Maryland Department of the Environment
Maryland Department of Agriculture
Maryland Department of Planning

TRANSCRIPT OF

Harry R. Hughes Center for Agro-Ecology, Inc.

2012 GROWTH OFFSET POLICY MEETING

July 24, 2012

1:33 p.m.

Hagerstown Hotel & Convention Center
1910 Dual Highway
Hagerstown, Maryland

A P P E A R A N C E S

Maryland Department of the Environment

PAUL EMMART
JAY SAKAI
DAVID COSTELLO

Maryland Department of Agriculture

JOHN C. RHODERICK

Maryland Department of Planning

JOSEPH TASSONE

Harry R. Hughes Center for Agro-Ecology, Inc.

NANCY K. NUNN
SARAH TAYLOR-ROGERS
MIKE BILIK

ALSO PRESENT:

BILL ATKINSON
DAN BALDWIN
JIM BENDER
CHRIS BOGGS
JOE CALZARETTE
KAREN COFFMAN

(continued)

A P P E A R A N C E S
(continued)

ALSO PRESENT:

RANDY CRAIG
BRUCE DELL
BRAD DYJAK
SAM HOUSEHOLDER
DENISE JACOBY
JOHN KANE
DONNELLE KEECH
BRIGID KENNEY
ZACHARY KERSHNER
JOE KRABOTH
ERIN LANAGAN
STEVE LEATHERMAN
RICH LEFEBURE
TIM LUNG
JAMES LUTTRELL
KIM MEZZANOTTE
KEITH MOORE
SHANNON MOORE
HANNAH MURRAY
DALE NISBET
GINGER NOBLE
FRED NUGENT
ANGIE PATTERSON
JULIE PIPPEL
DEE PRICE
ALEX REED
TYLER REICCE
DENNY REMSBURG
DUSTY ROOD
DALE SAMS
ED SCHREIBER
JENNIFER SMITH
DAVID UMLING
ELMER WEIBLEY

HAGERSTOWN, MARYLAND

TUESDAY, JULY 24, 2012

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P R O C E E D I N G S

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MR. EMMART: Good afternoon, ladies and gentlemen. We would like to get started. It's a little bit after 1:30.

Welcome to the Accounting for Growth Policy Meeting. We are here to announce, I'm very happy to say, a new policy, which is a joint state agency policy, and let me just introduce people.

My name is Paul Emmart. I'm from MDE. I work in the Science Services Administration, and on my left, we have a panel of my colleagues from different state agencies: At the end, Jay Sakai from MDE; Joe Tassone from the Maryland Department of Planning, and John Rhoderick from Maryland Department of Agriculture.

And I just want to say right off the

1 bat, if everybody can hear me, we're good, and
2 if not, please just raise your hand, let me know.
3 This series of outreach meetings is
4 supported by two major foundations: The Town
5 Creek Foundation and also the Harry Hughes Center
6 for Agro-Ecology, and they are both providing
7 the support and the logistics and making these
8 meetings possible for us.
9 Essentially, this is a PowerPoint
10 presentation. The way we set it up is that I
11 will be giving a brief PowerPoint, 30 minutes
12 or so, and then we'll open it up for questions
13 to the panel, and those questions can address
14 any of the issues within the PowerPoint.
15 So let's begin. We can go to the next
16 slide. This is a presentation overview basically
17 that we will go through. We're going to talk
18 quickly about the history, what got us to where
19 we are today and what caused the policy to come
20 into being.
21 We're going to talk about calculating

1 a load, and by load, we mean the amount of
2 pollution which is generated from, for example,
3 an acre of land. That comes from new growth and
4 development. We're going to talk about offsetting
5 and implications of the economic side of this,
6 of this policy, what we mention may occur.
7 We're going to go into very briefly
8 the trading policies that already exist at MDA,
9 as published, and MDE; and then we'll talk about
10 protecting water quality, and by that, we mean
11 two types, the Bay water quality and also local
12 water quality.
13 We'll discuss trading geographies
14 that will impact the policy. Finally, how the
15 policy will be implemented, and then what is
16 our schedule. So that's basically the overview.
17 Just to give a bit of history because
18 it's not -- sometimes, you know, people come to
19 these meetings with various, different backgrounds
20 as to, you know, what sense they have of where
21 these things come from and why the new policy is

1 even required.

2 The problem with the Bay is obviously

3 very well understood, in terms of many of the,

4 you know, public's impressions and funding

5 priorities, but it has been a voluntary agreement

6 to try to clean up the Bay.

7 In 1983, EPA and Maryland -- I'm sorry --

8 Maryland, Pennsylvania, and the other states,

9 recognized that the Bay was so degraded that

10 there was some urgency in acting. Then in 1987,

11 a policy basically of a 40 percent nutrient

12 reduction was issued, and that hoped to be

13 achieved by 2000, by nutrients simply being

14 phosphorus and nitrogen.

15 Then the Chesapeake Agreement, the

16 2000 agreement called "C2K" was proposed to

17 eliminate the impairment by 2010; and, of

18 course, that 40 percent reduction in nitrogen

19 and phosphorus did not get accomplished. In

20 2006, EPA and policy and scientists had to

21 concede that basically the 2000 agreement would

1 not be met. Next, please.

2 As an example of one of the issues that

3 was realized about how the agreement wouldn't

4 be met, there was a general emphasis on growth,

5 basically, the growth in the states and, of

6 course, the early 2000s having an economic boom,

7 that the growth was outpacing progress. So one

8 of the reasons we're not making the progress that

9 we hoped was that growth was actually overcoming,

10 that is, the pollution load from new growth was

11 overcoming all the efforts that people were making

12 in the early 19 -- well, through the 1990s at

13 least.

14 So this is a quote from -- oh, I'm

15 sorry. We're on Slide 4. This is a quote from

16 an EPA Inspector General's report from 2007 which

17 just basically emphasized that if communities

18 do not sufficiently address the runoff from new

19 development, then loads from developed lands

20 will continue to increase rather than diminish;

21 and as a result, restoration costs for the Bay

1 will increase and, obviously -- this is 2007 --
2 will not meet the C2K agreement, and that in fact
3 turned out to be the case.
4 I think that this is an important quote
5 because it emphasizes the costs that the citizens
6 of not just in Maryland, but the entire Bay
7 region, will have to suffer if there isn't an
8 adequate policy in place; and so that brings us
9 to getting closer in time to 2009, when the CBF,
10 the Chesapeake Bay Fund -- Foundation sued the
11 EPA, and that litigation was basically essentially
12 to force the EPA to take more control, to move
13 literally from a voluntary regime to a regulatory
14 one.
15 So that lawsuit was stayed in 2009 with
16 the issuance of President Obama's executive order,
17 and then it was settled in 2010 with, you know,
18 the basic understanding that EPA would release a
19 federal strategy to show what the feds were going
20 to do, and that each state would produce a Draft
21 Watershed Implementation Plan, a WIP.

1 In fact, in December 2010, each state
2 produced a Draft Phase I WIP, and then finally in
3 December, it was published -- I beg your pardon --
4 and then the EPA issued the Bay TMDL in December
5 of 2010.
6 The reason for switching was simply
7 that the voluntary efforts were seen not to
8 be advancing the restoration as quickly as was
9 needed. So this change to a regulatory framework
10 really did change the game in some way. It brings
11 us to today, to 2011.
12 Each jurisdiction has recently submitted
13 a Final Phase II Watershed Implementation Plan.
14 For Maryland, that was submitted on March 30th,
15 and there were additional comments from local
16 jurisdictions that were submitted as recently
17 as July 16th, and those were comments on the
18 State's submittal. The State submitted their
19 Phase II WIP, and all of that has been forwarded
20 to EPA for their consideration, and if you're
21 interested in looking through those documents,

1 they are available on the MDE website.

2 But in a nutshell, just to say what

3 the WIP is about, it's a two-prong thing. It's

4 basically to restore the waters. All sectors

5 have to reduce existing loads to restore the Bay,

6 and by "Bay," we're talking about the segments

7 within the main stem that are suffering from lack

8 of oxygen. They were essentially dead zones.

9 But the second prong, which is the one

10 we're here to talk about today, is this lower

11 bullet, basically to account for growth and to

12 maintain the Bay's health as it is now. So this

13 is what we've come to. This is the implementation

14 of the WIP period, in essence.

15 And you should probably know that

16 they're -- the way that EPA has phased in the

17 watershed implementation planning is in three

18 phases. We've passed the first phase, and between

19 now and 2017 will be basically the implementation

20 that we expect to achieve our goals in 2025. So

21 by 2025, EPA is anticipating that the strategies

1 and things that we have put in the WIP will be
2 on the ground by then.
3 So one of the things that was mentioned
4 in the WIP is a policy to address new loads.
5 That's new loads from new development. New
6 loads were addressed in two major ways. The
7 first was that wastewater treatment plants, the
8 large plants, significant ones, have in their
9 design capacity a certain amount of capacity
10 which is available for new growth. So that's
11 one way in which urban centers can actually grow
12 without impacting the Bay. That growth has been
13 already allocated.
14 The other way is for new loads that would
15 come from development that perhaps would not be
16 connected to a large wastewater treatment plant,
17 or if they are connected to a treatment plant,
18 it's a treatment plant that doesn't have much
19 capacity, in fact, may be out of capacity all
20 together. So those new loads need to be offset
21 in order just simply to maintain the quality of

1 the Bay at this point.

2 There are two related efforts that sort

3 of came at a similar time frame. The first is

4 that Maryland has committed to offset the new

5 growth in the WIP, but the second is just as

6 a result of this year's General Assembly, and

7 that is what we call the "Septics Bill" -- it's

8 SB 236 -- which requires that offset provisions

9 for Tier III areas be proposed by the end of 2012.

10 Tier III areas are -- they're basically construed

11 as large lot development areas and rural villages

12 which are on septic systems.

13 Now, these two policies, one which only

14 applies to Tier III and the other one, the top

15 bullet, applies to the entire state, they could

16 be sort of rolled out separately, but we're

17 choosing to do them concurrently.

18 So this policy, we're hoping, will

19 satisfy the requirement of SB 236 to be prepared

20 by December; and it will also set in place a

21 policy under the WIP which was not supposed to

1 be in place until 2013; and I think in the phases,
2 while we were developing the WIP, we were thinking
3 it would be December 2013, but it's on a much
4 faster track than that. Next slide, please.
5 The objectives of this policy can be
6 described in two ways. First of all, it's very
7 significant that the type of offset that we're
8 trying to develop is going to be a permanent
9 offset. That is as long as the load which is
10 coming from new development is contributing to
11 Bay water quality, we want to have that offset
12 equally accounted for. We want it to be accounted
13 for in an equal fashion.
14 Secondly, in order to further the Bay
15 restoration, not so much just to maintain it,
16 we want to minimize the pollution load from
17 growth so that fewer offsets are needed. There
18 are economic reasons for this, but it's also
19 an argument of efficiency really. We want,
20 for instance, in the second dash there to allow
21 public resources to focus on reducing existing

1 loads to meet the allocations.

2 If you've had a chance to look at the

3 WIP document, there are targets, pollution load

4 targets, for the five major basins of the state

5 of Maryland, and those are for existing load.

6 That's pollution that is coming, for instance,

7 from, you know, existing impervious surface, hard

8 surface, and also pervious surface.

9 So in order to sort of focus the public

10 resources, the funding that is needed, on those

11 existing sources, it's very important that

12 these offsets are used well and not used for

13 the existing load but are used for the new load,

14 clearly.

15 So we're trying to encourage this whole

16 policy to work to the advantage of counties, local

17 governments, in order to optimize the offsets that

18 are available and then to also use their zoning

19 and planning authorities to optimize the kind of

20 growth that each one of those jurisdictions wants

21 to have. Next slide, please.

1 So some of the concepts that were
2 articulated in the WIP, in the Phase II Final
3 WIP, include for new development that it must
4 be all applicable regulations. So that would
5 include stormwater regulations, the most recent
6 of which, of course, is the "Environmental Site
7 Design to the Maximum Extent Practical," and that
8 the new development will offset post-development
9 nonpoint source loads.
10 So I hope that the concept of point
11 sources and nonpoint sources is clear to everyone,
12 point sources being those ones directly discharged
13 from types or from a large urban area in a
14 stormwater collection area or as close to a
15 nonpoint source that might come off of rural
16 lands, agriculture, things like that.
17 The second concept was that redevelopment
18 will not be required to offset -- oh, I beg your
19 pardon. I've done that one.
20 This third concept was that new on-site
21 disposal systems must meet all applicable

1 regulations and offset the post-development
2 wastewater load. So that is septic systems
3 with not only offset -- not only meet the new
4 regulations for, let's say, new Best Available
5 Technology, but they would also offset the
6 amount that is in fact discharged, even with
7 a BAT system, and then point sources, as we had
8 talked before. New loads and increased load
9 from existing point sources above the nutrient
10 allocation must be offset. So that is if there
11 is no capacity in that amount, it would go to a
12 treatment plant that would have to be offset.
13 There are, in fact, some significant
14 differences in this policy from what we envisioned
15 in the WIP. In the Draft WIP, in 2010, the policy
16 was considered as a way -- as a conceptual idea
17 of how we would actually offset these loads; and
18 what we've gone to at this stage, which is partly
19 because of the time frame, but also because of we
20 want this policy to be successful, and one of the
21 ways to make the policy successful is to make it

1 simple in some sense, and one way that we have
2 identified that will simplify the policy is
3 simply to address nitrogen.
4 Now, other states do have trading
5 policies and things like that that address
6 phosphorus credits; but we are, at this stage --
7 and I would urge you to try to think of this
8 policy as a conceptual approach at this stage.
9 Nothing has been, you know, put into regulation
10 or anything like that at this stage. We're really
11 trying to make these outreach efforts to gather
12 your opinions and to gather your input and your
13 insight as to how the policy should be formulated;
14 but at this point, one of the key departures from
15 the WIP has been that we're just trying to isolate
16 nitrogen. So there would be no separate offset
17 applied for phosphorus at this point.
18 The second bullet, also important, is
19 that we are envisioning a development, let's say,
20 on a development parcel, for example, and what
21 we're hoping is that that load that would be

1 coming off that acre, let's say, one acre of
2 land, would be 100 percent offset.
3 So in the WIP, it presented offset
4 policy as if there would be a certain reduction
5 from the post-development load that would go
6 down to a forest load, which if you're familiar
7 with the stormwater regulations, the Stormwater
8 Management Act of 2007, ESD to the MEP -- that
9 was Environmental Site Design to the Maximum
10 Extent Practical -- tries to bring the load
11 that's coming off of one acre, let's say, to
12 roughly the load that would come from a forest
13 condition. So this is looking for a greater
14 offset than that.
15 So in new development, you would perhaps
16 apply ESD to the MEP, but that you would still
17 have to offset the remaining load. Okay? So
18 again, these are the types of loads that we're
19 thinking about, and now we'll get into more how
20 is it that you do calculate that load from a
21 parcel of land.

1 The type of load that we are discussing
2 is going to be the direct load, which is
3 wastewater, discharging the groundwater from
4 conventional septic or BAT septic systems.
5 We'll also be talking about discharging wastewater
6 treatment from wastewater treatment plants and,
7 of course, stormwater, which we'll use the Bay,
8 the Chesapeake Bay, the model loading rates to
9 estimate for a load.
10 An additional thing that has been added
11 to this policy that we feel is very important
12 is an indirect load, and that is how to account
13 for mobile emissions. A lot of nitrogen is
14 airborne and goes directly into the Bay from
15 the air.
16 There is also a source of nitrogen
17 which comes from exhaust, from vehicle miles
18 traveled, and then is deposited either in the
19 Bay or in local waters and streams, and we are
20 trying to capture that component as well. So
21 wastewater, stormwater, and then emissions from

1 atmospheric deposition.

2 The next couple of slides are basically

3 a number of slides to show you what are the loads

4 that we anticipate are coming from a parcel of

5 land in pounds per year.

6 So the first type is from a conventional

7 septic system, 9.86 pounds of nitrogen per year,

8 and then about half of that coming from an

9 upgraded Best Available Technology system, and

10 these are per household numbers for the septic

11 system. Okay.

12 For wastewater treatment plants, basic

13 numbers in milligrams per liter of discharge

14 of the effluent are 18 per secondary treatment,

15 8 for BNR, and then 4 for ENR. Now the plants

16 can work at a better level than that seasonally,

17 but these are the numbers that we're using for

18 our calculation.

19 The stormwater load factors, these are

20 designed for two types of land, impervious hard

21 surfaces and then pervious, like grass, field,

1 pasture surfaces. These numbers, 15.34 and 10.78,
2 are model numbers; that is, they come from the
3 Chesapeake Bay Model, and they are -- they will be
4 reduced significantly, 50 percent at least, once
5 ESD to the MEP, that is stormwater regulations are
6 applied.
7 So those numbers are essentially halved,
8 and then -- oh, I beg your pardon -- sorry, if you
9 would go back just one more. And the last one is
10 forested land. A traditional number for a forest
11 load is 3 pounds per acre per year, so we're also
12 using that too.
13 Air deposition, this is some -- this
14 is a way to capture that component. Essentially,
15 what we have done is divided -- made a divide
16 between very dense areas and then less dense
17 areas, in terms of census population per square
18 mile.
19 So, for instance, if you -- to take the
20 first number first, if you're living in a rural
21 area that is less than 10,000 people per square

1 mile, what we anticipate is that you would have
2 to drive back and forth to your residence, and
3 in that case, the NOX emission, which should
4 be offset -- again, this is a number that is
5 proposed for this policy, so we have had to pick
6 something -- we picked one pound per year that
7 will have to be offset. So all of these three
8 components that we talked about are going to
9 have to be added up cumulatively to know how
10 much do you actually have to offset.
11 If, for instance -- just to go back one
12 slide, please -- if you are in a more dense area,
13 let's say, a densely populated urban center,
14 the offset would only be required of half a pound
15 per household or EDU, and this applies simply to
16 residential. We're not talking about commercial,
17 because what we're trying to capture is the
18 vehicle miles traveled from your home to wherever.
19 Now, these are some examples, and I
20 just want to say before everybody, you know,
21 gets crossed eyes looking at these examples,

1 the PowerPoint will be posted on our website,
2 the MDE website, and you do have a copy of it
3 printed out for you. These are just some examples
4 that we have tried to put up that demonstrate
5 how you calculate the load that you would have
6 to offset and what would be the likely scenario.
7 So, for instance, there are three
8 scenarios that are listed here. The first one
9 is a Low Density Residential. The second one
10 is a Medium Density, and the third is a High
11 Density. So going from the top on "Low," the
12 amount we're talking about just as a sample,
13 as an example, a two-acre lot on septic, using
14 an upgraded septic system, with a very little
15 amount of hard surface, 10 percent impervious.
16 In the second "Medium," the lot is
17 somewhat smaller, half an acre; and then in the
18 "High Density," very, very small, just a tenth.
19 And in the High Density one, this one is on ENR.
20 It's on the highest technological wastewater
21 treatment plant. It has capacity.

1 So what I'm trying to show is that each
2 one of these components -- "WW" is wastewater,
3 stormwater, and the air emission -- are all of
4 those components are added up to figure out what
5 the offset load would be.
6 Now, the calculation of these numbers,
7 we can discuss. There is -- what we're proposing
8 within about maybe a week or so is to have a
9 spreadsheet available which has formulas in it
10 which will allow you to input whichever one of
11 these scenarios it is that you want to look at
12 by component, and then it will calculate the load
13 to be offset for you.
14 But this is just basically to show that,
15 for instance, with wastewater which is on, let's
16 say, a BAT system, you would have this amount
17 of nitrogen to offset; but as you go down to
18 the highly developed areas, when you're on a
19 wastewater treatment plant and it does have
20 capacity for the wastewater component, you
21 don't have anything to offset; and as a result,

1 it's simply -- it's intuitive in a way that the
2 higher the load is in the more diffuse areas
3 where there isn't the technological treatment
4 of the nitrogen. Next.
5 This policy will also apply to
6 non-residential developments -- so, for
7 instance, commercial and mixed developments --
8 and we are hoping to capture that load in a
9 very similar manner based on the same components,
10 the wastewater, stormwater and air.
11 And these examples show various types.
12 The first one is a warehouse, so it's a commercial
13 property. It's developed. It's on an undeveloped
14 acre, so it's essentially green fields, and it's
15 going to have a very high level of impervious
16 coverage. Just based on those facts, the offset
17 is going to be quite high as a result.
18 If we look down at the bottom one, this
19 is almost the opposite extreme. We're talking
20 about a redevelopment property in an urban site.
21 So automatically, you know that it's very, very

1 dense. So -- oh, I should point out, I'm sorry --
2 in the commercial examples, the NOX offset does
3 not apply. As I mentioned before, we're just
4 applying the NOX offset to residential.
5 So that's why in the first scenario
6 and in the third scenario, it's a zero for the
7 air component, but going back to this one, this
8 is really -- it's very stark is the reason I'm
9 focusing on it because it's redevelopment. It's
10 on an urban site, it's commercial, and served by
11 a wastewater treatment plant with capacity. So
12 as a result, there is, in fact, not even a pound
13 to be offset. So that's, in a way, the optimal
14 situation for this policy to work and also for
15 the, you know, developer not to have to purchase
16 any credits. Okay.
17 Now, we wanted to talk a little bit about
18 the economic implications of this policy because
19 one of the things that might happen is that you
20 would automatically question, okay, where are you
21 going to get those credits? How will we get those

1 credits? And I think it's fairly intuitive that
2 if the credits are not available, if they are
3 scarce, their price will rise, and the price is
4 of great concern.
5 But one of the things that comes from
6 the policy's focus on redevelopment is that it
7 emphasizes not just the protection of water
8 quality but also that redevelopment is favored.
9 So, for instance, in this, in the scenarios that
10 I've tried to show, redevelopment concentrates
11 the growth in dense areas that are served by
12 wastewater treatment plants.
13 So, for instance, when you do concentrate
14 them and you don't need, in that last scenario,
15 any of the offsets to be purchased, then it's
16 not an issue if there are very few offsets, or
17 at least it's not as much in the sense that it
18 doesn't prohibit development outside of those
19 areas; but on the other hand, if the development
20 does focus on those areas, then there are fewer
21 credits that need to be used, and for whatever

1 credits are necessary, those credits are used
2 in the most efficient manner.
3 So we're hoping that this policy,
4 in a sense, it will maximize the development
5 potential, and it will allow Maryland to maintain
6 the restored Bay, based on this new growth being
7 offset, and that the economic growth will also
8 be concentrated.
9 This next slide is a slide which the
10 Maryland Department of Planning has developed
11 in order to emphasize the relationship between
12 jobs and residences and growth. These numbers
13 on the left-hand column, the Dominant Type of
14 Development, are the same types of development
15 we were talking about before: High density on
16 the ENR, mixed development on non-ENR and septics,
17 and then large lots that are on sewer -- large
18 lots, no sewer.
19 MR. RHODERICK: No sewer.
20 MR. EMMART: No sewer.
21 MR. RHODERICK: It's no sewer.

1 MR. EMMART: Okay.

2 MS. KENNEY: They're on septic.

3 MR. EMMART: And so those are on septic,

4 that is to say. All right.

5 So then the idea behind the slide is

6 simply that the pounds of nitrogen per capita

7 are least where the density of the housing is

8 the greatest. So in "High Density on ENR," the

9 pounds of nitrogen per capita are 2.5 to 3, and

10 as you go down that column for "Mixed" and then

11 for "Large Lots," the pounds of nitrogen increases

12 per capita.

13 And to look at it another way, on the

14 third column, "Jobs or Residents Per 100 Pounds

15 of Nitrogen," that's basically to say that if

16 you had 100 pounds of nitrogen and you needed

17 to offset it, what would you get for that? You

18 would get, per capita, 38 to 44 jobs per resident,

19 if I've got that right. I'll have to defer to MDP

20 to...

21 MR. TASSONE: Jobs and/or residents.

1 MR. EMMART: Jobs and/or residents.

2 But the basic, the basic message is,

3 I think, quite clear. It's that essentially in

4 the higher density areas, when it is served by

5 ENR plants, those areas tend to have a higher --

6 a lower per capita nitrogen level and a higher

7 per capita job and resident ratio. Okay.

8 So one of the ways that we wanted to

9 introduce this policy was to say to you, explain

10 in some way, how it would interact or integrate

11 with the trading policies that exist. The trading

12 policies from 2008 and also again 2010 that have

13 already been published, they are out there, and

14 this policy will integrate with them.

