low for a 60 milligram conventional septic system running about 200 gallons, you know, at -- a year.

MR. EMMART: Mm-hmm.

MS. LEVELEV: This is an average number for the State. We're using their program numbers that are raised, for instance, people per household

and maybe between 60 and 40 milligrams per year, so -- but these are Bay program numbers that are used by the Bay model.

TOM HUGHES: Well, I -- I don't remember. We'll, we'll check it. We'll -- I'll talk to you later about that --

MR. EMMART: Please do.

TOM HUGHES: -- but, for instance, on some State websites, they use nine pounds per person per year for a conventional septics --

MS. LEVELEV: Yeah.

MR. EMMART: Okay.

TOM HUGHES: -- and I was just wondering.

The other one, if I understood you correctly, if you have a, a new role of development going in. You take no consideration whatever of what the current land use is.

MR. EMMART: Correct.

TOM HUGHES: You just add up based on these formulae, what --

MR. EMMART: Yes.

TOM HUGHES: -- the nitrogen load is --

MR. EMMART: Absolutely correct.

TOM HUGHES: -- is that correct? Okay.

MR. EMMART: I hope that's clear to everybody. We're trying to avoid, purposely trying to avoid, giving credit for the reductions in the land use, the conversional land use, so these calculations of what offset is required are based strictly on the development itself, not on the prior land use. Please, in the back?

PHIL SHIRE: Thank you. Phil Shire, St. Mary's County on the western shore.

Does that include stormwater management calculations also, you know, instead of the original?

MR. EMMART: Yes, it does. Yeah.

PHIL SHIRE: It's -- get the message out to the public engineering community.

MR. EMMART: Okay. If you would please just send us a comment to state that, that'd be

great. Further questions?

SANBY COYMAN: Sanby Coyman with Talbot County Planning Department.

It seems like accounting for all this, and, you know, maintaining the records and inspecting, has there been any thought on how all that's going to be administered?

MR. EMMART: Yes, there's been some thought about it. It has not been solved, though. It's a quite a big burden, I think.

MR. COSTELLO: Considerable thought. And, I think, frankly, depending upon how the system develops, then there likely to be multiple, you know, multiple elements. So, for instance, if we have aggregators, if we have, you know, to the extent that we develop a robust market system, then, obviously, they're likely to be more inspectors verifying practices to see their placement, because people have money on the line, and they'll, they'll have the -- so, they're likely to be multiple roles, 'cause, obviously, the

State's going to have a role, local jurisdictions will have a role, and we believe the private sector will have a role in, you know, managing many of the trades, and verifying that many of the practices that are required against credits have been properly generated. But we can't answer right now to what extent, other than it's likely to be significant.

MR. RHODERICK: I was going to say, under the current trading policy, these points as you saw up there for agriculture, we have a system set up and in place. But, as you say, the, the urban component, a whole new entity that we haven't addressed, as well as, I guess, a county level, the Legislature, you're going to have to keep the new development and the offsets, as well.

MR. EMMART: Question?

DAVID FOSTER: I'm David Foster, the river -- over on the Chester River, and I'd like to thank you for putting on a very clear presentation.

Just a brief comment, and a question.

First, with regard to the loading for septic tanks, I was reviewing the Queen Anne accounting WIP just yesterday, and I noted that they also referred to 26 pounds per residence, which will roughly correspond --

UNIDENTIFIED MAN: Perfect household.

DAVID FOSTER: -- per household --

UNIDENTIFIED MAN: Right.

DAVID FOSTER: -- which would roughly correspond to the nine pounds per person, not 2.6 people per, per residence, so you need to double-check that.

The other question -- and it's one that you'll remember I've asked before -- while we certainly appreciate the -- the goal of smart growth, we understand the desire -- I understand desire to have a different ratio requirements for people who are building in a targeted growth area versus a nontargeted growth area.

I still have real difficulty trying to explain to people in Kent County, for example,

why -- and help me walk through this example -- if somebody was to build in a nontargeted area just up the river from Chesterstown, they would not be allowed, under your policy, to get an offset 300 yards away across the river, but they would be allowed, under your policy, to get an offset 30 miles away on the Sassafras River. I just don't understand how we can explain that as an environmentally-based program for residents of this area.

So help me with the language I can use to explain to people here. Thank you.

MR. EMMART: I'm not exactly sure how to explain that fully, and you did ask that question before, so we have your notes and thoughts.

One thing that did come up in another meeting, which I thought was very interesting, was the concept of limiting the purchase of the credit within the county. For some county folks that seemed like a good option, because they wanted the

restoration to occur within the county. So what that person suggested as a sort of an, a supplement to this policy would be to make it a heirarchy at the county level to say, okay, the first option must be to try to purchase it within the county where it is, whether it's in targeted growth area or not, so that the restoration and the additional load, which is going to be part of the counties, would be locally based. Then, if that credit can't be purchased, then to sub -- to move further out in the hierarchy.

I don't know if that directly answers it, but it was a very good suggestion, I thought.

MR. COSTELLO: I know, I think that still what Paul has said -- and, Dave, we've talked about this a little bit -- obviously, geography, in terms of how the market's likely to play out, and also the -- what we see as multiple paths here, aside from -- we do want local jurisdictions to take responsibility for their waste load allocation.

So we believe, again, that if a county is, is being responsible, in terms of its meetings its TMDL requirements, as well that -- we think that, obviously, that this would help them do -- this is going to help with their level of compliance.

Now, in terms of most local water quality, quality issues -- and I know a number of people have come up with questions -- Paul, I think addressed that earlier, as well -- and, you know, in this instance, if it happened on this side of the river or the other side of the river, it's still helping this area in terms of at least the offset.

DAVID FOSTER: Right. It was on the other side of the river. It would be in Queen Anne's County versus here, even though it's only three miles away.

MR. COSTELLO: No, I understand. But it still impacts the same river --

DAVID FOSTER: Right.

MR. COSTELLO: -- right -- so, so from that -- in that regard -- we just think, again, as, as you add up the potential benefits of local jurisdiction responsibility, and local jurisdiction also accounting for how they deal with their capacity, offset capacity, and their loads that we think that they, on balance, provide more benefits that, you know, the challenges that you outline.

So it's -- and much of this program, really, is about balance. I mean, we're looking to offset loads to the Chesapeake, for the most part, because most of the loading ultimately ends up in the Chesapeake, the nutrient loading, the pollution ends up in the Chesapeake.

So, again, on balance we think that overall those geographies will drive, you know, greater compliance overall, accelerating compliance related to the pollution load to the Bay, more cost effective -- quite frankly, more cost effective compliance and, and more cost effective solutions.

So we're -- you know, none of us is

perfect. We're still looking at all aspects, but we think in that regard -- Joe, do you have --

MR. TASSONE: I just wanted to also respond, David, that the fundamental reason for the two trading geographies frameworks, the one that said that, if you're imparting a growth revitalization area, you can offset anywhere and, if you're not, you have to offset it in the county, is that the targeted growth and revitalization development is going to load at a much lower rate --

MR. COSTELLO: Mm-hmm.

MR. TASSONE: -- per new job or residence.

MR. COSTELLO: Mm-hmm.

MR. TASSONE: And it's the kind of development that we want to encourage both from the standpoint of the minimizing total new loads for every new job or resident we accommodate, but also for minimizing the rate at which we eat up our limited offset capacity.

So, the flip side of that is to make development that doesn't work that way and is going to eat up much more offset capacity per capita, new growth discouraged from doing so because it contradicts our objective.

Now, now, your issue has to do with what are the unintended consequences --

DAVID FOSTER: Precisely.

MR. TASSONE: -- of that for local water quality where it prevents you from trading right across the river in the same watershed. So that's something that we can think about, trying to find a way to accommodate, but we don't want to accommodate it at the expense of the broader principle.

DAVID FOSTER: All right. I appreciate that, to incentivize smart growth, that's fine. We all have a stake in that. But we've got to be able to do that where it's in a way that is understandable and is environmentally sound. It's a challenge. I appreciate the struggle that you're

--

MR. COSTELLO: You know, one thing that you could add, too -- and this is something that's, that's on the table -- I mean, if, if we could clearly show that such a trade did impact, negatively impact local water quality, we could exclude that tidal trade outlet. So, I mean, that's conceivably a provision that would entirely address your concern. So that -- I mean, that's still on the table as a consideration.

MR. EMMART: In the back, please, ma'am? Oh, I'm sorry. Okay. Bill?

BILL WOLINSKI: Bill Wolinski with Talbot County Public Works. I have a similar question. And the Guidelines under existing trading policies, there's restrictions on offsets and credits for any situation where there's a TMDL, local TMDL, that might be violated. But in a lot of -- you could have a lot of situations occur where there isn't established TMDL's. And, you know, how would you go about making an assessment

of adverse impacts of the local water quality for an offset or a trade, you know, in that area?

MR. TASSONE: I mean, I think that it would really depend on the situation. If you had a situation where there was development, and under the offset policy it would be required to do a nitrogen load offset, the question would be if the way that it could do that under the policy would compromise the local, the local watershed with respect to the nitrogen loads or, perhaps, in another way, how could you address that, how could you avoid that? But I think the idea is that the local water quality issue takes first priority and has to be dealt with through the permanent review and approval process as it relates to the local constraint.

BILL WOLINSKI: My understanding is that in a lot of TMDL's that are forthcoming, that haven't been determined, you may get in a situation -- now, I'm speaking from specific tidal creeks in Talbot County that are potentially

nitrogen-impacted, and yet there's not a TMDL for it -- you could have a situation arise where someone's trying to develop a credit, or an offset, and information isn't really been determined as far as the extent of additional load reductions that are required.

MR. EMMART: Not at that scale, that's right, there wouldn't be that smaller scale. There is the load reduction required for that lender of segment, however, under the Bay model, so there would be a reduction required. And, presumably, any new TMDL that would be developed would be done consistent with that.

BILL WOLINSKI: But they could be more limiting, or more restrictive.

