

DEPARTMENT OF THE ENVIRONMENT MEETING
PHASE II WIP INFORMATIONAL MEETINGS

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The above meeting was held on
Monday, March 5th, 2012 at Maryland
Department of the Environment, 1800 Washington
Boulevard, Baltimore, Maryland, commencing at
2:00 p.m., and was reported by Dawn Hyde, a
notary public.

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1 ATTENDEES:

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3 MR. RICHARD ESKIN

4 Director of Science Services Administration

5 Maryland Department of the Environment

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7 MR. JOHN RHODERICK

8 Administrator

9 Maryland Department of Agriculture

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1 P R O C E E D I N G S

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3 MR. ESKIN: My name is Richard
4 Eskin. I'm the director of science services
5 here at the Maryland Department of the
6 Environment. I'm the department's lead on the
7 Watershed Implementation Plan.

8 The way things are going to go, I am
9 going to give a 15-, 20-minute presentation,
10 make sure everybody's on the same page, has
11 the basics. Then John Rhoderick from the
12 Maryland Department of Agriculture is going to
13 do the same thing essentially for the
14 agricultural side, 15, 20 minutes, and then
15 we'll be here to answer your questions until
16 four o'clock, you run out of questions, or we
17 all decide we've had enough.

18 So I will just get right into it.
19 Anybody have any questions? There are
20 restrooms. If you go out that back door and
21 go to your right, there are two restrooms or

1 three restrooms on your right.

2 Okay. I'd like to begin by
3 acknowledging with great appreciation the
4 assistance of the Town Creek Foundation and
5 the Hughes Agro-Ecology Center. Town Creek
6 provided funding to the Agro-Ecology Center
7 and they have done all the work in setting up
8 these meetings.

9 This is the last of this series. We
10 had a meeting out in Chestertown, we had a
11 videoconference that included four different
12 locations. I was actually present in College
13 Park but we videoed into Frostburg, the
14 College of Southern Maryland and Salisbury.
15 We had one in Hagerstown, and now this will be
16 the final meeting.

17 And so the Agro-Ecology Center set
18 all of that up for us and we probably couldn't
19 have had this level of outreach without their
20 assistance. I know we couldn't have had it.

21 Very quickly, let me go over some of

1 the basics for the TMDL. A TMDL is total
2 maximum daily load. It's the maximum number
3 of pollutants that can enter a water body and
4 still allow that water body to meet the water
5 quality standards. The water quality
6 standards are a regulation in COMAR in
7 Maryland. They have to be approved by EPA.
8 And basically they set goals for every water
9 body.

10 For the TMDL the two main goals that
11 we're concerned with are the dissolved oxygen
12 in the main part of the bay and water clarity
13 in the shallow parts where SAV is a critical
14 habitat component and they need clear water
15 with good light penetration to thrive.

16 There is three basic parts to the
17 TMDL: the waste load allocation, which is
18 critical, that is the sum of the loads from
19 all of the regulated sources. Any source that
20 needs a permit: municipal wastewater treatment
21 plant, storm water, CAFOs, all of those are

1 captured in the waste load allocation. The
2 load allocation is basically everything else
3 that is left, largely unregulated urban areas,
4 agriculture and atmospheric deposition.

5 The margin of safety in this case is
6 what we call implicit. We did not set aside
7 some specific amount of load for the margin of
8 safety; rather, we made a series of
9 conservative assumptions that are built right
10 into the model.

11 I am sure many of you know that
12 we've been working to restore the bay since
13 the first bay agreement in 1983. During most
14 of that period, all of that period, really,
15 it's been a voluntary approach and we have
16 made a lot of progress.

17 It's not fair to say it didn't work.
18 It wasn't enough but it did work. We did do a
19 lot of good stuff. We did get a lot of
20 programs up and running and we did at least
21 stabilize the loads. It would have been a lot

1 worse without those voluntary programs. But
2 right now we're moving into a greater level of
3 accountability, starting with the TMDL itself.

4 The TMDL is not directly enforceable
5 but permits that are enforceable need to be
6 consistent with the loads in the TMDL. So
7 immediately once the TMDL is completed, we're
8 moving more into a regulatory framework.

9 The Watershed Implementation Plans.
10 That's part of what EPA calls reasonable
11 assurance. Particularly for the load
12 allocation where you don't have compliance
13 with the permit, if you have a plan in place,
14 if that plan is public, if it's transparent,
15 then it will hold us accountable basically for
16 making sure that the plan gets implemented and
17 therefore that the loads are reduced.

18 If you have a plan, you want to
19 follow that plan, you need to track whether or
20 not you're doing what's required by the plan,
21 so that is very, very important.

1 For those of you who are from local
2 governments, I want to emphasize again how
3 important developing your tracking systems
4 are. We cannot credit you for things that you
5 have done that we're not aware of unless you
6 report them to us. We want to give you full
7 credit for everything that you've done to
8 avoid the consequences that I'll talk about in
9 a moment.

10 But if you don't report them to us,
11 you can't get credit for it. So you need some
12 system internally to track, you know, all of
13 the stream restorations you've done, the
14 conversions of dry ponds to wet ponds.
15 Whatever it is, that needs to be recorded.

16 On the agriculture side, John's
17 working directly with the conservationists
18 using conservation tracker to track that, but
19 for local governments, we need you guys
20 reporting to us. Then what we have also done
21 in the past, unfortunately, is we have had a

1 decade-long goal and then we haven't checked
2 on that periodically. We came to the end of
3 that decade and we found, well, we didn't make
4 satisfactory progress. That's not going to
5 happen this time.

6 So we set two-year limitation goals,
7 we've set milestones as part of that, and if
8 you're not meeting your milestones, that's
9 when we start talking about consequences.
10 Start talking about it. So what are those
11 consequences?

12 EPA sent us a letter December of
13 2009, five- or six-page letter detailing the
14 kinds of actions they could take for lack of
15 implementation. They can -- the permit
16 programs, for example, aren't delegated
17 programs. EPA still retains authority. EPA
18 can come back in, open a permit and say, well,
19 you may have built this plant to have two
20 million gallons of capacity but you're not
21 making progress anywhere else, we're going to

1 take away half that capacity. No more
2 hookups, no more growth to this wastewater
3 treatment plant.

4 Obviously, that's not something that
5 most counties will find desirable. That's one
6 of the types of consequences that could occur.
7 They could expand NPDES coverage for storm
8 water, for example. Not all counties have
9 storm water permits.

10 Well, under something called
11 residual designation, EPA could say, look,
12 County X, you are not making satisfactory
13 progress, we're going to have to impose a
14 storm water permit on you with all the
15 implications of additional staff, consequences
16 for enforcement, possible penalties. All of
17 that could happen.

18 So I think that what we all really
19 want to do is do our best to meet our
20 milestones and avoid even the possibility of
21 these consequences.

1 That said, I want you all to also
2 understand EPA is not anxious to impose
3 consequences. They don't want to do it but
4 they have assured us they will if it's
5 necessary. Enhanced oversight, federal
6 enforcement. All of those are other
7 possibilities.

8 So what has happened so far through
9 the process? One, because local governments
10 are so critical to the implementation, we set
11 up teams at the county scale, and what do I
12 mean by county scale? Well, the county scale
13 includes not only county government but
14 municipalities as well.

15 In Anne Arundel County, which was a
16 pilot jurisdiction, we worked with DOD, the
17 military, Fort Mead was there. We worked with
18 the airport because they're a large
19 landholder. We worked with SHA because they
20 also have a storm water permit.

21 So we want to involve everybody who

1 has a role to play in this. So we set up
2 those teams but then we -- okay, you have a
3 team, you have people together. This is kind
4 of complicated. How do we actually determine
5 what we want to do.

6 We developed a software tool called
7 MAST, Maryland Assessment and Scenario Tool.
8 You can think of that as a spreadsheet
9 designed to help you develop a local strategy.

10 It has all of the best management
11 practices. It has the relevant land uses.
12 Basically, you put in a percentage of the land
13 use to which you want to apply that best
14 management practice and it calculates your
15 load reduction. It's much, much better than a
16 spreadsheet and that spreadsheet's going to
17 take into account, for example, the relative
18 effect of this depending on your distance from
19 the bay. They don't take into account the
20 change in efficiencies when you add multiple
21 best management practices on the same land

1 area.

2 This does all of that. What it is
3 is a simulation of EPA's watershed model and
4 the reason that is important is that when we
5 submit our strategy, EPA runs them in this
6 watershed model and that's how they know if
7 they're okay or not. So if we don't have a
8 tool that does it quickly, we can't really
9 experiment and come out with the most
10 efficient strategy.

11 What happened before MAST is we
12 would develop a strategy, EPA would take a
13 week to get it back. Well, obviously you're
14 not going to do a lot of what-ifs with that.
15 But here, you get instant feedback. You can
16 do those what-ifs so you could tweak your
17 strategy much better.

18 EPA requires that we submit two-year
19 milestones statewide. That was done by
20 January 6th and we submitted the overall
21 strategies for the bay 2017 and 2025 on

1 January 27th. We are now in the review and
2 revision period which closes at the end of
3 this week: March 9th, comments close.

4 I would strongly recommend that
5 particularly counties of local government, but
6 everybody else as well, submit comments. To
7 some extent, submitting those comments holds
8 open the door to this process if you want the
9 make changes later.

10 So if you're a local government, you
11 say you want to go back once you get some
12 information from us in April, which I will
13 talk about more in a moment, you'll have that
14 door open to allow you to do that.

15 Why 2017 and 2025? 2017 is one of
16 those sort of interim milestones. That is
17 when EPA expects us to have completed 60
18 percent of the required implementation that we
19 will need to get to of the total
20 implementation. It's all supposed to be done
21 by 2025.

1 What is in the WIP? Four sections.
2 Section I has those specific strategies, 2017,
3 2025. Shows it by sector, shows it statewide
4 and it references an appendix which actually
5 has it by basin. Now, there are five basins
6 in Maryland. There is the Potomac, the
7 Patuxent, the Susquehanna, the Western Shore
8 and the Eastern Shore.

9 So as you start having a lot of
10 tables, that is why we put it into the
11 appendix because you have tables for each
12 basin times nitrogen, times phosphorus, times
13 sediment. So it's getting to be a pretty long
14 list of tables and we felt that that would
15 interfere with working your way through it.

16 We have the milestones in there
17 accounting for growth. They're all in
18 Section I. There was accounting for growth.
19 One of things that happened over the years in
20 the voluntary process is that as we upgraded
21 our waste treatment plants, as we put more

1 best management practices on farmland, as we
2 improved our storm water permits, we were
3 still growing.