15 Just to go over some of the principles

16 that are in the trading policies, a unit of trade

17 called a "credit" is equal to one (1) pound of

18 nitrogen or phosphorus per year, and automatically

19 there, you will see there is a difference somewhat

20 in the policy of the accounting for growth and

21 the trading policy. The trading policy does

1 incorporate phosphorus, but this policy is just,
2 for the moment, going to focus on nitrogen.
3 The second bullet, all nutrient trades
4 and offsets must comply with any local TMDL
5 allocations and must not cause or contribute to
6 any local violations of water quality standards.
7 That is a very important premise that we do not
8 want the Bay to be further degraded, and if
9 any trading policy that is going to, let's say,
10 encourage sellers, generators of credits, to
11 try to, you know, capture the credit from the
12 work that they do, the implementation of the
13 BMPs, we want to make sure that they have to
14 come down to the TMDL allocation first. They
15 have to reduce their load, such that they have
16 met the allocation, and then anything they go
17 beyond that allocation, that counts to the
18 credit.
19 Do you have a question in the back?
20 MR. UMLING: Yeah, this is important.
21 You used the term in here "must not contribute,

1 cause or contribute to any local violations of
2 water quality standards."
3 Are you referring to locally within the
4 Bay Model for the Chesapeake Bay, or when you
5 talk about local, are you talking about any stream
6 segments that may have their own TMDLs within that
7 locality?
8 MR. EMMART: Excellent question. You're
9 right, it's a very important issue. We are aware
10 of the difference. As you stated, there are local
11 water quality standards, and by "local," that's a
12 very charged term because we don't know if it is
13 the stream segment or if it's the Bay CB4, let's
14 say.
15 We are basically -- from the trading
16 policy, it's an absolute. Am I correct, John,
17 in that way, that you must --
18 MR. RHODERICK: The lower of the two.
19 MR. EMMART: -- you must meet the
20 stricter of those two. So, for instance, if
21 there's a local TMDL and it has a limit of the

1 load that you have to go down to, that you have
2 to reduce to, then you must achieve that reduction
3 and then go beyond that in order to generate any
4 credit; but if the local, let's say, is not as
5 strict as the Bay TMDL, then the Bay TMDL limit
6 would govern.
7 Does that help? That doesn't? There
8 are a couple of other slides coming that address
9 this issue, but for now, I think that's --
10 we'll discuss that a little further, but it's
11 an extremely important question.
12 In the trading policy, there are delivery
13 factors that are applied to account for the
14 differences in delivered loads between trading
15 partners to their locations. So, for instance,
16 if you were in Anne Arundel County versus Garrett
17 County, there would be delivery factors applied
18 to that amount of nitrogen. A pound of nitrogen
19 in Anne Arundel is not the same as a pound up in
20 Garrett or in Washington County. The monetary
21 value of the credits will be determined by the

1 market. That's what the trading policy states.
2 Next.
3 Okay. Now, we're on to the water quality
4 issues again. One of the premises of the Bay
5 TMDL, of course, is that the main stem -- and
6 this is segments, you know, CB 4, 3, and 5 --
7 those ones are where the impairment is really
8 causing a dead zone, and local stream inputs from
9 up in the Bay are bringing, obviously bringing
10 down the nutrients, and the oxygen levels, the
11 DO measurements there, are so low that there isn't
12 enough for even aquatic life to survive.
13 So we are hoping that this offset policy
14 will address the significant new growth that may
15 contribute to that. So we hope that by reducing
16 the sediments that reach the main stem that we
17 will, first of all, protect the Bay. Now this
18 is just about the Bay and tidal water quality.
19 Next slide, please.
20 In terms of non-tidal water quality,
21 we -- one of the reasons -- I should just explain

1 a little more fully. One of the reasons why we
2 feel that nitrogen is a good parameter to use
3 as the credit is that many of the efficiencies
4 for the practices that are put into the ground
5 have nitrogen and phosphorus efficiency rates,
6 and usually the nitrogen rates are less than
7 the phosphorus. Nitrogen, as a constituent,
8 is simply more water soluble. It's harder to
9 catch by those practices normally, and so we
10 feel that if we use nitrogen as the standard
11 in this trading policy, we will be able to also
12 address phosphorus.
13 So this second bullet on the slide
14 at the bottom emphasizes that point. It says
15 basically the majority of nitrogen management
16 practices also reduce the loads of phosphorus;
17 and, in fact, urban practices result in larger
18 relative reductions in phosphorus than nitrogen.
19 I'm saying that first because I want to explain
20 why it is that we're focused on nitrogen.
21 But for local non-tidal streams,

1 normally, phosphorus is the issue. Normally,
2 it's what we term "the limiting factor." You
3 have to have both nitrogen and phosphorus in
4 order to cause an alpha bloom and to have an
5 impact to the biotic life, but if you don't add --
6 the way that you would increase that impact is
7 that you would add more phosphorus. If you
8 add more nitrogen, then it has a minimal impact
9 because phosphorus is the limiting factor.
10 I hope that explains it to some extent,
11 but what we are aiming at is targeting the
12 nitrogen in order to address local water quality.
13 So that nitrogen standard that you would find
14 in, for instance, a local TMDL, if that were
15 stricter than the Bay limit, we would apply
16 that one; but if the Bay were stricter, we
17 would also apply the stricter of the two that
18 would cover.
19 Protecting non-tidal water quality,
20 this is a slide that is about ESD to the MEP
21 to emphasize that it also -- this is the new

1 stormwater regulations, and we assume, even
2 before the offset policy was in place, that all
3 of these regulations are going to be followed --
4 that this will also protect local water quality.
5 It will protect habitat integrity, and it will
6 increase -- we want to push the stormwater into
7 the groundwater. We want to make sure that the
8 groundwater recharge is diminished -- or is
9 increased vis-a-vis going off site. We want
10 it to increase and go and there to be less runoff
11 on it. Sorry about that.
12 And in terms of requiring the sellers to
13 meet the Bay WIP baseline reductions, we feel that
14 that will also drive water quality improvements
15 at the local level because there won't be credits
16 to sell if they cannot meet the water quality
17 standard there.
18 The trading geographies, this is another
19 slight difference between what we are proposing
20 in the offset policy or accounting for growth
21 policy and what is existing in the trading

1 policies. Essentially, at the moment, current
2 trading policy has three basins: The Potomac,
3 Patuxent, and then everywhere else within the
4 state.
5 The offset policy may need to modify
6 that. We're considering the offset policy as
7 somewhat of an overlay on the trading policy.
8 So once this accounting for growth policy comes
9 into play, there will be adjustments to the
10 trading policies.
11 For instance, the WIP discusses the
12 five major basins which are one way of dividing
13 up the state; whereas, the trading policy has
14 three. So there may be an adjustment to try to
15 make the most efficient policy work for Maryland.
16 Next.
17 The Accounting for Growth trading
18 geographies will follow the rules of the trading
19 policy to the extent that they are consistent,
20 and then they will add one thing; and the thing
21 that we're trying to add -- this is another very

1 important distinction between the two -- is that,
2 according to the plan of Maryland, there are
3 certain areas within the state that are identified
4 as "Priority Funding Areas," and within those
5 priority funding areas, there are targeted growth
6 and revitalization areas which are a smaller
7 subset of the PFAs.
8 What this policy aims to do is to
9 encourage and incentivize the development to
10 occur in the targeted areas, in those growth
11 areas; and one way to incentivize this, if those
12 areas being served by the highest technological
13 wastewater treatment plant, is to say that their
14 ability to purchase offsets to develop in those
15 areas, that can be purchased anywhere in the
16 state; and, in fact, the trading policy might
17 even have to be adjusted in some sense because
18 we might wish to encourage interstate trading.
19 That's not something we have determined, but on
20 the other hand, if it did come about, if the
21 growth and development occurred in these targeted

areas, then the purchase of those credits could come from anywhere.

However, the opposite is really sort of a disincentive, and that is that if -- well, I shouldn't declare that it's a disincentive, but it could be seen as a disincentive -- that if the development does not occur in the targeted growth areas, then the developer, the person would be restricted to purchasing the credit within the county where the development occurred.

Now, we've had several different meetings on this and received feedback from a number of constituents about that, about the limitation, that if the development doesn't occur in a targeted growth area, then the credit has to be purchased in the county; and some of the comments have been very positive and said that that's great. Other ones have said, no, that's really negative. So that's the kind of -- one of the issues in this policy which is not resolved. It's proposed. However, we do welcome your

1 insight on those issues. Next slide.

2 Okay. We're almost to the end. I just

3 want to describe briefly how this proposal is

4 going to be implemented. It would be implemented

5 generally through an MDE permit. It would be a

6 regulation.

7 We would use the existing statutory

8 authority, so no further legislative action would

9 be required. It would be promulgated through

10 the regulatory process, and as far as the policy

11 has been developed so far, it would be -- the

12 mechanism for its delivery would be a general

13 permit for offsets.

14 MDE would ask the developer to calculate

15 the load and also to obtain the permanent offsets.

16 That would mean submitting information in order

17 to obtain the permit that would certify that the

18 offsets are there, that they exist, and that they

19 will be maintained permanently.

20 And that's essentially it, except for two

21 small things. The first is these are the areas,

1 these are proposed areas that we are seeking your
2 feedback on. These are some of the areas that
3 have not been resolved in the policy fully.
4 We would like, as I said before, to have
5 your input, your insight, to get your comments,
6 suggestions, on this proposal, as it's laid out,
7 or any other alternatives that you might envision,
8 because the bottom line issue is that we must
9 address new growth loads, and this is just one way
10 to achieve that, but we would welcome alternative
11 proposals.
12 We would like to flesh out what are the
13 roles for local and county government. Very much
14 like the trade policy, we would like to, you know,
15 conceptualize how, for instance, the trades would
16 actually operate, whether they would be through
17 aggregators or brokers for the offsets.
18 We would like some information, you
19 know, if you agree or disagree about using
20 nitrogen alone. When the effective date would
21 be of this policy, the SB 236 indicates that

1 the proposal, the policy itself, needs to be
2 in place, I believe, by 2012, by the end, by
3 December. So it's a very short time frame.
4 There are other ways to calculate the
5 post-development load, and once we do have this
6 calculation tool up on our website and you have
7 access to it, we would appreciate your comments
8 on that.
9 Similarly, with trading geographies,
10 the verification of offsets, this is all -- these
11 are all things that we think are central to the
12 policy. You can't have offsets if they're not
13 verified, but how, how to go about verifying
14 them in an efficient manner and especially to
15 ensure that the offsets are permanent. The
16 idea of permanent is that the load, as of again,
17 the load that's produced by this new growth needs
18 to be offset for the duration of that growth.
19 So it's -- that's sort of an open question, what
20 does that word "permanent" mean.
21 And then in terms of the mechanics of

1 the policy, is it necessary to have a fee in lieu
2 system, for instance, like the wetlands program?
3 Is that something that would aid this policy,
4 or is it something that would detract from the
5 policy? So we would like your thoughts on those
6 areas.
7 This is the schedule. Essentially, for
8 the period from July to September, we are going
9 to be going around the state giving these regional
10 meetings, just to make people aware of the fact
11 that the policy is going to be formulated, to give
12 them a chance for input.
13 And we're going to put and have put some
14 documents up on the MDE website, for instance,
15 the discussion draft is a narrative of about
16 ten pages that explains in some detail what I
17 have discussed today. We are hoping to put
18 the spreadsheet for calculating a load up there
19 relatively soon. It's not up there right now.
20 And then in August or so, we're hoping to have
21 draft regulations and to revise those as we

1 receive comments from everyone.

2 In October, there will be Attorney

3 General review of the policy, approval by the

4 Secretary of the Department. In November, we

5 will brief the Legislature, the Environmental

6 House Committees; and then in early December,

7 it will be submitted to the AELR and DLS. Those

8 are administrative bodies that review proposed

9 new regulations.

10 And then if it passes that series of

11 elements, then it would, mid-December, it will

12 come into the Maryland Register as a public

13 notice, and then there will be an opportunity

14 for comment, generally through the regulatory

15 process.

16 So if you would like to comment, and we

17 hope you do, we would require you to send your

18 comments to us no later than October 1st. Because

19 of this being in a tight time frame and trying to

20 get ready for December, October 1st would be about

21 the latest that we could receive comments.

1 You can submit them to a special website
2 email address, which I hope you can read it --
3 it's in your paperwork as well -- is "afg" (which
4 stands for Accounting for Growth) "@mde.state,"
5 or if you want to send a hard copy, you can send
6 it directly to me at the Maryland Department
7 of the Environment, and those comments will be
8 compiled.
9 We are not planning on having a comment
10 response document. That was what we did with the
11 WIP, but we had a little more time in order to do
12 that. So we find what we will do instead is we
13 will receive your comments, consider them, modify
14 the regulations, as appropriate; and then the
15 draft regulations, as I said, will be published,
16 and there will be an opportunity for a second
17 round of public comment, and that's it.
18 So now what I'm going to do is I'm going
19 to open the floor to questions, and the panel is
20 going to assist me, and we will try to answer what
21 questions you do have. Sir, in the back.

MR. UMLING: I'm not saying --

MR. EMMART: Excuse me. Would you like a microphone?

MR. UMLING: I think I can talk -- can everybody hear what I'm saying?

THE REPORTER: And name, please.

MR. UMLING: I can project, I think.

THE REPORTER: Name, please.

MR. RHODERICK: Oh, name, name.

MR. EMMART: Oh, beg your pardon. Whoever is going to ask a question or speak, if you wouldn't mind, please identify yourself and your affiliation, just so that we have that on record.

MR. UMLING: I am David Umling, City Planner for the City of Cumberland.

I'm not saying that this is actually happening or going to happen, but it is something that I would like you to consider as something that could possibly happen.

Given the fact that we're out here on

1 the very fringes of Maryland, surrounded by other
2 states, a lot of what affects our local water
3 quality in some of our streams comes from other
4 states over which we have little or no control.
5 The City of Cumberland has an ENR sewage
6 treatment plant, and we're not getting a lot of
7 growth. So, theoretically, we should have some
8 trading capability, given the fact that we're
9 way out here at the restaurant at the end of
10 Maryland's universe.
11 However, if water quality, as you just
12 defined it -- that's why I asked that question
13 about the -- you know, what you meant by local
14 violations -- if water quality in one of those
15 streams was high enough to kick us out of the
16 ability to trade, then we would be a community
17 that would have no growth or very little growth,
18 trading capacity, without any ability to use it
19 or any ability to control whether or not we would
20 be able to use it in the future.
21 And I think that's the way it would work

1 under the scenarios that you said, because I'm --
2 I'm just not so optimistic as to believe that if
3 you tell a shopping center that wants to serve
4 people in Annapolis that they can't go in there
5 because there's no capacity to them, they won't
6 rush out to Cumberland to put it there because
7 we have the capacity. So I'm assuming that
8 we're still going to be in a very limited growth
9 environment.
10 MR. EMMART: Joe, would you like to
11 address that or...
12 MS. NUNN: Hey, Paul.
13 MR. EMMART: Yes.
14 MS. NUNN: We have a request that the
15 panel reintroduce themselves.
16 MR. EMMART: Oh, yes, of course, please.
17 So I don't want to lose that question
18 though. I think that's very good, and what would
19 you -- go ahead.
20 MR. SAKAI: I am Jay Sakai with the
21 Department of Environment.

1 David, I will take a shot at this,
2 and then you can tell me if I got your question
3 correct.
4 And by the way, the concern about
5 local water quality is, as Paul said, is a very
6 important one, because I think everybody has
7 concerns that trading and offsets that are driving
8 trades are going to result in local impairments
9 where we don't want them, local degradation where
10 we don't want them; and, you know, we certainly
11 don't want a lot of development degrading local
12 water quality while we make allowances for it
13 somewhere where it doesn't matter. I mean, I
14 think that's kind of the gist of what I hear
15 here.
16 We have said both fairly clearly in
17 our trading policy, and the department's trading
18 policy is on our website, point to point. It
19 may go through some iterations, but John Rhoderick
20 has talked about trading as well; and in all of
21 these principles, in all of these discussions

1 about policies is a clear notion that you
2 cannot -- you cannot trade, for instance, if
3 that trade will result in degradation of local
4 water quality. So that's -- the first protection
5 is always the local receiving water quality.
6 Now, the reason why this is a little more
7 complicated is because there isn't yet in very
8 many cases nutrient criteria, for instance, for
9 flowing streams. We have a lot of work that's
10 gone into a determination of what the Bay TMDL
11 will be, and we have the five segments; but
12 that's part and parcel different than what a
13 local receiving water, like the Potomac, you know,
14 may require.
15 There is much more work that's going on
16 with the EPA right now about -- and within Science
17 Services about, for instance, nutrient criteria
18 for local water, but it's something that we're
19 very mindful of, and it's something that we want
20 to meet -- you know, we don't -- we don't want
21 unintended consequences here.

1 Does that answer it, sir?

2 MR. UMLING: I understand what you're

3 saying and -- and what my point was wasn't

4 that, you know, we would want the opportunity

5 to contaminate our own streams, but what I'm

6 saying is a lot of our streams come down from

7 Pennsylvania. We do have some suspected problems

8 in some of those streams. It appears that it's

9 not coming from Cumberland, but if we would have,

10 theoretically, the ability to be able to trade

11 things but were barred because somebody we can't

12 control --

13 MR. SAKAI: Oh, I see.

14 MR. UMLING: -- in another state is

15 degrading our stream, that leaves us with zero

16 on all ends. I mean, maybe that's an unfortunate,

17 unintended consequence of this, but understand,

18 that's what it's leaving us with, if that occurs.

19 MR. SAKAI: Well, in the broader context,

20 obviously, that's the story of the Bay. You know,

21 the Bay is half of Susquehanna and, you know, the

1 rest of it is coming from everywhere else. So,
2 you know, others have made the -- have pointed out
3 that if Maryland does all these different things
4 and we don't get the same type of movement in
5 Pennsylvania, it's not really going to make that
6 much difference with this.
7 MR. UMLING: But the parts of the Bay
8 that are developing and causing that problem
9 aren't the most economically distressed portions.
10 MR. SAKAI: I understand that, and I
11 think that's --
12 MR. UMLING: And you're leaving the
13 economically distressed portions with potentially
14 no way out of that hole.
15 MR. SAKAI: I mean, I think that's a good
16 comment. That's something that -- John, I don't
17 know if you have anything else on that.
18 MR. RHODERICK: Are we talking about the
19 allocation, or are we -- when you're talking about
20 impaired water body, like you say, West Virginia
21 that drains into the Potomac, they have a TMDL.

1 They have a nitrogen/phosphorus allocation and
2 goals that they have to get down to, to restore
3 their portion of the Potomac.
4 So each state, even though, as you say,
5 Pennsylvania flows into Maryland and West Virginia
6 and Virginia, each state was given by EPA, for
7 those water bodies, an allocation in the loading
8 that they have to meet.
9 MR. UMLING: But I recognize some states
10 have been more aggressive with assuming that
11 responsibility than others have --
12 MR. RHODERICK: True.
13 MR. UMLING: -- but we're directly
14 affected by states that are not as aggressive
15 about doing that, and that even are resistant
16 in some regards to wanting to do that, in large
17 part, for the same reasons, there has been
18 resistance in our part.
19 MR. RHODERICK: But that's EPA's role.
20 I mean, that's the whole point of bringing EPA
21 into the equation, because Maryland didn't have

1 the ability to dictate to West Virginia, but EPA
2 does. So they've got their -- as you say, they've
3 had to develop a plan, based on the allocations
4 they were given, for the loadings going into the
5 Potomac, and that plan has got to be met.
6 MR. UMLING: Well, and I understand that
7 explanation, but it doesn't sell well, as a person
8 who is paid to help the people who are affected by
9 this, to have to tell them.
10 MR. RHODERICK: And I agree, but I'm
11 hoping these two-year milestones, that's what EPA
12 says they're going to use as the enforcement. So
13 the first two years are coming up. We'll see.
14 MR. COSTELLO: David Costello. I'm with
15 the MDE as well.
16 One thing I would add, and not to
17 defend Pennsylvania or West Virginia, but this
18 is something they would say to us, that the people
19 who benefit most from the Bay are the people who
20 live on the Bay, and that's one of the challenges;
21 and even in Cumberland, for instance, to the

1 extent that the Bay is restored, to the extent
2 that our seafood industry, that boating and
3 swimming and recreation, you know, grow, as
4 it was in the past, you know, then obviously
5 Marylanders and Virginians, but in large part,
6 Marylanders are going to benefit financially
7 as we do now from the Bay, and we'll benefit,
8 you know -- you know, three-, four-, five-fold,
9 depending upon, you know, what estimated -- and,
10 of course, that's revenue to the state, and as
11 you know, not all revenue goes throughout the
12 state, but a fair amount of revenue does go to
13 Western Maryland and other parts of the state.
14 So again, not to defend Pennsylvania,
15 New York, or other states, but we do, we all
16 benefit from a restored Bay, and we're talking
17 billions of dollars in benefit; and ultimately --
18 and I know it's going to be years away -- but
19 it does ultimately benefit all residents of the
20 state.
21 MR. UMLING: And just to be clear, my

1 comment was not directed at whether or not we
2 should clean the Bay --
3 MR. COSTELLO: Right, right.
4 MR. UMLING: -- but how the trading
5 policy works and how it impacts --
6 MR. COSTELLO: Okay.
7 MR. UMLING: -- communities that have
8 to depend on that trading under this system.
9 MR. COSTELLO: Right.
10 MR. TASSONE: And David -- this is
11 Joe Tassone -- I would add to everything that's
12 been said that reiterate Jay's point. You ask
13 a really good question, and I'm not sure that
14 we've responded fully to it. We've certainly
15 got it on record here, but submit it in writing
16 as Paul gave the indications of how to do that,
17 so we can make sure, as we go forward, we can
18 think it through, because it's pretty -- you
19 know, you characterize a special case that's
20 worth focusing on individually.
21 MR. EMMART: Other questions, please.

1 In the back. Please state your name.

2 MS. KEECH: Hi, I'm Donnelle Keech from

3 the Nature Conservancy. I have just a quick

4 clarifying question.

5 You mentioned that there were delivery

6 factors that got factored in, in calculating

7 the value of trades, but I didn't hear you

8 mention delivery factors in the calculation

9 of post-development loads.

10 MR. EMMART: Thank you.

11 MS. KEECH: Did I just miss that? Are

12 they in there and they didn't get mentioned or...

13 MR. TASSONE: I mean, I can say that

14 the -- what was characterized, I think, in the

15 presentation is that the growth offset policy

16 would be consistent with trading policy, except

17 as it's modified.

18 Current trading policy figures in

19 delivery to the estuary factors for wherever

20 loads are coming from. So at this point, those

21 would be figured into offset trading also, unless

1 and until another proposal comes up for that.
2 MS. KEECH: Right, but what I --
3 what I understood from the first part of the
4 presentation is that another important number
5 in the calculation is the difference between
6 your -- the forest load and the post-development
7 loads.
8 What I'm asking is, you know, is a
9 post-development of an identical development in
10 Anne Arundel County or Allegany County considered
11 to have the same post-development load?
12 MR. SAKAI: Okay. So --
13 MR. EMMART: Yes, it is.
14 MS. KEECH: It is?
15 MR. EMMART: Yes, that's correct.
16 MS. KEECH: It is, okay.
17 MR. SAKAI: -- your premise or your
18 statement is correct. The loading numbers and
19 the calculations that you see were as a stream
20 for stormwater, and we used generally a state-wide
21 average loading rate for the septic number. We're

1 not using delivery factors, and I guess the reason
2 is really just trying to make sure that this is
3 simple to implement. If it gets, you know, down
4 to the point where you go on a development by
5 development basis, you have to factor in on a
6 specific delivery factor based on the specific
7 geography of the development.
8 We think it's quite complicated, and
9 it seems to make sense, at least to us, that if
10 you're going to try to calculate, and you give
11 a tool to somebody, to a developer, to calculate
12 an offset, that we're going to just average it
13 across the state and just make certain assumptions
14 about it. That's a little different than the way
15 trading has evolved, but we have different tools
16 for trading, but it is different, you're right.
17 MR. EMMART: And I can add just one
18 thing too. I just want to make clear that it's
19 an average state number from the Chesapeake Bay
20 Model of the no-action load.
21 So it's the -- I know that -- I didn't

1 know if you would want to know that information,
2 but it's simply to give the origin of that number.
3 It's a no-action load from the Chesapeake Bay
4 Model, in their most recent version, and it has
5 been averaged across the state.
6 And to go to something else that Jay
7 said, for instance, with the NOX emission portion,
8 that component of whether you're in a densely
9 developed tract or a not so densely, less than
10 10,000 people per square mile, there is a very
11 easy way to calculate that. If you go to the
12 census website, there is simply a little map
13 where you plug in your address, and you can
14 easily determine what the population density
15 is for that address.
16 MS. KEECH: Okay.
17 MR. EMMART: So that's something that
18 we will provide in a spreadsheet as an easy tool
19 that you can simply identify what type of census
20 tract you're in. It's not so easy with the loads,
21 and that's why we're trying to do a state-wide

1 average.

2 MS. KEECH: I guess maybe if I ask my

3 question more pointedly, you can give me a more

4 useful answer.

5 What I heard was that the further you

6 are away from the Bay, the less your credits are

7 worth because of those delivery factors, and yet

8 the further you are away from the Bay doesn't seem

9 to matter in terms of your post-development load.

10 MR. RHODERICK: All right. I'm going

11 to try to take that front end about the delivery

12 load, and now talking switching sides, on the

13 seller side, in order to generate a credit, the

14 tool we're using is based on delivered loads.

15 So, you're right, as an example I can

16 give you, if you were a farm -- I'm going to have

17 to use my farm background here -- on a farm in

18 Washington County, based on a credit generated

19 here, the delivered load, it would be times 0.6

20 by the time it gets delivered to the Bay. So a

21 pound here is probably a third of a pound by the

1 time it gets to the Bay, as an example.

2 Now, that is on the generation side,

3 and as Paul said, on the buyer side, in order

4 to determine for the buyer, we're using the

5 state-wide average.

6 MR. EMMART: Yes, please.

7 MS. MOORE: My question is for my

8 colleague, John.

9 THE REPORTER: Name, please.

10 MS. MOORE: I am Shannon Moore from

11 Frederick County Government, and my question

12 goes to the issue of availability and costs for

13 verified offsets.

14 I was just wondering, the last time you

15 and I had talked, you weren't sure that there

16 would be trades available within the Potomac basin

17 because of the preponderance, I guess, of animal

18 agriculture. I'm wondering if you're seeing any

19 trades available in our region, if there's a

20 trading price, or if you're seeing potential for

21 those in the future?

1 MR. RHODERICK: Of a segway, okay. Let
2 me try to give you three slides real quick because
3 this is a follow-up to that question.
4 There has been a lot of questions raised
5 about potential offsets. So as was mentioned --
6 and again, this is talking from the ag side --
7 over the last year-and-a-half, we have had the
8 ability to go out and inventory some of our farms
9 to get an estimate of credit potential.
10 So if you can go to the next slide.
11 MR. EMMART: John, if you could just let
12 everybody know that these slides are not in their
13 packet.
14 MR. RHODERICK: These are not in the
15 packet, and the reason I did not put them there,
16 these are preliminary slides. I am still trying
17 to fill in some of this information, but I got a
18 feeling we ran out of time.
19 So what I'm showing you here very quickly
20 is, at this point, we've inventoried about 103
21 farms, over 1200 fields, because that's how we

1 do it. It represents about 23,000 acres out of
2 1.2 million acres in Maryland, so these are very
3 preliminary numbers. It's less than 2 percent of
4 the acreages.
5 Overall, what I'm pointing to -- and I'm
6 going to use some bar graphs that's on the back
7 end here -- on an average credit per farm, what
8 we're seeing -- and again, as you see, it varies
9 based on regions of the state. So I'll do this
10 in bar graphs. It's easier. Go ahead to the next
11 one.
12 MS. MOORE: What do SL&T stand for?
13 MR. RHODERICK: Ahh, structural ... SLT,
14 right here.
15 MS. MOORE: Okay.
16 MR. RHODERICK: All right. Next slide.
17 I'll save that, Shannon.
18 So, basically, this is what it looks
19 like, when you look at on a farm basis:
20 Average-wise, about 200 nitrogen credits per
21 farm, a little less than 20 phosphorus credits

1 per farm. These are all unverified.