MR. EMMART: That's true. It could be, it could be even tighter than the Bay TMDL in order to generate downstream benefit or, you know, it -- it's, it's also possible that it may not be that.

MR. RHODERICK: Well, right now they've got 34 -- when we talk nutrients, there's a 303B

list which has hundreds, but when you cut that list to just nutrients, that's what MDE's been working on as a first priority to identify those local TMDL's that have nutrients. They've done, I think it's, 34, 37 currently. And there's a bunch more they've got in the, in the computer. So those are -- they're trying to close that gap so that this situation doesn't arise.

MS. LEVELEV: Also, in addition, when TMDL is developed, the traditional offsets are needed that would be part of the TMDL implementation plan, is we have opportunity to establish it now to see what impact all the development would be, probably impact of-modeling of each development, and that's -- that we will.

MR. COSTELLO: And, again, I think this is addressed but, ultimately, I don't think you know is that, you know, if applying there's, you know, greater impairment have to be developed -- ultimately, obviously, counties will have to account for that at some stage as it relates to

meeting the requirements of the TMDL.

So, you know, as this plays out, you know, short of putting, putting in an exclusion -- I mean, basically, putting in a provision, which we could, if we do up front, given the condition of local water that you -- this type of trade was allowed, then we could do that.

Also, if you weren't -- we didn't find out until later that the new development created a greater impairment, we could make adjustments later to get -- you know, obviously require that that load be addressed at a later date.

So it's -- I mean, it's meant to be a process, it's meant to be -- and sort of an adaptive process. Obviously, we can, we can adjust as we have. I mean, if you look at the way the main TMDL is, is now and how we're attempting to address those loads, it's very much based on an adaptive process. So whatever we put in place, obviously, we'll then try to address -- bottom line is, we're going to try to address new loads going

forward. I mean, it's -- the whole TMDL will be, when we reduce that 11 million pounds annually that's going into the Bay so that it reach -- reaches the state -- well, we believe that reaches a state where the Bay can cleanse itself, literally. We have got to prevent any backsliding by any new pollution. And that's something, you know, this process is attempting to, you know, obviously guaranteeing as we put it in place, you know.

MR. EMMART: In the back, please?

HELEN DESPINEL: Yeah. Helen DeSpinel, Queen Anne County.

I guess what's really confusing me about the offsets is that when you take -- when you stopped loading nitrogen onto a piece of land when you're farming it, and then you develop it and you're doing different loads, I understand, but there's no net benefit --

MR. EMMART: That's right.

HELEN DESPINEL: -- to that, and that's

not being recognized in any of these offsets.

And I understand -- I heard that you're not going to do it --

MR. RHODERICK: That's right.

HELEN DESPINEL: -- but I -- it's -- somebody gets that benefit.

And I will tell you, I spent a lot of time doing my comprehensive plan, and doing a water resource element. And when I did my water resource element, I found using MDE numbers that every time I converted to a development using the authority --

MR. COSTELLO: Yeah.

HELEN DISPINEL: -- all my numbers went down. But -- and I, I'm not saying that it's a good thing to have small, or anything, what I'm trying to figure out is, where that benefit goes --

MR. TASSONE: Mm-hmm.

HELEN DESPINEL: -- okay? Somebody gets it.

MR. RHODERICK: Okay.

HELEN DESPINEL: And if I can't

calculate it on my new development --

MR. COSTELLO: Marya --

MR. RHODERICK: I'll take the first bite. One thing in the Bay model and that correlation you just talked about, if you go from ag from another land use, the load goes away from ag and becomes part of that new land use. So it goes on your side of the ledger where you can deal with it.

HELEN DISPINEL: Well, I understand that --

MR. RHODERICK: Okay.

HELEN DISPINEL: -- and, you know, that we've always had trouble with the EPA's analysis --

MR. RHODERICK: Well --

HELEN DISPINEL: -- of our land use.

MR. RHODERICK: -- the, the secondary -- the second answer to that is, again, because you, as you said, you're using MAST, you're using this model, you're doing this straight line calculation of, is this the ag land use, is the

urban land use. What's not in that equation is the fact that when you convert it to an urban land use, it's not just about the land load, there's all the secondary ancillary components that come with that. There's the road infrastructure, there's the school, there's the mall, there's the, the air -- the airshed. So you have to look at the total load --

HELEN DISPINEL: Mm-hmm.

MR. RHODERICK: -- that comes with urban, not just that one straight one-to-one conversion. And even the wastewater loads come with that. So, if you those all together, it's a higher load under urban than it was in ag. You have to look at the entire component when you say conversion to urban.

HELEN DISPINEL: Well, I'd still like a credit, and that's where I'm a little bit confounded. But I, I'm okay. I mean --

MR. RHODERICK: No, you want per load.

HELEN DISPINEL: -- I'll follow the

rules.

MR. RHODERICK: Okay. No. It -- the more you convert, that's great, 'cause the ag load goes down, but the urban loads going to go up.

HELEN DISPINEL: Okay.

MR. EMMART: Sir, please?

CHRIS ROGERS: Chris Rogers with ERS.

MR. EMMART: Mm-hmm.

CHRIS ROGERS: Can you walk me through the procedures here? So this is just getting public comment on a policy that's going to be the framework for the regulation. There aren't going to be further comment?

MR. EMMART: Yeah. That's right.

CHRIS RODGERS: And, then, when the regulations come with effect -- I mean, do you have any idea what they're going to look like; is it going to be a requirement that each municipality certify each new development, you know, with a piece of paper from MDE, or is it going to be a regulation that, you know, you're going to come

check every three years the forest conservation regs, or the regulatory program; do you have any idea what it's going to look like?

MR. EMMART: I'm going to defer to David.

MR. COSTELLO: Yeah. I mean, I mean, conceptually, again, and -- we're at a conceptual stage, and we hope to actually have a, a draft reg maybe drawn up by the 1st of September that, I mean, could conceivably be an MDE permit related to construction and stormwater related to construction. So the developer would be required to get the permit.

Now, again, going forward, ultimately, you know, who manages -- you know, because, obviously, the, the credits are being generated, and who manages, you know, to insure that develop -- that development -- 'cause, you know, once a developer steps away, who owns the property -- there was concern about, obviously, making sure that whatever that developer bought is

maintained on the credit side.

So, I mean, we do see a role going forward. I mean, again, we're not sure about the time frame of the credit, we're not -- I mean the permit, we're not sure about what extent local jurisdictions may stay -- step in and take over responsibility for that particular property to insure that, you know, that that offset lasts as long as there's discharge from that property, you know. So these are the kinds of things we're work -- we need to work out in terms of, you know, to what level if aggregators start selling credits to developers, I mean, ultimately, someone is responsible to insure that that property continues to be offset, I mean, the load from that property.

So all of this needs to be worked out, but at least it -- we're thinking, from a regulatory standpoint, to start it in the permit from MDE, It might be a permit conceivably administered by local jurisdictions. We, we're thinking about how that might play out. So there's

still a lot left to, to determine.

And clearly, we're open to ideas. If people have ideas on the way we should do this, this is exactly what we're trying to gather from you all, from various stakeholders. How do you -- and, you know, these are all the kinds of things that we're wrestling with. But, ultimately, you know, whatever we put in place, we need to make sure that the loads are offset, new loads are offset, and that people are held accountable to insure that those offsets are, indeed, as -- you know, lasting as long as the load is lasting, yeah.

MR. EMMART: Are there questions on this side here? Sir?

UNIDENTIFIED MAN: What is this -- what is the start date going to be for this? In other words, if somebody's going to apply for a subdivision, when is the drop dead date that they have to get in the door before all this caves in?

MR. COSTELLO: There's no effective date. Now, we, we've committed, as part of the

WIP, you know, by the end of 2013, roughly --

MR. EMMART: We have --

MR. COSTELLO: -- ag policy.

MR. EMMART: We have stated on the website it would be in the latter part of 2013 --

UNIDENTIFIED MAN: Okay.

MR. EMMART: -- but, of course, it depends on the regulatory process once this is actually made into a regulation.

UNIDENTIFIED MAN: The second question. You said you were going to be considering allowing actual cover crops to be used as credits. What about CRP renewals.

MR. RHODERICK: CRP what?

UNIDENTIFIED MAN: Renewals. In other words, if somebody's contract, 10-year contract is up --

MR. RHODERICK: Right.

UNIDENTIFIED MAN: -- and they resign, could that generate a credit?

MR. RHODERICK: Under the current

policy guidelines from the trading program, when those renewals come up, rather than we have that buffer ripped out, we would prefer to allow that go up on the offset market, yes. So they could have an option to re-enroll in a CRP, or someone else might.

MR. EMMART: Sir, in the back?

KENNETH USAB: My name is Kenneth Usab. I'm with the consulting engineering community.

I, I see, with the formulation that you have, that you're trying to encourage smart growth and redevelopment in brown fields areas, but it's been my experience that a lot of those sites are located on waterways and water bodies that tend to be more impaired, in many cases, to begin with than, maybe, some of the other green field sites. So, if we're saying that there's absolutely an increase in the nitrogen related to redevelopment activity on those sites, even though it may be a little bit smaller, what I also heard you say is that local governments would need to address that

water quality issue in their management of the waterway. So I don't see how those two things work together.

MR. EMMART: Yeah, that's a good --

KENNETH USAB: There's a direct conflict there.

MR. EMMART: That's a very good observation.

KENNETH USAB: And a second question. I'm doing a lot more of my work over here on the Eastern Shore. I wanted to understand a little bit better what you mean by requiring sellers to meet the Bay -- this is on Page 8 at the bottom -- meet the Bay WIP baseline reductions. What I would see is that one of the more cost effective ways to, to meet the reduction is by thinking forests -- the State's even doing that right now -- and I would see a lot of conversion of ag to forest in order to meet it, would be a cost effective way, in many cases, where the long-term permanent type of restoration. What does that paragraph mean, and is

that a possibility?

MR. EMMART: Yeah. I'm going to defer to John --

MR. RHODERICK: Joe.

MR. EMMART: -- or Joe, rather.