4 So we had more septic systems, we
5 had more hookups to wastewater treatment
6 plants, we had -- we didn't get more
7 agriculture, but we had all these things that
8 were adding to the loads as we were reducing
9 the loads, and so we sort of neutralized the
10 progress. That's why we haven't made as much
11 progress as we hoped.

12 This time, new load that comes in
13 that's not in the TMDL, it needs to be offset
14 by some additional reductions over and above
15 what is in our strategies.

16 Talk a little bit about cost and
17 funding, and I'm sure that that is probably
18 the foremost question on your mind which we
19 will get to to some extent in the question and
20 answer. And we do -- I mean, there is a lot
21 of funding that is available.

1 The Bay Restoration Fund, which we
2 are sincerely hoping to at least double. The
3 trust fund, the 319 grants, the Chesapeake Bay
4 Implementation grants. There is local money
5 as well. It's not enough. We know that but
6 we don't have all the answers right now. So
7 that will be something that we will have to
8 move on together moving forward.

9 In Section II we talk about the
10 engagement that we've had through the various
11 meetings, all of -- how many meetings did you
12 have, John, forty-six?

13 MR. RHODERICK: Forty-six.

14 MR. ESKIN: Forty-six meetings they
15 held with the conservation districts for the
16 local team meetings as well as the regional
17 meetings that we had, meetings with DOD. And
18 in fact we also provided hands-on training for
19 the MAST tool here at our computer lab, and
20 the person who wrote the program was actually
21 the trainer and she understands the bay model

1 very well.

2 Section III is basically what we got
3 back from the local governments exactly as we
4 got them, which is posted there on the Web for
5 folks to see. And then finally we talk about
6 where we're going in a little bit.

7 I'm not going to go through all the
8 appendices but there is a lot of supporting
9 information, a lot of detail in support of
10 what's in the WIP.

11 We set milestones, we set time
12 frames, so pace is very important to keep up
13 with that, and I noted earlier 60 percent by
14 2017. We had originally been trying to get to
15 full implementation by 2025. That really
16 didn't seem feasible when we looked carefully
17 in detail about what needed to be done and how
18 much it would cost and how long to raise that
19 money.

20 So we went back to basically what
21 everybody else is doing, which is 60 percent

1 by 2017 and completion by 2025.

2 The ENR upgrades are proceeding at
3 pace which is really critical. That program
4 has been established since about 2003, so it's
5 up and moving and as we upgrade the largest
6 plants, we are making real progress. Getting
7 the remainder of the Bay Restoration Funds
8 will be critical to keep that pace going.

9 However, although we're doing really
10 well in wastewater treatment plants, we're
11 also doing well with agriculture, but we need
12 to have incremental progress across all of the
13 sectors. We can't sit back and say, well,
14 they're ahead of the game, we'll just take our
15 time because you need to ramp up now,
16 otherwise you won't have the program capacity
17 when you need it.

18 Scale. I mentioned the five basins.
19 We developed the strategy at the county scale.
20 We are going to continue working with counties
21 as this moves along. That level of

1 responsibility is critical. Watershed,
2 basins, they don't have budgets. They don't
3 have planners. It's the counties, the
4 governmental units that have these things that
5 are, you know, important to actually get the
6 implementation. So although we're reporting
7 to EPA at the basin level, we're going to
8 continue working locally at the county scale.

9 I talked about this already. We had
10 thought about moving forward to about 2013,
11 then we more recently decided, well, this task
12 force that met over the summer, the septic
13 task force, more properly known as the
14 sustainability and wastewater disposal task
15 force, had some very good recommendations.

16 They've gone to the General
17 Assembly. So to make sure we're not stepping
18 on any toes, we just said let's see how the
19 General Assembly handles this and then we will
20 take off from wherever they leave us in April.

21 Offsets for growth and future loads.

1 I know that local funding is a critical issue
2 but a way to bring in the private sector is
3 that developers, as they want to develop, will
4 increase loads. I mentioned before to account
5 for loads, they need to offset that. One of
6 the ways to offset that is to help pay for
7 septic upgrades, help pay for storm water
8 retrofits and so forth.

9 And we are assuming -- well,
10 accounting for growth is coming out probably
11 this spring for discussion but at this point,
12 we're sort of assuming it's not necessarily
13 going be on a one-to-one -- the offsets won't
14 be on a one-to-one basis. You might have to
15 offset at two to one and that's how you get
16 some help there.

17 Not all counties submitted complete
18 strategies, and that's fine. I mean, they're
19 independent governmental units. We can't make
20 them do this. There may still be consequences
21 but we couldn't make them submit that. So

1 what we did because MDE, State of Maryland,
2 had to submit a strategy that will meet water
3 quality standards for EPA, we filled in the
4 gaps.

5 So if we got from a county a
6 complete strategy that met water quality
7 standards, for their allocation we used that
8 exactly as we got it. If it was -- made
9 progress but wasn't all the way there, we
10 filled in the remainder. And if we got
11 nothing in terms of an explicit strategy for
12 what we call an input deck which is all best
13 management practices as opposed to the model,
14 then we developed that in its entirety.

15 It requires, first, anything that
16 would be required by a permit because that has
17 to be done. And then we looked at more
18 programmatic approach like urban nutrient
19 management that are very cost effective. And
20 then finally we allocated the remaining BMPs
21 based on the allocation strategy.

1 These are the numbers of where we
2 are and where we need to get to. So for
3 nitrogen we need to -- from 2010 we need to
4 reduce by another 11 and a half million pounds
5 which is a 22 percent reduction. Phosphorus,
6 similarly, 500,000 pounds and 15 percent
7 reduction, and 26 million pounds for sediment,
8 another two percent reduction.

9 Where do we go in the future? We're
10 going to accommodate refinements to local
11 plans through July. Many local plans will
12 probably be constructed based on the
13 expectation they need to be completed by 2020.
14 If you want to go back and until you have
15 given us the 2025 now, say it's 60 percent, 70
16 percent, well, that will probably, at least to
17 a little extent, mitigate some of the concern
18 because if the costs are stretched out, then
19 they're lower on an annual basis and that
20 makes that a lot more feasible, or more
21 feasible anyway.

1 After July we'll have to work
2 through an adaptive management process. We're
3 not completely sure that what means but we
4 know that we can't have a perfect plan at this
5 time that won't change between now and 2025.

6 Again, tracking and reporting. I
7 can't emphasize that too much. And then we
8 would like to work with locals and with EPA to
9 get better numbers on land use, better numbers
10 on septic systems. Make the input to the
11 model better while we're working on making the
12 model itself better.

13 The schedule. January 6th we handed
14 in the milestones. We are now in the public
15 comment period. Between March 9th and
16 March 30th we'll be looking at your comments.
17 We will be making revisions to what was
18 submitted, and then March 30th it goes to EPA.

19 EPA then essentially has to make a
20 decision on whether they change the TMDL and
21 then go out and get comments again or not

1 depending on the nature of the revisions that
2 we request.

3 And then basically July 2nd we move
4 from the planning phase more strongly into the
5 implementation phase. I know that many of you
6 are doing implementation but we need to
7 accelerate over what we've been doing in the
8 past.

9 And that is it. And now I will turn
10 it over to John.

11 MR. RHODERICK: Thank you, Rich.
12 Good afternoon. My name is John Rhoderick for
13 those who aren't familiar with me. I'm from
14 the Maryland Department of Agriculture and for
15 the last year I was asked to help facilitate
16 the Watershed Implementation Plans that were
17 developed at the county level across all the
18 counties in Maryland for agriculture.

19 So what I want to do is kind of give
20 you a brief synopsis of that exercise but I
21 think first off one of the questions that

1 comes up right away is, as Rich has talked, he
2 has talked about, you know, looking at county
3 governments to help develop plans for what I
4 call the septic load, the wastewater load and
5 the storm water load. So why do we pull
6 agriculture out differently? Why didn't that
7 just get rolled into it?

8 Well, for the most part, when you
9 look at the county areas, when we're dealing
10 with agriculture, there is a set of different
11 players. County government certainly provides
12 the support and operating assistance for
13 conservation districts, essentially agencies,
14 et cetera.

15 But the people that work in the
16 day-to-day, boots on the ground with the
17 landowners and with the farmers, are the ones
18 we felt we needed to get into the room because
19 those are the only guys that could make these
20 direct commitments we were looking for to say
21 that we believe these are the opportunities

1 going forward and we're committed to
2 fulfilling the goals of the plan. And that's
3 really what it was about, was to get some very
4 concrete goals that we felt we could deliver
5 on at the local level.

6 So as Rich mentioned, we had a
7 series of 46 meetings, two in each county with
8 this work group we called ag work group. Now,
9 obviously we were focused on making sure
10 certain stakeholders were there because we
11 thought they were critical, but it was an open
12 meeting. County planning officers were there,
13 public works, commissioners, et cetera,
14 watershed organizations, waterkeepers.

15 So it was a very good meeting
16 overall to sit down and talk comprehensively
17 about agriculture. And as you will see from
18 this first slide, this is one of the reasons
19 we felt we really needed to focus in on this
20 methodology.

21 It's a little hard to see, but when

1 you look up here and again depending on what
2 you've been reading in the paper, we're in
3 Maryland, and in Maryland agriculture is not
4 the dominant pollution source. This is a more
5 urbanized state.

6 If we were in Pennsylvania, I could
7 sit here and tell you 75 percent of the loads
8 are agriculture, but in Maryland about 35
9 percent of the loads are agriculture. So as
10 we say, if you think of it as a chair, there's
11 four components to it: There is wastewater,
12 there's urban, there's storm water and there's
13 ag.

14 Agriculture can't do it alone. It's
15 not going to get done with agriculture. So
16 it's all four components pulling together.

17 But having said that, having said
18 that overall 35 percent of the load comes from
19 agriculture, depending on what as you see
20 here, what watershed we're in, it's a
21 completely different game. And so when we're

1 on the Eastern Shore, certainly talking within
2 those counties and with those ag workers, the
3 focus of the plan is going to be on
4 agriculture. It's not going to get done
5 without agriculture.

6 But if we're here like in the
7 Patapsco/Back River region, only three percent
8 of the load of the Patapsco/Back is from
9 agriculture. So it's not going to be a plan
10 that will be centric on ag's accomplishments.