2 Western Maryland, you know, your farms

3 are averaging a little over maybe 300, depending

4 on the types of farms. Elmer, thank you very

5 much. He's the majority.

6 Again, for nitrogen, you can see on

7 the Eastern Shore, they're generating on a per

8 farm basis much greater credits, but again, take

9 the Eastern Shore, bigger farms, bigger acreage.

10 So...

11 MS. KEECH: Could you just say a little

12 bit about what assumptions --

13 MR. RHODERICK: A lot.

14 MS. KEECH: Yeah, I know that, but just

15 give us --

16 MR. RHODERICK: We're taking a lot of

17 liberties with this and --

18 MS. KEECH: -- give us a little bit of

19 an idea about what has to be done on a farm in

20 order to generate this level of credit.

21 MR. RHODERICK: All right. This goes

1 to -- and again, I'm not going to go through the
2 whole trading policy stance, but it requires to
3 go on a farm -- and we've got people in the room
4 you can talk to; I suggest you talk to Ginger
5 and to Elmer, who are right here, after the
6 meeting -- but you go out on a farm, you do
7 a walking inventory, pull the man's nutrient
8 management plans, conservation plan, all the
9 information you can to ascertain his nutrient
10 inputs on the farm, his nutrient exports, his
11 conservation practices; and utilizing that,
12 that's how we determine if he's met a baseline.
13 We have in this tool from the Bay Model
14 each of the 58 segments in Maryland. In the
15 Bay Model, we have the absolute load on a per
16 acre basis for ag, as well as for urban, as well
17 as for other entities.
18 So we compare a farm to that baseline,
19 and if he's met the baseline, then we talk
20 about what he could potentially do additional
21 to generate credits. So that's what this is

1 representing, these farms that we know have met
2 the baseline, looking at possibilities to generate
3 additional credits as offsets. Okay?
4 MS. KEECH: And so would you consider
5 this a conservative estimate in terms of --
6 MR. RHODERICK: This is all unverified
7 information.
8 MS. KEECH: Okay.
9 MR. RHODERICK: So again, this is just
10 very preliminary polling, some people who have
11 been out there doing inventories. We have not
12 looked at the data. We're getting from them some
13 preliminary information.
14 MS. KEECH: Thanks.
15 MR. RHODERICK: So anyway, this gives you
16 an idea of where in the areas there is potential,
17 and go to the last slide real quick.
18 This gives you, as you say, what those
19 credits consist of, and as you see on most of the
20 farms, that as we go out and inventory, a lot of
21 these farms have met baseline already. As was

1 eluded to, Maryland is farther ahead than some
2 other states. So the farms demonstrate they
3 can meet baseline which means they have a lot
4 of what we call "existing practices" that are
5 below baseline that could potentially be credits.
6 So that 80 percent of what we see out
7 there, they've already got sufficient extra
8 practices that could potentially be credits;
9 and when you break those down into existing
10 versus new practices, you see what type of
11 practices they are; and the majority, 80 percent
12 of them across the board, whether it's new or
13 existing, are what we call "annual practices,"
14 such as cover crops, conservation tillage...
15 Help me out, Elmer. What else?
16 MR. WEIBLEY: That's it.
17 MR. RHODERICK: Okay.
18 MR. WEIBLEY: Conservation, crop
19 rotation.
20 MR. RHODERICK: Okay. Versus structural
21 practices, and as you heard the policy here,

1 the policy would point to the fact that we need
2 permanent practices. Well, if you look at this
3 scape, those would be considered structural or
4 land conversion. So there is a small segment of
5 the overall offsets in ag that would be considered
6 permanent.
7 Does that give you enough information?
8 MS. MOORE: Well, I was looking at your
9 numbers for Frederick County, and you have one
10 farm --
11 MR. RHODERICK: Yeah.
12 MS. MOORE: -- with ag credit potential
13 in the --
14 MR. RHODERICK: Again, so I was
15 discounting information in that consideration,
16 one farm representing less than one-tenth of
17 one (1) percent.
18 MS. MOORE: Does that mean that you
19 have only looked at one farm so far?
20 MR. RHODERICK: Yep, we have only
21 looked at one farm, so I wouldn't draw a lot

1 of conclusions.

2 MS. MOORE: Okay.

3 MR. RHODERICK: If you go back, real

4 quickly, two slides --

5 MS. MOORE: Now, do they have credits

6 that are on the market now, or is it --

7 MR. RHODERICK: No.

8 MS. MOORE: Okay.

9 MR. RHODERICK: These are all unverified.

10 They have not come in for verification. The only

11 two counties that have really done extensive work

12 is Howard and Washington at this point, so draw

13 your conclusions.

14 MR. COSTELLO: John, can I just add --

15 MR. RHODERICK: Sure.

16 MR. COSTELLO: -- add a little bit more

17 as well, is that, you know, one of the things

18 too, if you're looking at these numbers now, and

19 particularly as it relates to capacity, this --

20 we're not sure what's going to happen to the whole

21 trading system because there hasn't been trading

1 in this state; and once a regulation is in place,
2 we believe that, obviously, it will drive trading
3 because they will -- it will, in a sense, monatize
4 and generate a market. It will really reinforce
5 the market.
6 So, conceivably, capacity, the capacity
7 we estimate now will be considerably less than
8 what actual capacity is, once there is a market
9 generating greater degrees of interest, greater
10 degrees of compliance.
11 So, conceivably, once you create a
12 stream, a monetary stream for farmers to convert
13 more land, whether it's to pasture, to tree farm,
14 to whatever, there are a range of practices that
15 are likely to be taken up if farmers and the
16 agricultural community see an opportunity here
17 to generate more credits and, in turn, generate
18 more income.
19 So, I mean, that's one of the things
20 that -- and I know MDP -- I don't know if MDP
21 has talked about it yet, but they are doing --

1 they are working with John and others to come
2 up with sort of a --
3 MR. RHODERICK: Capacity.
4 MR. COSTELLO: -- a capacity analysis
5 or inventory, given where we are today; but,
6 of course, we believe that that will grow
7 considerably once the market kicks in and once
8 people realize they can make money by generating
9 more and more credits, both on the ag side, as
10 well as the urban side.
11 MR. DELL: Have you considered the fact
12 that it could generate so much economic impact
13 that you could basically do away with farming
14 in the state of Maryland?
15 MR. RHODERICK: No. There are controls
16 on the program as to what -- there are controls
17 on the program. One of the premises of the
18 program is you just can't take a farm and convert
19 the whole thing to woods. So it's to maintain
20 farming as a viable institution in the state.
21 MR. EMMART: And also, if I could

1 add another thing, one of the ways that we're
2 calculating the post-development load, which
3 is significant, is that if it's an agricultural
4 field, let's say, or, you know, a crop and it's
5 converted to development of some sort, that jump
6 down in the load that occurs is not a credit to
7 any developer.
8 That essentially is a benefit, of course,
9 to the Bay -- because it is, because the load
10 decreases -- but it is not an incentive for a
11 developer to, for instance, gain more credit,
12 somehow get a windfall, and then go and sell
13 that credit for even more conversion of ag land
14 to develop. So that's what we were considering
15 in a way as a margin of safety.
16 MR. COSTELLO: And just one thing I
17 would add, that purely from an economic standpoint
18 as it relates to the market, agriculture, if you
19 look at commodity prices over the last five or
20 six years, and you consider, continue to look at
21 global growth and commodity prices, you know, the

1 market will play out.

2 I think what you will find, not only

3 are we putting in place safeguards to protect

4 a very vital industry that's likely to see

5 considerable monetary growth, just as from

6 a commodity perspective, but the market will

7 obviously play out in a way that's likely to

8 protect ag as well, aside from these safeguards

9 we're putting in place.

10 So it will be interesting to see how

11 the market plays out. It's likely to drive down

12 overall costs, as in terms of Bay restoration

13 costs or pollution reduction costs, and it's

14 likely also to play out in terms of how we

15 generate a nutrient trading market in a very

16 positive way as an industry.

17 MR. EMMART: Further questions? Yes,

18 sir.

19 MR. WEIBLEY: Yeah, Elmer Weibley with

20 the Washington County SCD.

21 It seems that a lot of stock is being

1 put in the ability of the ag community to generate
2 these credits potentially through the Maryland
3 Nutrient Trading Program. So with that in mind
4 and having Ginger, particularly -- sitting beside
5 us -- run the analysis on 28 farms in Washington
6 County, you know, and John's spreadsheets and
7 graphs really demonstrate the truth of the
8 matter.
9 The truth of the matter is that the
10 opportunities that I think you all are expecting
11 state-wide from agriculture are unrealistic.
12 For example, you have an example, Example No. 2
13 on page 9 of 10, a developer doing 50 household
14 units, etc., and he needs to produce 117 or offset
15 117 pounds of nitrogen.
16 We took that scenario, the number 117,
17 ran it through, looked at several farms in
18 Washington County, and said what would we have
19 to do -- and it's one of those ones that's on
20 the spreadsheet here -- with that specific
21 farm and said, okay, if we wanted to generate

1 some credits on this farm, what additional
2 practices would we need to do, based on what
3 your paper lays out, but it has to be permanent
4 and it has to be verifiable.
5 And for agriculture, the only opportunity
6 you have for that is a land conversion practice,
7 because the annual practices aren't permanent;
8 the structural practices are based upon a farm
9 operation operating the way it is, and obviously,
10 that's not permanent because ownership changes,
11 farm operations change.
12 So at least from where we sit, we see
13 it as only land conversion practices. So we took
14 what we thought would be the most beneficial to
15 generate credits, which would be taking cropland
16 and converting it to forest. We did that on three
17 different farms to look at how many pounds of
18 nitrogen would be created or saved or offset for
19 every acre of trees that's created on an acre
20 of cropland. It ranged from a credit of seven
21 offsets down to zero.

1 We did that on three farms. We used
2 various different acreages. We took entire
3 fields. We just did rough area and forest
4 buffers. So with that in mind, we got an
5 average of 0.52 pounds of nitrogen being saved
6 for the creation of an acre of forest on an
7 acre of cropland.
8 So in your example of 117 credits, you
9 would have to convert 222 acres of cropland into
10 permanent forest, forever, in order to offset this
11 50 acre -- or 50-lot subdivision. Then taking the
12 economics, we looked at last summer -- this past
13 spring's records and what it cost to plant trees
14 on an acre. It's $2100 per acre, multiply it by
15 222 acres, $466,000 just to establish the trees.
16 Then we begin to talk about it has to
17 be permanent for your policy. So you have to
18 purchase an easement. Land goes from 6 to $7,000
19 per acre. Certainly, you wouldn't purchase the
20 land fee simple, so $5,000 per acre. You do
21 the math. Then you're talking about verifiable,

1 over the long term and maintenance, and if you
2 have any experience in creating forest, it doesn't
3 happen overnight. So there is so many questions
4 with that.
5 So we came down, and just ignoring
6 legal fees, ignoring survey costs to create the
7 easements, we came up with two million dollars
8 would be the cost for 117 credits in your Scenario
9 No. 2. Fifty lots, that's $40,000 added to the
10 cost of those homes. So...
11 MR. UMLING: And if I may, I would like
12 to add something to what you're saying.
13 There is another factor that you need
14 to look at that supports what he is saying too,
15 and that's the overlapping impact of other
16 programs that are out there already causing
17 what he's talking about, and that's the Forest
18 Conservation Program, which Washington County
19 is under, even though Allegany County is not.
20 We were seeing that in Charles Town
21 where people were coming out and buying up

1 farms and converting them to forest as forest
2 mitigation, so that they could find the cheap
3 land to do that; and this is only going to
4 cause the same thing to expedite when you start
5 overlapping land conversion as a way to get
6 trading credits, and you're going to lose farm
7 land, because once it's forested, they're not
8 going to bring it back.
9 MR. COSTELLO: Now, can I just say
10 something about aggregators, and I don't think
11 John misspoke, but when we talk about permanency,
12 we're really talking about in perpetuity.
13 So, for instance, a developer, if a
14 developer developed a development, it's going to
15 have a load as long as the development exists or
16 technology allows it to zero out its load. Right?
17 So there is going to have to be an offset for that
18 load of this new development.
19 Now, what we believe could happen or
20 is likely to happen as this policy develops,
21 exactly for the reason that you've pointed out,

1 annual practices -- and if you look at the number,
2 the numbers that John put up there, in terms
3 of capacity -- we believe there is capacity,
4 considerable capacity, in annual practices.
5 The thing you have to put in place
6 there -- and that's why we believe aggregators
7 will step forward -- is that as long as there
8 is assurance that you have enough, quite frankly,
9 reserved capacity of annual practices -- say,
10 you are an aggregator, so you've bought up
11 credits, you've bought up, you know, basically
12 practices across the state that you can sell
13 to a developer and ensure that at every year
14 that that development nutrient load is offset,
15 then it will work. So that even if that farm,
16 even if one farm didn't maintain cover crops on
17 whatever it sold, you know, other farms have.
18 So you can see how aggregators could
19 actually play out, and this is -- you know, this
20 is done for other -- you know, obviously trading,
21 that aggregators ultimately become a bit of a

1 new crop, a new industry, that they are out there
2 buying credits.
3 Now, they have to have insurance bonding.
4 They have to have a surety. They will have to
5 buy more credits than they actually have to give
6 up to keep reserved to ensure that the load
7 reductions are in place; but we believe, overall,
8 economically again, those annual credits are much
9 less costly. So it's likely to play out in a way,
10 again, that would ultimately drive down overall
11 costs for pollution reduction, and it's likely
12 to be a viable market.
13 The other thing that you see in the
14 graphs is that, you know, conceivably, if the
15 policy is put in place, it becomes watershed,
16 Bay watershed wide which opens up the market
17 and potential capacity to buy offsets elsewhere
18 out of state, if you've got the right kind of
19 development, if the scenarios play out or at
20 least the framing we have in place.
21 So, again, we think the market obviously

1 is something that will develop and might develop,
2 as many markets do, very cleverly. People will
3 figure out that they have got -- they're going to
4 obviously look to buy the cheapest -- right? --
5 look to generate credits at least expense, but
6 they have to be, you know, assured and, quite
7 frankly, bonded credits or offsets; but that's
8 how we think it is likely to play out and address
9 some of the issues that you've raised.
10 MR. WEIBLEY: Excellent. That makes a
11 lot of sense.
12 MR. EMMART: Question, sir?
13 MR. MOORE: Keith Moore with Frederick,
14 Seibert & Associates and the Home Builders
15 Association, Washington County.
16 Just following up with Elmer's
17 question -- I mean, you've obviously thought
18 pretty hard enough -- is what do you expect a
19 pound of nitrogen to be going for?
20 MR. EMMART: This calls for you, John.
21 I defer to the panel.

1 MR. RHODERICK: All right. I can take it
2 a different tack. I mean, it's all speculative at
3 this time, but obviously, as Elmer said, if you
4 have to conclude the whole land cost, well, there
5 is another scenario that suggests there is a bunch
6 of ag reserve farms out there already. They've
7 already got perpetual easements on them. So,
8 potentially, if you could work with those type
9 of individuals, there is a cost deferment built
10 into that calculation right there.
11 MR. MOORE: Thank you.
12 MR. RHODERICK: So you can play it any
13 which way.
14 MR. EMMART: In the back, please.
15 MS. KEECH: Just to follow up on this.
16 Could you talk a little bit about the sources
17 of credits from other than agricultural that
18 you're -- that you're envisioning playing an
19 important role in the issue?
20 MR. SAKAI: You know, we don't expect
21 all offsets to come from the ag community, and we

1 certainly don't -- oh, well, we don't expect and
2 we certainly hope that everything in development
3 that contributes as nitrogen, well, it has to be
4 offset by permanent land conversion taking place
5 on a farm field, I mean, that -- that's just not
6 a good outcome.
7 You saw on one of the slides a fee in
8 lieu. There is a lot of opportunity for offsets.
9 We expect local governments to be somewhat
10 involved in this discussion, and it's possible
11 there are some municipalities and counties that
12 want to start -- you know, they have existing
13 stormwater mitigation funds that could be easily
14 structured to provide a source of funding for
15 additional implementation, stormwater management
16 practices, but they tend to be very expensive.
17 So whether the -- you know, if you let
18 this be market-based, I think we're saying it's
19 going to be hard for, at least initially, folks
20 that compete with what ends up in the ag trading
21 marketplace because it will be relatively low

1 cost, but septic upgrades, wastewater treatment
2 plant upgrades, you know, upgrades in bioneers,
3 there is a stormwater management. You know,
4 we expect there to be developed a third leg
5 of this three-legged stool in trading when we
6 put some of the rules in the game about urban
7 practices in place; and, you know, ideally, there
8 is a wealth of opportunity.
9 You know, we haven't come close to doing
10 100 percent of what we can do to improve water
11 quality either locally or in the Bay. So there
12 is a lot of opportunity, and we think that it will
13 come from a variety of different sources.
14 MR. TASSONE: And to add to that, we are
15 trying to put together information, such as John
16 has shown here, which is, you know, as close
17 to ground -- the ground level information as
18 possible, along with the more generalized gross
19 scale information, like perhaps some information
20 we can get from the Bay Watershed Model, and
21 bring the two things together to come up with

1 some sort of numbers that relate to potential
2 offset supply that we can look at on a statewide
3 and a smaller basis. So we're in the process
4 of putting that information together, and we hope
5 to have something together to consider internally
6 this week and to share shortly thereafter.
7 MR. EMMART: Yes, ma'am, in the back,
8 please.
9 MS. PATTERSON: Hi, I'm Angie Patterson
10 with Allegany County. I have two questions.
11 One is how is this supposed to be
12 enforced and kept track of? Like when Allegany
13 County is issuing a permit for a development,
14 who says you will need to also do an offset?
15 MR. SAKAI: Well, let me answer that
16 question before you get to your second question.
17 MS. PATTERSON: Yep.
18 MR. SAKAI: On our policy framework,
19 we contemplated or are proposing to implement
20 this through a state discharge permit. This
21 could be a local program since locals are the

1 ones that generally issue bringing permits in
2 development approvals, but we're contemplating
3 this being part of a development -- of a discharge
4 permit scenario. The requirement and obligation
5 would be on the department to provide all the
6 verification that's required, the enforcement
7 of the permit, etc., etc.
8 That being said, I don't relish the idea
9 of having to be a permitting authority for three
10 or four thousand additional new permits in the
11 State of Maryland and having to inspect the 10
12 or 15 additional practices that are associated
13 with that new development as a trader offset.
14 What we're hoping for, or at least what
15 I'm hoping for, is that there will be a role for
16 the folks that bring trades to the marketplace
17 to provide the level of certification and a surety
18 to that process. There may be some oversight
19 and auditing associated with that. If there is
20 an integrator involved, the requirement would be
21 on the integrator to include in the price of his

1 trade his ability to verify the cert.

2 So that at some point along the way, if

3 we're counting a practice against a development

4 offset, somebody has looked at this and said, yes,

5 this exists, it's in the ground, everybody has

6 confidence in it, it will be maintained at the

7 time. We're not, at this point, looking at this

8 as being a local -- as to the approval process,

9 but I think we're looking for input on that.

10 MS. PATTERSON: Thanks.

11 My second question has to do with the one

12 side where you talked about the stormwater loads,

13 it said that 50 percent of the load would be --

14 at the bottom of page 5, the third slide on page 5

15 of our handout -- stormwater loading factors.

16 There is a little superscript there, and

17 then it says "will be reduced by 50 percent for

18 ESD to the MEP." I am trying to understand, if

19 doing ESD, if you've met ESD, then ... and "met

20 what's in good condition" --

21 MR. SAKAI: Right.

1 MS. PATTERSON: -- so why do you only get
2 a 50 percent credit for that?
3 MR. SAKAI: Well, that's a -- I mean,
4 that's a really good question and -- but I don't
5 have a really good answer, unfortunately, for
6 you. The 50 percent is what the Bay Program
7 Model assigns as a stock efficiency. It's kind
8 of the place-holder for all the different
9 practices.
10 We look at -- they look at environmental
11 site design, as defined in Maryland Stormwater
12 Management regulations, and globally, we get
13 credit for half of the nitrogen level. It's
14 higher levels of phosphorus and higher levels
15 of sediment reduction, but for nitrogen, it's
16 only half.
17 There is kind of an ongoing discussion
18 with the Urban Stormwater Management Group in
19 particular about the 50 percent. There are some
20 that would argue that it's as high as 75, 80
21 percent. There is also another discussion about

1 the fate of nitrogen going into groundwater. So
2 for now, 50 percent is what the Bay Program gives
3 Maryland for new development that has ESD to the
4 MEP.
5 MS. PATTERSON: Well, okay. And then
6 actually, I have --
7 MR. SAKAI: So I take it from your
8 comment that you think that's low.
9 MS. PATTERSON: Well, I mean, I guess,
10 the way the --
11 MR. SAKAI: What's a good condition to
12 be a better number?
13 MS. PATTERSON: -- the way the manual
14 is -- proposes, that if you do ESD, that you have
15 essentially made the site equivalent to what's in
16 good condition.
17 MR. SAKAI: Yeah, but --
18 MS. PATTERSON: So how can you still have
19 a net increase?
20 MR. SAKAI: The difference is that
21 they -- you know, there is -- if you look at

1 an individual -- we can get very technical here,
2 but, I mean, the short answer is, if you look
3 at individual practices, some have very high
4 efficiencies and some have very low efficiencies,
5 and without being able to predict exactly overall
6 what a development is going to do, I don't know
7 how they got to the 50 percent number, but it
8 was based on some analysis that looked at, you
9 know, what we know about different types of
10 infiltration practices, and I think it's probably
11 a conservative number.
12 I mean, it's not likely to go lower.
13 It's more likely to go higher over time; but,
14 you know, we think -- you know, what's a good
15 condition, it was in good condition, and, you
16 know, there is a good potential for you to
17 actually be getting better pollution efficiency.
18 So it's a conservative number, I agree.
19 MS. PATTERSON: Okay. And then just
20 following up on that, I also was thinking about
21 this idea that you have to offset the full

1 post-development load, not the post-development
2 minus the what's in good condition. So I'm trying
3 to understand how that's justified.
4 MR. SAKAI: Well, and I think it's clear
5 that, I mean, that's a -- you know, whether you
6 count a developer that goes from maybe 12 pounds
7 net urban load to have it to 6, woods -- and, you
8 know, have a nominal nitrogen load rate of 3, why
9 not count from 3.
10 As a matter of policy, we're presenting
11 this as a factor of safety, associated with what
12 we don't know about how all this implementation
13 is going to work, but again, it's another level
14 of conservative estimate that provides that
15 difference as a margin of safety.
16 MS. PATTERSON: Uh-huh.
17 MR. EMMART: And the same is also true
18 for septics, that if the BAT system is used,
19 there is still a discharge of almost 5 pounds.
20 That 5 pounds would have to be offset entirely,
21 even if the BAT is used.

1 MS. PATTERSON: Right.

2 MR. EMMART: So it's very strict in one

3 sense.

4 MS. PATTERSON: Okay. I mean, I guess,

5 I'm sure you can sense that we think being in

6 Allegany and being from the western portion of

7 the state, we don't see growth ... at all. So,

8 you know, our developers have a hard time coming

9 up with enough money to complete a project. So

10 that's -- that's where -- where our questions are

11 coming from.

12 MR. EMMART: Please, go ahead. Could you

13 say who you are, please.

14 MR. DYJAK: Sure. Brad Dyjak of the

15 Town of Myersville. Three questions, if I may.

16 The first one kind of ducktails off of

17 what Angie had just mentioned. This is more

18 relating to how this plan will kind of coordinate

19 with the plan of Maryland -- and specifically,

20 I guess, Joe, maybe this is a good question for

21 you -- but with a designated place or designated

1 areas, I know that, you know, the examples that
2 go through here, they certainly address, you
3 know, the revitalization areas; but I guess
4 I'm concerned about the existing community areas
5 that may be designated within a PFA and future
6 growth areas also designated within the PFA or
7 just outside of PFA within the municipal growth
8 boundaries or community growth boundaries.
9 You know, to what extent will this be
10 compatible with those aims of again trying to
11 focus the, you know, growth within the PFA? I
12 know there is, obviously, the density example
13 that's given here; but, you know, I guess my
14 concern is, is this going to be too much of a
15 disincentive for, you know, developers?
16 If it's not a revitalization area,
17 but it's already within a municipality or a
18 community growth area, you know, to what extent
19 are they going to look at this and say, well,
20 this is, you know, way too much. We're already
21 having to meet the woods in good condition of the

1 ESD to the MEP, and now we have to go above this.
2 What -- you know, and this is making
3 the assumption that, especially in our community,
4 you know, there is adequate sewer capacity. We
5 have a, you know, functioning wastewater treatment
6 plant with plenty, you know, actually plenty
7 of capacity. To what extent, you know, will that
8 hinder development potentially?
9 MR. TASSONE: Well, our expectation is
10 that it should be very mutually reinforcing. A
11 couple of things about the draft policy.
12 First, you might have noticed that it
13 specified that development in targeted growth and
14 revitalization areas would be free to seek their
15 offsets anywhere in the state, not be restricted,
16 in terms of sellers, as to where they are.
17 MR. DYJAK: I think I agree with that.
18 I think that's a good policy.
19 MR. TASSONE: But not only is that an
20 encouraging or mutually reinforcing thing, but
21 so are a couple of other aspects of the policy.