MR. TASSONE: First question, sir, about redevelopment. The reason that stormwater loads for redevelopment are excused from the offset requirement here is because redevelopment, presumably, is going to take place under the new stormwater management regulations requiring the ESD and the MEP and, so, pretty much any redevelopment is -- first, it's not a land use change. It's going from a full development to new development. And, second, it's going to generally result in a decrease in nitrogen loads and, therefore, and then improve the water quality based on the reduced input that was used by, so that's why we're not as concerned about redevelopment. Is that all your asking about in the first part of your question, was the issue of redevelopment?

KENNETH USAB: Well, there were still components related to the wastewater, even if it was ENR for that, for that redevelopment. If you had a brown field site that was concrete, or an old industrial area and convert it into residential, for example --

MR. TASSONE: Mm-mm.

KENNETH USAB: -- okay, you're going to have a wastewater component even if you don't have a stormwater --

MR. TASSONE: Okay.

KENNETH USAB: -- component on it that you're going to have to offset to help that.

MR. TASSONE: All right. So my response was related to stormwater component.

With regards to the wastewater component, if the development site is in an area conserved by an ENR wastewater treatment plant, all of those plants, at this point in time, have capacity under their existing permits for additional discharge and still be below their

nutrient caps. So that nutrient load is allocated into the TMDL already. It's figured in as if it already exists. Even though it might not exist until the year 2030 or 2050 at this point in time, it's already figured in. So you, you wouldn't have to offset for that part of the load either. And, presumably, the receding body of water could tolerate that additional input assuming that all the other reductions that are intended for watershed are implemented.

MR. EMMART: But if were -- if the development -- the redevelopment were not on a wastewater treatment plant, or were on one that didn't have capacity, there would be an offset required per household for each one of those units.

MR. TASSONE: Right. So if that takes care of the first part of your question, we can go to John in the second part.

MR. RHODERICK: I think I actually heard there was two questions in there concerning ag. And one was about conversion of forest land.

The other one --

KENNETH USAB: Converting ag to forest and, then, also understanding --

MR. EMMART: The baseline.

MR. RHODERICK: Oh, the baseline.

KENNETH USAB: -- the base -- what the baseline -- what that means, and an example.

MR. RHODERICK: Okay. Let's go with the baseline. Basically, what we have in our current policy was the wastewater policy, and then the ag policy. The statement that before you, you can generate offsets you have to meet your TMDL obligation.

KENNETH USAB: Mm-hmm.

MR. RHODERICK: So in the case of wastewater, they have to take those plans to ENR, which is formally and heavily dependent on technology for agriculture. What we've done is, we've taken the basic TMDL and the loads that were given regarding that, we've converted those to a Curry or ag load and, so, what we have is what's

1 called on-farm assessment tool where we can go out,
2 inventory a farm, and ascertain what his load is on
3 that farm, and does it meet that particular load as
4 described under TMDL. And, so, if he's under that
5 load, then anything he wants to generate or do as
6 additional things could be offset. So first he has
7 to meet his TMDL obligation. And that goes not
8 just to the Bay TMDL but, as was mentioned earlier
9 by Bill, if you're in a locally-impaired
10 watershed -- and a lot of them have, like,
11 phosphorus impairments, you have to meet that
12 first, too. So your, your farm, in this situation,
13 would have to meet the most restrictive of wherever
14 you're located before you can generate credits.
15 Now, the second part about conversion
16 of ag to forest -- and it comes up a lot -- as Paul
17 mentioned on the front end, Maryland is committed
18 to protecting and preserving its farmland and, so,
19 we look at this program as the program that we
20 don't want to harm that. But we're not looking to
21 take, you know, the farmland out from the farmers

and just have it converted to forest. So we do work with the farmers on management practices, including buffers, that they could install. And, again, looking back, they have to maintain -- their farming has to stay within being an operating farm. So you can put wooden buffers in but, again, we want them to know that they have a water quality benefit, not just taking the entire farm -- without production.

KENNETH USAB: We would have a tree forest.

MR. RHODERICK: Silviculture?

KENNETH USAB: Yes. It's an active operation. You can put a Christmas tree -- you can convert, you can grow Christmas trees; you can do vineyards --

MR. COSTELLO: Pasture, right.

KENNETH USAB: -- you know, you could go to pasture, you could land convert it and qualify it as a pasture. Again, all qualifiable credits.

MR. EMMART: In the middle?

BETH ANN LYNCH: Beth Ann Lynch with the Dorchester Planning Commission. I read the policy -- oh, thank you -- I read the policy on idle farmland. It said you can't idle a substantial amount of the farm. So what is, exactly, substantial; is there a percentage?

MR. RHODERICK: When you look at buffers, buffers are supposed to be located adjacent to streams. That's the water quality benefit. So doing a buffer, as we know -- as they defined it is, 35 feet wide. It's 50 feet wide. It's even 100 feet wide, depending on the slope, provided water quality benefit. Taking a buffer out 300 feet, taking the entire field, there's no -- there's no, there's similar what we call benefit, so that's how we approach it. We look at, you know, based on the soils, the slopes, what's the appropriate buffer to steer for protection versus what's just taking excess land up.

MR. EMMART: Other questions, please?

BOB PARKS: Yeah, Bob Parks, Chesapeake River Association. John, you've had more experience now with nutrient trading. What percent of the farms will meet that baseline now; do you have any sense of that at all?

MR. RHODERICK: Sure enough. I, didn't ask him for this, but okay. Actually, this is come up a couple times, and Maryland Office of Planning is actually putting together a comprehensive document that looks within all sectors to try and give people a sense of what the potential offsets would be out there, the availability.

As part of that, we did the study, very quickly, looking at based on what we know from our current program about the number of farms that we've inventoried, the number of fields we've gone out and looked at as to what we see as credit potential for agriculture.

So, with that, and this is very busy -- you go to the next slide, if you could -- the big take-away message is -- here is, we've inventoried

at this point only about less than -- around two percent of the entire farm acres out there to see if they can meet baseline, and what kind of credits they could generate. So depending on the county you're in, we have good data, or we have very spotty data.

The bottom line in here is the percent being baseline, which is getting what you're asking. On average, we're seeing broad concept about 65 percent of current farms can already meet baseline. So, at that -- and it goes higher, depending on some counties. Some counties were at 80 percent where they can already meet baseline, which means they're ready and eligible to trade.

So then we looked at the next step, which is -- and go to the next slide -- was based on that, what we talked about, credit potential on these farms. So, on an average, we're seeing, again, based on that limited sampling and some unverified data that they can generate about 200 nitrogen credits per farm, would have 20 phosphorus

1 credits per farm. This is statewide. And as you
2 can see, depending on where you're located, that
3 number changes dramatically, especially here on the
4 Eastern Shore. Some of the farms, 'cause they have
5 bigger acreage can generate substantially more
6 credits. So like you see on the Eastern Shore,
7 they can generate up to, maybe, 700 nitrogen
8 credits per farm.
9 So, depending on what builders and the
10 developers would need, they may be able to work
11 with one or two farms, or else a pool of five or
12 six farms.
13 Anyway, so that's one piece. The
14 second thing was -- the last slide -- was this.
15 When we talked about what type of credits are we
16 seeing out there? Well, if you look at what --
17 and, again, since some of these farms, or a
18 substantial portion already MEP baseline, they have
19 existing practices above and beyond baselines. We
20 just talked about, that they -- so many in excess
21 of the TMDL. So the potential is there that a lot

of what we're seeing currently is about 75 percent of them are -- would have already practices available on the landscape without doing anything additionally.

For those other ones that don't, we talked to them about opportunities to do new practices, and they -- we've gotten some response, obviously. So we looked at, again, the breakdown of, of types of practices, whether it's structural practice, a land conversion or an annual practice like cover crops. What we're seeing across the board, whether it's existing or new, the majority of them are annual practices at this point, which gets to that cover crop. So that's where the biggest opportunities are at this point.

And, again, this market's in infancy, and trades have not happened to date, so this is really pushing on the farmers, landowners to get some information out of them, but them not understanding what the market is out there.

So, again, this is preliminary. It's

1 going to be part of a broader inventory on paper
2 that Department of Planning is putting together,
3 but it's to get some sense of, at least for this
4 one sector, what the potential is.
5 BOB PARKS: That's great news, John.
6 MR. RHODERICK: Okay.
7 UNIDENTIFIED MAN: Where can we find
8 these slides on the web?
9 MR. RHODERICK: They are not but,
10 hopefully -- I believe they're going to be part of
11 that document. Joe?
12 MR. TASSONE: Yeah.
13 MR. RHODERICK: So when this document
14 comes out, both wastewater, stormwater, or septic,
15 and ag, it should help across the sectors, so at
16 least preliminary information on potentials.
17 MR. COSTELLO: You know, and bear in
18 mind once that inventory's completed, that's an
19 inventory before the market's really established.
20 So our expectation's capacity will grow once
21 there's an understanding, you know, once the market

plays out. And the market's likely to, to expand capacity.

MR. EMMART: Question on this end?

MEREDITH BLACKBURY-GIRARD: Yeah, I'm Meredith Blackbury-Girard with the Town Creek Foundation. I was wondering if you have a sense of what would happen if there isn't a nutrient trading market. What's the Plan B?

MR. COSTELLO: Well, I think that's, that's a very good question, because what is the alternative? We know there's a -- there -- we know the TMDL is in place because the Bay is, is polluted, it's been degraded, and we know what we need to do to restore it to health, all right?

So what we've come up with, we've come up with a Bay restoration plan that, quite frankly, you know, I think most people understand it is very expensive, and, and it's a very heavy lift.

We believe that this approach is one that might, as I said earlier, expedite attainment, expedite compliance, and reduce costs, because it

brings in the market and the opportunities that that mechanism provides.

The alternative, conceivably, 10 years down the road is the EPA starts to require more and more, mandating more and more regulations to, again, reach the TMDL. But the TMDL is there for a reason. There's a total maximum daily load of pollution that the Bay can annually receive and, obviously, we've had a polluted and degraded Bay now for a number of years. If we don't come up with these kinds of approaches that we believe, conceivably, could reduce the cost of Bay restoration efforts across the board for local jurisdictions, for property owners, for State Government, for the Federal Government, quite frankly, then, then it's likely that more regulation and mandates will be required. And, quite frankly, I think most people would find those far less welcome than trying to develop this kind of approach to Bay restoration.