11 So again, it's very helpful
12 depending on where you are as to what
13 agriculture plays in those plans. So as I
14 mentioned, what we set up with these ag work
15 groups in each county, we basically said
16 here's your assigned load, we got those from
17 MDE. It's a very helpful chart to have to see
18 all the loads broken down by county. So we
19 could say, all right, here's your targets, now
20 let's talk about a plan.

21 Originally, as most of you worked on

1 it, as we did, it was a 2020 plan because we
2 said based on our governor's initiative, we
3 wanted all the information gone in the ground
4 by 2020, and that actually for the focus of
5 these meetings was very helpful to look at
6 that concept.

7 As you know, subsequent to that we
8 took the information we got from those county
9 plans and for agriculture and just extended
10 them out five more years. We got some
11 feedback from our ag work groups that that
12 was -- they were comfortable with that.

13 We also developed two-year plans and
14 that was critical because that's how we
15 operate in the field. We operate these yearly
16 plans and goals. That is something we have
17 been doing for years and years in the
18 conservation districts extension, et cetera,
19 so it's not a new concept.

20 Each year, we sign memorandums with
21 the conservation districts of how much

1 implementation, how much farmer outreach
2 they're going to do, so we were comfortable in
3 that role.

4 We utilized the ag work groups. You
5 see up here it says we set two sets of goals.
6 Well, we wanted to get out in front of this
7 and prior to having the final numbers and
8 final model versions, which we didn't get
9 until August, we actually had a whole set of
10 meetings in every one of the counties in June
11 and July using the old model and the old
12 numbers just to start the process.

13 To sit down and say, okay, here is
14 what you have done to date, here is a
15 theoretical goal. How far or what
16 opportunities are there going forward to meet
17 it. So we did that. And then once we got the
18 new numbers and the new model, we went back
19 out using that format and upped the
20 information.

21 We actually had two planning tools

1 we used, and you'll see those in a minute, and
2 we had two strategies we used. The first
3 strategy when we went out in June and July, we
4 said, okay, based on what you know of the
5 existing resources you have, your manpower
6 requirements and your programs, whether it be
7 farm-built programs or state-run programs, how
8 far can we get. What do you think we can get
9 done. And so that was one exercise.

10 The second one, once we got the new
11 model information, we saw a much more
12 aggressive goal we had to meet so we changed
13 the scope. We said forget the concept of what
14 you have available to get there with, throw
15 that out. Now let's talk if you had unlimited
16 resources, unlimited manpower, how much more
17 can you do and can we get there.

18 So I'm going to -- we also had, as
19 Rich mentioned, conservation tracker which
20 we've been using for a number of years. For
21 agriculture, we're able to track no matter

1 whether it's through grant programs, federal
2 programs, state programs, watershed
3 organizations, we can track information about
4 conservation practices that landowners and
5 farmers have installed.

6 And that's valuable because that
7 gives us the lay of the land, as we say, and
8 it allows people to sit down and say how much
9 more can we do. So we have the database in
10 place that was -- it's a valuable component of
11 these analyses.

12 This is a little blurry but you've
13 got copies in front of you. This is what we
14 attempted the first time, back in June and
15 July. As you can see, on the far side we
16 stuck with what the model said we could use.
17 Now, in the model, what we listed here was
18 only those things the model said we would get
19 credit for. These are certainly not all the
20 conservation practices that we worked with the
21 farm community on, but this is all the model

1 reads.

2 So we took that concept, we had some
3 old loading information for nitrogen and
4 phosphorus for each one of the practices. We
5 created a simplistic spreadsheet. We said in
6 the next column how much we got from
7 conservation tracker, how much we had done of
8 these practices by county.

9 So we had that in front of people
10 when they sat down and talked to us. And from
11 that we moved forward and said, okay, so for
12 barnyard runoff control, if we have already
13 done your county a hundred runoff control
14 systems on farms, how many more farms out
15 there is an opportunity to install this type
16 of practice.

17 And they would give us the feedback
18 because these guys dealt with the farm
19 communities, familiar with the farms that were
20 there, and they could say we know about this
21 guy who's been saying for a long time I would

1 like to get this practice installed, and we
2 think this other guy could benefit from it as
3 well.

4 So that is what we got was an
5 assessment of what we thought we could do by
6 2020 with our existing resources and programs.
7 We were able to track, again as a simple
8 spreadsheet, a load reduction because we just
9 calculated on the fly using the spreadsheet.
10 So we were able to say the target is X, we
11 would start adding BMPs to see how far we
12 could get.

13 So the next slide kind of gives you
14 an overall summation of that process back in
15 June and July. And basically using the old
16 model, what the old model was telling us at
17 the time was that the raw load for agriculture
18 in Maryland -- this is the model number -- if
19 we weren't doing any conservation practices on
20 the ground, then a raw load going into the bay
21 would potentially be about 22.6 million

1 pounds. But because we are doing all these
2 conservation practices and they're there
3 annually, we have a potential of what we think
4 we're putting in is about 17.7.

5 So on an annual basis we're already
6 providing mitigation for almost nine million
7 pounds of potential agricultural nitrogen
8 loads into the bay based on the conservation
9 practices the farmer and landowners have
10 installed.

11 The next one is the target. Again
12 based on the old model, we were told that we
13 needed a plan to get down to 13.7 million
14 pounds. So, in essence, if we're already at
15 17.7, we've got to get to 13.7, we needed a
16 plan for about four million more pounds of
17 reduction. We're already doing 9 million
18 pounds annually. Give us a plan for four
19 million more.

20 So in taking the counties again
21 through the exercise, saying based on existing

1 resources, existing programs and a 2020
2 deadline, how far can we get, and this is what
3 we ended up with. We can make progress. We
4 can get down to about 17.7 to about 15. It
5 doesn't quite hit the target that we were
6 looking for but it gives us a very good
7 estimate of what we can do with what we have
8 and it would get us part of the way there.

9 Obviously, to get the other part,
10 given this exercise, there is more manpower or
11 more time.

12 Okay. So then we have -- in August,
13 as I mentioned, the new bay model came out.
14 We had new numbers to work with. We took that
15 spreadsheet and information back to our groups
16 and said MDE is actually helping us quite a
17 bit more here. They've come up with this tool
18 called MAST, and what it allows us to do is
19 actually get a much better look at how the
20 model works.

21 When we were working in the

1 spreadsheet world, the assumption is that in
2 the spreadsheet, as you're familiar, it's
3 additive. But that's not how the model works.

4 In a model, if you put a
5 conservation practice on an acre of land, you
6 have one load reduction for that. If you put
7 another conservation practice on that same
8 acre of land, you don't get an additive
9 effect. You get what's called stacking or a
10 train. You get less and less effectiveness.

11 So as an example, if everybody's
12 doing cover crops, so every acre of land has
13 cover crops -- or, I'm sorry, has nutrient
14 management on it. So we have nutrient
15 management. That's one input into the model.

16 For that same acre of land, we say
17 in addition we're going to do cover crops on
18 this acre. Well, the model doesn't give us
19 for those cover crops the full load reduction.
20 It gives you a partial because you have
21 already got one conservation practice on it.

1 So in many cases we do five or six
2 management practices on the same acre of land.
3 They may be grass buffers, cover crops,
4 nutrient management, precision agriculture,
5 et cetera, et cetera. It's not an additive
6 effect in the model. It's a treatment train
7 and you get less and less reduction.

8 So what was great with that was we
9 had MAST, which was for the first time able to
10 mimic that. So we were getting much truer
11 readings as we put these BMPs in to get an
12 estimate of what our load reduction potentials
13 would be.

14 Now, we were on the front end of
15 using MAST. The ag workers were one of the
16 first to use it so not all of the pieces of
17 the MAST tool were activated. The
18 agricultural portion was but the animal
19 component and the manure transport component
20 weren't active at the time we worked with our
21 groups. So we didn't get a true read from

1 those. However, it was very valuable because
2 it allowed us to peek into the model to see
3 what the model does and how it works.

4 Okay. And so here is what we ended
5 up with. Two things up here. As you notice,
6 the numbers changed. Model-to-model numbers
7 shift and this shows a significant shift. In
8 the previous model we said the raw load for
9 agriculture was 22 million pounds. New model
10 says it's 28 million pounds. That's quite a
11 shift. That's about a 20 percent difference.

12 The implementation rate we had under
13 the previous model said it was about 17.6
14 billion pounds of implementation. This model
15 said no, it's only 19.7. That's two million
16 pounds less implementation credit I'm going to
17 get.

18 So on and on. And as you see, the
19 goal's shifted as well. Instead of 13.7, it
20 moved up to 15.2. So again, model-to-model
21 you get different numbers. The good news is

1 under the scenario we worked with, which is we
2 said take all the brakes off, forget funding
3 limitations or personnel changes. Tell me how
4 much more we can get done. What we ended up
5 with was a plan that got us just under the
6 target. This was for nitrogen, which is the
7 most difficult.

8 So overall, we have a state plan for
9 agriculture that says given the goals these
10 guys committed to, we can get there. However,
11 it's an aggressive strategy and it will need
12 some help. The phosphorus, it became actually
13 easier. Nitrogen was the difficult one.
14 Phosphorus we seemed to easily get under the
15 goal.

16 However, don't hold to that number
17 because, again, in the model world we know
18 there is an issue with the model on
19 phosphorus. It's not doing a good job of
20 modeling phosphorus. So while we have a plan
21 that suggests we're under it, the model --

1 we're not holding our breath and jumping up
2 and down yet because we need to see the model
3 corrected and see where we stand.

4 Okay. And again, as Rich said, this
5 is what it looks like on the basin load
6 because there is how we send it to the model.
7 And as you can see, the two major basins of
8 concern when we talk about agriculture are the
9 Eastern Shore and the Potomac.

10 While the other basins obviously
11 have a load to them, where our significant
12 outreach lies is in those two areas.

13 And overall, on the Eastern Shore
14 our overall plan, we just about make it for
15 nitrogen. And in the Potomac we easily make
16 it. We make it well under. And again from a
17 state perspective we make it overall.

18 For phosphorus, remember how
19 difficult it was to get nitrogen on the Shore.
20 Phosphorus we easily make it. Again, this is
21 that model thing, we don't think it's reading

1 right because as some of you know, when we
2 talk about issues with agriculture, we
3 continue to talk about manure and poultry,
4 which is on the Eastern Shore. And so the
5 suggestion there is an overload of phosphorus
6 on the Shore doesn't seem to be supported by
7 the model.