1 A very important one of which is the
2 fact that if you're served -- if you're doing
3 a development in an area served by a treatment
4 plant with capacity, you don't have to offset
5 the wastewater load from the development.
6 But a second thing that's not minor
7 at all is the difference in the magnitude of
8 the offset loads that's inherent in the way the
9 calculations are done by the spreadsheet, relative
10 to how much is your offset going to be calculated,
11 depending on whether it's a -- you know, a -- what
12 we might call a smart growth development versus a
13 more dispersed, diffuse form of development. So
14 those numbers are going to be vastly different.
15 So we think that those three aspects,
16 the potential for where you get your offsets
17 from, the minimization of the offset requirement
18 by virtue of being in a place served by a
19 treatment plant with capacity, and the inherently
20 smaller numbers are going to really add up to a
21 significant incentive for the kind of development

1 you're talking about.

2 MR. COSTELLO: I would just add a little

3 bit to what Joe said. I remind you also about

4 the redevelopment opportunity there is no

5 offset requirement for, at least on nonpoint

6 or stormwater.

7 MR. TASSONE: Right. And that's very

8 important. I'm sorry I missed that.

9 MR. COSTELLO: And so if you look at

10 the scenarios -- and that's why maybe one of

11 the things, once the spreadsheet is up, you

12 can play scenarios -- I mean, they are clearly,

13 from developers we've already spoken to, they

14 understand for communities, existing communities,

15 whether it's Cumberland or Hagerstown or wherever,

16 you know, there is going to be a considerable

17 comparative advantage for developing within those

18 communities, and remember that what's driving this

19 policy is a requirement.

20 You know, there is a federal requirement.

21 The requirements are likely only to become more

1 stringent until the Bay is restored, is that we
2 are required to put in place a policy to offset
3 growth -- I mean, to offset pollution from new
4 development. Correct?
5 So, I mean, obviously, we think the one
6 that we're putting forward here today is, quite
7 frankly, the most cost effective and, conceivably,
8 so cost effective that it will likely drive
9 down the overall cost of even attaining our
10 Bay restoration goals, aside from generating,
11 conceivably, new jobs and, obviously, you know,
12 quite frankly, some new industry, as it relates
13 to trading and verification and insurance and
14 all that, that goes along with that kind of
15 industry.
16 So, I mean, many people in the private
17 sector, quite frankly, would see this as a very
18 creative instrument, a market, in large part, a
19 market-driven instrument that we are looking to
20 possibly use here.
21 Otherwise, if this doesn't work, then

1 conceivably, the EPA, a few years down the road,
2 if we haven't made progress again -- and again,
3 we're making the most progress of any state --
4 if we haven't made sufficient progress, they
5 might come back and start to look at mandates,
6 as opposed to these voluntary programs that are
7 graduating into, you know, more requirements.
8 But here again is a program that's
9 really trying to tap the market to drive not
10 only progress but obviously to add these other
11 benefits that, conceivably, we've talked about.
12 So that's just to provide a little more of that
13 kind of context.
14 MR. TASSONE: You had a second part to
15 your question?
16 MR. DYJAK: I did, and it kind of
17 follows up along those lines on sort of the
18 implementation, but that is again with the
19 trading scheme. I guess two questions on that.
20 The first is, I guess, you know, who
21 do you envision -- I guess you mentioned

1 private sector. I mean, are there environmental
2 organizations that would be taking the lead here?
3 I guess, has, you know, MDE, MDP, and MDA, I
4 guess, scouted out any potential aggregators or
5 those who would be interested in that? I guess --
6 and I'm trying to, I guess, see the role there.
7 And I guess to that end, I'm also looking
8 at it, you know, from a farmer's perspective.
9 You know, if I'm going to go and do all the --
10 you know, the two million dollars potentially
11 of investment, you know, I need to know, have an
12 assurance that, you know, I will have a buyer on
13 the other end and, obviously, you know, to front
14 that money. I guess I'm just trying to assure
15 that there is sort of that driven market.
16 And then I guess the final point to
17 that I would make is that I think, you know --
18 I think, you know, you see a comedies of scale
19 if you allow, you know, interbasin and intercounty
20 trading of credits, and I would highly encourage
21 that to be considered; and I think going to

1 something Dave mentioned earlier, I think that's
2 even maybe interstate, if you can work out
3 agreements with, you know, surrounding states.
4 I just think, you know, especially out
5 in Western Maryland and the Eastern Shore, I mean,
6 you know, you're so close and they're so impacted
7 by adjacent states that, you know, in many cases,
8 you know, they're the ones that are kind of
9 causing that degradation.
10 Would it not make sense to be able
11 to work out credits and trading with them? I
12 just don't see the need -- you know, I think
13 it actually impedes the process if we, you know,
14 really focus on limiting our scope for the trade.
15 MR. RHODERICK: All right. I'll go,
16 I'll start on the back end.
17 Yes, the EPA, we're actually part of
18 an interstate consortium that's looking at the
19 potential for interstate trading and what the
20 rules -- because as you said, different base
21 lines, different states, delivery ratios, etc.

1 So we're still looking at the potential.

2 The first part about aggregators, yes,

3 most of -- at least from the ag sector, most of

4 these trades are not going to be a farmer with

5 a municipality. These are going to be contracts

6 with an aggregator that will have a subcontract

7 with the farmers. The aggregator will take on

8 the risks and the assurance with the municipality,

9 so yeah. Elmer. Yes? No?

10 MR. WEIBLEY: You don't want to hear what

11 I have to say.

12 (Laughter)

13 MR. RHODERICK: We'll leave it at yes.

14 MR. COSTELLO: You know, one thing I

15 would just add, it's like any market. I mean,

16 obviously, this will be -- this will be new. So

17 the expectation is this will take some time to

18 develop, and as it develops, obviously, you will

19 get more and more people into it, whether it's

20 aggregators or brokers, even farmers.

21 And quite frankly, developers who are

1 probably -- in an urban setting are probably going
2 to try to not only take care of all of their load,
3 but conceivably, if there is a load to be had that
4 they can address in neighboring parcels, they may
5 even try to do that and generate credits that
6 they, in turn, either use or sell.
7 So, I mean, conceivably, if the market
8 plays out, and if we continue to be as creative as
9 we have been at making money, I mean, conceivably,
10 a lot is going to happen here that we really can't
11 project; and so it's hard to say now because there
12 haven't been trades. There aren't -- there really
13 isn't a lot going on out there.
14 But again, the expectation is, if you've
15 got something like a regulation, which is what
16 we're talking about here, this has happened
17 elsewhere, where you put a regulation, it actually
18 juices the market and induces the market, and
19 that's the way we think this is likely to play
20 out.
21 MR. BALDWIN: Okay. I just wanted to

1 say quickly, to the question about the plan of
2 Maryland and this policy at MDP -- I'm sorry --
3 I am Dan Baldwin with MDP -- we've really wanted
4 a way to infuse the two, the plan of Maryland
5 and the TMDL, simply because the plan of Maryland
6 really gives local governments, especially through
7 the mapping exercise by identifying special areas,
8 you know, targeted growth and revitalization
9 areas, it allows local governments to really
10 say these are the places that we absolutely want
11 to see growth and we want to see the state focus
12 its efforts. This is a state effort to hook up
13 the two where a perfect partnership.
14 MR. EMMART: Sir, you had a question?
15 MR. DELL: Yeah. I'm Bruce Dell with the
16 City of Brunswick.
17 I guess the question I have, you know, at
18 this point, do you have a line of people out there
19 ready to become sellers? I seriously doubt that
20 they're out there waiting to do this.
21 And what's the time factor that you think

1 that that is going to take to get implemented,
2 and along with that is, when is this stuff going
3 to start coming down the pipe and be implemented
4 onto a developer on an existing project that's
5 already been approved and going through the
6 process?
7 The Stormwater Management grandfathered
8 certain projects from their new regulations.
9 Now, if that project is kind of going along,
10 and they're in the process of getting approvals
11 to a certain date getting reported, and then
12 they get hit with this offset, how is that going
13 to play out, and what was the thought process
14 with those types of projects?
15 MR. COSTELLO: Let me just mention
16 one thing and then maybe Jay can talk about
17 grandfathering.
18 But one thing, as it relates to sellers,
19 what we're likely to have first are buyers. If
20 you've got buyers, then you are going to have
21 sellers. Right? And really, what the regulation

1 will do is generate buyers because they're going
2 to be looking to buy the cheapest offset, right,
3 because to reduce their pollution load.
4 And now one of the things, as it relates
5 to fee in lieu, and I would throw this out,
6 because developers have started to ask that,
7 and they know that we don't like fee in lieu
8 because -- because often what has happened with
9 fee in lieu in the past is that the people haven't
10 taken the money and put the money into the, you
11 know, practices. They have actually used the
12 money elsewhere. They haven't used the money
13 appropriately.
14 Now, a possibility is a temporary fee
15 in lieu as the market starts to build, so that
16 you actually start to build capital, you start
17 to build demand; and at the same time, you're
18 likely to get -- if you've got demand, I guarantee
19 that probably you're going to start seeing
20 sellers, because, obviously, nobody wants to
21 put the investment in, if they don't think there

1 is demand out for their --

2 MR. DELL: Who would manage that pool

3 of fee in lieu?

4 MR. COSTELLO: Pardon?

5 MR. DELL: Who would manage that pool

6 of fee in lieu?

7 MR. COSTELLO: Well, the fee in lieu

8 would likely be -- this is why we're really

9 looking to talk to local jurisdictions. You

10 know, it's conceivable that local jurisdictions

11 or the state and local jurisdictions, but that's

12 why these are the kinds of things that would --

13 we need to work out, and I don't know if Jay wants

14 to talk a little bit about how grandfathering has

15 been done in the past or...

16 MR. SAKAI: Well, you know, the one thing

17 we learned going through stormwater management

18 regulations was grandfathering is pretty important

19 to everybody, and we missed it, and we have

20 suffered the consequences. We did end up having

21 to do this emergency regulation, and it was a

1 mess.

2 We were a little more thoughtful about

3 how we did this than when we did the rules and

4 setup of stormwater regulations. We were very

5 sensitive about it when we had the discussion

6 about Septic Bill 236, and I would expect --

7 well, I mean, I can tell you, this process will

8 be no different. This regulation will be no

9 different.

10 We're very much aware that for folks

11 that have -- you know, it takes a long time to

12 get the development pipeline, and we don't want

13 to, you know, have somebody get to the very end

14 and then figure out, well, you can't do it because

15 you can't get your darn offset.

16 So I think there is going to be a good --

17 I can't tell you what grandfathered is going to

18 look like. I can tell you that we are very,

19 very focused on having something that makes a

20 lot of sense. You know, we don't want to have

21 grandfathering take forever, but I think there

1 is something that makes sense for everybody.
2 And I think I would very much like to
3 get a little bit of input on that, about what
4 your perspectives are. Locals may have a
5 different perspective than the developing
6 community, but that's certainly something for
7 you to weigh in on.
8 MR. EMMART: Other questions? Please,
9 you haven't asked one.
10 MS. PIPPEL: Julie Pippel, Washington
11 County Government, and right now, I have at least
12 25 questions from staff members. So I'm going
13 to rephrase this into maybe two considerations
14 and ask whether these are possibilities.
15 The first item, I attended the "swap"
16 presentation and I've also attended this
17 presentation. I know and I understand that
18 due to the time frame on this, you're not
19 planning to address comments back that you
20 receive, but have you considered posting the
21 frequently asked questions -- because I've

1 seen repetitive questions on this -- on the
2 web page that can be referenced back to?
3 That would be a question of consideration
4 and thought.
5 The other thing --
6 MR. EMMART: The answer is yes.
7 MS. PIPPEL: Yes?
8 MR. EMMART: Yes, we have considered it.
9 We have considered that idea --
10 MS. PIPPEL: Considered.
11 MR. EMMART: -- although we haven't had
12 time to post anything at this time --
13 MS. PIPPEL: Okay. But that's --
14 MR. EMMART: -- but it's a good idea.
15 It's a very good suggestion.
16 MS. PIPPEL: -- the intention is if time
17 allows.
18 The other is, as a county government
19 staff, if we can consolidate our questions,
20 because we haven't even talked to our Commissioner
21 yet to get their questions yet. You know, we

1 haven't gotten feedback from the WIP team and the
2 Potomac team as well, but if we can consolidate
3 these questions, can we have a point of contact
4 that either we can have, you know, a conference
5 call with or an additional meeting -- and I'm not
6 saying with all of you -- but to go through those
7 questions that we would like answered in order to
8 develop those structured comments about, you know,
9 okay, we -- just using the example of going back
10 to fee in lieu, as a county, we would suggest fee
11 in lieu and we would suggest the structure of
12 X-Y -- or A-B-C, X-Y-Z. Is that a possibility
13 in this process?
14 MR. EMMART: I think so, yes.
15 MR. TASSONE: Yeah, it would make a lot
16 of sense from everybody's standpoint.
17 MR. COSTELLO: What we would have to
18 do is -- I mean, obviously, we expect to have a
19 lot of meetings, these public meetings, but we
20 certainly expect to have what we call ad hoc or
21 side meetings. If it ever got to the point where

1 we -- I can't imagine we wouldn't get to the point
2 where we couldn't have such meetings between now
3 and...
4 MR. EMMART: Right, and we would also
5 welcome very much the thoughtful responses.
6 MR. COSTELLO: Yeah.
7 MR. EMMART: You know, if you would
8 develop questions and you wanted to discuss those,
9 I would encourage all the panel members to join
10 that, so that you can get a full response from
11 all the agencies --
12 MR. COSTELLO: Yeah.
13 MR. EMMART: -- because you can see how
14 many different points the policy touches, so it's
15 quite -- it's quite broad; and yes, you know, if
16 we can arrange it, we will.
17 MS. PIPPEL: Yeah, we --
18 MR. SAKAI: Alternatively, Julie, you can
19 go to all five meetings and ask five questions.
20 At each meeting, you can ask a question.
21 (Laughter)

1 MS. PIPPEL: That's my limit, five
2 questions? All right.
3 MR. TASSONE: Twenty-five.
4 MS. PIPPEL: I'm just going to figure
5 out how to just go "and, comma, but," and get
6 them all in.
7 MR. EMMART: All right. Further
8 questions or comments? Please.
9 MS. PATTERSON: I wonder, with a
10 single-family residential subdivision, I'm
11 wondering when the offset would be accounted
12 for, like whenever a developer comes in for a
13 plat approval or when a lot owner comes in for
14 a building permit?
15 MR. SAKAI: I'm glad you asked that
16 question because the threshold of implementation
17 is a consideration here, and I don't think we
18 touched upon it in the discussion; but, you know,
19 if we used something, a framework similar to the
20 general permit for construction, the NOI, which
21 establishes a one-acre level of disturbance as a

1 minimum threshold by which you need to account for
2 offsets, everything else beyond that would be, you
3 know, kind of off the books.
4 You know, I don't -- I'm not anticipating
5 this being implemented on each and every one.
6 So right now, we were talking about one acre
7 of disturbance which would take out most of the
8 single-family development and allow it to kind
9 of live in that 5,000, one acre, you know, area,
10 but that's our thinking right now.
11 MS. PATTERSON: Okay.
12 MR. EMMART: Any other comments or
13 questions for the panel? Elmer.
14 MR. WEIBLEY: Just to suggest to other
15 counties that are represented here, you know,
16 there is a lot of things that are going to go
17 under this, but it is complicated, and it is going
18 to have an effect, and you're going to be part
19 of the development process, and somebody is going
20 to say, hey, it's 100 credits.
21 You need to be preparing your county to

1 get there, and that's one of the reasons we've
2 done all the assessments in Washington County
3 that we have, because, you know, we don't have
4 tons of new information today about what we might
5 be able to do with the annual practices and how
6 it could work, and that's very helpful.
7 But we had the opportunity to have
8 a conversation with at least that many and
9 certainly many more farmers about trading,
10 and we've assessed a certain number of farms
11 and found kind of what the temperature is on
12 BMP implementation, as well as meeting the
13 baseline and how the trading tool works, so
14 that we're a little better prepared than you
15 are, if you have no idea what's going on in
16 your county. You don't have anybody perhaps
17 that you talked to that has said to you, I would
18 be interested in discussing the trade.
19 It depends on how much the trade is
20 worth, it depends on what the final deal is, but
21 you need to start thinking about in your county

1 how -- which landowners are you potentially going
2 to be working with to trade, because when this
3 thing comes and there is a -- you know, we get
4 to the final rule-making process and you set your
5 grandfathering up and you have a deadline, there
6 will be a shorter period of time than you have now
7 to get ready to make that happen, and you're going
8 to need to set up some local partners to work with
9 to make it happen.
10 So, for instance, in your stormwater
11 management division, if you don't have a lot of
12 contact with farmers who might have credits, you
13 need to find out who those farmers are and what
14 agency works with them regularly and start a
15 dialogue and getting them educated about it.
16 So that's just kind of a suggestion for
17 the other people represented in the room. It's
18 time to get started on it.
19 MR. RHODERICK: And if I could add just
20 one thing to what Elmer said here, as you see --
21 when I showed you that other slide -- Howard

1 County, that whole initiative in Howard County
2 started from the county commissioners. They
3 came to the conservation district and said we
4 need to get a handle on the potential for offsets.
5 So that's why they got so far ahead,
6 and they actually funded the district personnel
7 to go out and do those assessments because they
8 wanted to get at least some kind of front-end
9 understanding that if it was ag sector they were
10 going to work with, what was out there, because
11 as you said, there is a multitude of other sectors
12 that you need to look at as well.
13 MR. SAKAI: And I'm not supposed to
14 be asking you questions, but you raised an
15 interesting point.
16 MR. RHODERICK: That's good.
17 MR. SAKAI: I just wanted to follow up
18 on it.
19 You know, I know that the districts tend
20 to have that unique relationship where they're
21 dealing with a developing community because

1 they're dealing with rules that sort of control
2 anyway on each and every project. Then you're
3 dealing with the ag community on the other side.
4 I mean, do you see the districts playing
5 an important role here in facilitating the
6 interaction within the development community
7 and the ag community in terms of developing a
8 trading capacity?
9 MR. WEIBLEY: Absolutely, they can, and
10 I think that will be kind of individualized, based
11 on the capacity of each conservation district, the
12 willingness of the county to work with them, and
13 kind of their reputation and relationship with the
14 development community, and we feel we have a good
15 relationship with both here.
16 So that's why we've kind of, you know,
17 looked into this and are trying to get ahead of
18 it a little bit, because to us, it seemed to be
19 a natural -- we're not sure whether we'll be,
20 you know, all quitting our jobs and become an
21 aggregator. I'm not sure whether it's better

1 to be via verifier or be with an agriculture --
2 with you guys perhaps.
3 We're just not sure, but we know there
4 is a natural role there, bring those partners
5 together, and that's what we do. So we see it
6 as being a -- if nothing else, it's going to be
7 a vital service for the economic development in
8 the towns to keep things moving.
9 MR. SAKAI: I'm glad to hear you say
10 that.
11 MR. EMMART: Very good. Sir, I think
12 you had a question in the back.
13 MR. DELL: Yeah, but I forgot what it
14 was.
15 MR. EMMART: Oh, all right.
16 (Laughter)
17 MR. DELL: Oh, I know what it was.
18 MR. EMMART: Okay.
19 MR. DELL: It was the difference between
20 dealing with the development pollutants and the
21 air pollutants. Do you ever see that being

1 separated, or is it going to be a package deal
2 of all the different types are all going to be
3 added up and you're going to have a final number
4 at the end?
5 And that air component is going to be --
6 sounds like based on population, regardless
7 of where you are, and what the dynamic of the
8 community might be, whether you're a commuting
9 community or whether you have all your jobs -- you
10 know, a higher percentage of jobs at the location
11 and not as many -- I guess what I'm getting at,
12 are BMPs going to come into play here?
13 MR. TASSONE: Well, they do in the
14 calculation as it's currently framed, and it
15 does have to do with where you are, because
16 census of boundaries that contain population
17 of density of 10,000 or more per square mile
18 are specific places, not -- you know, they're
19 not just scattered around randomly, and so they
20 have a different rate because of the association
21 of what goes on within them with respect to

1 travel times and BMT and NOX emissions and
2 nitrogen deposition that results from it. So
3 it's laid out to address the things you're talking
4 about, but it's a very simplified view of it --
5 MR. DELL: Yeah.
6 MR. TASSONE: -- just, you know,
7 aggregating things by census boundary and
8 looking at 10,000 or more and everything else.
9 MR. DELL: Well, I mean, I am just --
10 I am thinking in a sense of Brunswick, we're
11 about 6,000 people. The census tract could be
12 a little bit bigger than that. We have a lot
13 of commuter traffic that comes into the city
14 because we are a MARC station. So I'm thinking
15 we're going to get almost penalized and have
16 the -- be less than 10,000 and have one, as
17 opposed to the half, even though we are a
18 commuter station that brings people in from
19 two or three other states sometimes.
20 MR. TASSONE: That is a good point
21 and observation, and I don't think we have a

1 ready-made way to address that at this point.

2 MR. EMMART: I was just going to say

3 that if it's for commercial purposes though,

4 there would not be an offset for NOX. There is

5 no offset for commercial development. It's only

6 for residential.

7 MR. DELL: Yeah, I understand that, but

8 we are doing residential in there. We have a

9 major subdivision that is in the process.

10 MR. EMMART: Okay. In the rear, please.

11 MR. UMLING: Yeah, in looking at that

12 figure again, when you talk about 10,000 per

13 square mile, I don't know if you're really

14 reducing it on anything more than the City of

15 Baltimore. I mean, you've got a huge range

16 of density. I mean, Cumberland, we're at about

17 2700 people per square mile, and we're the most

18 urban compact pattern with the shortest commuting

19 trips that you could have in our area.

20 So I really think that, you know, if you

21 look at suburban densities versus rural densities,

1 I don't know whether there is such a similarity
2 between suburban densities which may range
3 anywhere from 50 people per square mile up to
4 a thousand or 1500. That's where you're going
5 to see the most commuting traffic and the most
6 vehicle miles traveled for the density of
7 population that you have, and whether or not
8 there needs to be something that reflects more
9 rural environment.
10 I have no idea how this trends. I don't
11 know that you folks have any definitive idea of
12 how it trends either. So I think you basically
13 said Baltimore gets a half; the rest of the state
14 gets one. Is that correct or...
15 MR. TASSONE: No, it isn't just Baltimore
16 because there are other census boundaries too.
17 MR. UMLING: But they're going to be
18 right in there. I mean, you're talking Annapolis
19 and right around Washington; correct?
20 MR. TASSONE: Well, yeah, they probably
21 are concentrated more in central Maryland, but

1 we do have information to look at how things trend
2 the way you were talking about, and if what you're
3 doing is suggesting that we look more closely at
4 that with respect to this, then that's a good
5 suggestion.
6 MR. COSTELLO: I would just add one
7 thing. I mean, I think it is a good suggestion
8 and it's something we'll look at; but also bear
9 in mind that the -- actually, the load related
10 to BMT is really comparatively quite small, and
11 it was really an attempt to at least capture it
12 at that position to some degree, so a pound or a
13 half a pound. Unless it's a really, really large
14 development, it doesn't add up to all that many
15 pounds to offset.
16 MR. UMLING: Then why not just ignore it?
17 MR. COSTELLO: Well, it's -- and again,
18 we're trying to just justify -- if we're trying
19 to account for all new, you know, pollution load,
20 as it relates to expanded development and growth,
21 we're trying to account for it again --

1 MR. UMLING: Well, I think a lot of --
2 MR. COSTELLO: -- but I understand what
3 you're saying.
4 MR. UMLING: I think a lot of your
5 targeted revitalization areas in the state are
6 not going to make that threshold with that measure
7 in it.
8 MR. COSTELLO: No, no, I think you're
9 right. I think most existing communities outside
10 of, say, the Fredericks and the -- you know, and
11 obviously the DC suburbs and the Baltimore City
12 and the Baltimore City suburbs, you're not going
13 to have a lot of communities that are going to
14 reach that -- you know, that greater than 10,000
15 per census tract threshold.
16 However, if you're again in a targeted
17 revitalization area, which most of the existing
18 communities are, and if it's redevelopment and
19 you are on ENR, or even if you're on BNR, the
20 overall load isn't going to be that high.
21 Again, comparatively, existing

1 communities are going to be quite advantaged
2 compared to, you know, low density development
3 areas; and that's why I would encourage you,
4 once the spreadsheet is up, to start running
5 the numbers, and then obviously developers
6 in the area should run the numbers, so people
7 get a sense, well, what does this really mean.
8 The one thing we don't know yet is
9 actually the cost of offsetting the pound yet,
10 because that's what the market ultimately will
11 drive, but once it starts, people will have a
12 sense. So play the numbers. It's not to say
13 that any of this policy is set in stone. We're
14 obviously trying to get feedback to come up with
15 some final regulatory language, so we'll take
16 it into account, but that's just some of the
17 background.
18 MR. DELL: I understand wanting to have
19 that becoming as part of this, but, you know, I'm
20 looking maybe two or three years down the road,
21 when the State comes back and says, okay, we're

1 going to start, you know, charging a fee for
2 your BMPs for everybody. You are going to get
3 a baseline number, and then anything over that,
4 we're going to start charging you a fee per mile
5 of travel above that baseline number.
6 And they have -- and they have these
7 emission stations out there, all set up, that
8 people can drive into and they can look at their
9 odometer and do all that, and then they're going
10 to get charged there, and then we're going to
11 charge them again here; and I know once you set
12 this number up, it isn't never going to come
13 back out of the equation.
14 MR. COSTELLO: Well, yeah, it's
15 conceivable. One thing, I think, that's
16 very conceivable, at some point maybe the
17 exhaust emissions, if we get to the point
18 where technology, you know, we've got electric
19 cars or electric trucks or, you know, whatever
20 they are, hydrogen, you know, fuel cells, I
21 mean, we may get to the point where air emissions

1 from motor vehicles disappear or almost entirely.
2 So that's -- that's the case to remove it from
3 the requirement.
4 I think what you are going to get on the
5 congestions -- where you're likely to see BMT is
6 on congestion. I think as you go forward, one of
7 the greater impacts on --
8 MR. DELL: That's what I am getting at --
9 Mr. COSTELLO: Right. One of the greater
10 impacts --
11 MR. DELL: -- because your concerns
12 aren't being --
13 MR. COSTELLO: No, no, no, I'm not
14 saying -- I'm not sure what's going to happen,
15 but I think what you will find out going forward,
16 people in denser communities are going to be
17 concerned more and more about congestion because
18 of its impact on quality of life, getting to
19 work, on commerce, holding up commerce, those
20 kinds of things, and that's -- and that's
21 obviously not as much of a pollution load issue

1 as it is a different issue.