MEREDITH BLACKBURY-GIRARD: Thank you.

I have one more question, which is, my understanding is that the WIP recommends that the ratio for trading be greater than one to one, and it appears that this policy suggests that -- a trading ratio of one to one.

MR. EMMART: That's correct. That's very much right. And it's a feature which has been really left out of the slide presentation. The WIP did, in fact, discuss both in the Phase I and the Phase II the idea of ratios and offsets, that is, that if you, for instance, wanted to build one house, you would have one septic system, and you had to offset that five pounds of discharge.

Perhaps, what the policy states right now is that you would go and look for a credit, it would be equal to five pounds, so you would -- it would be a one-to-one ratio. However, the WIP suggests that there may be a consideration given to, for instance, two-to-one offsets, or even three-to-one in places that are more distant from where the development occurs, or simply as a matter

to encouraging an accelerated reduction of loads across the entire state. So that idea right now, we're not actively pursuing it, but it's still under consideration.

MR. RHODERICK: And, again, there's a -- as you say the -- what we're talking about here is a one-to-one ratio, but if you looked at the trading policies as it stands, the current policy, depending on the types of practice, there only certain practices that have this quantified reduction and where the one to one would apply. In the policy there's a lot of new revolving technologies coming out that have not been fully researched --

MEREDITH BLACKBURY-GIRARD: Mm-hmm.

MR. RHODERICK: -- and when we get into some of those, we do talk in the policy about those. We have requirements of two-to-one, three-to-one, four-to-one, because those are not fully quantified best manner for practices, so --

MR. TASSONE: And -- also, I think that

the answer to your second question, Meredith, is related to your first question. The potential, the higher than one-to-one offset ratios, when you're talking about at first, as time progressed and we began to struggle with the issue of getting a handle on an estimate of potential offset supply and the uncertainties associated with that, then we've had to think again about the idea of looking for higher offset ratios until we have a good handle on that.

MR. EMMART: Question in the back, please?

UNIDENTIFIED MAN: Has there been any thought for using -- to enabling local jurisdictions, that are going to have to meet their normal TMDL load, to let them participate in this market, or is this going to be exclusively for offsetting new development? I strongly encourage you to open it up, 'cause could be some major opportunities there.

MR. TASSONE: Well, the trading policy,

as it already stands, is available to any source sector that can trade with another source sector to reduce its load, although it hasn't been fully defined for non-point to non-point, but that's, that's -- we anticipate that that'll happen.

MR. RHODERICK: You talked about meeting the TMDL.

UNIDENTIFIED MAN: Yes, sir.

MR. RHODERICK: Oh, no. So you're saying, on the front end, these credits at this time are, are strictly reserved for an offset, so both --

UNIDENTIFIED MAN: There is a reason for that?

MS. LEVELEV: No.

MR. RHODERICK: Yes, because, as you saw, there's a limited number it would give them up on the front end you used to meet your allocation, what's -- what are you going to have when the developer comes in and says, I need offsets?

SANBY COYMAN: We'll have a growing

market, because the price will go up --

MR. RHODERICK: Go up.

SANBY COYMAN: -- and the -- substantially increase the market.

MR. RHODERICK: If there's unlimited offsets. Again --

SANBY COYMAN: -- and, ultimately --

MR. RHODERICK: -- there's concern that there are no new offsets.

SANBY COYMAN: I hear what you're, I hear what you're saying --

MR. RHODERICK: Yeah.

SANBY COYMAN: -- okay? But I would strongly encourage you to think about that, and the volume of years, like, may be able to support that. That could really be to everybody's advantage.

MS. LEVELEV: I just wanted to point out that performance in the offset, there is an offset policy. The credits or offsets from our farmers on every policy are limited to draws. But if you draw and the -- they're not available to

meet other reductions that local governments may need. But the irrigation and the water sewer irrigation plan, and in your plan you may need a reduction, that reduction still can be achieved through operations, or some other -- not major facilities that we're paying to upgrade their restoration farms that all the citizens of Maryland are paying for by their own facilities that are being operated for additional reductions needed in order to reduction of need. So the -- there is opportunity to do it, and to describe now, pointed forward, and kept managing those.

MR. COSTELLO: You know, going forward, as well, and, obviously, the county WIP's, the extent that the counties have to account for their load, I mean, conceivably going forward, a county who moves forward faster, and achieves its waste load allocation, you know, reduces its load and it attains its baseline, then, conceivably, a county could generate credits and sell those to other counties who, quite frankly -- and developers in

other counties who dealt with, you know, who hadn't MEP their baseline. So, I mean, it's conceivable, as the market goes forward -- and, again, this is likely to move forward -- you know, obviously, it's not. You know, on Day One it's going to take time to build up a fairly robust market here. And that we are looking at ways, different measures -- I mean, we have -- we haven't talked much about fees-in-lieu, or these kinds of things -- if we had temporary fee-in-lieu to help, you know, help counties to use their utility fee, you know, so there are likely to be ways as this develops, certainly, that county jurisdictions could generate credits and, you know, could work with their residents, quite frankly, and generate collective credits. And, conceivably, there are ways to take percentages of credits and share credits within their jurisdictions.

So I think there are a number of creative ways that you can probably imagine how this could be constructed over time, and it's not

to say that we've precluded anything, although we've got to make sure we get our baselines, because this is all about offsetting new growth, new development.

SANBY COYMAN: I just encourage you, keep an open mind with us, the urban VMP's, is absolutely staggering.

MR. COSTELLO: Right.

SANBY COYMAN: It's not expensive, it's staggering.

MR. COSTELLO: Right. Understood. The -- you know, the other -- let me just add one other thing. I really expect, as well, as you start to measure actual load, as you know we do in terms of the Bay, that the fact that -- if you put this mechanism in place, you're likely to get, quite frankly, far higher compliance in terms of load reduction than we have today that is reported, you know, that is reported -- and, you know, quite frankly, we're probably -- you know, so these are things that -- considered, as well, in terms of

whether or not this type of approach will actually expedite compliance higher than what we believe, quite frankly, is taking place based on reports. So, in terms of, you know, no compliance reports, those kinds of things, so --

MS. LEVELEV: I also wanted to add that we -- the object for us is we're soliciting comments, and also constructive ideas on how --

MR. COSTELLO: Yeah.

MS. LEVELEV: -- to get it implemented. So in your e-mailing to Paul and to his website, if you have any examples to seeing it work on Eastern Shore, or in other more urban counties, please send it to us. We can evaluate it, and do some calculations, and incorporate your ideas into the final policy.

MR. COSTELLO: And, and, Sanby, even if you think that this type of system in your county would help to expedite your meeting your baseline and play out the numbers, give us an idea of why you think this would work and --

SANBY COYMAN: Yeah, it's --

MR. COSTELLO: -- we're willing to look at anything.

SANBY COYMAN: Okay. All right. Be happy to.

MR. EMMART: David here.

DAVID FOSTER: David Foster again, Chester River Association. John Rhoderick made reference to the on-farm assessment tool, and I've heard very good things about that talking to farmers. It allows them to calculate the reductions, and sometimes they can get estimates of the costs and cost effectiveness of that.

Conversely, when I've had an opportunity to meet with WIP teams, various counties on the Eastern Shore, and they're still looking for any tool even roughly comparable to that on-farm assessment tool. I was in one county just yesterday, and they said they had no idea what portion of the TMDL they were able to meet, that they're working on it for months assiduously, but

they had no way because they couldn't calculate the reductions. This is crying out for something like the on-farm assessment tool. We really need that for our stormwater.

Unfortunately, when we do get that, I'm afraid it's going to confirm precisely what he said, that those costs are astronomical. But we still need it. We still need to make those calculations. There's no benefit to any of us to keep blinders on people who are trying to make those calculations.

MR. RHODERICK: We, we've heard that at a number of meetings, and we are looking at it, and it's very preliminary to the costs involved. But we are looking at. Is there something out there, something feasible, that can do exactly that?

DAVID FOSTER: But at least --

MR. RHODERICK: You're talking --

DAVID FOSTER: -- to be able to calculate the efficiencies?

MR. RHODERICK: What you're talking, as

you say, that the individual property owner is capable, and that's a whole new level.

MS. LEVELEV: Just a question. We have the MAST tool that -- does that help at all? It has months and years, if you put in efficiency, it would lead you --

MR. EMMART: I think if you would talk to Dave Dunmyer --

UNIDENTIFIED MAN: What's the problem?

MR. EMMART: -- what's been your response there?

UNIDENTIFIED MAN: Every time we go in the MAST, the loads are restricted, so what do we charge and what do we believe? And I've sent multiple times comments to MDE regarding this issue, and all I get is, I know, we've working on it. At some point it's going to be efficient and we will be able to use it --

MR. EMMART: Right.

UNIDENTIFIED MAN: -- but I don't know when.

MR. EMMART: Well, I think one of the things that everybody hopefully understands is that the MAST tool is the Maryland Assessments Scenario Tool, it's a computational online tool to say, to use the word, it sort of mimics the Bay watershed model so that you can very rapidly put in a scenario with certain TMD's put on land use type. So, for instance, on agriculture, or urban. And when you put in those BMP's, whatever you anticipate whatever your implementation will be, it produces, very quickly, in a couple minutes, a total load for each one of those sectors, and it will tell you, you know, for instance, if you did this amount of implementation, what type of reduction in load you will get.

That said, it's a relatively new tool -- it was just developed last year -- and the benefit that we see is that it's made some part of the Bay model, for instance, the underlying data, visible to people. It sort of opened up a black box.