8 Anyway. Okay. So this is what the
9 state plan looks like. It's broken down
10 obviously by 2013, by 2017 and 2025 and it's
11 in your packet. There are two pages. One of
12 the things that I should point out because
13 people don't see them when they look at some
14 of these goals, some of them say, that doesn't
15 look too impressive.

16 You have to remember where we are
17 currently, and I'll take the example of forest
18 buffers. When you look here on the plan, it
19 says okay, by 2013 we're going to be 335 acres
20 additional. That is one number. And by 2025,
21 2300 acres. You go, well, that's not much.

1 You have to understand where we are to date.
2 To date we've already done 26,000 acres of
3 forest buffers in agriculture. So we have
4 done all the load hanging through easy stuff
5 and that's a significant amount of acres
6 already in forest buffers.

7 So these are the additional
8 opportunities. And again, for some of these
9 BMPs, we've worn these BMPS out. This is one
10 of them. Same with grass buffers. We've done
11 over 47,000 acres of grass buffers currently.
12 So it's 47,000 acres, plus the additional 533,
13 2,200 and 3,700. So again, you have to
14 understand where we are currently versus where
15 we're going.

16 And that was the value of the work
17 groups because these guys could say we have
18 been beating on doors, we have been selling
19 this BMP for a number of years right now and
20 it's just not going to go any further.

21 Okay. What I want to show you is

1 the value we saw of having the two sets of
2 meetings because information changed. As you
3 can see, when we went out to these ag work
4 groups in the first meeting, we said based on
5 existing resource, existing programs, how much
6 more can we do. Well, we did a -- we pulled
7 some of the more significant things they gave
8 back to us to say where are we going to see
9 the most activity.

10 Now, we went out and said under an
11 aggressive strategy, forget the funding
12 constraints or the boots-on-the-ground
13 constraints, where are we going to get to or
14 where is the emphasis going to shift, you can
15 could see how the pie chart shifted. One I'll
16 point out particularly is decision/precision
17 agriculture, which as you see, shifted
18 significantly between the two concepts.

19 I want to touch briefly on the
20 watershed model particularly in terms of
21 agriculture because, again, there are some

1 things that we need to point out, one being
2 that you know with the watershed model -- and
3 again, EPA came out with this model under a
4 consent order. They gave it to us in August,
5 they didn't have a lot of time to QA/QC it so
6 our process of working with it, we have
7 actually been providing a lot of input where
8 something seemed to not be working correctly.

9 So for agriculture, as you see, we
10 had to actually submit that about three
11 different times because of some things that
12 weren't working correctly and we're still
13 looking and working with confirming some of
14 those ag reductions. Just like I talked to
15 you about the phosphorus issue.

16 So again, with using the MAST tool
17 that we used, again we talked about being one
18 of the first to use it, the ag workers. There
19 was some issue with people that attended those
20 meetings. I want to, you know, we all saw it
21 so I wanted to tell you that we recognize it.

1 There were some issues with the tool as well
2 because, again, it hadn't had a chance to be
3 QA/QC validated.

4 So since that time we adjusted -- we
5 developed or called some adjustments to that
6 tool. And we are looking at some other input
7 issues principally from as far as the ag loads
8 and the number of animals, and manures that
9 the model suggests is being generated by those
10 animals.

11 This is very light but again, this
12 is something MDE did a great job in assessing
13 in looking at the MAST tool and how it fit
14 with the model. In some cases, some
15 counties -- and this is what I'm referring to,
16 for those people that were in these counties,
17 were there with us using the tool. When it
18 seemed like something was running right, there
19 were some errors where it clearly was off
20 significantly.

21 Look at like Somerset County for

1 crop loads. It was off 177 percent. And I
2 should thank Lee in the back and his group for
3 numerous efforts in helping to identify this.

4 So this was for nitrogen, and you
5 can see another chart for phosphorus. And
6 again, you know, we had very short times so
7 these are things that we've recognized hence
8 that we're going to work on.

9 Okay. Next steps. As I mentioned,
10 the EPA has been very gracious in recognizing
11 and working with us to say when these model
12 issues come up, they want to correct this
13 model, they want it to work correctly. So
14 they've formed work groups. There's an ag
15 work group, there's an urban work group,
16 there's a septic work group, et cetera, at the
17 bay programs.

18 This is composed of people from all
19 the five states that work in those areas and
20 where they have solved some things with the
21 model, they formed some work groups.

1 For agriculture, we have our ag work
2 groups. We have a list of about 40 things
3 from all five states that said these are
4 things with the model we would like to take a
5 second look at.

6 For this year -- and I apologize, it
7 says 2013 up here. It should be 2012. For
8 this year, we have three panels,
9 subcommittees. One is nutrient management and
10 it's looking at, as you see up here, a list of
11 items that we think are a top priority. One
12 that's very dear to Maryland is this third
13 item, nursery BMPs.

14 For those that work with us, and
15 again because we're working with first time
16 understanding the model. Nursery BMPs. In
17 the model currently, the way it's set up,
18 there is only one management practice that we
19 can apply for nursery loads and that is water
20 recapture.

21 It was very clearly demonstrated to

1 us in our ag work groups. When we talked to
2 the nurserymen and we talked to others, they
3 said there is a whole suite of practices that
4 we use but we're not getting credit for. And
5 in fact we found out that if we use just this
6 one BMP, we can only reduce the load for
7 nurseries by about ten percent maximum which
8 wasn't going to get us to our goal.

9 So again, the model is limiting us
10 on our ability to address a load because it
11 only allows one BMP. So they're going to be
12 looking at that.

13 The other one is down here under
14 cover crops, and again, one of the things that
15 jumps out is this thing called additional
16 species. Currently, Maryland's cover crop
17 program actually pays for forage radish,
18 rapeseed, et cetera. In the bay model there's
19 only three types of cover crops that we get
20 credit for, and yet we have about seven or
21 eight that we know are cover crops that have

1 real quality benefit.

2 So again, working with the bay
3 program we're trying to get these to get
4 credit in the model because, again, we're
5 implementing these things and not getting
6 credit. And again, this is the third work
7 group on conservation tillage and these are
8 some of the things they're working on.

9 Just like Rich said, what I want to
10 do is shift gears now. Accounting-for-growth
11 strategy and how agriculture fits in this. As
12 Rich mentioned, under EPA's guidelines we have
13 to develop a strategy that basically the bay's
14 capped at this point. No new loads going into
15 the bay unless they're offset.

16 So basically, whether it be a new
17 industry or a new development, there's got to
18 be an offset, you can't continue to add load
19 to the bay. Everybody's capped.

20 So with that in mind, we have
21 already had and set up for the last year and a

1 half a trading program that has a point source
2 program and a point to ag offset program. So
3 we have that set up. We have some tools in
4 place to assist.

5 This is just to give you a status
6 update that if you haven't been to the
7 website, Maryland's trading program is
8 mdnutrienttrading.org. And as of the end of
9 the year we had over 5,000 hits, we had 160
10 accounts opened. We've already run -- on
11 farms we've already run about 80 assessments
12 on farms looking for credits or offsets and
13 we've got about 200 farms right now that are
14 currently lined up that we're doing
15 assessments on.

16 We've hired some additional staff,
17 and a few counties, the county governments are
18 actually working with the soil conservation
19 district where they're providing funding for
20 them to go out and assess farms. And again,
21 assist the county so that when a developer

1 comes in, they have the ability according to
2 where the offsets are.

3 Okay. I'll end with this because
4 this kind of ties it all together. This is
5 what we end up with statewide, whether it be
6 for agriculture or any other sector.
7 Basically, as of 2009, according to the model,
8 we were putting almost 52 million pounds into
9 the bay. The target we had to get down to was
10 41.0 and -- I'm sorry, 41.1 and the plan we
11 came up with gets us to 41.0.

12 For agriculture for nitrogen, again
13 our loading into the bay is about 19.7
14 currently. We have to reduce that down to a
15 plan for 15.2 and the plan we sent in gets us
16 to 15.1, and similar numbers for phosphorus
17 are down below.

18 And at this point I'm going to stop.
19 I think Rich and I will field some questions.

20 MR. ESKIN: This is where we're
21 going to get into trouble. We only have one

1 microphone today. So those of you who have
2 questions -- and we do have a stenographer
3 here who is taking down information for a
4 transcript so we can post it on the Web for
5 those who have not had an opportunity to be
6 here.

7 What I'd like to ask you to do, if
8 you have a question, is just come up here,
9 line up right down this row and then we'll
10 take a question one at a time. And please
11 identify yourselves and your affiliation when
12 you come up.

13 Come on, guys, don't be bashful.
14 This has never happened before.

15 MR. DiNUNNO: When you get old, you
16 don't mind making comments because you don't
17 live long enough to have anybody refute them.
18 So I am coming up.

19 My name is Joseph DiNunno. I'm
20 simply a retired engineer who has worked in
21 the environmental protection field for a long

1 time. But more than that, I am a 50-year
2 resident in the area and I have been on the
3 bay and I've watched it degrade. So I am one
4 of those many citizens who are concerned about
5 what is happening in the bay.

6 The thing I noticed most about your
7 presentation which, incidentally, was very
8 informative as well as well done, is that a
9 root cause of all of this doesn't seem to be
10 addressed and that is the control of the land
11 use in the bay other than the penalty system
12 you talked about.

13 But as long as zoning and
14 authorization to build and construct is at the
15 local level, that seems to be totally out of
16 keeping in today's requirement for control of
17 the watershed which requires six states and
18 the District of Columbia to have some common
19 program.

20 So without the root cause analysis
21 of this, which I don't see in this, I think

1 that we've got a lot of things going on, a lot
2 of actions going on, but it's all action and
3 not substance unless you get to the root cause
4 of this which is control over development in
5 the watershed and that can't be at the local
6 level, I submit. Anyway.

7 MR. ESKIN: John would love to take
8 this. No, I think that you make a very good
9 point. It's actually implicit in what we're
10 doing. The problem is not who controls it,
11 who controls local growth. It's more in how
12 we grow.

13 And part of the problem has been
14 that while in many cases local governments
15 take potentially their school capacity, their
16 road capacity, you know, they say we have
17 adequate facility ordinances and things like
18 that. They have not paid attention to the
19 assimilative capacity of their waters.

20 We actually started to begin
21 addressing this issue a number of years ago

1 with what we called the water resources
2 element which is an add-on to the
3 comprehensive plans where at least to a
4 limited extent sensitive areas, drinking water
5 capacity and wastewater capacity, the local
6 governments now, as part of their planning
7 process, had to address whether they had
8 adequate water resources.