2 But you're right, we're likely going to

3 have to confront congestion and have to deal with

4 it. How we mitigate that, other than, you know,

5 more walkability, more transit, those kinds of

6 things, remains to be seen.

7 MR. EMMART: I just want to do a quick

8 time check. It's about quarter to four, and this

9 meeting is scheduled to end at four, but if anyone

10 has any further comments, please let us know

11 either now, so we can address it, or by submitting

12 your comments to the email. Remember, it's

13 Accounting for Growth, AFG, at the Maryland --

14 MDE's website. Please.

15 MS. KEECH: I have another question

16 about trading. I don't have a good sense --

17 maybe I should -- about how cutting edge we are

18 in Maryland or if there are other states that

19 have, you know, well-established that kind of

20 track record in trading.

21 I'm particularly interested in what

1 experience there is out there in terms of what
2 level of oversight and regulation it takes to
3 ensure that fraud and corruption aren't making
4 their way into the system.
5 MR. RHODERICK: We have what's called
6 a Standing Nutrient Trading Advisory Group, work
7 group, and the whole premise behind that was a
8 broad consortium stakeholder, so we have a lot
9 of environmental communities. So accountability
10 verification in developing Maryland's trading
11 program were paramount.
12 There are currently within the program
13 three layers of verification that, in essence,
14 are done annually. So once a practice is
15 installed and you're part of a trade, you're
16 going to see, in essence, almost three layers
17 of people out there making sure it's being
18 maintained and it's functioning as intended;
19 and again, no trades count at this time until
20 the practice is installed.
21 MS. KEECH: Right, understood, and do

1 those -- do those councils -- what did you just
2 call them, the --
3 AUDIENCE MEMBER: The advisory ag
4 committee, was it?
5 MR. RHODERICK: The advisory committee.
6 MS. KEECH: Advisory? I mean, does
7 that -- that advisory committee's name doesn't
8 imply that it has regulatory authority. I mean,
9 what happens to someone who has -- if -- I'm
10 just --
11 MR. RHODERICK: There is a whole --
12 MS. KEECH: I feel like I'm sounding
13 sort of like a parrot, but the vision, the
14 spectrum that's been raised here is that once
15 these regulations create this demand, that we're
16 going to go from having done no trades to suddenly
17 having trades be a very important part of very
18 economically important and lucrative things --
19 MR. RHODERICK: Right.
20 MS. KEECH: -- and that seems like an
21 invitation to -- to disaster.

1 MR. RHODERICK: I would suggest maybe
2 the best thing -- obviously, we don't have time
3 to go through all the information about the
4 trading program and, as you say --
5 MS. KEECH: Sure. No, I understand.
6 MR. RHODERICK: -- the verification.
7 Mdnutrienttrading.org, you go on the
8 website, the whole program is laid out there.
9 You can see it. We have a process to decertify
10 credits, should that fail. There is talking about
11 within the contracts under the free market that
12 there are monetary penalties, as well as what I
13 call "make right" penalties.
14 So that as an aggregator or as a farmer,
15 if for some reason that failed, you're going to
16 get hit with a monetary damage, as well as you
17 have an obligation to instantly go back on the
18 market and find other credits to make right for
19 the ones that are wrong as an example. Okay?
20 MS. KEECH: Yeah. Do other states have
21 more advanced --

1 MR. RHODERICK: No.

2 MS. KEECH: -- longer running credit?

3 No? So we're really unsure here.

4 MR. RHODERICK: As far as Maryland's

5 program, as evaluated by EPA within the five

6 states, we've got the highest rating of our

7 trading program.

8 MS. KEECH: Thank you.

9 MR. SAKAI: I just wanted to add to

10 that, and I agree with John, I mean, I have some

11 familiarity with what is going on in Virginia

12 and Pennsylvania; and, you know, by far, we have

13 established the highest baseline, and we have a --

14 you know, John has worked through an awful lot of

15 the process side of the trade. The question that

16 I think you're getting to though is, you know,

17 who is on the book and who is going to be held

18 accountable and who is responsible.

19 To the extent that an offset or a trade

20 is -- you know, presumably, there is a regulation

21 that requires somebody to do something. Now,

1 under the framework we're talking about, it would
2 be under the auspices of a discharge permit that
3 we would issue. We would look upon the condition
4 of the trade as an obligation to the permittee,
5 like any other permittee that's out there, to
6 comply with the terms of the permit, ensure that
7 his discharge is fully offset and mitigated, and
8 the consequences are pretty -- you know, pretty
9 straightforward.
10 So we have -- you know, there would be
11 a regulatory side of this. What we're hopeful,
12 and what we have some confidence of right now, is
13 that the framework on trading we have established
14 has a very robust certification and guarantee,
15 because, you know, everybody is looking at this
16 with -- as you said, I mean, there is not a lot
17 of -- we're going to go from a no trades happening
18 to a lot of trades, and to basically get any
19 clearer as a result of this policy, we have to
20 make pretty sure that all of this is going in.
21 So I think we do have some confidence

1 that we thought this through. It will be captured
2 in my mind in a regulatory framework document,
3 either as permanent language as regulation or
4 as policy. Right now, you can go on the websites
5 and actually look at what is in place right now.
6 MS. KEECH: Thank you.
7 MR. EMMART: Okay. Just one more
8 question, please, in the back.
9 MS. PATTERSON: I just wondered, are
10 the offset requirements for Tier III different
11 than everywhere else, or is that only relevant
12 in terms of the time frame?
13 MR. SAKAI: It is the time frame.
14 MR. EMMART: It's the geographic area.
15 MR. TASSONE: Yeah, at this point, there
16 is no difference.
17 MS. PATTERSON: Okay.
18 MR. TASSONE: The time frame is specified
19 in SB 236 for Tier III offset requirements, but
20 it's not specified there for everyplace else; but
21 as Paul said, we're trying to address them in

1 unison, so that this isn't a fragmented process.

2 MS. PATTERSON: Right. So there won't be

3 any difference between them?

4 MR. TASSONE: Not if things go as hoped.

5 MR. RHODERICK: Right.

6 MR. EMMART: All right. If there are no

7 further questions, I just want to thank everyone

8 for participating, and I really do hope that you

9 will follow up with your comments in writing,

10 and also if you're interested to coming to other

11 meetings and posing different questions, please

12 do. We have a list --

13 MR. RHODERICK: Especially Julie.

14 MR. EMMART: -- a limit of five for Julie

15 only -- but we do have a list of all the upcoming

16 presentations up through September that's on the

17 MDE website, so please check it out. Thank you

18 very much.

19 (Applause)

20 (Proceeding concluded at 3:46 p.m.)

21 - - -

1 CERTIFICATION OF NOTARY

2 I, SHERYL L. GASPARIK, RPR, the officer
3 before whom the foregoing proceeding was taken,
4 do hereby certify:

5 That the above and foregoing contains
6 a true and correct transcription of the
7 proceedings, all of which were reported by me.

8 I certify that I am neither counsel for,
9 related to, or employed by any of the parties to
10 this action; and I further certify that I am in
11 no way interested, financially or otherwise, in
12 the outcome of this matter.

13

14

15

16 _____

17 SHERYL L. GASPARIK, RPR

18 Notary Public - State of Maryland

19 Commission Expires: December 13, 2012

20

21

Maryland Department of the Environment
Maryland Department of Agriculture
Maryland Department of Planning

TRANSCRIPT OF

Harry R. Hughes Center for Agro-Ecology, Inc.

2012 GROWTH OFFSET POLICY MEETING

July 24, 2012

1:33 p.m.

Hagerstown Hotel & Convention Center
1910 Dual Highway
Hagerstown, Maryland

A P P E A R A N C E S

Maryland Department of the Environment

PAUL EMMART
JAY SAKAI
DAVID COSTELLO

Maryland Department of Agriculture

JOHN C. RHODERICK

Maryland Department of Planning

JOSEPH TASSONE

Harry R. Hughes Center for Agro-Ecology, Inc.

NANCY K. NUNN
SARAH TAYLOR-ROGERS
MIKE BILIK

ALSO PRESENT:

BILL ATKINSON
DAN BALDWIN
JIM BENDER
CHRIS BOGGS
JOE CALZARETTE
KAREN COFFMAN

(continued)

A P P E A R A N C E S
(continued)

ALSO PRESENT:

RANDY CRAIG
BRUCE DELL
BRAD DYJAK
SAM HOUSEHOLDER
DENISE JACOBY
JOHN KANE
DONNELLE KEECH
BRIGID KENNEY
ZACHARY KERSHNER
JOE KRABOTH
ERIN LANAGAN
STEVE LEATHERMAN
RICH LEFEBURE
TIM LUNG
JAMES LUTTRELL
KIM MEZZANOTTE
KEITH MOORE
SHANNON MOORE
HANNAH MURRAY
DALE NISBET
GINGER NOBLE
FRED NUGENT
ANGIE PATTERSON
JULIE PIPPEL
DEE PRICE
ALEX REED
TYLER REICCE
DENNY REMSBURG
DUSTY ROOD
DALE SAMS
ED SCHREIBER
JENNIFER SMITH
DAVID UMLING
ELMER WEIBLEY

HAGERSTOWN, MARYLAND

TUESDAY, JULY 24, 2012

- - -

P R O C E E D I N G S

- - -

MR. EMMART: Good afternoon, ladies and gentlemen. We would like to get started. It's a little bit after 1:30.

Welcome to the Accounting for Growth Policy Meeting. We are here to announce, I'm very happy to say, a new policy, which is a joint state agency policy, and let me just introduce people.

My name is Paul Emmart. I'm from MDE. I work in the Science Services Administration, and on my left, we have a panel of my colleagues from different state agencies: At the end, Jay Sakai from MDE; Joe Tassone from the Maryland Department of Planning, and John Rhoderick from Maryland Department of Agriculture.

And I just want to say right off the

bat, if everybody can hear me, we're good, and if not, please just raise your hand, let me know.

This series of outreach meetings is supported by two major foundations: The Town Creek Foundation and also the Harry Hughes Center for Agro-Ecology, and they are both providing the support and the logistics and making these meetings possible for us.

Essentially, this is a PowerPoint presentation. The way we set it up is that I will be giving a brief PowerPoint, 30 minutes or so, and then we'll open it up for questions to the panel, and those questions can address any of the issues within the PowerPoint.

So let's begin. We can go to the next slide. This is a presentation overview basically that we will go through. We're going to talk quickly about the history, what got us to where we are today and what caused the policy to come into being.

We're going to talk about calculating

a load, and by load, we mean the amount of pollution which is generated from, for example, an acre of land. That comes from new growth and development. We're going to talk about offsetting and implications of the economic side of this, of this policy, what we mention may occur.

We're going to go into very briefly the trading policies that already exist at MDA, as published, and MDE; and then we'll talk about protecting water quality, and by that, we mean two types, the Bay water quality and also local water quality.

We'll discuss trading geographies that will impact the policy. Finally, how the policy will be implemented, and then what is our schedule. So that's basically the overview.

Just to give a bit of history because it's not -- sometimes, you know, people come to these meetings with various, different backgrounds as to, you know, what sense they have of where these things come from and why the new policy is

even required.

The problem with the Bay is obviously very well understood, in terms of many of the, you know, public's impressions and funding priorities, but it has been a voluntary agreement to try to clean up the Bay.

In 1983, EPA and Maryland -- I'm sorry -- Maryland, Pennsylvania, and the other states, recognized that the Bay was so degraded that there was some urgency in acting. Then in 1987, a policy basically of a 40 percent nutrient reduction was issued, and that hoped to be achieved by 2000, by nutrients simply being phosphorus and nitrogen.

Then the Chesapeake Agreement, the 2000 agreement called "C2K" was proposed to eliminate the impairment by 2010; and, of course, that 40 percent reduction in nitrogen and phosphorus did not get accomplished. In 2006, EPA and policy and scientists had to concede that basically the 2000 agreement would

not be met. Next, please.

As an example of one of the issues that was realized about how the agreement wouldn't be met, there was a general emphasis on growth, basically, the growth in the states and, of course, the early 2000s having an economic boom, that the growth was outpacing progress. So one of the reasons we're not making the progress that we hoped was that growth was actually overcoming, that is, the pollution load from new growth was overcoming all the efforts that people were making in the early 19 -- well, through the 1990s at least.

So this is a quote from -- oh, I'm sorry. We're on Slide 4. This is a quote from an EPA Inspector General's report from 2007 which just basically emphasized that if communities do not sufficiently address the runoff from new development, then loads from developed lands will continue to increase rather than diminish; and as a result, restoration costs for the Bay

will increase and, obviously -- this is 2007 -- will not meet the C2K agreement, and that in fact turned out to be the case.

I think that this is an important quote because it emphasizes the costs that the citizens of not just in Maryland, but the entire Bay region, will have to suffer if there isn't an adequate policy in place; and so that brings us to getting closer in time to 2009, when the CBF, the Chesapeake Bay Fund -- Foundation sued the EPA, and that litigation was basically essentially to force the EPA to take more control, to move literally from a voluntary regime to a regulatory one.

So that lawsuit was stayed in 2009 with the issuance of President Obama's executive order, and then it was settled in 2010 with, you know, the basic understanding that EPA would release a federal strategy to show what the feds were going to do, and that each state would produce a Draft Watershed Implementation Plan, a WIP.

In fact, in December 2010, each state produced a Draft Phase I WIP, and then finally in December, it was published -- I beg your pardon -- and then the EPA issued the Bay TMDL in December of 2010.

The reason for switching was simply that the voluntary efforts were seen not to be advancing the restoration as quickly as was needed. So this change to a regulatory framework really did change the game in some way. It brings us to today, to 2011.

Each jurisdiction has recently submitted a Final Phase II Watershed Implementation Plan. For Maryland, that was submitted on March 30th, and there were additional comments from local jurisdictions that were submitted as recently as July 16th, and those were comments on the State's submittal. The State submitted their Phase II WIP, and all of that has been forwarded to EPA for their consideration, and if you're interested in looking through those documents,

they are available on the MDE website.

But in a nutshell, just to say what the WIP is about, it's a two-prong thing. It's basically to restore the waters. All sectors have to reduce existing loads to restore the Bay, and by "Bay," we're talking about the segments within the main stem that are suffering from lack of oxygen. They were essentially dead zones.

But the second prong, which is the one we're here to talk about today, is this lower bullet, basically to account for growth and to maintain the Bay's health as it is now. So this is what we've come to. This is the implementation of the WIP period, in essence.

And you should probably know that they're -- the way that EPA has phased in the watershed implementation planning is in three phases. We've passed the first phase, and between now and 2017 will be basically the implementation that we expect to achieve our goals in 2025. So by 2025, EPA is anticipating that the strategies

and things that we have put in the WIP will be on the ground by then.

So one of the things that was mentioned in the WIP is a policy to address new loads. That's new loads from new development. New loads were addressed in two major ways. The first was that wastewater treatment plants, the large plants, significant ones, have in their design capacity a certain amount of capacity which is available for new growth. So that's one way in which urban centers can actually grow without impacting the Bay. That growth has been already allocated.

The other way is for new loads that would come from development that perhaps would not be connected to a large wastewater treatment plant, or if they are connected to a treatment plant, it's a treatment plant that doesn't have much capacity, in fact, may be out of capacity all together. So those new loads need to be offset in order just simply to maintain the quality of

1 the Bay at this point.
2 There are two related efforts that sort
3 of came at a similar time frame. The first is
4 that Maryland has committed to offset the new
5 growth in the WIP, but the second is just as
6 a result of this year's General Assembly, and
7 that is what we call the "Septics Bill" -- it's
8 SB 236 -- which requires that offset provisions
9 for Tier III areas be proposed by the end of 2012.
10 Tier III areas are -- they're basically construed
11 as large lot development areas and rural villages
12 which are on septic systems.
13 Now, these two policies, one which only
14 applies to Tier III and the other one, the top
15 bullet, applies to the entire state, they could
16 be sort of rolled out separately, but we're
17 choosing to do them concurrently.
18 So this policy, we're hoping, will
19 satisfy the requirement of SB 236 to be prepared
20 by December; and it will also set in place a
21 policy under the WIP which was not supposed to

1 be in place until 2013; and I think in the phases,
2 while we were developing the WIP, we were thinking
3 it would be December 2013, but it's on a much
4 faster track than that. Next slide, please.
5 The objectives of this policy can be
6 described in two ways. First of all, it's very
7 significant that the type of offset that we're
8 trying to develop is going to be a permanent
9 offset. That is as long as the load which is
10 coming from new development is contributing to
11 Bay water quality, we want to have that offset
12 equally accounted for. We want it to be accounted
13 for in an equal fashion.
14 Secondly, in order to further the Bay
15 restoration, not so much just to maintain it,
16 we want to minimize the pollution load from
17 growth so that fewer offsets are needed. There
18 are economic reasons for this, but it's also
19 an argument of efficiency really. We want,
20 for instance, in the second dash there to allow
21 public resources to focus on reducing existing

1 loads to meet the allocations.
2 If you've had a chance to look at the
3 WIP document, there are targets, pollution load
4 targets, for the five major basins of the state
5 of Maryland, and those are for existing load.
6 That's pollution that is coming, for instance,
7 from, you know, existing impervious surface, hard
8 surface, and also pervious surface.
9 So in order to sort of focus the public
10 resources, the funding that is needed, on those
11 existing sources, it's very important that
12 these offsets are used well and not used for
13 the existing load but are used for the new load,
14 clearly.
15 So we're trying to encourage this whole
16 policy to work to the advantage of counties, local
17 governments, in order to optimize the offsets that
18 are available and then to also use their zoning
19 and planning authorities to optimize the kind of
20 growth that each one of those jurisdictions wants
21 to have. Next slide, please.

1 So some of the concepts that were
2 articulated in the WIP, in the Phase II Final
3 WIP, include for new development that it must
4 be all applicable regulations. So that would
5 include stormwater regulations, the most recent
6 of which, of course, is the "Environmental Site
7 Design to the Maximum Extent Practical," and that
8 the new development will offset post-development
9 nonpoint source loads.
10 So I hope that the concept of point
11 sources and nonpoint sources is clear to everyone,
12 point sources being those ones directly discharged
13 from types or from a large urban area in a
14 stormwater collection area or as close to a
15 nonpoint source that might come off of rural
16 lands, agriculture, things like that.
17 The second concept was that redevelopment
18 will not be required to offset -- oh, I beg your
19 pardon. I've done that one.
20 This third concept was that new on-site
21 disposal systems must meet all applicable

regulations and offset the post-development wastewater load. So that is septic systems with not only offset -- not only meet the new regulations for, let's say, new Best Available Technology, but they would also offset the amount that is in fact discharged, even with a BAT system, and then point sources, as we had talked before. New loads and increased load from existing point sources above the nutrient allocation must be offset. So that is if there is no capacity in that amount, it would go to a treatment plant that would have to be offset.

There are, in fact, some significant differences in this policy from what we envisioned in the WIP. In the Draft WIP, in 2010, the policy was considered as a way -- as a conceptual idea of how we would actually offset these loads; and what we've gone to at this stage, which is partly because of the time frame, but also because of we want this policy to be successful, and one of the ways to make the policy successful is to make it

simple in some sense, and one way that we have identified that will simplify the policy is simply to address nitrogen.

Now, other states do have trading policies and things like that that address phosphorus credits; but we are, at this stage -- and I would urge you to try to think of this policy as a conceptual approach at this stage. Nothing has been, you know, put into regulation or anything like that at this stage. We're really trying to make these outreach efforts to gather your opinions and to gather your input and your insight as to how the policy should be formulated; but at this point, one of the key departures from the WIP has been that we're just trying to isolate nitrogen. So there would be no separate offset applied for phosphorus at this point.

The second bullet, also important, is that we are envisioning a development, let's say, on a development parcel, for example, and what we're hoping is that that load that would be

coming off that acre, let's say, one acre of land, would be 100 percent offset.

So in the WIP, it presented offset policy as if there would be a certain reduction from the post-development load that would go down to a forest load, which if you're familiar with the stormwater regulations, the Stormwater Management Act of 2007, ESD to the MEP -- that was Environmental Site Design to the Maximum Extent Practical -- tries to bring the load that's coming off of one acre, let's say, to roughly the load that would come from a forest condition. So this is looking for a greater offset than that.

So in new development, you would perhaps apply ESD to the MEP, but that you would still have to offset the remaining load. Okay? So again, these are the types of loads that we're thinking about, and now we'll get into more how is it that you do calculate that load from a parcel of land.

The type of load that we are discussing is going to be the direct load, which is wastewater, discharging the groundwater from conventional septic or BAT septic systems. We'll also be talking about discharging wastewater treatment from wastewater treatment plants and, of course, stormwater, which we'll use the Bay, the Chesapeake Bay, the model loading rates to estimate for a load.

An additional thing that has been added to this policy that we feel is very important is an indirect load, and that is how to account for mobile emissions. A lot of nitrogen is airborne and goes directly into the Bay from the air.

There is also a source of nitrogen which comes from exhaust, from vehicle miles traveled, and then is deposited either in the Bay or in local waters and streams, and we are trying to capture that component as well. So wastewater, stormwater, and then emissions from

atmospheric deposition.

The next couple of slides are basically a number of slides to show you what are the loads that we anticipate are coming from a parcel of land in pounds per year.

So the first type is from a conventional septic system, 9.86 pounds of nitrogen per year, and then about half of that coming from an upgraded Best Available Technology system, and these are per household numbers for the septic system. Okay.

For wastewater treatment plants, basic numbers in milligrams per liter of discharge of the effluent are 18 per secondary treatment, 8 for BNR, and then 4 for ENR. Now the plants can work at a better level than that seasonally, but these are the numbers that we're using for our calculation.

The stormwater load factors, these are designed for two types of land, impervious hard surfaces and then pervious, like grass, field,

pasture surfaces. These numbers, 15.34 and 10.78, are model numbers; that is, they come from the Chesapeake Bay Model, and they are -- they will be reduced significantly, 50 percent at least, once ESD to the MEP, that is stormwater regulations are applied.

So those numbers are essentially halved, and then -- oh, I beg your pardon -- sorry, if you would go back just one more. And the last one is forested land. A traditional number for a forest load is 3 pounds per acre per year, so we're also using that too.

Air deposition, this is some -- this is a way to capture that component. Essentially, what we have done is divided -- made a divide between very dense areas and then less dense areas, in terms of census population per square mile.

So, for instance, if you -- to take the first number first, if you're living in a rural area that is less than 10,000 people per square

mile, what we anticipate is that you would have to drive back and forth to your residence, and in that case, the NOX emission, which should be offset -- again, this is a number that is proposed for this policy, so we have had to pick something -- we picked one pound per year that will have to be offset. So all of these three components that we talked about are going to have to be added up cumulatively to know how much do you actually have to offset.

If, for instance -- just to go back one slide, please -- if you are in a more dense area, let's say, a densely populated urban center, the offset would only be required of half a pound per household or EDU, and this applies simply to residential. We're not talking about commercial, because what we're trying to capture is the vehicle miles traveled from your home to wherever.

Now, these are some examples, and I just want to say before everybody, you know, gets crossed eyes looking at these examples,

the PowerPoint will be posted on our website, the MDE website, and you do have a copy of it printed out for you. These are just some examples that we have tried to put up that demonstrate how you calculate the load that you would have to offset and what would be the likely scenario.

So, for instance, there are three scenarios that are listed here. The first one is a Low Density Residential. The second one is a Medium Density, and the third is a High Density. So going from the top on "Low," the amount we're talking about just as a sample, as an example, a two-acre lot on septic, using an upgraded septic system, with a very little amount of hard surface, 10 percent impervious.

In the second "Medium," the lot is somewhat smaller, half an acre; and then in the "High Density," very, very small, just a tenth. And in the High Density one, this one is on ENR. It's on the highest technological wastewater treatment plant. It has capacity.

So what I'm trying to show is that each one of these components -- "WW" is wastewater, stormwater, and the air emission -- are all of those components are added up to figure out what the offset load would be.

Now, the calculation of these numbers, we can discuss. There is -- what we're proposing within about maybe a week or so is to have a spreadsheet available which has formulas in it which will allow you to input whichever one of these scenarios it is that you want to look at by component, and then it will calculate the load to be offset for you.

But this is just basically to show that, for instance, with wastewater which is on, let's say, a BAT system, you would have this amount of nitrogen to offset; but as you go down to the highly developed areas, when you're on a wastewater treatment plant and it does have capacity for the wastewater component, you don't have anything to offset; and as a result,

it's simply -- it's intuitive in a way that the higher the load is in the more diffuse areas where there isn't the technological treatment of the nitrogen. Next.

This policy will also apply to non-residential developments -- so, for instance, commercial and mixed developments -- and we are hoping to capture that load in a very similar manner based on the same components, the wastewater, stormwater and air.

And these examples show various types. The first one is a warehouse, so it's a commercial property. It's developed. It's on an undeveloped acre, so it's essentially green fields, and it's going to have a very high level of impervious coverage. Just based on those facts, the offset is going to be quite high as a result.

If we look down at the bottom one, this is almost the opposite extreme. We're talking about a redevelopment property in an urban site. So automatically, you know that it's very, very

dense. So -- oh, I should point out, I'm sorry -- in the commercial examples, the NOX offset does not apply. As I mentioned before, we're just applying the NOX offset to residential.