The downside of the tool has been that, as the model undergoes revisions and becomes updated, so does this MAST tool, and so, to some extent, we've been held a bit captive, and people, users -- it's a free online tool -- anyone can get a password to use it -- but the downside has been that there have been the change in loads, and that it has disappointed people who are looking for very, very specific, especially site specific -- it does not go down to the level of a farm like this tool that agriculture has. The smallest unit that it uses, because it tries to imitate the Bay model, is what's referred to as the land over a segment, which is quite a large area.

So it, it's not comparable to use, for instance, the offset policy at this stage. And we do realize there have been changes, you know, even in the -- even when the tool was first announced. And the reason the tool was developed at all was simply to assist local governments, and, and users to understand the way that the model

works, to produce their loads, and then it was meant to inform the WIP process so that the local WIP's could be developed more accurately. But it has had issues, and the development has been, as we increase the development of the tool and add features to it, of course, it does change. And, so, it's gone a little bit up and down, and there have been issues like that. But each time I think the tool has improved, although the loads may have changed.

So that doesn't -- that confirms your, your statement, but it doesn't answer the problem.

UNIDENTIFIED MAN: I think something at least at the county scale, if that's what we're asking to calculate on --

MR. EMMART: Uh-huh.

UNIDENTIFIED MAN: -- at least at that scale it would be useful.

MR. EMMART: But the MAST does do calculations.

UNIDENTIFIED MAN: It does. And it

1 does it for scale, but as you said, it's land --
2 MR. EMMART: Right.
3 UNIDENTIFIED MAN: -- it's per the
4 segment.
5 MR. EMMART: Right.
6 MR. EMMART: And the model over load
7 goes on your panel list, I mean --
8 MR. EMMART: You're completely right.
9 No, totally admitted.
10 One of the things that we've tried to
11 do is, because the Federal facilities that are
12 also -- all the land use types are included in the
13 MAST -- the Federal facilities of MAST, as well,
14 for some modified tool because MAST doesn't operate
15 at that scale -- that one base -- Fort Detrick, or
16 something.
17 And municipalities have had some
18 similar issues. We have developed smaller
19 spreadsheet tools that I could offer you that
20 simply work using the land use type. And you would
21 enter what kind of land use you have, and then a

load will be associated with that. So I can follow up with you after.

Further questions? Oh, sorry.

ERIK FISHER: Erik Fisher with the Chesapeake Bay Foundation.

We've talked a little bit about what might happen if the market doesn't develop. I guess I have a related question associated with situations where development may be excused from its responsibility to offset its load or a related issue where the development may pay into a fund in lieu of, of offsetting its load. Given that in both of those situations the load doesn't disappear, I'm curious where the load goes, and who would then bear the responsibility for those nutrients. I mean, it would seem to me that that would typically transfer the burden to us in the form of an increase in stormwater and wastewater responsibility to local government and the State, but I -- I'm interested in hearing your perspective on it.

MR. RHODERICK: Well, we were talking about that. I think one of the premises of the trade programs as it currently stands is, you don't get the credit until the practice is installed.

ERIK FISHER: Mm-hmm.

MR. RHODERICK: And we're trying to incorporate that premise all the way through. So if there was a fee-in-lieu system in place, again, the developer couldn't start construction until that practice which paid into it is installed and in place so that the offset is out there generating the reductions prior to breaking ground. So --

ERIK FISHER: So what's the benefit to a fee-in-lieu in that case? If, if the practice is on the ground and you're paying it, that doesn't really strike me as being --

MR. RHODERICK: Well, the fee-in-lieu, the idea is that you pay into it, it's getting broader practice, and you may get a regional --

ERIK FISHER: Okay.

MR. RHODERICK: -- stormwater facility,

because a number of builders pay into it.

ERIK FISHER: Right.

MR. RHODERICK: But, again, we still want to stick to the general premise that your offset's got to be in place first --

ERIK FISHER: Mm-hmm.

MR. RHODERICK: -- in order to --

ERIK FISHER: And that's all true for grandfathering, as well, or where does that load go?

MR. TASSONE: Grandfathering, I think, would have to be handled in the same way that development is currently handled, since we don't have this offset policy in place and operating yet. Which, in the two-year milestones since Maryland's been meeting for the past several -- couple, couple of years is where the mounting new development is taking place, and the additional load that's coming from it is having to be offset programmatically through comparable load reductions to achieve through the whole target load reduction you have.

In other words, they get incorporated into the targeted load reduction, and they become the general responsibility of the State of Maryland and, therefore, the counties to whom responsibilities are to some degree allocated through the local WIP's.

ERIK FISHER: Okay.

MR. TASSONE: And, so, it's basically where the public's dealing with them, in general, until we get this in place.

KEN DUCKETT: Ken Duckett of Caroline County. From a practical standpoint, if you tell the public, you can pay us but we're not going to let you build -- oh, I'm -- oh, they can hear me -- you're going to end up with developers who get stuck, and then if you can't find -- I mean, again, if the market doesn't form as quickly as you'd like, or if you want to do large projects, it may be that the most cost effective projects that they fund which is -- you need to collect money from 10, or 50, or 100 builders whose projects -- it's

1 impractical to tell the developer, you can pay, and
2 then in two years, or five years, or 10 years,
3 whenever we actually get the project done, that's
4 when you would build. I mean, then it's local
5 governments end up being whipping posts for telling
6 people yes, but not yet.
7 MR. RHODERICK: Right. Let it -- okay.
8 I was going to say part of it's up there in those
9 annual practices. Those are available to anyone
10 who needs them. You could use those as stopgaps,
11 you know, have those available, any of you.
12 MR. COSTELLO: Yeah. One, one
13 consideration on the table again -- and, again, is
14 not part of the conceptual framework -- is
15 exactly -- we're not sure day one where the market
16 is. Obviously, we believe that there are practices
17 in place that if -- you know that could be
18 purchased immediately. We're not sure what kind of
19 demand would be. But conceivably, I mean
20 there could be a system until the market is again
21 more robust that, you know, there could be a

fee-in-lieu, but it have to be one that was -- you know, someone would have to take responsibility. For instance, in those local jurisdictions, they would have to insure to us that, indeed, those practices are being put into place.

So when we talk conceptually, we've got a number of things we're talking about here. We're not ultimately sure where we're going to end up, but a number of people have talked fee-in-lieu, about possibly fee-in-lieu in -- as a temporary -- if the market doesn't develop, or if capacity isn't there immediately, those kinds of things.

So it does -- and one thing I would throw out, as well -- and it gets back to the permit -- I mean, conceivably they could be adjusted -- we're thinking of a general discharge permit that, that is based on the, you know, the averages we have using the Bay model in terms of load, right. And -- but, conceivably, there could be an all option for an individual permit if a developer could prove he wanted to pay a little bit

more money because that have to bear the burden, the administrative burden of doing more work to actually prove -- and they'd have to prove to us what the load for that particular development parcel is. So that's another consideration on the table, conceivably, that -- so these are some of the ideas we're getting in about, you know, developers who've argued, well, why should we pay for, you know, an average load when people need -- and we can really determine what the load is and not only offset it entirely, conceivably, you know, look to generate credits by taking in loads, and then joining parcels, for instance. So there's a lot, conceivably, on the table to look at.

KEN DUCKETT: The other thing, if you're looking for a model, it's -- forest conservation has its problems, the State forest conversation law, but it is relatively straightforward and you can still get things done and comply with forest conservation. The biggest challenge I see is -- moving forward is when we

have something that needs to move, and then we say, well, how does this work, or what's the credit to it, the information lag. Because, in no disrespect to our State agencies, but sometimes getting answers takes months, years, decades, eons. I mean, that it's -- if we know what the rules are, we could learn to adapt with them. It's -- the hardest thing is, we don't know. Well, can I do this? We don't know.

The thing about forest conservation networks is developers, local governments, people know how it works, it's fairly straightforward. They come in, they say, you're doing the x development. This is your forest conservation requirement. It allows things to move in a reasonably quick fashion.

MR. RHODERICK: I want him to add there's actually, there's one -- is anybody from Howard County here? Good. Okay. I can speak out of turn.

Howard County looked at this from a

1 different way. I mean, actually, the county
2 contact came to the soil conservation district, and
3 based on their trying to get a locked up, or a
4 handle on what the offsets are for ag. So they've
5 commissioned the District, used the funding
6 resources, go out and inventory all their farms so
7 they have, on the front end, an idea of where they
8 would go when the program comes in with the offsets
9 and what's available. So they're being a little
10 more proactive at this point.
11 MR. COSTELLO: And, John, the numbers
12 are considerable, their capacity is considerable
13 compared to -- because of that industry.
14 MR. RHODERICK: Right. Because now
15 it's established that they have --
16 MR. COSTELLO: I mean, look at Howard
17 County's numbers. And if you really want to get a
18 sense of -- that's why one of the things -- you
19 know, when MDE finishes, we'll have to see how your
20 inventory plays out, but you can see Howard
21 County's, obviously, not the largest, even though

it has the largest ag sector consistently. You know, consider if they've got that much capacity, what other counties or jurisdictions conceivably have in the State as relates to capacity.

MR. RHODERICK: And they're behind the river. They're based on a river.

MR. EMMART: All right. Just one moment. We had a question in the back, and then we'll come to you.

TRACY MANINGAS: Hi. I'm Tracy Maningas from St. Mary's County. And we're at Naval Air Station, Patuxent River, St. Mary's County. A lot of the projects on our base are under the permit threshold. They're -- they have to have the plains. They don't have to -- they don't have the full acre that needs the permit, and we thought we can begin to putting that requirement on the plain side, as well.

MR. RHODERICK: You mean the paper to serve us you're talking about?

TRACY MANINGAS: Right. I mean, under

5000 square feet to less than under an acre, they just have the plain. If it's an acre above, then you go into the permits. And, like I said, a lot of my little projects are smaller than that one-acre permit, so --

MR. RHODERICK: To do the analysis?

TRACY MANINGAS: Yeah.

MR. RHODERICK: But that's been raised on a meeting, should there be a threshold.

TRACY MANINGAS: Oh, I have no problem giving people work to do. That's no problem.

MR. EMMART: Okay. Now, basically, we come -- with the microphone and ask your question.