9 In essence, although it's implicit,
10 we're expanding that now by saying here is
11 your allocation, you're over your allocation,
12 you need to get your allocation of pollutants
13 down to this level. And so -- and if you
14 don't, there will be consequences.

15 So that will force the thinking
16 about do we have the assimilative capacity in
17 our waters to do this or if we really need to
18 do this, how can we offset this somewhere else
19 so that we don't exceed assimilative capacity
20 of our waters.

21 So you're right, it is a sound

1 concept. We're just approaching it a little
2 indirectly. Local governments should have a
3 decision making capability. They just have to
4 make those decisions based on a broader
5 understanding of other implications of their
6 growth.

7 MR. RHODERICK: Just to follow up
8 with Rich, EPA has made it very clear to us
9 that we have to have a very transparent and
10 accountable verification system that they can
11 look at that assures them that at the county
12 level through the state that we are indeed
13 maintaining the zero load and we are
14 offsetting those parameters.

15 So yes, we have to establish our
16 whole system but EPA has made it very clear
17 they want to see that in place.

18 MR. TITUS: Timothy Titus with the
19 Friends of the Patapsco Valley and Heritage
20 Greenway. We're now calling ourselves the
21 Patapsco Heritage Greenway.

1 Two questions of a general sort but
2 difficult questions. Number one, could you
3 expand a little bit about sediments.
4 Especially about phosphorus and sediment.

5 And second, have you been able to
6 build in any sort of cost data so that we can
7 think about at the margins where our best bang
8 for the buck is.

9 MR. ESKIN: Through the model with
10 the bay program, we have been working on
11 nutrients and modeling nutrients,
12 understanding these dynamics for many years.
13 We have not really paid that much attention to
14 sediment at this point. So we're much less
15 sophisticated there.

16 As a general rule, phosphorus sticks
17 to sediment. So insofar as you are
18 controlling phosphorus, it's likely that in
19 most cases you will also be controlling
20 sediment because that's the way you control
21 phosphorus.

1 If you look at the numbers that I
2 presented at the end of my presentation, it's
3 showing you only one percent, two percent
4 reduction in sediment. So we're pretty
5 confident that if we meet our phosphorus goal,
6 we will also meet our sediment goal, broadly.

7 There may be locations where that is
8 not -- does not prove to be true, particularly
9 if you're getting most of your phosphorus
10 reductions from the wastewater treatment plans
11 because then you're not controlling sediment
12 to control phosphorus.

13 But that will be localized. We're
14 not too worried about it now but we'll take
15 care of that in Phrase III after 2017. And --
16 I'm sorry, what was your other question?

17 MR. TITUS: Marginal cost analysis.

18 MR. ESKIN: Oh, the cost analysis.
19 We did -- EPA is doing a cost analysis. We
20 have done some work on that. It takes a while
21 to put it together. We have Dr. Dennis King

1 from the University of Maryland do storm water
2 costs for us and he did a great job. That's
3 up on the Web. I'm not sure if it's one of
4 the appendices but it's certainly available.

5 That was the area that we felt we
6 had the least certainty about what the costs
7 would be. We know because we fund many
8 agricultural best management practices about
9 what they cost. We have a ballpark.

10 Wastewater treatment plants, we know
11 exactly what they cost because we're funding a
12 large part of that and we have a pretty good
13 handle on septic.

14 What we'd like to do is convince EPA
15 that we should be able to add the costs into
16 the MAST model so that when you do that, you
17 get not only the reduction in the amount of
18 pollution that you get with the given set of
19 practices, but you will also get a total cost
20 as well as the cost per pound, and that could
21 really inform what you need to do. There

1 hasn't been time to do that but we are
2 recognizing that that would be extremely
3 helpful to everybody if we could do that.

4 MR. TITUS: Thank you.

5 MR. CHEN: Dr. Chen from Prince
6 George's County government. The county's
7 spent a lot of money to develop an
8 implementation plan and submitted it to the
9 MDE in November last year, and is MDE planning
10 to give us a comment on our plan?

11 The reason I ask that is because you
12 told us that from March 30th to June 30th we
13 have time to revise our plan. But we don't
14 have a comment from you on our plan. We
15 really don't know how to improve our plan.
16 Thank you.

17 MR. ESKIN: We were actually -- I
18 was reviewing it today. We're going to get a
19 communication out on that. We're not going to
20 specifically approve or disapprove your plan.
21 What we are going to do, as I said before,

1 some counties gave us a complete listing of
2 all the BMPs, others did not. We're going to
3 get all of the information at the county scale
4 that went into the model out to you. Some
5 things that you might want to think about.
6 You probably constructed that model to achieve
7 the 70 percent by 2017, and the 2025 you did
8 everything.

9 Well, now we have a little more
10 time. That might be a revision that you want
11 to make. You might have thought about trading
12 a little bit more since you first submitted
13 your plan.

14 Do you want to -- will you be able
15 to proceed fast enough on your storm water?
16 Do you want to try and stretch that out by
17 maybe trading with a wastewater treatment
18 plant.

19 Do you have a better idea now just
20 because you have had more time to think about
21 it? All of those are options. So the end of

1 April we will be getting this detailed
2 information out to you. We will work with you
3 on that and then before July you could make
4 revisions, if you want, to your plan. But we
5 are not going to approve or disapprove or look
6 at your milestones. And that's another thing
7 that we're working on separately.

8 We trying to get contractor
9 assistance to estimate what is the maximum
10 feasible implementation that you could do on
11 an annual basis, and then we sort of
12 back-calculate from that to 2025 as to whether
13 your milestones as they're currently
14 constructed would get you to where you need to
15 be: Are you going too slow, are you going
16 faster than you need to. We don't want you to
17 put yourself in a corner where you build your
18 milestones and they're not going to be
19 sufficient to get you to there and then there
20 will be possible consequences.

21 So we're working on that too as part

1 of improving our plans. As a practical
2 matter, I would accept that we're going to
3 have a much better handle on all of this as we
4 come up to evaluation of 2013 milestones.
5 That will be the first run. We need to show
6 progress. I can't emphasize that too
7 strongly. I would expect that the
8 consequences are going to be somewhat
9 situational.

10 Say, for example, you had a plan to
11 do some storm water retrofit. You had to
12 purchase some land and that's taking longer
13 than you thought but the money's there, you
14 purchased that one, you're behind schedule but
15 you'll catch up in the next few months. I
16 would not expect any consequences for that.

17 If the county digs in their heels
18 and says no, this is just too expensive and
19 we're not going to do it, then we might look
20 for early consequences because we need to make
21 progress across the state.

1 So somewhat situational on that but
2 we will get more detailed information out for
3 you to review. The important thing is to
4 start developing your programmatic capacity
5 now to do what you need to do going forward to
6 2025.

7 MS. VANDER GAAG: I'm Helen Vander
8 Gaag, Blue Water Baltimore. You spoke earlier
9 on about tracking and you said that
10 jurisdictions really need to be setting up
11 their tracking program.

12 I am curious as to how MDE is going
13 to track the tracking in the sense of how are
14 you going to be having folks go out doing
15 inspections, monitoring, recognizing these are
16 complicated processes.

17 And I do have one question
18 additional to that. I'll say them both at the
19 same time which is that you said we might wait
20 until the end of Session to figure out how we
21 might be funding these. Do we have a plan C

1 about funding if we don't get plan A or
2 plan B?

3 MR. ESKIN: I'll take the tracking
4 first. We use an application that is actually
5 being used across the whole bay watershed
6 called NEIEN, it's National Environmental
7 Information Exchange Network. Ron Pell kind of
8 reminds me that he collects the information
9 from everybody.

10 Some of the information, and it's
11 going to vary sector by sector, the
12 information that we're getting on agriculture
13 is going to come out of conservation tracker.
14 John's folks are going to be out there.
15 They're going to provide confirmation of
16 what's happening.

17 Septic systems typically are funded
18 from the Bay Restoration Fund. Because we're
19 spending money on it we can have confidence
20 that the information we're getting back is
21 going to be reasonably accurate.

1 Storm water we mostly collect from
2 storm water annual reports. So basically, you
3 know, they're reporting under a permit, there
4 would be penalties if anybody is faking it.

5 And finally, septic systems -- I
6 mean wastewater treatment systems, we're
7 funding from BRF so we have a real good handle
8 on that. We get the monitoring reports and so
9 forth so we have a pretty good handle on that
10 so I really don't see the issue there.

11 MS. VANDER GAAG: Do you do any
12 monitoring other than just the annual reports
13 for storm waters?

14 MR. ESKIN: What we're also doing is
15 a whole nontitle and title work quality
16 monitoring network. So we're actually running
17 in parallel. One, we're monitoring the
18 implementation. In parallel to that we're
19 monitoring water quality.

20 Now, they're not going to go forward
21 at the same pace. We know that there are

1 lags. The U.S. Geological Survey has done a
2 fair amount to quantify the rate of those lags
3 but that is why -- in fact, we're talking
4 about 2017, 60 percent of the implementation,
5 not a 60 percent in terms of water quality.

6 As to cost. We are favoring local
7 storm water utilities as the means for at
8 least acceleration in local implementation.
9 There is a new bill in the General Assembly,
10 not one that the department has submitted, but
11 we know almost for sure that regardless of the
12 amount of state and federal funding, there is
13 going to be an increased contribution locally.

14 And your storm water utility does
15 not necessarily have to fund the whole
16 difference, but it should show some
17 improvement, some acceleration. Get one more
18 position, do ten percent more than you did
19 last year. Make some progress. Show
20 willingness to move on this and start doing
21 better than we have done in the past. Start

1 building your programmatic capacity.

2 And in fact, actually just simply
3 the act of authorizing a storm water utility
4 would be viewed as progress, even if you
5 didn't actually implement it yet. So that has
6 to be a part of the program.

7 Continuing to talk to EPA about
8 additional funding as well. In fact, I just
9 sent something out today that hopefully will
10 get to Congress, saying that we need storm
11 water funding. And it's infrastructure.
12 Prevents flooding. It's not only fixing the
13 bay. So we need to work on that.

14 MS. BEAUREGARD: Hi, I'm Carol
15 Beauregard. I've been involved in
16 environmental issues now since 1987 and with a
17 lot of other people who are very chemically
18 sensitive. And I had a question -- several
19 questions actually. One is the enhanced
20 treatment, a nutrient management on this page.
21 Does that mean only for farms or is that for

1 private land also, that that would be a
2 commercial or homeowners?