So that's why in the first scenario and in the third scenario, it's a zero for the air component, but going back to this one, this is really -- it's very stark is the reason I'm focusing on it because it's redevelopment. It's on an urban site, it's commercial, and served by a wastewater treatment plant with capacity. So as a result, there is, in fact, not even a pound to be offset. So that's, in a way, the optimal situation for this policy to work and also for the, you know, developer not to have to purchase any credits. Okay.

Now, we wanted to talk a little bit about the economic implications of this policy because one of the things that might happen is that you would automatically question, okay, where are you going to get those credits? How will we get those

credits? And I think it's fairly intuitive that if the credits are not available, if they are scarce, their price will rise, and the price is of great concern.

But one of the things that comes from the policy's focus on redevelopment is that it emphasizes not just the protection of water quality but also that redevelopment is favored. So, for instance, in this, in the scenarios that I've tried to show, redevelopment concentrates the growth in dense areas that are served by wastewater treatment plants.

So, for instance, when you do concentrate them and you don't need, in that last scenario, any of the offsets to be purchased, then it's not an issue if there are very few offsets, or at least it's not as much in the sense that it doesn't prohibit development outside of those areas; but on the other hand, if the development does focus on those areas, then there are fewer credits that need to be used, and for whatever

1 credits are necessary, those credits are used
2 in the most efficient manner.
3 So we're hoping that this policy,
4 in a sense, it will maximize the development
5 potential, and it will allow Maryland to maintain
6 the restored Bay, based on this new growth being
7 offset, and that the economic growth will also
8 be concentrated.
9 This next slide is a slide which the
10 Maryland Department of Planning has developed
11 in order to emphasize the relationship between
12 jobs and residences and growth. These numbers
13 on the left-hand column, the Dominant Type of
14 Development, are the same types of development
15 we were talking about before: High density on
16 the ENR, mixed development on non-ENR and septics,
17 and then large lots that are on sewer -- large
18 lots, no sewer.
19 MR. RHODERICK: No sewer.
20 MR. EMMART: No sewer.
21 MR. RHODERICK: It's no sewer.

1 MR. EMMART: Okay.
2 MS. KENNEY: They're on septic.
3 MR. EMMART: And so those are on septic,
4 that is to say. All right.
5 So then the idea behind the slide is
6 simply that the pounds of nitrogen per capita
7 are least where the density of the housing is
8 the greatest. So in "High Density on ENR," the
9 pounds of nitrogen per capita are 2.5 to 3, and
10 as you go down that column for "Mixed" and then
11 for "Large Lots," the pounds of nitrogen increases
12 per capita.
13 And to look at it another way, on the
14 third column, "Jobs or Residents Per 100 Pounds
15 of Nitrogen," that's basically to say that if
16 you had 100 pounds of nitrogen and you needed
17 to offset it, what would you get for that? You
18 would get, per capita, 38 to 44 jobs per resident,
19 if I've got that right. I'll have to defer to MDP
20 to...
21 MR. TASSONE: Jobs and/or residents.

1 MR. EMMART: Jobs and/or residents.
2 But the basic, the basic message is,
3 I think, quite clear. It's that essentially in
4 the higher density areas, when it is served by
5 ENR plants, those areas tend to have a higher --
6 a lower per capita nitrogen level and a higher
7 per capita job and resident ratio. Okay.
8 So one of the ways that we wanted to
9 introduce this policy was to say to you, explain
10 in some way, how it would interact or integrate
11 with the trading policies that exist. The trading
12 policies from 2008 and also again 2010 that have
13 already been published, they are out there, and
14 this policy will integrate with them.
15 Just to go over some of the principles
16 that are in the trading policies, a unit of trade
17 called a "credit" is equal to one (1) pound of
18 nitrogen or phosphorus per year, and automatically
19 there, you will see there is a difference somewhat
20 in the policy of the accounting for growth and
21 the trading policy. The trading policy does

1 incorporate phosphorus, but this policy is just,
2 for the moment, going to focus on nitrogen.
3 The second bullet, all nutrient trades
4 and offsets must comply with any local TMDL
5 allocations and must not cause or contribute to
6 any local violations of water quality standards.
7 That is a very important premise that we do not
8 want the Bay to be further degraded, and if
9 any trading policy that is going to, let's say,
10 encourage sellers, generators of credits, to
11 try to, you know, capture the credit from the
12 work that they do, the implementation of the
13 BMPs, we want to make sure that they have to
14 come down to the TMDL allocation first. They
15 have to reduce their load, such that they have
16 met the allocation, and then anything they go
17 beyond that allocation, that counts to the
18 credit.
19 Do you have a question in the back?
20 MR. UMLING: Yeah, this is important.
21 You used the term in here "must not contribute,

cause or contribute to any local violations of water quality standards."

Are you referring to locally within the Bay Model for the Chesapeake Bay, or when you talk about local, are you talking about any stream segments that may have their own TMDLs within that locality?

MR. EMMART: Excellent question. You're right, it's a very important issue. We are aware of the difference. As you stated, there are local water quality standards, and by "local," that's a very charged term because we don't know if it is the stream segment or if it's the Bay CB4, let's say.

We are basically -- from the trading policy, it's an absolute. Am I correct, John, in that way, that you must --

MR. RHODERICK: The lower of the two.

MR. EMMART: -- you must meet the stricter of those two. So, for instance, if there's a local TMDL and it has a limit of the

load that you have to go down to, that you have to reduce to, then you must achieve that reduction and then go beyond that in order to generate any credit; but if the local, let's say, is not as strict as the Bay TMDL, then the Bay TMDL limit would govern.

Does that help? That doesn't? There are a couple of other slides coming that address this issue, but for now, I think that's -- we'll discuss that a little further, but it's an extremely important question.

In the trading policy, there are delivery factors that are applied to account for the differences in delivered loads between trading partners to their locations. So, for instance, if you were in Anne Arundel County versus Garrett County, there would be delivery factors applied to that amount of nitrogen. A pound of nitrogen in Anne Arundel is not the same as a pound up in Garrett or in Washington County. The monetary value of the credits will be determined by the

market. That's what the trading policy states. Next.

Okay. Now, we're on to the water quality issues again. One of the premises of the Bay TMDL, of course, is that the main stem -- and this is segments, you know, CB 4, 3, and 5 -- those ones are where the impairment is really causing a dead zone, and local stream inputs from up in the Bay are bringing, obviously bringing down the nutrients, and the oxygen levels, the DO measurements there, are so low that there isn't enough for even aquatic life to survive.

So we are hoping that this offset policy will address the significant new growth that may contribute to that. So we hope that by reducing the sediments that reach the main stem that we will, first of all, protect the Bay. Now this is just about the Bay and tidal water quality. Next slide, please.

In terms of non-tidal water quality, we -- one of the reasons -- I should just explain

a little more fully. One of the reasons why we feel that nitrogen is a good parameter to use as the credit is that many of the efficiencies for the practices that are put into the ground have nitrogen and phosphorus efficiency rates, and usually the nitrogen rates are less than the phosphorus. Nitrogen, as a constituent, is simply more water soluble. It's harder to catch by those practices normally, and so we feel that if we use nitrogen as the standard in this trading policy, we will be able to also address phosphorus.

So this second bullet on the slide at the bottom emphasizes that point. It says basically the majority of nitrogen management practices also reduce the loads of phosphorus; and, in fact, urban practices result in larger relative reductions in phosphorus than nitrogen. I'm saying that first because I want to explain why it is that we're focused on nitrogen.

But for local non-tidal streams,

normally, phosphorus is the issue. Normally, it's what we term "the limiting factor." You have to have both nitrogen and phosphorus in order to cause an alpha bloom and to have an impact to the biotic life, but if you don't add -- the way that you would increase that impact is that you would add more phosphorus. If you add more nitrogen, then it has a minimal impact because phosphorus is the limiting factor.

I hope that explains it to some extent, but what we are aiming at is targeting the nitrogen in order to address local water quality. So that nitrogen standard that you would find in, for instance, a local TMDL, if that were stricter than the Bay limit, we would apply that one; but if the Bay were stricter, we would also apply the stricter of the two that would cover.

Protecting non-tidal water quality, this is a slide that is about ESD to the MEP to emphasize that it also -- this is the new

stormwater regulations, and we assume, even before the offset policy was in place, that all of these regulations are going to be followed -- that this will also protect local water quality. It will protect habitat integrity, and it will increase -- we want to push the stormwater into the groundwater. We want to make sure that the groundwater recharge is diminished -- or is increased vis-a-vis going off site. We want it to increase and go and there to be less runoff on it. Sorry about that.

And in terms of requiring the sellers to meet the Bay WIP baseline reductions, we feel that that will also drive water quality improvements at the local level because there won't be credits to sell if they cannot meet the water quality standard there.

The trading geographies, this is another slight difference between what we are proposing in the offset policy or accounting for growth policy and what is existing in the trading

policies. Essentially, at the moment, current trading policy has three basins: The Potomac, Patuxent, and then everywhere else within the state.

The offset policy may need to modify that. We're considering the offset policy as somewhat of an overlay on the trading policy. So once this accounting for growth policy comes into play, there will be adjustments to the trading policies.

For instance, the WIP discusses the five major basins which are one way of dividing up the state; whereas, the trading policy has three. So there may be an adjustment to try to make the most efficient policy work for Maryland. Next.

The Accounting for Growth trading geographies will follow the rules of the trading policy to the extent that they are consistent, and then they will add one thing; and the thing that we're trying to add -- this is another very

important distinction between the two -- is that, according to the plan of Maryland, there are certain areas within the state that are identified as "Priority Funding Areas," and within those priority funding areas, there are targeted growth and revitalization areas which are a smaller subset of the PFAs.

What this policy aims to do is to encourage and incentivize the development to occur in the targeted areas, in those growth areas; and one way to incentivize this, if those areas being served by the highest technological wastewater treatment plant, is to say that their ability to purchase offsets to develop in those areas, that can be purchased anywhere in the state; and, in fact, the trading policy might even have to be adjusted in some sense because we might wish to encourage interstate trading. That's not something we have determined, but on the other hand, if it did come about, if the growth and development occurred in these targeted

areas, then the purchase of those credits could come from anywhere.

However, the opposite is really sort of a disincentive, and that is that if -- well, I shouldn't declare that it's a disincentive, but it could be seen as a disincentive -- that if the development does not occur in the targeted growth areas, then the developer, the person would be restricted to purchasing the credit within the county where the development occurred.

Now, we've had several different meetings on this and received feedback from a number of constituents about that, about the limitation, that if the development doesn't occur in a targeted growth area, then the credit has to be purchased in the county; and some of the comments have been very positive and said that that's great. Other ones have said, no, that's really negative. So that's the kind of -- one of the issues in this policy which is not resolved. It's proposed. However, we do welcome your

insight on those issues. Next slide.

Okay. We're almost to the end. I just want to describe briefly how this proposal is going to be implemented. It would be implemented generally through an MDE permit. It would be a regulation.

We would use the existing statutory authority, so no further legislative action would be required. It would be promulgated through the regulatory process, and as far as the policy has been developed so far, it would be -- the mechanism for its delivery would be a general permit for offsets.

MDE would ask the developer to calculate the load and also to obtain the permanent offsets. That would mean submitting information in order to obtain the permit that would certify that the offsets are there, that they exist, and that they will be maintained permanently.

And that's essentially it, except for two small things. The first is these are the areas,

these are proposed areas that we are seeking your feedback on. These are some of the areas that have not been resolved in the policy fully.

We would like, as I said before, to have your input, your insight, to get your comments, suggestions, on this proposal, as it's laid out, or any other alternatives that you might envision, because the bottom line issue is that we must address new growth loads, and this is just one way to achieve that, but we would welcome alternative proposals.

We would like to flesh out what are the roles for local and county government. Very much like the trade policy, we would like to, you know, conceptualize how, for instance, the trades would actually operate, whether they would be through aggregators or brokers for the offsets.

We would like some information, you know, if you agree or disagree about using nitrogen alone. When the effective date would be of this policy, the SB 236 indicates that

the proposal, the policy itself, needs to be in place, I believe, by 2012, by the end, by December. So it's a very short time frame.

There are other ways to calculate the post-development load, and once we do have this calculation tool up on our website and you have access to it, we would appreciate your comments on that.

Similarly, with trading geographies, the verification of offsets, this is all -- these are all things that we think are central to the policy. You can't have offsets if they're not verified, but how, how to go about verifying them in an efficient manner and especially to ensure that the offsets are permanent. The idea of permanent is that the load, as of again, the load that's produced by this new growth needs to be offset for the duration of that growth. So it's -- that's sort of an open question, what does that word "permanent" mean.

And then in terms of the mechanics of

the policy, is it necessary to have a fee in lieu system, for instance, like the wetlands program? Is that something that would aid this policy, or is it something that would detract from the policy? So we would like your thoughts on those areas.

This is the schedule. Essentially, for the period from July to September, we are going to be going around the state giving these regional meetings, just to make people aware of the fact that the policy is going to be formulated, to give them a chance for input.

And we're going to put and have put some documents up on the MDE website, for instance, the discussion draft is a narrative of about ten pages that explains in some detail what I have discussed today. We are hoping to put the spreadsheet for calculating a load up there relatively soon. It's not up there right now. And then in August or so, we're hoping to have draft regulations and to revise those as we

receive comments from everyone.

In October, there will be Attorney General review of the policy, approval by the Secretary of the Department. In November, we will brief the Legislature, the Environmental House Committees; and then in early December, it will be submitted to the AELR and DLS. Those are administrative bodies that review proposed new regulations.

And then if it passes that series of elements, then it would, mid-December, it will come into the Maryland Register as a public notice, and then there will be an opportunity for comment, generally through the regulatory process.

So if you would like to comment, and we hope you do, we would require you to send your comments to us no later than October 1st. Because of this being in a tight time frame and trying to get ready for December, October 1st would be about the latest that we could receive comments.

You can submit them to a special website email address, which I hope you can read it -- it's in your paperwork as well -- is "afg" (which stands for Accounting for Growth) "@mde.state," or if you want to send a hard copy, you can send it directly to me at the Maryland Department of the Environment, and those comments will be compiled.

We are not planning on having a comment response document. That was what we did with the WIP, but we had a little more time in order to do that. So we find what we will do instead is we will receive your comments, consider them, modify the regulations, as appropriate; and then the draft regulations, as I said, will be published, and there will be an opportunity for a second round of public comment, and that's it.

So now what I'm going to do is I'm going to open the floor to questions, and the panel is going to assist me, and we will try to answer what questions you do have. Sir, in the back.

MR. UMLING: I'm not saying --

MR. EMMART: Excuse me. Would you like a microphone?

MR. UMLING: I think I can talk -- can everybody hear what I'm saying?

THE REPORTER: And name, please.

MR. UMLING: I can project, I think.

THE REPORTER: Name, please.

MR. RHODERICK: Oh, name, name.

MR. EMMART: Oh, beg your pardon. Whoever is going to ask a question or speak, if you wouldn't mind, please identify yourself and your affiliation, just so that we have that on record.

MR. UMLING: I am David Umling, City Planner for the City of Cumberland.

I'm not saying that this is actually happening or going to happen, but it is something that I would like you to consider as something that could possibly happen.

Given the fact that we're out here on

the very fringes of Maryland, surrounded by other states, a lot of what affects our local water quality in some of our streams comes from other states over which we have little or no control.

The City of Cumberland has an ENR sewage treatment plant, and we're not getting a lot of growth. So, theoretically, we should have some trading capability, given the fact that we're way out here at the restaurant at the end of Maryland's universe.

However, if water quality, as you just defined it -- that's why I asked that question about the -- you know, what you meant by local violations -- if water quality in one of those streams was high enough to kick us out of the ability to trade, then we would be a community that would have no growth or very little growth, trading capacity, without any ability to use it or any ability to control whether or not we would be able to use it in the future.

And I think that's the way it would work

under the scenarios that you said, because I'm -- I'm just not so optimistic as to believe that if you tell a shopping center that wants to serve people in Annapolis that they can't go in there because there's no capacity to them, they won't rush out to Cumberland to put it there because we have the capacity. So I'm assuming that we're still going to be in a very limited growth environment.

MR. EMMART: Joe, would you like to address that or...

MS. NUNN: Hey, Paul.

MR. EMMART: Yes.

MS. NUNN: We have a request that the panel reintroduce themselves.

MR. EMMART: Oh, yes, of course, please.

So I don't want to lose that question though. I think that's very good, and what would you -- go ahead.

MR. SAKAI: I am Jay Sakai with the Department of Environment.

David, I will take a shot at this, and then you can tell me if I got your question correct.

And by the way, the concern about local water quality is, as Paul said, is a very important one, because I think everybody has concerns that trading and offsets that are driving trades are going to result in local impairments where we don't want them, local degradation where we don't want them; and, you know, we certainly don't want a lot of development degrading local water quality while we make allowances for it somewhere where it doesn't matter. I mean, I think that's kind of the gist of what I hear here.

We have said both fairly clearly in our trading policy, and the department's trading policy is on our website, point to point. It may go through some iterations, but John Rhoderick has talked about trading as well; and in all of these principles, in all of these discussions

about policies is a clear notion that you cannot -- you cannot trade, for instance, if that trade will result in degradation of local water quality. So that's -- the first protection is always the local receiving water quality.

Now, the reason why this is a little more complicated is because there isn't yet in very many cases nutrient criteria, for instance, for flowing streams. We have a lot of work that's gone into a determination of what the Bay TMDL will be, and we have the five segments; but that's part and parcel different than what a local receiving water, like the Potomac, you know, may require.

There is much more work that's going on with the EPA right now about -- and within Science Services about, for instance, nutrient criteria for local water, but it's something that we're very mindful of, and it's something that we want to meet -- you know, we don't -- we don't want unintended consequences here.

Does that answer it, sir?

MR. UMLING: I understand what you're saying and -- and what my point was wasn't that, you know, we would want the opportunity to contaminate our own streams, but what I'm saying is a lot of our streams come down from Pennsylvania. We do have some suspected problems in some of those streams. It appears that it's not coming from Cumberland, but if we would have, theoretically, the ability to be able to trade things but were barred because somebody we can't control --

MR. SAKAI: Oh, I see.

MR. UMLING: -- in another state is degrading our stream, that leaves us with zero on all ends. I mean, maybe that's an unfortunate, unintended consequence of this, but understand, that's what it's leaving us with, if that occurs.

MR. SAKAI: Well, in the broader context, obviously, that's the story of the Bay. You know, the Bay is half of Susquehanna and, you know, the

rest of it is coming from everywhere else. So, you know, others have made the -- have pointed out that if Maryland does all these different things and we don't get the same type of movement in Pennsylvania, it's not really going to make that much difference with this.

MR. UMLING: But the parts of the Bay that are developing and causing that problem aren't the most economically distressed portions.

MR. SAKAI: I understand that, and I think that's --

MR. UMLING: And you're leaving the economically distressed portions with potentially no way out of that hole.

MR. SAKAI: I mean, I think that's a good comment. That's something that -- John, I don't know if you have anything else on that.

MR. RHODERICK: Are we talking about the allocation, or are we -- when you're talking about impaired water body, like you say, West Virginia that drains into the Potomac, they have a TMDL.

They have a nitrogen/phosphorus allocation and goals that they have to get down to, to restore their portion of the Potomac.

So each state, even though, as you say, Pennsylvania flows into Maryland and West Virginia and Virginia, each state was given by EPA, for those water bodies, an allocation in the loading that they have to meet.

MR. UMLING: But I recognize some states have been more aggressive with assuming that responsibility than others have --

MR. RHODERICK: True.

MR. UMLING: -- but we're directly affected by states that are not as aggressive about doing that, and that even are resistant in some regards to wanting to do that, in large part, for the same reasons, there has been resistance in our part.

MR. RHODERICK: But that's EPA's role. I mean, that's the whole point of bringing EPA into the equation, because Maryland didn't have

the ability to dictate to West Virginia, but EPA does. So they've got their -- as you say, they've had to develop a plan, based on the allocations they were given, for the loadings going into the Potomac, and that plan has got to be met.

MR. UMLING: Well, and I understand that explanation, but it doesn't sell well, as a person who is paid to help the people who are affected by this, to have to tell them.

MR. RHODERICK: And I agree, but I'm hoping these two-year milestones, that's what EPA says they're going to use as the enforcement. So the first two years are coming up. We'll see.

MR. COSTELLO: David Costello. I'm with the MDE as well.

One thing I would add, and not to defend Pennsylvania or West Virginia, but this is something they would say to us, that the people who benefit most from the Bay are the people who live on the Bay, and that's one of the challenges; and even in Cumberland, for instance, to the

extent that the Bay is restored, to the extent that our seafood industry, that boating and swimming and recreation, you know, grow, as it was in the past, you know, then obviously Marylanders and Virginians, but in large part, Marylanders are going to benefit financially as we do now from the Bay, and we'll benefit, you know -- you know, three-, four-, five-fold, depending upon, you know, what estimated -- and, of course, that's revenue to the state, and as you know, not all revenue goes throughout the state, but a fair amount of revenue does go to Western Maryland and other parts of the state.

So again, not to defend Pennsylvania, New York, or other states, but we do, we all benefit from a restored Bay, and we're talking billions of dollars in benefit; and ultimately -- and I know it's going to be years away -- but it does ultimately benefit all residents of the state.

MR. UMLING: And just to be clear, my

comment was not directed at whether or not we should clean the Bay --

MR. COSTELLO: Right, right.

MR. UMLING: -- but how the trading policy works and how it impacts --

MR. COSTELLO: Okay.

MR. UMLING: -- communities that have to depend on that trading under this system.

MR. COSTELLO: Right.

MR. TASSONE: And David -- this is Joe Tassone -- I would add to everything that's been said that reiterate Jay's point. You ask a really good question, and I'm not sure that we've responded fully to it. We've certainly got it on record here, but submit it in writing as Paul gave the indications of how to do that, so we can make sure, as we go forward, we can think it through, because it's pretty -- you know, you characterize a special case that's worth focusing on individually.

MR. EMMART: Other questions, please.

In the back. Please state your name.

MS. KEECH: Hi, I'm Donnelle Keech from the Nature Conservancy. I have just a quick clarifying question.

You mentioned that there were delivery factors that got factored in, in calculating the value of trades, but I didn't hear you mention delivery factors in the calculation of post-development loads.

MR. EMMART: Thank you.

MS. KEECH: Did I just miss that? Are they in there and they didn't get mentioned or...

MR. TASSONE: I mean, I can say that the -- what was characterized, I think, in the presentation is that the growth offset policy would be consistent with trading policy, except as it's modified.

Current trading policy figures in delivery to the estuary factors for wherever loads are coming from. So at this point, those would be figured into offset trading also, unless

and until another proposal comes up for that.

MS. KEECH: Right, but what I -- what I understood from the first part of the presentation is that another important number in the calculation is the difference between your -- the forest load and the post-development loads.

What I'm asking is, you know, is a post-development of an identical development in Anne Arundel County or Allegany County considered to have the same post-development load?

MR. SAKAI: Okay. So --

MR. EMMART: Yes, it is.

MS. KEECH: It is?

MR. EMMART: Yes, that's correct.

MS. KEECH: It is, okay.

MR. SAKAI: -- your premise or your statement is correct. The loading numbers and the calculations that you see were as a stream for stormwater, and we used generally a state-wide average loading rate for the septic number. We're

not using delivery factors, and I guess the reason is really just trying to make sure that this is simple to implement. If it gets, you know, down to the point where you go on a development by development basis, you have to factor in on a specific delivery factor based on the specific geography of the development.

We think it's quite complicated, and it seems to make sense, at least to us, that if you're going to try to calculate, and you give a tool to somebody, to a developer, to calculate an offset, that we're going to just average it across the state and just make certain assumptions about it. That's a little different than the way trading has evolved, but we have different tools for trading, but it is different, you're right.

MR. EMMART: And I can add just one thing too. I just want to make clear that it's an average state number from the Chesapeake Bay Model of the no-action load.

So it's the -- I know that -- I didn't

know if you would want to know that information, but it's simply to give the origin of that number. It's a no-action load from the Chesapeake Bay Model, in their most recent version, and it has been averaged across the state.

And to go to something else that Jay said, for instance, with the NOX emission portion, that component of whether you're in a densely developed tract or a not so densely, less than 10,000 people per square mile, there is a very easy way to calculate that. If you go to the census website, there is simply a little map where you plug in your address, and you can easily determine what the population density is for that address.

MS. KEECH: Okay.

MR. EMMART: So that's something that we will provide in a spreadsheet as an easy tool that you can simply identify what type of census tract you're in. It's not so easy with the loads, and that's why we're trying to do a state-wide

average.

MS. KEECH: I guess maybe if I ask my question more pointedly, you can give me a more useful answer.

What I heard was that the further you are away from the Bay, the less your credits are worth because of those delivery factors, and yet the further you are away from the Bay doesn't seem to matter in terms of your post-development load.

MR. RHODERICK: All right. I'm going to try to take that front end about the delivery load, and now talking switching sides, on the seller side, in order to generate a credit, the tool we're using is based on delivered loads.

So, you're right, as an example I can give you, if you were a farm -- I'm going to have to use my farm background here -- on a farm in Washington County, based on a credit generated here, the delivered load, it would be times 0.6 by the time it gets delivered to the Bay. So a pound here is probably a third of a pound by the

time it gets to the Bay, as an example.

Now, that is on the generation side, and as Paul said, on the buyer side, in order to determine for the buyer, we're using the state-wide average.

MR. EMMART: Yes, please.

MS. MOORE: My question is for my colleague, John.

THE REPORTER: Name, please.

MS. MOORE: I am Shannon Moore from Frederick County Government, and my question goes to the issue of availability and costs for verified offsets.

I was just wondering, the last time you and I had talked, you weren't sure that there would be trades available within the Potomac basin because of the preponderance, I guess, of animal agriculture. I'm wondering if you're seeing any trades available in our region, if there's a trading price, or if you're seeing potential for those in the future?

MR. RHODERICK: Of a segway, okay. Let me try to give you three slides real quick because this is a follow-up to that question.