KAREN MILLER: I don't know if I need it either. Karen Miller, District Manager of Kent Soil Conservation District. Everyone keeps saying, talking about, you know, the farmer has the offsets, but it comes down to does the farmer want to participate. You know, for years, the ag community has been beat on and said, you're the problem, you're the problem, you're polluting. And

now, all of a sudden, everyone's sitting here going, ag is going to save us. The numbers look like that because they don't care you need them. I mean, literally, that's the truth and, so, they don't want to do this assessment, and especially on the shore.

I don't know -- obviously, Howard County, they have a different way that they think. But on the shore here, they just -- they're not interested. So, somehow, you're either going to have to come around and make them be interested, or give them something that they're going to get. But right now, they're not seeing what's in it for them.

MR. TASSONE: And the short answer would, theoretically, be money --

MR. COSTELLO: Right.

MR. TASSONE: -- it would be well to be in. And the question is, how much for what, and --

KAREN MILLER: But you can't tell them that.

MR. COSTELLO: No, that's why the whole idea of the market is, as the market develops, they see, they hear of farmers who are participating --

KAREN MILLER: Mm-hmm.

MR. COSTELLO: -- you know, accruing benefits. So that's why it's likely to take place over time. I mean, ultimately, if there are buyers, right, who are willing to pay money for offsets, right, that's why we haven't had much participating in trading today, because there's no lever. You know, the lever, in this instance, is regulatory. So if you want a regulation in place that requires offsets, you're going to have a, conceivably, a whole heck of a lot of buyers, and those buyers are going to be looking. And once sellers realize there's something in it for them, you're likely to see the farmers probably really interested in the program, if they see that -- the real deterrent.

MR. TASSONE: But, you're right, if

there's not enough money --

MR. COSTELLO: Yeah.

MR. TASSONE: -- or there's too many other hassles or complexities involved in it, the farmers might not want to participate.

UNIDENTIFIED MAN: Or if they don't trust the Government --

MR. TASSONE: Right.

UNIDENTIFIED MAN: -- because they have been, you know, promised things in the past --

MR. COSTELLO: In the past, right.

UNIDENTIFIED MAN: -- the programs. And, again, I don't want to worry about your spreadsheet, but I'm going to go out on a limb and guess there's a farm in Caroline somewhere, I'm sure I've seen it. And, in Carroll County, I'm going to say there is. But, I mean, you guys have the mouth database, and everything else you have.

MR. COSTELLO: Well, that's that a good way to see it, but we're glad you asked.

UNIDENTIFIED MAN: Let me ask. You

know, I want -- yeah, what's the point in that spreadsheet?

MR. TASSONE: This is just a representation of a couple of farmers who have been --

(Off-record discussion.)

MR. TASSONE: -- yeah, they've been allowed to go on the farm and inventory what they can do.

MR. RHODERICK: This is a direct inventory. This is not a model.

MR. TASSONE: This reflects this lady's point about farmers not being interested in participating.

UNIDENTIFIED MAN: So there should be a title there that says, what, these are farmers who were interested, or farmers who have been asked?

MR. RHODERICK: It's been going out, and going on to do this --

MR. COSTELLO: Do a survey.

MR. RHODERICK: -- do a survey, that's

all.

MR. TASSONE: Yeah.

UNIDENTIFIED MAN: So you indicated it to the Farm Bureau, and these are -- there's no one in Caroline County that will let you come on a farm? I mean, I just --

MR. RHODERICK: Yeah, well --

UNIDENTIFIED MAN: There's zero up on the spreadsheet.

MR. RHODERICK: -- we've only been in, we've only been in business for a year and a half, so I'm kind of thrilled that we've been to 103 farms at this point, the year end.

UNIDENTIFIED MAN: Yeah.

MR. TASSONE: So, no, this is a very real problem.

UNIDENTIFIED MAN: All right.

MR. TASSONE: But also one last thing. And this corresponds to you. We are not the ones who are beating on the farmers to do this.

KAREN MILLER: I don't mean you, I just

meant the community -- the, you know, the urban as a whole --

MR. EMMART: That's the perception.

MR. TASSONE: Right.

KAREN MILLER: -- the perception is -- and they just -- I think this is showing you they're interested in helping here exactly. They're going to, they're going to take care of their own WIP's, and they're going to take care of their own numbers. And, unless something changes, unless the money gets big -- but with numbers like that, you may not be able to prove to them that money's going to get big.

MR. EMMART: Right. That is a potential and sort of impacts the geography, the trading geographies in some sense, too.

BILL WOLINSKI: Bill Wolinski again from Talbot County.

I had a question concerning how you're dealing with the fact that a lot of farming operations are on leased lands, and how to resolve

all this potentially work.

MR. RHODERICK: Again referring back to the policy, it's all about who's representing the credits. If you're a farmer and you're on leased lands, you have to have documentation, written document, that shows that you have management load that -- leased acres to make those management decisions over the entire time that you're proposing to get paid for credits.

So the landowner would have to sign something over to you so that you showed you have a management responsibility. And there's a whole bunch of other nuances that go with that.

MR. EMMART: Mm. All right. Further questions? In the front, please? Yeah.

UNIDENTIFIED MAN: No.

MR. EMMART: Okay.

JOSEPH BLIZZARD: Joseph Blizzard with Kent Soil & Water Conservation District.

The stormwater regulations, you said, the grandfathering -- I know now they grandfather

subdivisions that you already have if you're -- to build. And you got the stormwater to build. Now, the lines aren't built in that subdivision that -- are they going to, just going to apply them for offsets to put a house on that lot.

(Off-record discussion.)

MS. LEVELEV: I would think we have mainly --

JOSEPH BLIZZARD: Is that too hard?

MR. EMMART: Yeah, that's a little too detailed. I don't, I don't think they could answer that at this stage.

MR. RHODERICK: Yeah.

MR. EMMART: Brigid may have -- stand up -- a comment to make.

BRIGID KENNEY: Well, I -- thank you -- I can't answer the question fully, but for the stormwater regulations, they were written so that an administrative waiver from the new regulation could be granted if the development had proceeded to a certain point of approval by a certain date.

And those dates were in 2013 and 2017.

We would probably fashion something similar for these regulations, and one of the things we would really like comments on is what are the right benchmarks and what are the right time periods, realizing that every day we delay implementing this means that the burden's going to fall on the citizens, in general.

But we do want to be fair to the building community and their time line investments.

MR. EMMART: Any other questions? Please, in the back.

GREG O'DONNELL: All right. I'm Greg O'Donnell from the Kent County News, and I'm not going to ask about farming or technical things, but I do cover the County Commissions on a weekly basis. And, in your presentation, I'm curious about two particular things.

One is, I won't mention towns, but there's a town on the Sassafras River in Kent County, is notorious for having a hard time getting

their hands around critical area regulations. And I don't know quite -- how many decades those have been in place, but, but it's a fact. And I believe that they have a part-time administrator and one Public Works guy.

So, you appear to have said, well, local jurisdictions will be responsible for this, and I think you need to explain to me how this particular town is going to ride herd on, especially since they have -- I would say they could double the size of their town because they had an extra bunch of farmers than about 10 years ago. How are they going to administer this?

MR. EMMART: Right. Very good question.

MR. COSTELLO: Yeah.

GREG O'DONNELL: I mean, I think that needs serious -- that really needs serious thought, not just local watershed improvements.

MR. EMMART: Yeah.

MR. COSTELLO: It's, you know, in terms

of local jurisdictions, it really depends on the jurisdictions themselves. That's why, in how this is developed, it really is meant to be a, you know, somewhat cooperative occurrence.

We know there are a number of large county jurisdictions that are likely want to take on a considerable role, a considerable responsibility, you know. And it's not as though we're going to require jurisdictions that don't want to necessarily, or certainly don't have the capacity to administer any aspects of it. I mean, so it is going to be somewhat -- the policy's likely to be varied. And, and again, I would think the only thing that's for certain is, if we don't believe a jurisdiction has any -- doesn't have the capacity to manage any aspect, or to participate in any aspect, we're not, we're not going to be required to do so.

GREG O'DONNELL: Okay. And if you --

MR. COSTELLO: And --

MR. TASSONE: But the other subdivision

I've heard about a lot right here is the County.

MR. COSTELLO: Yeah.

GREG O'DONNELL: So you say, okay, the county will take care of that. Well, I think our County Planning Office is six people, maybe, seven. So all you've done is made --

MR. COSTELLO: Well --

GREG O'DONNELL: -- the problem slightly bigger in scale. So, once Kent County says, we can't take care of unincorporated areas much less these incorporated towns, where does it go?

MR. COSTELLO: Well, how does the county deal with developers now? I mean, isn't part of the role is to deal with development in the county now? Where is that?

GREG O'DONNELL: I think without the administrative burden that this would impose.

MR. COSTELLO: Right. But, again, one thing I would say about additional administrative burden, I think, again, as this plays out,

depending upon what system we put in place -- we already had permit requirements, the local jurisdictions had permit requirements related to development projects, all right, so there's not likely to be a significant burden as it relates to an additional permit that's coming from, from MDE.

Now, the way that the market is likely to play out, it's likely to generate a system of growth system aggregators that identify -- that work with sellers, farmers, and whoever's generating credits. So a lot of the overall administrative burden is likely to be taken up by -- not to say it's a bureaucracy, but the system that develops around the private market. So a lot of that is, is going to be -- now, now MDE, you know, again depending upon how it develops, if we're starting to, to deal with a lot of permits -- you know, obviously, there's a permit fee associated -- we would -- the administrative burden would be tied to that, and they would be paid for by that fee if the existent local

jurisdictions determine -- decided to participate, obviously, there's an opportunity for them to cover their costs. So it's -- it isn't -- I mean, for one to think that one permit is going to add a tremendous amount of burden isn't, that isn't accounted for by --

GREG O'DONNELL: I don't think --

MR. COSTELLO: Right.

GREG O'DONNELL: -- I don't think I --

MR. COSTELLO: Right.

GREG O'DONNELL: -- developed the question correctly, because I'm thinking 10 years down the road --

MR. COSTELLO: Yeah.