3 MR. RHODERICK: That is the ag
4 cropland, specifically for ag cropland.
5 Instead of fertilizer, variable rate
6 fertilizer applications. There is an urban
7 nutrient management component in the urban
8 strategy but that's not what that is referring
9 to.

10 MS. BEAUREGARD: So I'm really
11 concerned about the part of urban because when
12 I was poisoned in 1987, the pesticide
13 fertilizing season started in approximately
14 end of March and then went to approximately
15 mid to late October, and now we're being hit
16 with this every month of the year and we're
17 watching the landscape companies put down
18 fertilizers and pesticides during the winter
19 months when the ground is frozen.

20 So when we have rain, all that goes
21 off into our storm water. And we're also

1 watching signs being put up for pesticides and
2 for lime use, not just on homeowners'
3 properties but also on, in like restaurants
4 like *****. I don't want to pick on *****.
5 Don't put that down or they'll sue me.

6 But, you know, like restaurants and,
7 you know, commercial buildings, state
8 buildings and we're also seeing pesticides
9 used much more now.

10 So those of us who are chemically
11 sensitive are being hit constantly by this
12 stuff and we're getting very sick from it.
13 So, you know, we're more aware of it than
14 maybe the general public because of our
15 sensitivity to it and the ill health we get
16 from it.

17 So we're curious about what is
18 happening with the program to save the bay in
19 terms of looking at the amount of pesticides
20 and fertilizers we use? You have already
21 touched on what's happening over at the

1 airport because I know they use fertilizer on
2 their fields -- on their runways to get rid of
3 the ice and the snow, but also we're having --
4 well, they used to. Have they changed it?

5 Oh, great. That's good news.

6 But the other thing we're concerned
7 about is all the roadside spraying for
8 pesticides. A lot of county and state and
9 federal roads are being sprayed several times
10 a year with pesticides and things so that also
11 provides more runoff into our bay. So I would
12 like to know, you know, if that is going to be
13 addressed in this program.

14 MR. RHODERICK: You hit on a lot of
15 points there. Let me see if I can go through
16 some of them. We actually have an urban
17 fertilizer program, regulatory program, where
18 the lawn care companies that manage more than
19 ten acres or more, we -- they have to go
20 through a certification process. I'm very
21 concerned when I'm hearing what you're saying

1 about a winter application because that is not
2 supposed to be occurring. If it is, we need
3 to know about it.

4 MS. BEAUREGARD: But it is.

5 MR. RHODERICK: Well, that's what I
6 want to understand is when you say that, where
7 that's occurring because at this time
8 currently through a managed company it should
9 be. That's one piece. And again, is it
10 actual fertilizer or is it just liming?

11 Again, I mean potash or liming, sure, they
12 could do it. So you have to be very careful
13 when you say --

14 MS. BEAUREGARD: I know lime has
15 been used in my neighborhood but I'm on the
16 Maryland Sensitive List for Pesticides so I'm
17 notified and I have gotten notification from
18 other areas that I go that they have
19 fertilized already this year, days when we had
20 freezing temperature and freezing ground and
21 the ground was frozen.

1 MR. RHODERICK: Well, again, I need
2 to know about if that currently is through a
3 managed company?

4 MS. BEAUREGARD: It is.

5 MR. RHODERICK: If there is signs, I
6 would like to know who it is.

7 Anyway. So that is one component.
8 The second, as I said, what just recently got
9 passed is finally, for our ability to deal
10 with the other component which is the
11 residential use. There was a fertilizer bill
12 just passed last year that we're in the
13 process of enacting.

14 One component of that is that the
15 retail stores, if you go in and now look at
16 the fertilizer bag, you're going to see a
17 change in the formulation. The phosphorus is
18 out. And that is one component.

19 The second piece we have to do is
20 working again with the residential community
21 on education and outreach, continue, like you

1 say, that this stuff doesn't get applied on
2 the walkways, et cetera. So we're working on
3 that component as well at this time.

4 The tagging you see, and you're
5 right, you'll see stuff that says pesticides.
6 Well, a lot of times they put down fertilizer.
7 It's the tags they're using. So again it's
8 not necessarily a pesticide application.

9 What they're trying to do is inform,
10 especially if it's on public lands, that
11 there's been an application, as you said, for
12 your sensitivity. So yes, that is a
13 requirement to get those out there, that
14 information. And the component about the
15 airport, we worked with them a number of years
16 ago and it's completely out.

17 MS. BEAUREGARD: That's encouraging.
18 Thank you.

19 MR. BROWNLEE: Dave Brownlee,
20 environmental planner for planning and zoning
21 in Calvert County.

1 We've looked at the analysis of the
2 load reductions over different counties and
3 they varied from like a negative nine percent
4 in Worcester for their nitrogen load, down to
5 Baltimore County it was 45.1 percent reduction
6 requirement. Why are they so variable?

7 MR. ESKIN: I am actually preparing
8 a written answer for you on that. The way we
9 have allocated to the various counties, and
10 Lee, I may call on you to elaborate on what I
11 am saying -- is that we the point source, so
12 let's just take -- we had a strategy, it's
13 called an ENR, four milligrams per liter:
14 Everybody, every plant, every major plant got
15 the same requirements. So that's what happens
16 on the nonpoint source, agriculture, septic
17 and storm water although technically storm
18 water is a point source as far as EPA is
19 concerned. But for our references here it's
20 really a nonpoint source.

21 We used two strategies or two

1 scenario runs from EPA. One called no action,
2 the other is called maximum feasible. No
3 action is do nothing, maximum feasible is do
4 everything. The difference between those is
5 your reducible load. For any given nonpoint
6 source sector you took the same percentage
7 reduction of the reducible load.

8 Now, where does that put you. Well,
9 there's a couple reasons now why there could
10 be other differences. Your proximity to the
11 bay, your percentage of point to nonpoint
12 source. All those would have an impact on the
13 actual amount of reduction. How much
14 reduction you have done to date. All of those
15 things factor into that.

16 I can't give it here now, you know,
17 very specifically. You can come up to my
18 office if you want afterwards and we could
19 look at the numbers that I'm preparing in
20 response. This is from the bay. So all of
21 those factor into that.

1 Now, with Worcester County, where
2 there's like minus nine percent, we know
3 that's a problem with the model. It's not
4 handling excess manure very well. And that
5 was one of the reasons why we are now
6 reporting to EPA at a basin scale rather than
7 the county scale because the model is
8 basically designed to handle a
9 64,000-square-mile area. And when you start
10 getting down to, you know, a few dozens of
11 square miles, it doesn't work as well at that
12 scale.

13 The thing is with larger scales, the
14 pluses and minuses even out, you get a real
15 good answer. But when you start getting too
16 local, it doesn't work as well.

17 So that is -- all of that is part of
18 the answer.

19 Lee, anything you want to add?

20 SPEAKER: No, I think that's good.

21 MR. ESKIN: Anything else, Dave?

1 MR. BROWNLEE: Another question.

2 Also we found out there were cost
3 discrepancies in terms of the cost per county
4 in terms of household, and Calvert County and
5 Frederick County were very high compared to
6 others.

7 Maybe because we're not fully
8 agriculture and we don't have a large
9 population so the cost to the county per
10 household to meet the plan, to meet the goal
11 are more than we can charge. I mean, a
12 reasonable storm water fee was not going to
13 cover it.

14 MR. ESKIN: Yes. I mean, we did not
15 look at cost per household so I can't talk --
16 I can't speak to that point. There are
17 different approaches to cover your storm water
18 cost, for example. That could make a big
19 difference in the cost effectiveness. Anne
20 Arundel, for example, they said they want to
21 do a lot of stream restoration. Stream

1 restoration isn't necessarily the most
2 cost-effective approach. It may give you the
3 best value for your dollar because you're not
4 only getting your nutrient reductions but
5 you're fixing the stream, reducing sediment,
6 you're getting better biological values,
7 recreational values, all -- very valid
8 strategy but not necessarily the lowest cost.

9 So there may be ways to reduce the
10 cost and I don't know exactly what is in your
11 strategy but that's something you could look
12 at.

13 You could probably further lower the
14 cost -- I mentioned earlier if your strategy
15 is designed to meet by 2020, well, extend it
16 out five years to 2025. It will help a little
17 bit but it's not the answer. If you have
18 wastewater capacity that you're not going to
19 be using, say, in the next 20 years, some
20 trading between your storm water and your
21 wastewater, so basically you give back some

1 capacity as load and then you buy that back as
2 you build to your storm water allocation.
3 That would have the effect of extending the
4 period and so lowering the annual costs as
5 well.

6 We're very aware -- I mean, it's
7 like the difference between getting the
8 30-year mortgage and the 15-year mortgage.
9 It's the same amount of money but you may be
10 able to afford that 30-year but not the
11 15-year. So if you could find ways by
12 bonding, by trading to extend those costs into
13 the future, you're then lowering the annual
14 costs for your rate payers. So we will be
15 glad to talk to you about that.

16 I left you actually a voice message
17 about coming to speak to your commissioners,
18 so we'll work that out.

19 MR. BROWNLEE: Another question.
20 The plans on the agriculture for Calvert
21 County came out in excess of -- at least the

1 last time I saw it -- excess nutrients, and I
2 understand that they can't be given back to
3 the county -- you know, it will go against our
4 storm water. They're going to be shared in
5 the basin wide for ag. That kind of doesn't
6 seem fair. It seems like we should --

7 MR. ESKIN: I'll let John answer
8 that.

9 MR. BROWNLEE: And another thing.
10 If we -- if we see our cover costs are a
11 little high, we're thinking, well, maybe we
12 can take some of that money from the storm
13 water utility and throw it toward ag. If
14 we're not going to get credit for that for the
15 county, it's going to be shared around the
16 basin, we're not going to be very happy about
17 that.

18 MR. ESKIN: I think this is two
19 different situations.

20 MR. RHODERICK: Okay. The first one
21 as you said, yours was one of the counties

1 where, strategywise, we broke it down to
2 county level. It seemed like we could get
3 there using an aggressive strategy.

4 Obviously, there's inherent issues in that
5 strategy. As I said, it's aggressive, it's
6 going to require additional resources. So
7 that's one piece.

8 The second one is, as Rich and are
9 being very clear at this point, we're very
10 reluctant at this point on the model and the
11 ag loads. We think there's some adjustments
12 that are going to occur, and so suggesting on
13 the front end that, you know, yes, you have
14 got this excess so you don't have to do as
15 much storm water, I'm really scared about
16 doing that, Dave, because I'm not settled on
17 this model yet.

18 And, you know, if down the road
19 that's where it plays out, then great. But
20 there is a lot of questions out there right
21 now. And then what was the second piece,

1 sorry?