There has been a lot of questions raised about potential offsets. So as was mentioned -- and again, this is talking from the ag side -- over the last year-and-a-half, we have had the ability to go out and inventory some of our farms to get an estimate of credit potential.

So if you can go to the next slide.

MR. EMMART: John, if you could just let everybody know that these slides are not in their packet.

MR. RHODERICK: These are not in the packet, and the reason I did not put them there, these are preliminary slides. I am still trying to fill in some of this information, but I got a feeling we ran out of time.

So what I'm showing you here very quickly is, at this point, we've inventoried about 103 farms, over 1200 fields, because that's how we

do it. It represents about 23,000 acres out of 1.2 million acres in Maryland, so these are very preliminary numbers. It's less than 2 percent of the acreages.

Overall, what I'm pointing to -- and I'm going to use some bar graphs that's on the back end here -- on an average credit per farm, what we're seeing -- and again, as you see, it varies based on regions of the state. So I'll do this in bar graphs. It's easier. Go ahead to the next one.

MS. MOORE: What do SL&T stand for?

MR. RHODERICK: Ahh, structural ... SLT, right here.

MS. MOORE: Okay.

MR. RHODERICK: All right. Next slide. I'll save that, Shannon.

So, basically, this is what it looks like, when you look at on a farm basis: Average-wise, about 200 nitrogen credits per farm, a little less than 20 phosphorus credits

per farm. These are all unverified.

Western Maryland, you know, your farms are averaging a little over maybe 300, depending on the types of farms. Elmer, thank you very much. He's the majority.

Again, for nitrogen, you can see on the Eastern Shore, they're generating on a per farm basis much greater credits, but again, take the Eastern Shore, bigger farms, bigger acreage. So...

MS. KEECH: Could you just say a little bit about what assumptions --

MR. RHODERICK: A lot.

MS. KEECH: Yeah, I know that, but just give us --

MR. RHODERICK: We're taking a lot of liberties with this and --

MS. KEECH: -- give us a little bit of an idea about what has to be done on a farm in order to generate this level of credit.

MR. RHODERICK: All right. This goes

to -- and again, I'm not going to go through the whole trading policy stance, but it requires to go on a farm -- and we've got people in the room you can talk to; I suggest you talk to Ginger and to Elmer, who are right here, after the meeting -- but you go out on a farm, you do a walking inventory, pull the man's nutrient management plans, conservation plan, all the information you can to ascertain his nutrient inputs on the farm, his nutrient exports, his conservation practices; and utilizing that, that's how we determine if he's met a baseline.

We have in this tool from the Bay Model each of the 58 segments in Maryland. In the Bay Model, we have the absolute load on a per acre basis for ag, as well as for urban, as well as for other entities.

So we compare a farm to that baseline, and if he's met the baseline, then we talk about what he could potentially do additional to generate credits. So that's what this is

representing, these farms that we know have met the baseline, looking at possibilities to generate additional credits as offsets. Okay?

MS. KEECH: And so would you consider this a conservative estimate in terms of --

MR. RHODERICK: This is all unverified information.

MS. KEECH: Okay.

MR. RHODERICK: So again, this is just very preliminary polling, some people who have been out there doing inventories. We have not looked at the data. We're getting from them some preliminary information.

MS. KEECH: Thanks.

MR. RHODERICK: So anyway, this gives you an idea of where in the areas there is potential, and go to the last slide real quick.

This gives you, as you say, what those credits consist of, and as you see on most of the farms, that as we go out and inventory, a lot of these farms have met baseline already. As was

eluded to, Maryland is farther ahead than some other states. So the farms demonstrate they can meet baseline which means they have a lot of what we call "existing practices" that are below baseline that could potentially be credits.

So that 80 percent of what we see out there, they've already got sufficient extra practices that could potentially be credits; and when you break those down into existing versus new practices, you see what type of practices they are; and the majority, 80 percent of them across the board, whether it's new or existing, are what we call "annual practices," such as cover crops, conservation tillage... Help me out, Elmer. What else?

MR. WEIBLEY: That's it.

MR. RHODERICK: Okay.

MR. WEIBLEY: Conservation, crop rotation.

MR. RHODERICK: Okay. Versus structural practices, and as you heard the policy here,

the policy would point to the fact that we need permanent practices. Well, if you look at this scape, those would be considered structural or land conversion. So there is a small segment of the overall offsets in ag that would be considered permanent.

Does that give you enough information?

MS. MOORE: Well, I was looking at your numbers for Frederick County, and you have one farm --

MR. RHODERICK: Yeah.

MS. MOORE: -- with ag credit potential in the --

MR. RHODERICK: Again, so I was discounting information in that consideration, one farm representing less than one-tenth of one (1) percent.

MS. MOORE: Does that mean that you have only looked at one farm so far?

MR. RHODERICK: Yep, we have only looked at one farm, so I wouldn't draw a lot

of conclusions.

MS. MOORE: Okay.

MR. RHODERICK: If you go back, real quickly, two slides --

MS. MOORE: Now, do they have credits that are on the market now, or is it --

MR. RHODERICK: No.

MS. MOORE: Okay.

MR. RHODERICK: These are all unverified. They have not come in for verification. The only two counties that have really done extensive work is Howard and Washington at this point, so draw your conclusions.

MR. COSTELLO: John, can I just add --

MR. RHODERICK: Sure.

MR. COSTELLO: -- add a little bit more as well, is that, you know, one of the things too, if you're looking at these numbers now, and particularly as it relates to capacity, this -- we're not sure what's going to happen to the whole trading system because there hasn't been trading

in this state; and once a regulation is in place, we believe that, obviously, it will drive trading because they will -- it will, in a sense, monatize and generate a market. It will really reinforce the market.

So, conceivably, capacity, the capacity we estimate now will be considerably less than what actual capacity is, once there is a market generating greater degrees of interest, greater degrees of compliance.

So, conceivably, once you create a stream, a monetary stream for farmers to convert more land, whether it's to pasture, to tree farm, to whatever, there are a range of practices that are likely to be taken up if farmers and the agricultural community see an opportunity here to generate more credits and, in turn, generate more income.

So, I mean, that's one of the things that -- and I know MDP -- I don't know if MDP has talked about it yet, but they are doing --

they are working with John and others to come up with sort of a --

MR. RHODERICK: Capacity.

MR. COSTELLO: -- a capacity analysis or inventory, given where we are today; but, of course, we believe that that will grow considerably once the market kicks in and once people realize they can make money by generating more and more credits, both on the ag side, as well as the urban side.

MR. DELL: Have you considered the fact that it could generate so much economic impact that you could basically do away with farming in the state of Maryland?

MR. RHODERICK: No. There are controls on the program as to what -- there are controls on the program. One of the premises of the program is you just can't take a farm and convert the whole thing to woods. So it's to maintain farming as a viable institution in the state.

MR. EMMART: And also, if I could

add another thing, one of the ways that we're calculating the post-development load, which is significant, is that if it's an agricultural field, let's say, or, you know, a crop and it's converted to development of some sort, that jump down in the load that occurs is not a credit to any developer.

That essentially is a benefit, of course, to the Bay -- because it is, because the load decreases -- but it is not an incentive for a developer to, for instance, gain more credit, somehow get a windfall, and then go and sell that credit for even more conversion of ag land to develop. So that's what we were considering in a way as a margin of safety.

MR. COSTELLO: And just one thing I would add, that purely from an economic standpoint as it relates to the market, agriculture, if you look at commodity prices over the last five or six years, and you consider, continue to look at global growth and commodity prices, you know, the

market will play out.

I think what you will find, not only are we putting in place safeguards to protect a very vital industry that's likely to see considerable monetary growth, just as from a commodity perspective, but the market will obviously play out in a way that's likely to protect ag as well, aside from these safeguards we're putting in place.

So it will be interesting to see how the market plays out. It's likely to drive down overall costs, as in terms of Bay restoration costs or pollution reduction costs, and it's likely also to play out in terms of how we generate a nutrient trading market in a very positive way as an industry.

MR. EMMART: Further questions? Yes, sir.

MR. WEIBLEY: Yeah, Elmer Weibley with the Washington County SCD.

It seems that a lot of stock is being

1 put in the ability of the ag community to generate
2 these credits potentially through the Maryland
3 Nutrient Trading Program. So with that in mind
4 and having Ginger, particularly -- sitting beside
5 us -- run the analysis on 28 farms in Washington
6 County, you know, and John's spreadsheets and
7 graphs really demonstrate the truth of the
8 matter.
9 The truth of the matter is that the
10 opportunities that I think you all are expecting
11 state-wide from agriculture are unrealistic.
12 For example, you have an example, Example No. 2
13 on page 9 of 10, a developer doing 50 household
14 units, etc., and he needs to produce 117 or offset
15 117 pounds of nitrogen.
16 We took that scenario, the number 117,
17 ran it through, looked at several farms in
18 Washington County, and said what would we have
19 to do -- and it's one of those ones that's on
20 the spreadsheet here -- with that specific
21 farm and said, okay, if we wanted to generate

1 some credits on this farm, what additional
2 practices would we need to do, based on what
3 your paper lays out, but it has to be permanent
4 and it has to be verifiable.
5 And for agriculture, the only opportunity
6 you have for that is a land conversion practice,
7 because the annual practices aren't permanent;
8 the structural practices are based upon a farm
9 operation operating the way it is, and obviously,
10 that's not permanent because ownership changes,
11 farm operations change.
12 So at least from where we sit, we see
13 it as only land conversion practices. So we took
14 what we thought would be the most beneficial to
15 generate credits, which would be taking cropland
16 and converting it to forest. We did that on three
17 different farms to look at how many pounds of
18 nitrogen would be created or saved or offset for
19 every acre of trees that's created on an acre
20 of cropland. It ranged from a credit of seven
21 offsets down to zero.

1 We did that on three farms. We used
2 various different acreages. We took entire
3 fields. We just did rough area and forest
4 buffers. So with that in mind, we got an
5 average of 0.52 pounds of nitrogen being saved
6 for the creation of an acre of forest on an
7 acre of cropland.
8 So in your example of 117 credits, you
9 would have to convert 222 acres of cropland into
10 permanent forest, forever, in order to offset this
11 50 acre -- or 50-lot subdivision. Then taking the
12 economics, we looked at last summer -- this past
13 spring's records and what it cost to plant trees
14 on an acre. It's $2100 per acre, multiply it by
15 222 acres, $466,000 just to establish the trees.
16 Then we begin to talk about it has to
17 be permanent for your policy. So you have to
18 purchase an easement. Land goes from 6 to $7,000
19 per acre. Certainly, you wouldn't purchase the
20 land fee simple, so $5,000 per acre. You do
21 the math. Then you're talking about verifiable,

1 over the long term and maintenance, and if you
2 have any experience in creating forest, it doesn't
3 happen overnight. So there is so many questions
4 with that.
5 So we came down, and just ignoring
6 legal fees, ignoring survey costs to create the
7 easements, we came up with two million dollars
8 would be the cost for 117 credits in your Scenario
9 No. 2. Fifty lots, that's $40,000 added to the
10 cost of those homes. So...
11 MR. UMLING: And if I may, I would like
12 to add something to what you're saying.
13 There is another factor that you need
14 to look at that supports what he is saying too,
15 and that's the overlapping impact of other
16 programs that are out there already causing
17 what he's talking about, and that's the Forest
18 Conservation Program, which Washington County
19 is under, even though Allegany County is not.
20 We were seeing that in Charles Town
21 where people were coming out and buying up

farms and converting them to forest as forest mitigation, so that they could find the cheap land to do that; and this is only going to cause the same thing to expedite when you start overlapping land conversion as a way to get trading credits, and you're going to lose farm land, because once it's forested, they're not going to bring it back.

MR. COSTELLO: Now, can I just say something about aggregators, and I don't think John misspoke, but when we talk about permanency, we're really talking about in perpetuity.

So, for instance, a developer, if a developer developed a development, it's going to have a load as long as the development exists or technology allows it to zero out its load. Right? So there is going to have to be an offset for that load of this new development.

Now, what we believe could happen or is likely to happen as this policy develops, exactly for the reason that you've pointed out,

annual practices -- and if you look at the number, the numbers that John put up there, in terms of capacity -- we believe there is capacity, considerable capacity, in annual practices.

The thing you have to put in place there -- and that's why we believe aggregators will step forward -- is that as long as there is assurance that you have enough, quite frankly, reserved capacity of annual practices -- say, you are an aggregator, so you've bought up credits, you've bought up, you know, basically practices across the state that you can sell to a developer and ensure that at every year that that development nutrient load is offset, then it will work. So that even if that farm, even if one farm didn't maintain cover crops on whatever it sold, you know, other farms have.

So you can see how aggregators could actually play out, and this is -- you know, this is done for other -- you know, obviously trading, that aggregators ultimately become a bit of a

new crop, a new industry, that they are out there buying credits.

Now, they have to have insurance bonding. They have to have a surety. They will have to buy more credits than they actually have to give up to keep reserved to ensure that the load reductions are in place; but we believe, overall, economically again, those annual credits are much less costly. So it's likely to play out in a way, again, that would ultimately drive down overall costs for pollution reduction, and it's likely to be a viable market.

The other thing that you see in the graphs is that, you know, conceivably, if the policy is put in place, it becomes watershed, Bay watershed wide which opens up the market and potential capacity to buy offsets elsewhere out of state, if you've got the right kind of development, if the scenarios play out or at least the framing we have in place.

So, again, we think the market obviously

is something that will develop and might develop, as many markets do, very cleverly. People will figure out that they have got -- they're going to obviously look to buy the cheapest -- right? -- look to generate credits at least expense, but they have to be, you know, assured and, quite frankly, bonded credits or offsets; but that's how we think it is likely to play out and address some of the issues that you've raised.

MR. WEIBLEY: Excellent. That makes a lot of sense.

MR. EMMART: Question, sir?

MR. MOORE: Keith Moore with Frederick, Seibert & Associates and the Home Builders Association, Washington County.

Just following up with Elmer's question -- I mean, you've obviously thought pretty hard enough -- is what do you expect a pound of nitrogen to be going for?

MR. EMMART: This calls for you, John. I defer to the panel.

MR. RHODERICK: All right. I can take it a different tack. I mean, it's all speculative at this time, but obviously, as Elmer said, if you have to conclude the whole land cost, well, there is another scenario that suggests there is a bunch of ag reserve farms out there already. They've already got perpetual easements on them. So, potentially, if you could work with those type of individuals, there is a cost deferment built into that calculation right there.

MR. MOORE: Thank you.

MR. RHODERICK: So you can play it any which way.

MR. EMMART: In the back, please.

MS. KEECH: Just to follow up on this. Could you talk a little bit about the sources of credits from other than agricultural that you're -- that you're envisioning playing an important role in the issue?

MR. SAKAI: You know, we don't expect all offsets to come from the ag community, and we

certainly don't -- oh, well, we don't expect and we certainly hope that everything in development that contributes as nitrogen, well, it has to be offset by permanent land conversion taking place on a farm field, I mean, that -- that's just not a good outcome.

You saw on one of the slides a fee in lieu. There is a lot of opportunity for offsets. We expect local governments to be somewhat involved in this discussion, and it's possible there are some municipalities and counties that want to start -- you know, they have existing stormwater mitigation funds that could be easily structured to provide a source of funding for additional implementation, stormwater management practices, but they tend to be very expensive.

So whether the -- you know, if you let this be market-based, I think we're saying it's going to be hard for, at least initially, folks that compete with what ends up in the ag trading marketplace because it will be relatively low

cost, but septic upgrades, wastewater treatment plant upgrades, you know, upgrades in bioneers, there is a stormwater management. You know, we expect there to be developed a third leg of this three-legged stool in trading when we put some of the rules in the game about urban practices in place; and, you know, ideally, there is a wealth of opportunity.

You know, we haven't come close to doing 100 percent of what we can do to improve water quality either locally or in the Bay. So there is a lot of opportunity, and we think that it will come from a variety of different sources.

MR. TASSONE: And to add to that, we are trying to put together information, such as John has shown here, which is, you know, as close to ground -- the ground level information as possible, along with the more generalized gross scale information, like perhaps some information we can get from the Bay Watershed Model, and bring the two things together to come up with

some sort of numbers that relate to potential offset supply that we can look at on a statewide and a smaller basis. So we're in the process of putting that information together, and we hope to have something together to consider internally this week and to share shortly thereafter.

MR. EMMART: Yes, ma'am, in the back, please.

MS. PATTERSON: Hi, I'm Angie Patterson with Allegany County. I have two questions.

One is how is this supposed to be enforced and kept track of? Like when Allegany County is issuing a permit for a development, who says you will need to also do an offset?

MR. SAKAI: Well, let me answer that question before you get to your second question.

MS. PATTERSON: Yep.

MR. SAKAI: On our policy framework, we contemplated or are proposing to implement this through a state discharge permit. This could be a local program since locals are the

ones that generally issue bringing permits in development approvals, but we're contemplating this being part of a development -- of a discharge permit scenario. The requirement and obligation would be on the department to provide all the verification that's required, the enforcement of the permit, etc., etc.

That being said, I don't relish the idea of having to be a permitting authority for three or four thousand additional new permits in the State of Maryland and having to inspect the 10 or 15 additional practices that are associated with that new development as a trader offset.

What we're hoping for, or at least what I'm hoping for, is that there will be a role for the folks that bring trades to the marketplace to provide the level of certification and a surety to that process. There may be some oversight and auditing associated with that. If there is an integrator involved, the requirement would be on the integrator to include in the price of his

trade his ability to verify the cert.

So that at some point along the way, if we're counting a practice against a development offset, somebody has looked at this and said, yes, this exists, it's in the ground, everybody has confidence in it, it will be maintained at the time. We're not, at this point, looking at this as being a local -- as to the approval process, but I think we're looking for input on that.

MS. PATTERSON: Thanks.

My second question has to do with the one side where you talked about the stormwater loads, it said that 50 percent of the load would be -- at the bottom of page 5, the third slide on page 5 of our handout -- stormwater loading factors.

There is a little superscript there, and then it says "will be reduced by 50 percent for ESD to the MEP." I am trying to understand, if doing ESD, if you've met ESD, then ... and "met what's in good condition" --

MR. SAKAI: Right.

MS. PATTERSON: -- so why do you only get a 50 percent credit for that?

MR. SAKAI: Well, that's a -- I mean, that's a really good question and -- but I don't have a really good answer, unfortunately, for you. The 50 percent is what the Bay Program Model assigns as a stock efficiency. It's kind of the place-holder for all the different practices.

We look at -- they look at environmental site design, as defined in Maryland Stormwater Management regulations, and globally, we get credit for half of the nitrogen level. It's higher levels of phosphorus and higher levels of sediment reduction, but for nitrogen, it's only half.

There is kind of an ongoing discussion with the Urban Stormwater Management Group in particular about the 50 percent. There are some that would argue that it's as high as 75, 80 percent. There is also another discussion about

the fate of nitrogen going into groundwater. So for now, 50 percent is what the Bay Program gives Maryland for new development that has ESD to the MEP.

MS. PATTERSON: Well, okay. And then actually, I have --

MR. SAKAI: So I take it from your comment that you think that's low.

MS. PATTERSON: Well, I mean, I guess, the way the --

MR. SAKAI: What's a good condition to be a better number?

MS. PATTERSON: -- the way the manual is -- proposes, that if you do ESD, that you have essentially made the site equivalent to what's in good condition.

MR. SAKAI: Yeah, but --

MS. PATTERSON: So how can you still have a net increase?

MR. SAKAI: The difference is that they -- you know, there is -- if you look at

an individual -- we can get very technical here, but, I mean, the short answer is, if you look at individual practices, some have very high efficiencies and some have very low efficiencies, and without being able to predict exactly overall what a development is going to do, I don't know how they got to the 50 percent number, but it was based on some analysis that looked at, you know, what we know about different types of infiltration practices, and I think it's probably a conservative number.

I mean, it's not likely to go lower. It's more likely to go higher over time; but, you know, we think -- you know, what's a good condition, it was in good condition, and, you know, there is a good potential for you to actually be getting better pollution efficiency. So it's a conservative number, I agree.

MS. PATTERSON: Okay. And then just following up on that, I also was thinking about this idea that you have to offset the full

post-development load, not the post-development minus the what's in good condition. So I'm trying to understand how that's justified.

MR. SAKAI: Well, and I think it's clear that, I mean, that's a -- you know, whether you count a developer that goes from maybe 12 pounds net urban load to have it to 6, woods -- and, you know, have a nominal nitrogen load rate of 3, why not count from 3.

As a matter of policy, we're presenting this as a factor of safety, associated with what we don't know about how all this implementation is going to work, but again, it's another level of conservative estimate that provides that difference as a margin of safety.

MS. PATTERSON: Uh-huh.

MR. EMMART: And the same is also true for septics, that if the BAT system is used, there is still a discharge of almost 5 pounds. That 5 pounds would have to be offset entirely, even if the BAT is used.

MS. PATTERSON: Right.

MR. EMMART: So it's very strict in one sense.

MS. PATTERSON: Okay. I mean, I guess, I'm sure you can sense that we think being in Allegany and being from the western portion of the state, we don't see growth ... at all. So, you know, our developers have a hard time coming up with enough money to complete a project. So that's -- that's where -- where our questions are coming from.

MR. EMMART: Please, go ahead. Could you say who you are, please.

MR. DYJAK: Sure. Brad Dyjak of the Town of Myersville. Three questions, if I may.

The first one kind of ducktails off of what Angie had just mentioned. This is more relating to how this plan will kind of coordinate with the plan of Maryland -- and specifically, I guess, Joe, maybe this is a good question for you -- but with a designated place or designated

areas, I know that, you know, the examples that go through here, they certainly address, you know, the revitalization areas; but I guess I'm concerned about the existing community areas that may be designated within a PFA and future growth areas also designated within the PFA or just outside of PFA within the municipal growth boundaries or community growth boundaries.

You know, to what extent will this be compatible with those aims of again trying to focus the, you know, growth within the PFA? I know there is, obviously, the density example that's given here; but, you know, I guess my concern is, is this going to be too much of a disincentive for, you know, developers?

If it's not a revitalization area, but it's already within a municipality or a community growth area, you know, to what extent are they going to look at this and say, well, this is, you know, way too much. We're already having to meet the woods in good condition of the

ESD to the MEP, and now we have to go above this.

What -- you know, and this is making the assumption that, especially in our community, you know, there is adequate sewer capacity. We have a, you know, functioning wastewater treatment plant with plenty, you know, actually plenty of capacity. To what extent, you know, will that hinder development potentially?

MR. TASSONE: Well, our expectation is that it should be very mutually reinforcing. A couple of things about the draft policy.

First, you might have noticed that it specified that development in targeted growth and revitalization areas would be free to seek their offsets anywhere in the state, not be restricted, in terms of sellers, as to where they are.

MR. DYJAK: I think I agree with that. I think that's a good policy.

MR. TASSONE: But not only is that an encouraging or mutually reinforcing thing, but so are a couple of other aspects of the policy.

A very important one of which is the fact that if you're served -- if you're doing a development in an area served by a treatment plant with capacity, you don't have to offset the wastewater load from the development.

But a second thing that's not minor at all is the difference in the magnitude of the offset loads that's inherent in the way the calculations are done by the spreadsheet, relative to how much is your offset going to be calculated, depending on whether it's a -- you know, a -- what we might call a smart growth development versus a more dispersed, diffuse form of development. So those numbers are going to be vastly different.

So we think that those three aspects, the potential for where you get your offsets from, the minimization of the offset requirement by virtue of being in a place served by a treatment plant with capacity, and the inherently smaller numbers are going to really add up to a significant incentive for the kind of development

you're talking about.

MR. COSTELLO: I would just add a little bit to what Joe said. I remind you also about the redevelopment opportunity there is no offset requirement for, at least on nonpoint or stormwater.

MR. TASSONE: Right. And that's very important. I'm sorry I missed that.

MR. COSTELLO: And so if you look at the scenarios -- and that's why maybe one of the things, once the spreadsheet is up, you can play scenarios -- I mean, they are clearly, from developers we've already spoken to, they understand for communities, existing communities, whether it's Cumberland or Hagerstown or wherever, you know, there is going to be a considerable comparative advantage for developing within those communities, and remember that what's driving this policy is a requirement.

You know, there is a federal requirement. The requirements are likely only to become more

stringent until the Bay is restored, is that we are required to put in place a policy to offset growth -- I mean, to offset pollution from new development. Correct?

So, I mean, obviously, we think the one that we're putting forward here today is, quite frankly, the most cost effective and, conceivably, so cost effective that it will likely drive down the overall cost of even attaining our Bay restoration goals, aside from generating, conceivably, new jobs and, obviously, you know, quite frankly, some new industry, as it relates to trading and verification and insurance and all that, that goes along with that kind of industry.

So, I mean, many people in the private sector, quite frankly, would see this as a very creative instrument, a market, in large part, a market-driven instrument that we are looking to possibly use here.

Otherwise, if this doesn't work, then

conceivably, the EPA, a few years down the road, if we haven't made progress again -- and again, we're making the most progress of any state -- if we haven't made sufficient progress, they might come back and start to look at mandates, as opposed to these voluntary programs that are graduating into, you know, more requirements.

But here again is a program that's really trying to tap the market to drive not only progress but obviously to add these other benefits that, conceivably, we've talked about. So that's just to provide a little more of that kind of context.

MR. TASSONE: You had a second part to your question?

MR. DYJAK: I did, and it kind of follows up along those lines on sort of the implementation, but that is again with the trading scheme. I guess two questions on that.

The first is, I guess, you know, who do you envision -- I guess you mentioned

private sector. I mean, are there environmental organizations that would be taking the lead here? I guess, has, you know, MDE, MDP, and MDA, I guess, scouted out any potential aggregators or those who would be interested in that? I guess -- and I'm trying to, I guess, see the role there.

And I guess to that end, I'm also looking at it, you know, from a farmer's perspective. You know, if I'm going to go and do all the -- you know, the two million dollars potentially of investment, you know, I need to know, have an assurance that, you know, I will have a buyer on the other end and, obviously, you know, to front that money. I guess I'm just trying to assure that there is sort of that driven market.