GREG O'DONNELL: -- who is it from the county, or who is it from the town who's inspecting whatever it was that was put in that's generally --

MR. COSTELLO: Well --

GREG O'DONNELL: -- what the law states? That takes people, and it takes trained people, and it's --

MR. COSTELLO: -- understood. But that's why I'm saying the third party -- I mean, much of this, again, if this truly builds out to be a market-based system, there's conceivably a lot of money on the table. So I guarantee you those who are responsible to guarantee that that load is offset, who, if they become aggregators -- if someone is it, you know, is an aggregator of credit, so they're responsible, they sold their credit, right -- whether it's annual practices, or they, they sold stream buffers, or whatever it was to a developer, right -- if, if for some reason those credits fail, that they follow the load, there isn't sufficient pollution reduction to cover the load of that property then, obviously, you know, someone might be sued.

GREG O'DONNELL: Right.

MR. COSTELLO: So there is likely to be a robust third-party verification that's paid for. This isn't necessarily government entities. It's obviously going to be third-party verification that

the Government has confidence that they're capable of insuring that the offsets continue to be in place.

So, again, it needn't be a lot more government. Quite frankly, it's likely to be, again, third-party verifiers working with private aggregators and brokers that deal with much of these offsets in the future.

MR. RHODERICK: And, again, I mean, that permanent ag component talks about, there's three levels of verification for every project.

There's the initial installation that has to be verified and certified by a technical expert.

The second one is, he talks about is -- there has to be this third-party independent verifier, and those under the current policy have to be inspected a minimum of every year and a report's got to be generated. Then we have, the MDA has made the statement that we will do random spot checks on top. So the State does have a

limited role. I know, you know, depending -- at this time, the market's so small we can do them all --

MR. COSTELLO: Right.

MR. RHODERICK: -- but, as it grows, then we would be doing these random spot checks. So there are layers of assurance.

GREG O'DONNELL: Sure. Okay. My second question.

MS. LEVELEV: I just say --

GREG O'DONELL: Oh, I'm sorry.

MS. LEVELEV: -- I just say that EPA is a source of developing protocols and verification of all of the BMP's. They're going through this process right now, and it's very important to both sides.

GREG O'DONNELL: Right. My second question involves unincorporated areas of Kent County. I noticed the examples in your slide show that you were talking about, you're talking about the designated -- I'm not sure of the term -- I'll

just --

MR. TASSONE: Targeting --

GREG O'DONNELL: -- is it targeting?

MR. TASSONE: -- growth for revitalization.

GREG O'DONNELL: Right. It's not clear to me, how does that -- articulate for things like urban -- with rural villages unincorporated in the county? They seem to be lost in the middle between farmers and the towns.

MR. TASSONE: That depends on how counties and municipalities with land use management authority refused to participate in this targeted growth and revitalization area establishment process. If they choose to do so, then, you know, it's possible that they become such areas.

But the areas you're talking about that -- sounds like you're talking about unincorporated areas that are probably served by on-site wastewater treatment plants -- I mean,

on-site wastewater treatment.

GREG O'DONNELL: Bob Coleman -- gosh, where else in Kent County --

MR. TASSONE: Right. So little --

GREG O'DONNELL: -- the little lanes that have the waste treatment plant.

MR. TASSONE: -- yes.

GREG O'DONNELL: But there are unequal created villages that don't have sewer service and may be distant from a treatment plant.

MR. TASSONE: Well, they're not likely to be able to become target of the growth revitalization areas.

GREG O'DONNELL: But that's the problem, because they do have a residential and small business infrastructure that's essentially sitting there waiting for redevelopment, and that's what my question goes to; where do they fit into there?

MR. TASSONE: All right.

GREG O'DONNELL: Do they simply

continue to deteriorate?

MR. TASSONE: Is there going to be a lot of development there?

GREG O'DONNELL: They're --

MR. TASSONE: All right. Or redevelopment?

GREG O'DONNELL: Well, no, no. If you want to redevelop Kennedyville, do you -- there's a nice little edition called the Village of Kennedyville which started as a planned neighborhood development, is going on very slowly because of the economy. But there are probably four vacant commercial properties in Kennedyville which could be used by somebody. They've been vacant for years, and somebody may want to say -- the county may want to say, let's have a vibrant little commercial center of some sort in Kennedyville. Perhaps it's all furniture vendors who belong to a furniture-making co-op.

Whatever it is, I don't see -- I didn't hear anything about how that fits into the plan.

And there are villages like this all over the Eastern Shore, it's not just Kent County. And I think it gets lost in the sauce.

Okay. I didn't -- I started asking a question, and I'm sort of propounding a point of view.

MR. EMMART: Your points are very, very relevant.

MR. TASSONE: Yeah, because they wouldn't fit into the scheme -- it depends on first, are they a targeted grow revitalization area or not; second, are they redevelopment projects, or are they retooled development projects or not. And depending on the answers to those questions, they would be treated one way or another under the policy.

GREG O'DONNELL: If I could get some later -- some details from this would be great --

MR. EMMART: You had a question, I think.

KEN DUCKETT: And going back to your

other point that somehow the market's going to take care of all of the administrative burden, I mean, that -- that's just completely different than anything MDE, or MGE (sic), or MDA has done.

MR. TASSONE: Right.

KEN DUCKETT: Forest conservation, local people are out there checking to make sure that the forest conservation areas are in compliance. The new septic regulation package plans, you can't let private developers be ultimately responsible for those MDE's come in and said, no, you -- like when we have failed community systems, it's the local government that needs to take them over -- there's no way that you're going to get a room full of local government people to believe that the State's not going to say, at the end of the day, you're going to be responsible for tracking the offsets -- offset, and enforcing these things, inspecting them, sending in reports, meetings. That's just -- the market may take care of the transactions, but the bureau and bureaucracy

is going to be on local governments.

MR. COSTELLO: Yeah. Absent -- ultimately -- obviously we are on the hook to achieve the TMDL. All right. Based on what those local jurisdictions are on the hook, anyone with a discharge permit -- I mean, the EPA require a lot of discharge permits all over the place conceivably, all right?

So, so what I am saying is that, you know, clearly we are -- whatever system we put in place, we have to insure public verification. And quite frankly, to the extent that its market system, system is likely to be insurance involved, this -- there are likely to be a lot of steps. I mean, like I talk about insurance, that's the aggregator's approach, whose ever -- whoever's putting together together the credits for sale.

But, you know, and, then, obviously, there will be a permit fee. We will likely do more inspections, and we will have to be assured that, obviously, our regulations and our permits are

being adhered to. So we believe we can craft a system, particularly working with local governments, in terms of how this plays out. That's different than what's been done in the past, and that's the whole point. We believe there's growth of the market in this instance, as it relates to trading in offsets to, help bear the burden, and bearing much part of the burden -- it's like the IRS. I mean, the IRS doesn't inspect every tax return. You know, theoretically, we don't inspect every permit. Neither does, does ag. But, you know, we want to put in place a system that we believe on balance and overall will help to, you know, reduce pollution load considerably, and reduce the cost of pollution reduction. And that's why we're, you know, exploring this alternative, and that's why we're very open to ideas, whether they come from Sanby, who thinks that, you know, his county might get greater reduction overall that -- if the systems -- this sort of concept's tweaked in a certain way. But --

MR. TASSONE: Well, and, so, the idea isn't that, because there's going to be private sector transactions involved in this, that a burden on local government's going to be totally eliminated.

MR. COSTELLO: Right.

MR. TASSONE: The idea is to take advantage of what the private sector can do to facilitate these transactions by having to be part of the moneymaking enterprise for both sides of the transaction, and to use that to advantage, and then the State and the local governments are going to have to fill in the blanks with the oversight process.

MR. COSTELLO: Yeah.

MR. EMMART: This gentleman here has a question. I'm just going to remind everybody there's a time check. It's about quarter to 4:00. We're scheduled to have the room until 4 o'clock. There are some refreshments in the back with some snacks, but -- please help yourselves. But any

question?

UNIDENTIFIED MAN: I guess I was trying to think like a government capitalist, and how this trading policy's going to work.

Say a county would go in an up-front project, the stormwater project would generate nutrients, and then be able to parlay these off, and sell off those at a higher value to -- because those credits have to be used within the county -- and generate revenues to be rolled over into another project. And rolled over because of the market-driven system, you want to get in a position where we're going to be overvalued and people outside of it, but this could be some kind of control in the county level, sort of like was done with solid waste, and in buying on the argument where, you know, maybe, the development county, they're developing parks, here we're looking at stormwater facilities to generate nutrient credits for encouraging development.

MR. TASSONE: And what you're saying,

essentially, is that a local government can be part of open market.

UNIDENTIFIED MAN: That's what I'm saying.

MR. TASSONE: Right.

UNIDENTIFIED MAN: The question or concern is that, getting into that market, are we going to be competing with, I'll call it, the statewide market where somebody can come in and undercut our price? Again, we have some control, because these -- I guess we're looking at some type of control because of those credits. If we have a developer in Worcester County want to do something, we've got to be able to get a fiduciary credit in Worcester County.

MR. TASSONE: Well, in fact, we were talking about that on the way down here. If you have specific ideas from your county's perspective about what you would like to have control over, and why, then we'd like to, we'd like to, to hear them.

MR. RHODERICK: You pay for

installation, they're your credits.

UNIDENTIFIED MAN: Well, I guess the key is to be able to sell it for more than the face value, so that we will rollover additional money, you know, and, so, we make 20 percent on it. Then we can use that -- we can do other stormwater project, resell those. The main goal is that, by the time you get to 2025, ultimately, we stop that, we paid for that.

MR. RHODERICK: That's what aggregators are doing right now in, in North Carolina, they're doing the same thing where they will sell a pool of credits -- I mean, 1000 credits to sell the pool -- but they've got some agreements where they use that money, and they actually do install practices above and beyond -- instead of 1000 credits where they installed 1500 credits. So they're taking part of it and building up, as you say, their portfolio, so they're -- and roll it.