2 MR. BROWNLEE: Let's say we use some
3 of our storm water money, throw it toward ag,
4 you know --

5 MR. RHODERICK: Get some additional
6 credit, right.

7 Again, because I'm leery as to where
8 you stand, whether we're above and beyond
9 meeting our obligation. I know overall, when
10 we talk about ag, we're talking about
11 statewide a 70 percent reduction of all
12 possible loads.

13 As we said, this E3 load, maximum we
14 can do. The baseline for ag is 70 percent
15 reduction. That means there's a potential
16 maybe for 30 percent additional, maybe.

17 Again, given -- but that is the component that
18 we're holding back and saying that is what you
19 need for growth and offset going forward. So
20 if you snatch that now just to meet your
21 obligation, what are you going to do, because

1 Calvert County's a growing area.

2 Are you willing to say to your
3 planning office just shut it down and say you
4 can't -- no more houses here because you don't
5 have any way to offset those loads now?

6 MR. ESKIN: So what he's saying is
7 hold that for future growth.

8 MR. RHODERICK: You need to hold
9 that for future growth is what we're
10 recommending.

11 MR. BROWNLEE: We have an ag need
12 and it's apparent we have money. Rather than
13 spend all our expenses on storm water, we
14 spend it to upgrade and implement an ag BMP,
15 the county should get credit and not share it
16 among, you know, other jurisdictions.

17 MR. RHODERICK: That is what I am
18 saying. I have got to get a 70 percent
19 reduction overall in your account. So we've
20 got to speak [inaudible]. For me to sit here
21 and say yes, that's an urban piece count

1 because the county paid for it, I may not have
2 enough on that plan to get there. Those are
3 what we recently said we can get to so, you
4 know --

5 MR. ESKIN: I think there is one
6 more point to make before you leave. An
7 important consideration is that right now
8 we're in this Phase II, you only need 60
9 percent. Do you have a storm water permit in
10 Phase I or Phase II?

11 MR. BROWNLEE: [Shakes his head.]

12 MR. ESKIN: No, you don't. Okay. I
13 think the way to think about this, at least
14 the way I think about it is don't worry about
15 the whole big chunk you can't possibly swallow
16 now. Worry more about how you could make
17 progress in your 2013 budget and your 2014
18 budget. Think about the end game in terms of
19 not going too slow now but when we get a
20 revised model in 2017, could be a whole new
21 game so don't worry so much about swallowing

1 that whole reduction, worry about the shorter
2 term, about making progress, setting up your
3 local capacity, making progress rather than
4 meeting the goal.

5 I think that's a more productive
6 approach to this because it is a big chunk to
7 swallow. I understand that but -- and you
8 could choke on it when you try and swallow it
9 all at once, but if you take off little bites
10 and say what would could I do in the next
11 budget, yes, I could find a little bit of
12 extra money. I could make some progress on
13 this building capacity. I may have to go a
14 lot faster later on if I go too slow now so
15 let me do as much as I can and let's make
16 progress that way rather than worry, well, how
17 much is the total cost and what does it add up
18 to per household.

19 Who knows what's going to happen
20 down the road. Who knows what the next
21 milestone is going to say so we know that the

1 model has been fairly consistent on the total
2 for the bay but the efficiencies internally
3 have changed. So let's see what happens and
4 we'll be in touch.

5 MR. BROWNLEE: Thank you.

6 MS. GHEZZI: Hi, my name's Lisa
7 Marie Ghezzi. I'm a Talbot County master
8 gardener, in part writing a in-my-backyard
9 publication for all of the people in our
10 community, and this plays a very significant
11 part of that. I'm also involved with the
12 Midshore Riverkeepers. So I'm an active
13 resident in the community volunteer.

14 I think the first gentleman, excuse
15 me, I didn't catch your name, made an
16 extremely important point and I hope I haven't
17 messed it up, but basically land use being the
18 root cause of the degradation of our bay and
19 then the consideration of development.

20 And I think that the question's been
21 addressed in a couple of different ways but I

1 still don't totally understand it from a
2 future development perspective. I hear 30
3 percent might be set aside, certainly
4 communities should consider that. Thirty
5 percent of the plan, you have just mentioned
6 it again, and that's why I need
7 clarification -- well, hold on one second.

8 Mr. Rhoderick also pointed out that
9 the load caps will be established. If we take
10 that -- let's just take a fictitious community
11 that has a hundred acres, 70 of which are
12 developed and 30 of which are not. What in
13 that 30 acres of that fictitious community --
14 what ability do they have to contribute
15 towards load in the future? I know it's a
16 very simplistic way to look at it but how are
17 we accounting for future development's impact
18 on our waters?

19 MR. ESKIN: We didn't really say
20 that, you know, 30 percent is set aside.
21 We're out of that. We're working towards the

1 60 to 70 percent actually. Now, by 2017 we're
2 still going to have to do the remainder going
3 forward. Just focus on what's right in front
4 of you now.

5 The accounting-for-growth strategy
6 will deal with a lot of this. So let's say
7 that 30 acres that you said and how could that
8 contribute to offsetting future growth. Let's
9 say it's in pasture now, well, you could plant
10 trees on that and that would lower the
11 per-acre loading rate of that area and so we
12 reduce your loads.

13 You could also offset septic
14 systems. You get the most credit for
15 upgrading a septic system that's in the
16 critical area because that's closest to the
17 water. But still, you could do that, you
18 know, you could find other ways to reduce
19 loads.

20 So basically the sort of the way
21 we're thinking about it now, you're a

1 developer. You're coming in, you're going to
2 build on land that's, say, half pasture, half
3 forest. When this development is done, what
4 would your loading look like. Will it go up
5 over what it is, will it go down. Most likely
6 it would go up. To the extent to which it
7 goes up, you would have to find other
8 reductions to offset that new load. What will
9 they be? Well, it depends on the particular
10 circumstances.

11 MS. GHEZZI: So it's a zero sum in
12 the --

13 MR. ESKIN: That's exactly right.
14 For right now actually it's a negative sum in
15 that we're accounting for growth because we're
16 above where we need to be. If we were just at
17 zero sum, we wouldn't be making progress. So
18 we may have like a two-to-one or a
19 three-to-one ratio that you need to reduce
20 three times as much as you increase your load.

21 Once we get down to the cap, then

1 it's a zero sum again, everything coming in
2 needs to be balanced and you need to maintain
3 that cap on into the future.

4 MS. BRUTON: My name's Theresa
5 Bruton, Hazen and Sawyer. Two questions. It
6 says in the appendix that the long-term
7 control plan written by the EPA states that
8 the elimination of combined sewer overflows, I
9 read the long-term control plan and it says
10 it's 85 percent reduction on a certain storm.
11 Are you eliminating combined sewer overflows?

12 MR. ESKIN: Honestly, I'm not
13 completely familiar with that issue. It may
14 depend on where you are. I know that there's
15 a different strategy in the District of
16 Columbia where their long-term plan is very
17 expensive. They're building tunnels to store
18 water versus what we're doing with, say,
19 Baltimore County, which is basically
20 disconnecting their storm and their sewer
21 systems.

1 What level of storm it gets, I don't
2 know. You could submit that comment or
3 question and we'll try and get you a specific
4 answer on that. I just don't know. There is
5 a number of communities that our CSOs have
6 dealt with, not only Baltimore City. I
7 believe Cambridge had some CSO issues and some
8 places further out west.

9 MS. BRUTON: My second question is
10 follow-up to Blue Water. She asked how you're
11 going to be reporting storm water. I am
12 familiar with how you report NPDS permits with
13 the wastewater plant. The permit has a load,
14 how many pounds you're allowed a year, and you
15 report that because there is a sampler that
16 takes and you calculate the load because there
17 is a flow meter. How are you going to do that
18 with storm water?

19 MR. ESKIN: Storm water permits
20 require a whole array of different things.
21 Some of the requirements for storm water, for

1 example, are to run some video through your
2 lines to see whether you have illegal or
3 illicit connections and things like that. The
4 part we're most interested in would be
5 probably two things. One is the actual
6 implementation that they have done to reduce
7 storm water runoff.

8 There is going to be in Phase I,
9 probably in the Phase II permits -- Phase I is
10 the largest jurisdictions, ten largest.
11 Phase II are two of the medium-sized
12 Washington County and Cecil and they have
13 permits.

14 So that permit is going to have a
15 requirement to retrofit 20 percent of your
16 developed area that does not have storm water
17 controls or areas equivalent to that. If they
18 don't have the maximum controls, you could add
19 more controls up to the maximum. So that's
20 going to be basically they'll report what
21 they've done, how many acres it's done, what

1 the drainage area is and what the expected
2 reduction would be.

3 MS. BRUTON: So there is no numbers.
4 It's a calculation from what you've done
5 equals --

6 MR. ESKIN: They also have a
7 monitoring requirement which includes what's
8 called event mean concentrations. That's when
9 you have rainfall, you could have your storm
10 water runoff. They have to monitor as the
11 water flow goes up and then goes down and that
12 is called an event mean concentration there.
13 This monitoring shows that this stuff is
14 working. So they also have to report that.

15 What we have seen as we've
16 implemented more and more storm water is that
17 the event mean concentrations of nutrients are
18 going down.

19 So there is both implementation
20 reporting as well as a monitoring reporting.

21 MS. BRUTON: Sampling the water or

1 in the system?

2 MR. ESKIN: The event mean
3 concentration is not each individual facility
4 but it's at specific locations.

5 MS. BRUTON: In the stream.

6 MR. ESKIN: I think it's coming
7 out -- well, I'm not sure where it is,
8 actually, as I don't do storm water. So I
9 don't want to --

10 MS. EASTMAN: My name is Ajax
11 Eastman. I am just asking a question. What
12 are the assurances that counties that didn't
13 submit the plans are -- that somebody will be
14 tracking and they'll be held accountable by
15 either the county or the state or EPA that
16 those have been achieved?

17 MR. ESKIN: What's going to happen
18 in 2013 and probably before, but most notably
19 in 2013, that we're going to have to submit to
20 them what we call an input deck. A new input
21 deck. 2013 progress. And what that's going

1 to include is the new BMPs that have been
2 implemented since now. And we're going to be
3 developing that, getting information on a
4 county-by-county basis. So we submit that to
5 EPA or, quite frankly, we analyze it in MAST
6 for a good approximation, and if the progress
7 that we're expecting hasn't been made, that is
8 when the uncomfortable discussions will ensue.