And then I guess the final point to that I would make is that I think, you know -- I think, you know, you see a comedies of scale if you allow, you know, interbasin and intercounty trading of credits, and I would highly encourage that to be considered; and I think going to

something Dave mentioned earlier, I think that's even maybe interstate, if you can work out agreements with, you know, surrounding states.

I just think, you know, especially out in Western Maryland and the Eastern Shore, I mean, you know, you're so close and they're so impacted by adjacent states that, you know, in many cases, you know, they're the ones that are kind of causing that degradation.

Would it not make sense to be able to work out credits and trading with them? I just don't see the need -- you know, I think it actually impedes the process if we, you know, really focus on limiting our scope for the trade.

MR. RHODERICK: All right. I'll go, I'll start on the back end.

Yes, the EPA, we're actually part of an interstate consortium that's looking at the potential for interstate trading and what the rules -- because as you said, different base lines, different states, delivery ratios, etc.

So we're still looking at the potential.

The first part about aggregators, yes, most of -- at least from the ag sector, most of these trades are not going to be a farmer with a municipality. These are going to be contracts with an aggregator that will have a subcontract with the farmers. The aggregator will take on the risks and the assurance with the municipality, so yeah. Elmer. Yes? No?

MR. WEIBLEY: You don't want to hear what I have to say.

(Laughter)

MR. RHODERICK: We'll leave it at yes.

MR. COSTELLO: You know, one thing I would just add, it's like any market. I mean, obviously, this will be -- this will be new. So the expectation is this will take some time to develop, and as it develops, obviously, you will get more and more people into it, whether it's aggregators or brokers, even farmers.

And quite frankly, developers who are

1 probably -- in an urban setting are probably going
2 to try to not only take care of all of their load,
3 but conceivably, if there is a load to be had that
4 they can address in neighboring parcels, they may
5 even try to do that and generate credits that
6 they, in turn, either use or sell.
7 So, I mean, conceivably, if the market
8 plays out, and if we continue to be as creative as
9 we have been at making money, I mean, conceivably,
10 a lot is going to happen here that we really can't
11 project; and so it's hard to say now because there
12 haven't been trades. There aren't -- there really
13 isn't a lot going on out there.
14 But again, the expectation is, if you've
15 got something like a regulation, which is what
16 we're talking about here, this has happened
17 elsewhere, where you put a regulation, it actually
18 juices the market and induces the market, and
19 that's the way we think this is likely to play
20 out.
21 MR. BALDWIN: Okay. I just wanted to

1 say quickly, to the question about the plan of
2 Maryland and this policy at MDP -- I'm sorry --
3 I am Dan Baldwin with MDP -- we've really wanted
4 a way to infuse the two, the plan of Maryland
5 and the TMDL, simply because the plan of Maryland
6 really gives local governments, especially through
7 the mapping exercise by identifying special areas,
8 you know, targeted growth and revitalization
9 areas, it allows local governments to really
10 say these are the places that we absolutely want
11 to see growth and we want to see the state focus
12 its efforts. This is a state effort to hook up
13 the two where a perfect partnership.
14 MR. EMMART: Sir, you had a question?
15 MR. DELL: Yeah. I'm Bruce Dell with the
16 City of Brunswick.
17 I guess the question I have, you know, at
18 this point, do you have a line of people out there
19 ready to become sellers? I seriously doubt that
20 they're out there waiting to do this.
21 And what's the time factor that you think

1 that that is going to take to get implemented,
2 and along with that is, when is this stuff going
3 to start coming down the pipe and be implemented
4 onto a developer on an existing project that's
5 already been approved and going through the
6 process?
7 The Stormwater Management grandfathered
8 certain projects from their new regulations.
9 Now, if that project is kind of going along,
10 and they're in the process of getting approvals
11 to a certain date getting reported, and then
12 they get hit with this offset, how is that going
13 to play out, and what was the thought process
14 with those types of projects?
15 MR. COSTELLO: Let me just mention
16 one thing and then maybe Jay can talk about
17 grandfathering.
18 But one thing, as it relates to sellers,
19 what we're likely to have first are buyers. If
20 you've got buyers, then you are going to have
21 sellers. Right? And really, what the regulation

1 will do is generate buyers because they're going
2 to be looking to buy the cheapest offset, right,
3 because to reduce their pollution load.
4 And now one of the things, as it relates
5 to fee in lieu, and I would throw this out,
6 because developers have started to ask that,
7 and they know that we don't like fee in lieu
8 because -- because often what has happened with
9 fee in lieu in the past is that the people haven't
10 taken the money and put the money into the, you
11 know, practices. They have actually used the
12 money elsewhere. They haven't used the money
13 appropriately.
14 Now, a possibility is a temporary fee
15 in lieu as the market starts to build, so that
16 you actually start to build capital, you start
17 to build demand; and at the same time, you're
18 likely to get -- if you've got demand, I guarantee
19 that probably you're going to start seeing
20 sellers, because, obviously, nobody wants to
21 put the investment in, if they don't think there

is demand out for their --

MR. DELL: Who would manage that pool of fee in lieu?

MR. COSTELLO: Pardon?

MR. DELL: Who would manage that pool of fee in lieu?

MR. COSTELLO: Well, the fee in lieu would likely be -- this is why we're really looking to talk to local jurisdictions. You know, it's conceivable that local jurisdictions or the state and local jurisdictions, but that's why these are the kinds of things that would -- we need to work out, and I don't know if Jay wants to talk a little bit about how grandfathering has been done in the past or...

MR. SAKAI: Well, you know, the one thing we learned going through stormwater management regulations was grandfathering is pretty important to everybody, and we missed it, and we have suffered the consequences. We did end up having to do this emergency regulation, and it was a

mess.

We were a little more thoughtful about how we did this than when we did the rules and setup of stormwater regulations. We were very sensitive about it when we had the discussion about Septic Bill 236, and I would expect -- well, I mean, I can tell you, this process will be no different. This regulation will be no different.

We're very much aware that for folks that have -- you know, it takes a long time to get the development pipeline, and we don't want to, you know, have somebody get to the very end and then figure out, well, you can't do it because you can't get your darn offset.

So I think there is going to be a good -- I can't tell you what grandfathered is going to look like. I can tell you that we are very, very focused on having something that makes a lot of sense. You know, we don't want to have grandfathering take forever, but I think there

is something that makes sense for everybody.

And I think I would very much like to get a little bit of input on that, about what your perspectives are. Locals may have a different perspective than the developing community, but that's certainly something for you to weigh in on.

MR. EMMART: Other questions? Please, you haven't asked one.

MS. PIPPEL: Julie Pippel, Washington County Government, and right now, I have at least 25 questions from staff members. So I'm going to rephrase this into maybe two considerations and ask whether these are possibilities.

The first item, I attended the "swap" presentation and I've also attended this presentation. I know and I understand that due to the time frame on this, you're not planning to address comments back that you receive, but have you considered posting the frequently asked questions -- because I've

seen repetitive questions on this -- on the web page that can be referenced back to? That would be a question of consideration and thought.

The other thing --

MR. EMMART: The answer is yes.

MS. PIPPEL: Yes?

MR. EMMART: Yes, we have considered it. We have considered that idea --

MS. PIPPEL: Considered.

MR. EMMART: -- although we haven't had time to post anything at this time --

MS. PIPPEL: Okay. But that's --

MR. EMMART: -- but it's a good idea. It's a very good suggestion.

MS. PIPPEL: -- the intention is if time allows.

The other is, as a county government staff, if we can consolidate our questions, because we haven't even talked to our Commissioner yet to get their questions yet. You know, we

haven't gotten feedback from the WIP team and the Potomac team as well, but if we can consolidate these questions, can we have a point of contact that either we can have, you know, a conference call with or an additional meeting -- and I'm not saying with all of you -- but to go through those questions that we would like answered in order to develop those structured comments about, you know, okay, we -- just using the example of going back to fee in lieu, as a county, we would suggest fee in lieu and we would suggest the structure of X-Y -- or A-B-C, X-Y-Z. Is that a possibility in this process?

MR. EMMART: I think so, yes.

MR. TASSONE: Yeah, it would make a lot of sense from everybody's standpoint.

MR. COSTELLO: What we would have to do is -- I mean, obviously, we expect to have a lot of meetings, these public meetings, but we certainly expect to have what we call ad hoc or side meetings. If it ever got to the point where

we -- I can't imagine we wouldn't get to the point where we couldn't have such meetings between now and...

MR. EMMART: Right, and we would also welcome very much the thoughtful responses.

MR. COSTELLO: Yeah.

MR. EMMART: You know, if you would develop questions and you wanted to discuss those, I would encourage all the panel members to join that, so that you can get a full response from all the agencies --

MR. COSTELLO: Yeah.

MR. EMMART: -- because you can see how many different points the policy touches, so it's quite -- it's quite broad; and yes, you know, if we can arrange it, we will.

MS. PIPPEL: Yeah, we --

MR. SAKAI: Alternatively, Julie, you can go to all five meetings and ask five questions. At each meeting, you can ask a question.

(Laughter)

MS. PIPPEL: That's my limit, five questions? All right.

MR. TASSONE: Twenty-five.

MS. PIPPEL: I'm just going to figure out how to just go "and, comma, but," and get them all in.

MR. EMMART: All right. Further questions or comments? Please.

MS. PATTERSON: I wonder, with a single-family residential subdivision, I'm wondering when the offset would be accounted for, like whenever a developer comes in for a plat approval or when a lot owner comes in for a building permit?

MR. SAKAI: I'm glad you asked that question because the threshold of implementation is a consideration here, and I don't think we touched upon it in the discussion; but, you know, if we used something, a framework similar to the general permit for construction, the NOI, which establishes a one-acre level of disturbance as a

minimum threshold by which you need to account for offsets, everything else beyond that would be, you know, kind of off the books.

You know, I don't -- I'm not anticipating this being implemented on each and every one. So right now, we were talking about one acre of disturbance which would take out most of the single-family development and allow it to kind of live in that 5,000, one acre, you know, area, but that's our thinking right now.

MS. PATTERSON: Okay.

MR. EMMART: Any other comments or questions for the panel? Elmer.

MR. WEIBLEY: Just to suggest to other counties that are represented here, you know, there is a lot of things that are going to go under this, but it is complicated, and it is going to have an effect, and you're going to be part of the development process, and somebody is going to say, hey, it's 100 credits.

You need to be preparing your county to

get there, and that's one of the reasons we've done all the assessments in Washington County that we have, because, you know, we don't have tons of new information today about what we might be able to do with the annual practices and how it could work, and that's very helpful.

But we had the opportunity to have a conversation with at least that many and certainly many more farmers about trading, and we've assessed a certain number of farms and found kind of what the temperature is on BMP implementation, as well as meeting the baseline and how the trading tool works, so that we're a little better prepared than you are, if you have no idea what's going on in your county. You don't have anybody perhaps that you talked to that has said to you, I would be interested in discussing the trade.

It depends on how much the trade is worth, it depends on what the final deal is, but you need to start thinking about in your county

how -- which landowners are you potentially going to be working with to trade, because when this thing comes and there is a -- you know, we get to the final rule-making process and you set your grandfathering up and you have a deadline, there will be a shorter period of time than you have now to get ready to make that happen, and you're going to need to set up some local partners to work with to make it happen.

So, for instance, in your stormwater management division, if you don't have a lot of contact with farmers who might have credits, you need to find out who those farmers are and what agency works with them regularly and start a dialogue and getting them educated about it.

So that's just kind of a suggestion for the other people represented in the room. It's time to get started on it.

MR. RHODERICK: And if I could add just one thing to what Elmer said here, as you see -- when I showed you that other slide -- Howard

County, that whole initiative in Howard County started from the county commissioners. They came to the conservation district and said we need to get a handle on the potential for offsets.

So that's why they got so far ahead, and they actually funded the district personnel to go out and do those assessments because they wanted to get at least some kind of front-end understanding that if it was ag sector they were going to work with, what was out there, because as you said, there is a multitude of other sectors that you need to look at as well.

MR. SAKAI: And I'm not supposed to be asking you questions, but you raised an interesting point.

MR. RHODERICK: That's good.

MR. SAKAI: I just wanted to follow up on it.

You know, I know that the districts tend to have that unique relationship where they're dealing with a developing community because

they're dealing with rules that sort of control anyway on each and every project. Then you're dealing with the ag community on the other side.

I mean, do you see the districts playing an important role here in facilitating the interaction within the development community and the ag community in terms of developing a trading capacity?

MR. WEIBLEY: Absolutely, they can, and I think that will be kind of individualized, based on the capacity of each conservation district, the willingness of the county to work with them, and kind of their reputation and relationship with the development community, and we feel we have a good relationship with both here.

So that's why we've kind of, you know, looked into this and are trying to get ahead of it a little bit, because to us, it seemed to be a natural -- we're not sure whether we'll be, you know, all quitting our jobs and become an aggregator. I'm not sure whether it's better

to be via verifier or be with an agriculture -- with you guys perhaps.

We're just not sure, but we know there is a natural role there, bring those partners together, and that's what we do. So we see it as being a -- if nothing else, it's going to be a vital service for the economic development in the towns to keep things moving.

MR. SAKAI: I'm glad to hear you say that.

MR. EMMART: Very good. Sir, I think you had a question in the back.

MR. DELL: Yeah, but I forgot what it was.

MR. EMMART: Oh, all right.

(Laughter)

MR. DELL: Oh, I know what it was.

MR. EMMART: Okay.

MR. DELL: It was the difference between dealing with the development pollutants and the air pollutants. Do you ever see that being

separated, or is it going to be a package deal of all the different types are all going to be added up and you're going to have a final number at the end?

And that air component is going to be -- sounds like based on population, regardless of where you are, and what the dynamic of the community might be, whether you're a commuting community or whether you have all your jobs -- you know, a higher percentage of jobs at the location and not as many -- I guess what I'm getting at, are BMPs going to come into play here?

MR. TASSONE: Well, they do in the calculation as it's currently framed, and it does have to do with where you are, because census of boundaries that contain population of density of 10,000 or more per square mile are specific places, not -- you know, they're not just scattered around randomly, and so they have a different rate because of the association of what goes on within them with respect to

travel times and BMT and NOX emissions and nitrogen deposition that results from it. So it's laid out to address the things you're talking about, but it's a very simplified view of it --

MR. DELL: Yeah.

MR. TASSONE: -- just, you know, aggregating things by census boundary and looking at 10,000 or more and everything else.

MR. DELL: Well, I mean, I am just -- I am thinking in a sense of Brunswick, we're about 6,000 people. The census tract could be a little bit bigger than that. We have a lot of commuter traffic that comes into the city because we are a MARC station. So I'm thinking we're going to get almost penalized and have the -- be less than 10,000 and have one, as opposed to the half, even though we are a commuter station that brings people in from two or three other states sometimes.

MR. TASSONE: That is a good point and observation, and I don't think we have a

ready-made way to address that at this point.

MR. EMMART: I was just going to say that if it's for commercial purposes though, there would not be an offset for NOX. There is no offset for commercial development. It's only for residential.

MR. DELL: Yeah, I understand that, but we are doing residential in there. We have a major subdivision that is in the process.

MR. EMMART: Okay. In the rear, please.

MR. UMLING: Yeah, in looking at that figure again, when you talk about 10,000 per square mile, I don't know if you're really reducing it on anything more than the City of Baltimore. I mean, you've got a huge range of density. I mean, Cumberland, we're at about 2700 people per square mile, and we're the most urban compact pattern with the shortest commuting trips that you could have in our area.

So I really think that, you know, if you look at suburban densities versus rural densities,

I don't know whether there is such a similarity between suburban densities which may range anywhere from 50 people per square mile up to a thousand or 1500. That's where you're going to see the most commuting traffic and the most vehicle miles traveled for the density of population that you have, and whether or not there needs to be something that reflects more rural environment.

I have no idea how this trends. I don't know that you folks have any definitive idea of how it trends either. So I think you basically said Baltimore gets a half; the rest of the state gets one. Is that correct or...

MR. TASSONE: No, it isn't just Baltimore because there are other census boundaries too.

MR. UMLING: But they're going to be right in there. I mean, you're talking Annapolis and right around Washington; correct?

MR. TASSONE: Well, yeah, they probably are concentrated more in central Maryland, but

we do have information to look at how things trend the way you were talking about, and if what you're doing is suggesting that we look more closely at that with respect to this, then that's a good suggestion.

MR. COSTELLO: I would just add one thing. I mean, I think it is a good suggestion and it's something we'll look at; but also bear in mind that the -- actually, the load related to BMT is really comparatively quite small, and it was really an attempt to at least capture it at that position to some degree, so a pound or a half a pound. Unless it's a really, really large development, it doesn't add up to all that many pounds to offset.

MR. UMLING: Then why not just ignore it?

MR. COSTELLO: Well, it's -- and again, we're trying to just justify -- if we're trying to account for all new, you know, pollution load, as it relates to expanded development and growth, we're trying to account for it again --

MR. UMLING: Well, I think a lot of --

MR. COSTELLO: -- but I understand what you're saying.

MR. UMLING: I think a lot of your targeted revitalization areas in the state are not going to make that threshold with that measure in it.

MR. COSTELLO: No, no, I think you're right. I think most existing communities outside of, say, the Fredericks and the -- you know, and obviously the DC suburbs and the Baltimore City and the Baltimore City suburbs, you're not going to have a lot of communities that are going to reach that -- you know, that greater than 10,000 per census tract threshold.

However, if you're again in a targeted revitalization area, which most of the existing communities are, and if it's redevelopment and you are on ENR, or even if you're on BNR, the overall load isn't going to be that high.

Again, comparatively, existing

communities are going to be quite advantaged compared to, you know, low density development areas; and that's why I would encourage you, once the spreadsheet is up, to start running the numbers, and then obviously developers in the area should run the numbers, so people get a sense, well, what does this really mean.

The one thing we don't know yet is actually the cost of offsetting the pound yet, because that's what the market ultimately will drive, but once it starts, people will have a sense. So play the numbers. It's not to say that any of this policy is set in stone. We're obviously trying to get feedback to come up with some final regulatory language, so we'll take it into account, but that's just some of the background.

MR. DELL: I understand wanting to have that becoming as part of this, but, you know, I'm looking maybe two or three years down the road, when the State comes back and says, okay, we're

1 going to start, you know, charging a fee for
2 your BMPs for everybody. You are going to get
3 a baseline number, and then anything over that,
4 we're going to start charging you a fee per mile
5 of travel above that baseline number.
6 And they have -- and they have these
7 emission stations out there, all set up, that
8 people can drive into and they can look at their
9 odometer and do all that, and then they're going
10 to get charged there, and then we're going to
11 charge them again here; and I know once you set
12 this number up, it isn't never going to come
13 back out of the equation.
14 MR. COSTELLO: Well, yeah, it's
15 conceivable. One thing, I think, that's
16 very conceivable, at some point maybe the
17 exhaust emissions, if we get to the point
18 where technology, you know, we've got electric
19 cars or electric trucks or, you know, whatever
20 they are, hydrogen, you know, fuel cells, I
21 mean, we may get to the point where air emissions

1 from motor vehicles disappear or almost entirely.
2 So that's -- that's the case to remove it from
3 the requirement.
4 I think what you are going to get on the
5 congestions -- where you're likely to see BMT is
6 on congestion. I think as you go forward, one of
7 the greater impacts on --
8 MR. DELL: That's what I am getting at --
9 Mr. COSTELLO: Right. One of the greater
10 impacts --
11 MR. DELL: -- because your concerns
12 aren't being --
13 MR. COSTELLO: No, no, no, I'm not
14 saying -- I'm not sure what's going to happen,
15 but I think what you will find out going forward,
16 people in denser communities are going to be
17 concerned more and more about congestion because
18 of its impact on quality of life, getting to
19 work, on commerce, holding up commerce, those
20 kinds of things, and that's -- and that's
21 obviously not as much of a pollution load issue

1 as it is a different issue.
2 But you're right, we're likely going to
3 have to confront congestion and have to deal with
4 it. How we mitigate that, other than, you know,
5 more walkability, more transit, those kinds of
6 things, remains to be seen.
7 MR. EMMART: I just want to do a quick
8 time check. It's about quarter to four, and this
9 meeting is scheduled to end at four, but if anyone
10 has any further comments, please let us know
11 either now, so we can address it, or by submitting
12 your comments to the email. Remember, it's
13 Accounting for Growth, AFG, at the Maryland --
14 MDE's website. Please.
15 MS. KEECH: I have another question
16 about trading. I don't have a good sense --
17 maybe I should -- about how cutting edge we are
18 in Maryland or if there are other states that
19 have, you know, well-established that kind of
20 track record in trading.
21 I'm particularly interested in what

1 experience there is out there in terms of what
2 level of oversight and regulation it takes to
3 ensure that fraud and corruption aren't making
4 their way into the system.
5 MR. RHODERICK: We have what's called
6 a Standing Nutrient Trading Advisory Group, work
7 group, and the whole premise behind that was a
8 broad consortium stakeholder, so we have a lot
9 of environmental communities. So accountability
10 verification in developing Maryland's trading
11 program were paramount.
12 There are currently within the program
13 three layers of verification that, in essence,
14 are done annually. So once a practice is
15 installed and you're part of a trade, you're
16 going to see, in essence, almost three layers
17 of people out there making sure it's being
18 maintained and it's functioning as intended;
19 and again, no trades count at this time until
20 the practice is installed.
21 MS. KEECH: Right, understood, and do

those -- do those councils -- what did you just call them, the --

AUDIENCE MEMBER: The advisory ag committee, was it?

MR. RHODERICK: The advisory committee.

MS. KEECH: Advisory? I mean, does that -- that advisory committee's name doesn't imply that it has regulatory authority. I mean, what happens to someone who has -- if -- I'm just --

MR. RHODERICK: There is a whole --

MS. KEECH: I feel like I'm sounding sort of like a parrot, but the vision, the spectrum that's been raised here is that once these regulations create this demand, that we're going to go from having done no trades to suddenly having trades be a very important part of very economically important and lucrative things --

MR. RHODERICK: Right.

MS. KEECH: -- and that seems like an invitation to -- to disaster.

MR. RHODERICK: I would suggest maybe the best thing -- obviously, we don't have time to go through all the information about the trading program and, as you say --

MS. KEECH: Sure. No, I understand.

MR. RHODERICK: -- the verification.

Mdnutrienttrading.org, you go on the website, the whole program is laid out there. You can see it. We have a process to decertify credits, should that fail. There is talking about within the contracts under the free market that there are monetary penalties, as well as what I call "make right" penalties.

So that as an aggregator or as a farmer, if for some reason that failed, you're going to get hit with a monetary damage, as well as you have an obligation to instantly go back on the market and find other credits to make right for the ones that are wrong as an example. Okay?

MS. KEECH: Yeah. Do other states have more advanced --

MR. RHODERICK: No.

MS. KEECH: -- longer running credit? No? So we're really unsure here.

MR. RHODERICK: As far as Maryland's program, as evaluated by EPA within the five states, we've got the highest rating of our trading program.

MS. KEECH: Thank you.

MR. SAKAI: I just wanted to add to that, and I agree with John, I mean, I have some familiarity with what is going on in Virginia and Pennsylvania; and, you know, by far, we have established the highest baseline, and we have a -- you know, John has worked through an awful lot of the process side of the trade. The question that I think you're getting to though is, you know, who is on the book and who is going to be held accountable and who is responsible.

To the extent that an offset or a trade is -- you know, presumably, there is a regulation that requires somebody to do something. Now,

under the framework we're talking about, it would be under the auspices of a discharge permit that we would issue. We would look upon the condition of the trade as an obligation to the permittee, like any other permittee that's out there, to comply with the terms of the permit, ensure that his discharge is fully offset and mitigated, and the consequences are pretty -- you know, pretty straightforward.

So we have -- you know, there would be a regulatory side of this. What we're hopeful, and what we have some confidence of right now, is that the framework on trading we have established has a very robust certification and guarantee, because, you know, everybody is looking at this with -- as you said, I mean, there is not a lot of -- we're going to go from a no trades happening to a lot of trades, and to basically get any clearer as a result of this policy, we have to make pretty sure that all of this is going in.

So I think we do have some confidence

that we thought this through. It will be captured in my mind in a regulatory framework document, either as permanent language as regulation or as policy. Right now, you can go on the websites and actually look at what is in place right now.

MS. KEECH: Thank you.

MR. EMMART: Okay. Just one more question, please, in the back.

MS. PATTERSON: I just wondered, are the offset requirements for Tier III different than everywhere else, or is that only relevant in terms of the time frame?

MR. SAKAI: It is the time frame.

MR. EMMART: It's the geographic area.

MR. TASSONE: Yeah, at this point, there is no difference.

MS. PATTERSON: Okay.

MR. TASSONE: The time frame is specified in SB 236 for Tier III offset requirements, but it's not specified there for everyplace else; but as Paul said, we're trying to address them in

unison, so that this isn't a fragmented process.

MS. PATTERSON: Right. So there won't be any difference between them?

MR. TASSONE: Not if things go as hoped.

MR. RHODERICK: Right.

MR. EMMART: All right. If there are no further questions, I just want to thank everyone for participating, and I really do hope that you will follow up with your comments in writing, and also if you're interested to coming to other meetings and posing different questions, please do. We have a list --

MR. RHODERICK: Especially Julie.

MR. EMMART: -- a limit of five for Julie only -- but we do have a list of all the upcoming presentations up through September that's on the MDE website, so please check it out. Thank you very much.

(Applause)

(Proceeding concluded at 3:46 p.m.)

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CERTIFICATION OF NOTARY

I, SHERYL L. GASPARIK, RPR, the officer before whom the foregoing proceeding was taken, do hereby certify:

That the above and foregoing contains a true and correct transcription of the proceedings, all of which were reported by me.

I certify that I am neither counsel for, related to, or employed by any of the parties to this action; and I further certify that I am in no way interested, financially or otherwise, in the outcome of this matter.

_____

SHERYL L. GASPARIK, RPR

Notary Public - State of Maryland

Commission Expires: December 13, 2012

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