MR. COSTELLO: And it's a reserve for the aggregators to protect against failure.

MR. RHODERICK: Right.

MR. COSTELLO: You know, that's their insurance coverage.

One of the things that -- but you know about the market. I mean, that's why we're not sure, ultimately, where the market price goes. That is why any, you know, anyone who invests in, in trying to build the credits is, obviously, going to have to be mindful of what the market prices are --

UNIDENTIFIED MAN: Right.

MR. COSTELLO: -- okay? And that is why the, whoever the generator is, whether it's a local jurisdiction, or if it's a farmer, or if it's a developer, whoever the generator is, I think it will be very key in terms of where these credit prices are going. And one of the things, in terms of the geography, you could conceivably sell your credits out of the jurisdiction, I mean, and if we go to a watershedwide, you know, literally across state system, you could conceivably sell credits

out of state if we come with a, you know, an entire Bay watershedwide trading system which, you know, is conceivable. It depends on the EPA, obviously, coming up with the right policy across states and all agreeing to it, but it is conceivable.

But I think, you know, if the market is plagued, then you can't guarantee a price. If you're looking, before you make an investment, for a guaranteed return, nobody's providing that kind of assurance, at least at the public level. If you think you can find a private insurer who wants to guarantee that risk, that's something else. But --

UNIDENTIFIED MAN: Yeah. I mean, like public/private partnerships. The other thing is we would legislate that, if we have to.

MR. EMMART: That's right. Well, that's definitely an option, to have control over it, and that is --

MS. LEVELEV: I'd like to point out that there is, in addition to this, there is also an EMG, is there a separate operation, or

legitimate --

MR. COSTELLO: Yeah.

MS. LEVELEV: -- and permanent.

UNIDENTIFIED MAN: Yes.

MS. LEVELEV: The EMG's a new introduction that will benefit both local government and local water policy.

UNIDENTIFIED MAN: Thank you.

MR. EMMART: Yeah, you had a question. Please.

KAREN MILLER: I just had one more question again. John's probably heard me ask this before.

You know, look 10, 15 years down the road. I know, from talking to the people in Howard County, they could not generate enough credits for them to continue to build. They have to rely on the shore. So what happens 10 years, 15 years down the road. They've bought all their credits over here. The Eastern Shore, the Chester River, the Choptank, everything's looking beautiful, and out

at Howard County it's all this pollution still running down the river into the Bay. There's nowhere for them to clean it up, then what happens? Because you've allowed them to build because they bought their credits out of county, so that they could continue to build, but then what do you do with the pollution once it's all there?

MR. RHODERICK: Part of it,remember is --

MR. COSTELLO: Yeah.

MR. RHODERICK: -- the premises on the front end is, you can't cause local degradation. So, again, we just talked about on the front-end, we're very sensitive of the fact that they can't continue to have the pollution load that's going to degrade that stream body. So, you know --

MR. TASSONE: And that is the first thing.

MR. RHODERICK: Yeah.

MR. TASSONE: The second thing is that the policy, as currently drafted, the only entities

in Howard County that could buy the credits on the shore would be the ones that are in Howard County's targeted growth and revitalization area. And they're going to be relatively small in terms of how many credits, but relative to how much development -- how the development is taking place. Their other development won't be able to offer credits under the draft policy.

MR. COSTELLO: And those developers are likely to be involved in redevelopment, so they're probably improving the land in, you know, mitigating the runoff that already exists by putting in the new development. So all of those factors would be taken into consideration.

But getting back to the initial point, if we had ever, at any point, determined that there's more pollution load coming, then, obviously, we have to address that as soon as we determined that, and do something different. I mean --

MR. EMMART: A question in the back?

MARC SEGALL: I just wanted to kind of make an observation that it's -- oh, excuse me -- Marc Segall. I'm with Planning for Talbot County.

You know, the notion of getting into a private market with this thing is all well and good, but I think in a way you're going to need to have some kind of government spin-off for this private nonprofit corporation that's advanced by the Government, because you're talking about arrangement in perpetuity.

MR. COSTELLO: Yeah.

MARC SEGALL: And Joe sat on the mouth board for a long time. He knows that, every month, we come in with situations because a property is changed hands, a contract is changed, another wrinkle has come up, somebody wants a -- you know, I can't imagine a private market sitting for all this stuff. And it's not going to be five years, it's not going to be until 2025, you're talking about forever.

MR. COSTELLO: Right.

MARC SEGALL: And it's a lot to ask a corporation to do. It might look good, you know, making money back and forth for the first 10 years, 15 years, it could go bust. You know, then what happens to your Bay agreement and all the cleanup, and everything else that goes?

MR. COSTELLO: Right. I think of an example of an authority. You know, you look at housing authorities across the country. I mean, in terms of just trying to manage such a -- you know, it's conceivable -- I mean, I think it's a good idea to throw on the table -- that if this grows to be as large as, conceivably, it could be, you may need a quasi-public, you know, public nonprofit authority to manage this issue. We don't know. I mean, that's certainly worth discussing and putting on the table. And we'd like to hear if you -- if you've got some more, send it our way.

MR. TASSONE: And, you know, Marc, some counties have already expressed the idea that they want to and think they can play a major role in

administering this program for the long-term. So we're -- that's what we want to hear, is what different jurisdictions are interested in doing and not doing, as well as other ways to handle those very challenging locations.

MR. EMMART: Okay. One question in the back, please?

UNIDENTIFIED MAN: I recently went to a presentation regarding urban retrofits for the TMDL loads, and one of the comments at that presentation was that many of the urban TMD retrofits is that permit statement, our pension, and island of roads, and things like that all have an anticipated design life with, maybe, seven to 10, maybe 15 years and then they would have to be replaced completely. So we're talking -- what you said is that this offset needs to be permanent, and I just, I don't, as an engineer, I don't know how a private entity could enter into something, an agreement like that, and how much you would have to charge to have something like that in perpetuity, because a lot of those are

extremely expensive.

So has anybody done any type of analysis to -- on the cost load of what you're talking about to do it in the watershed, or in the county? Short of reforestation, I mean, that one's pretty straightforward.

MR. RHODERICK: We meant these replanting, and you're thinking permanently at some point.

UNIDENTIFIED MAN: Okay.

MS. LEVELEV: No, sometimes when they think that we would have to have some kind of a load, or piece to sustain this type of plan are already made, so definitely it would have to be operating and maintaining the system facilities. The jurisdictions that allow their -- for permits are now, are we able to pull out these to better address the stormwater, the additional stormwater. So that, eventually, is what would be able to happen.

UNIDENTIFIED MAN: And -- but what I'm

hearing you say is that these agreements for these credits, these aggregators for companies that are developing these credits, have to have insurance, or other things, to guarantee bonding or whatever, in perpetuity, and they, they would need to charge enough money to make that -- all those numbers work to satisfy a bonding company, or an insurance company, or whatever. So I, I'm not sure the numbers add up on the perpetuity.

Now, maybe, there's a -- it's a 25-year life, and then the Government or the State -- I just put the question out there.

MR. RHODERICK: As long as the load exists it's got to be offset. That's the definition --

MR. COSTELLO: Right.

MR. RHODERICK: -- we're dealing with and, so, what you're talking about is right. They need some bonding. They have to show you a management plan that would address that specific issue. But once the light distracts, what's the

next piece?

MR. COSTELLO: Yeah, but the other, the other thing I draw out to -- and this is one of the things on the table -- is just the whole idea of permanence and perpetuity. Obviously, we have to put in place the system that guarantees that load is offset as long as that load exists, that pollution load in the development.

Theoretically, it might be a graduated system where we would put into place or, you know, if we were trying to work with the aggregators, or didn't feel we could generate enough aggregators to prime an interest, maybe there's a time frame that is 20 years, 25 years, and then there has to be a redress at that time of where the load is.

And that's why, you know, it's hard to see how this will play out from a market perspective, but that's why working again with local jurisdictions -- if we can work out with certain local jurisdictions about taking control or responsibility -- you know, there are any number of

things going forward that, you know, conceivably need to be considered.

If, again, we're going to run into -- to a problem that, because there's so much concern about in perpetuity or permanence that the price is coming out to be too high, and we're generating no credits, then, obviously, we've got to make adjustments so that -- it's a good question, and it, and it's something --

MR. TASSONE: And I think it's closely related to the market's question --

MR. COSTELLO: Yeah.

MR. TASSONE: -- given that, you know, the whole issue of a permanent entity having some responsibility for things that are supposed to go on forever.

MR. COSTELLO: Yeah.

UNIDENTIFIED MAN: Particularly like a municipality or something if we're saying they can't do the -- some of the these other credits we're talking about, they are going to have to

build into their cost an operation maintenance replacement regime for those every 15 to 20 years. That's a huge amount.

MR. TASSONE: Right. So it's a complex question, which is why we didn't presume to come out here with all answers to that but, rather, to hear perspectives and try to formulate an answer.

MR. COSTELLO: And why, as you say, a good point that, you know, it's what we're doing already. I mean, that all facilities know there has to be consideration of operations made. So they, they're ongoing costs either way, right? Whatever systems we have in place are, those costs are going to continue.

MR. EMMART: All right. Ladies and gentlemen, it's just a couple minutes before 4 o'clock. I wanted to thank you, very much, for your participation, and also to encourage you to the please send your comments in to us.

(At 3:57 p.m., the hearing was concluded.)

STATE OF MARYLAND

COUNTY OF BALTIMORE

I, Janet A. Brown, a Notary Public of the State of Maryland, County of Baltimore, do hereby certify that the above-captioned proceeding took place before me at the time and place herein set out.

I further certify that the proceeding was recorded stenographically by me and this transcript is a true record of the proceedings.

I further certify that I am not of counsel to any of the parties, nor an employee of counsel, nor related to any of the parties, nor in any way interested in the outcome of the action.

As witness my hand and seal this 14th day of August, 2012.

Janet A. Brown

Janet A. Brown
My Commission Expires 05.20.15

JANET ANNE BROWN
NOTARY PUBLIC
Baltimore County, Md.

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