9 And, you know, we would work with
10 EPA and we would say, well, you know,
11 statewide we're doing pretty good but this
12 county, they're not reporting much progress.
13 Let's work together with them to figure out
14 what is going on and how we could help them
15 catch up. And then the response, of course,
16 will be critical as to what happens next.

17 So we're taking this information, it
18 is being reported to us, we look for progress
19 both with respect to their milestones as well
20 as implementation, and then we come back if
21 you're not making the progress that needs to

1 be made and have a hard discussion.

2 MS. EASTMAN: So will you be doing
3 the tracking or they will be doing the
4 tracking?

5 MR. ESKIN: Well, they're reporting
6 to us and we'll be tracking what they report.
7 So let's say it's storm water and let's say
8 it's a county that has a permit. So they
9 would submit to us as part of their annual
10 required report under the permit what they've
11 done. Well, they haven't done anything, well,
12 that is a problem. We need to deal with it.

13 MS. EASTMAN: Thank you.

14 MS. BURGESS: Kim Burgess, City of
15 Baltimore, DAW. Let's go with that different
16 scenario. What if it's a county that doesn't
17 have a permit, you only have the city plus
18 nine counties that actually have an MS4
19 permit. And as you said earlier, the TMDL is
20 not an enforceable action. Just, I think, a
21 lot of people are looking around at that other

1 part of the state and they're saying, well,
2 it's a difficult conversation, but really
3 where is that time line going to come in with
4 it.

5 MR. ESKIN: I think it's likely
6 we'll be getting some progress from them
7 anyway as they take care of flooding and
8 things like that. In total, if you are a
9 county that doesn't have a permit, you're
10 probably a more rural county. If you're a
11 more rural county, you're probably getting
12 much of your implementation and progress
13 through the ag sector. They're not totally
14 responsible but it's going to be a pretty
15 small component. We'll have to look at that.

16 One of the consequences I know
17 earlier was residual designation. If we're
18 not seeing progress, that would be fairly, you
19 know, drastic. Almost like taking a cannon to
20 a mosquito, but it is a possibility.

21 So we have to see how well that

1 works, you know, how far behind it's getting
2 and what we could do about it. We don't
3 anticipate that that is going to be such a
4 significantly large load that we really need
5 to worry about it at this point.

6 MR. RHODERICK: I actually forgot,
7 when I was doing the presentation, we've
8 already put up a Web site effective today. If
9 you go to Maryland Department of Agriculture
10 and you click on conservation, you'll see TMDL
11 and you pop up -- there's a map and you'll see
12 county by county there's goals, and you'll see
13 there's a setup where we're going to track
14 progress.

15 So we will have 2013 goals and
16 you'll be able to track and we'll probably
17 annually load up information but you will be
18 able to see county by county the progress
19 based on goals.

20 MS. HORSEY: The conservation tab is
21 across the top towards the right hand of the

1 screen. Once you get on the conservation
2 page, on the left-hand side you'll see the
3 TMDL, watershed implementation tab. It's
4 about a third of the way down. And once you
5 click on that, you'll be able to click on the
6 state map and click on the county and then
7 you'll be able to navigate from there.

8 MR. ESKIN: More questions? David?

9 MR. CARROLL: David Carroll, Blue
10 Water Baltimore. How do you account for
11 stream bank erosion in the calculations
12 because certainly in areas like metropolitan
13 areas, that is a big number. We remove a
14 couple of hundred thousand cubic yards every
15 year out of the harbor to keep the channels
16 open because right now it's only characterized
17 as farm erosion.

18 I'm afraid we're going to get
19 counted out, the sediment loading is probably
20 counted as farm from the charts, that we're
21 going to get counted out. Stream bank erosion

1 has become a less and less important strategy.

2 So how do you account for that?

3 MR. ESKIN: Well, I think that is a
4 potentially very large load. In fact, there
5 is some indication now the stream bed and
6 stream bank erosion far exceeding surface
7 erosion like from agriculture.

8 As I mentioned before, some
9 counties, like Anne Arundel County, are
10 focusing on the issue of restoration which
11 would fix that problem. It's going to be
12 county by county. I think Baltimore County
13 also has been doing a lot of stream
14 restoration. Montgomery County is very
15 interested in that. So we have to look at
16 that plan.

17 If we are falling behind on
18 sediment, I think that that would be, then,
19 the time to try and fix that. I think where
20 we have highly eroded streams, many of it the
21 urban counties are monitoring that. I know

1 Prince George's County has a stream monitoring
2 program as does Montgomery County. I think
3 Charles County has initiated some.

4 So it's part of their local stream
5 monitoring programs and hopefully some of it
6 will go in to fix that. But as I said, we're
7 not guiding that at this particular point
8 except through whatever sediment erosion
9 controls need to be implemented according to
10 law. We fall behind on our sediment progress,
11 then we'll have to pick it up. But it's
12 something we should probably encourage much
13 stronger than we have been.

14 MR. TITUS: Tim Titus, Patapsco
15 Heritage Greenway. Are you satisfied that the
16 contribution of nongovernmental organizations
17 and volunteers are being adequately reported
18 and any best management practices that those
19 kind of groups contribute are being factored
20 in well enough through the counties?

21 MR. ESKIN: You know, that's a good

1 question. I really don't know. I don't know
2 how much they're doing. I know John is
3 working on voluntary stuff that's being done
4 by farmers. But as far as the NGOs, I don't
5 know. I would encourage them to report all
6 work locally with the counties.

7 MR. RHODERICK: We actually had at
8 these meetings, at least for agriculture, we
9 had a lot of the NGOs there. Some of those
10 numbers you saw reflected the ag strategy
11 directly from those NGOs where they said this
12 is an area I'm working on. We had
13 switchgrass, 1,000 acres, some of the wetland
14 acres, those were attributed to watershed
15 organizations that were working with the
16 farming community.

17 MR. ESKIN: I have a question for
18 you guys. How many of you have not submitted
19 comments on the WIP yet but are planning to do
20 so by Friday? Okay. Thanks. Just curious.

21 More questions? This side is kind

1 of quiet. I mean, feeling isolated?

2 MR. RHODERICK: That's your staff
3 over there. I'm not pushing you for questions
4 per se but it's coming up close to the end of
5 the comment period. Part of the purpose for
6 this meeting was to get your questions
7 answered before you had to submit your final
8 comments. The better you understand what we
9 have done, how we have got there, the better,
10 you know, more relevant your comments will be.
11 That's why I'm encouraging you that you
12 shouldn't feel shy or uncomfortable
13 commenting. So we'll leave it at that.

14 MR. DiNUNNO: My observation has
15 been that the storm water runoff is -- a major
16 contributor is our highway system. I know
17 locally over where I live you can see water
18 gushing in from the sides of the road down
19 into the gutter. I am sure this is happening
20 all across our state. As far as I know, there
21 is no requirement that the highway

1 administration gets storm water permits or
2 discharge permits.

3 How do you deal with this? You've
4 got a state agency is a major contributor for
5 this.

6 MR. ESKIN: Actually, the state
7 highway has a permit. They do. Now, they're
8 not responsible for the roads. They're
9 responsible for the state highways. If it's a
10 local road, then it's a local requirement.
11 But they do have a storm water permit.

12 We have been working with them. In
13 fact, they come up with a load of estimates.
14 They have a lot of engineers on staff, so in
15 some ways it's easier for them, but they are
16 pretty emphatically working on that. State
17 Highway administrator Beverly Swaim-Staley,
18 met with the bay cabinet early on about this
19 so we're all understanding what needs to be
20 done, and State Highways has been an active
21 participant in the whole process.

1 MS. HORSEY: There's something in
2 the draft WIP.

3 MR. ESKIN: Yes, they do have
4 something in the draft WIP strategy.

5 MR. STAINMAN: I came from the quiet
6 section. You instigated this. Stuart
7 Stainman from the Patapsco/Back River
8 tributary team. I have two questions.

9 The first is both agricultural and
10 urban groups are saying that they're doing or
11 considering some modifications that would
12 reduce nutrient loads but they're not listed
13 in the accepted BMPs. What is being done in
14 the schedule for expanding the list of BMPs
15 that are acceptable or can be counted? Do
16 that first.

17 MR. ESKIN: Yes, it's a little bit
18 easier.

19 MR. RHODERICK: Yes, I know I
20 glossed over it real quick. I told you there
21 was this ag work group. Part of that, we saw

1 there were some BMPs that were suggested or
2 new. So we have a process, there's about 12
3 BMPs that the ag workers have identified that
4 they feel they have work quality benefits.
5 The component we have is in process with the
6 EPA. Unfortunately, it's going to take
7 anywhere from three to five years. It's
8 gruesome.

9 You have to have the literature and
10 research to first start this. You pull out,
11 you gather, then you send it in and there's a
12 whole peer-review process that goes into it.
13 Once that's approved, it's passed up to the
14 bay work group. It would get into the model
15 but it is a process. We're lining that up
16 now. As I say, we've got 12 BMPs so we've got
17 a dog in the fight for agricultural.

18 MR. STAINMAN: Second question.
19 There are some pollution loads that you -- I
20 don't know if it's assigned to -- I don't know
21 if "assigned" is the right word -- but you

1 said to some jurisdictions that pollution
2 loads are coming from these sources, and as
3 the local jurisdictions have looked, they have
4 found that those are in error, that the
5 pollution loads from those sources are not
6 anywhere near as large as you estimated.

7 But obviously, the pollution is -- I
8 assume that pollution has been measured from a
9 monitor so the pollution is still there but
10 it's coming from some other sources. When
11 are -- as a citizen, when are you going to --
12 who's responsible for reducing it and when are
13 you going to reassign that?

14 MR. ESKIN: There is two aspects to
15 the accuracy of the model. One is the model
16 itself, how it handles the various processes
17 and how reflective they are of what actually
18 happens in the ecosystem. The other is the
19 data that we feed it.

20 If that is inaccurate, then
21 regardless of how accurate the model is, we're

1 not going to get accurate results. The old
2 garbage in, garbage out. In doing the model,
3 EPA basically has to use the lowest common
4 denominator on something like land use because
5 it has to be consistent across the whole
6 watershed, and that isn't always very
7 accurate.

8 I did note towards the end of my
9 presentation, one of the things that we need
10 to do in the future in working with EPA is to
11 get more accurate land use. Anne Arundel
12 County, working with Anne Arundel County early
13 on, they found a number of septic systems was
14 way off. That is, I think, a very good
15 example.

16 So as we're working to the revision
17 of the model, we need to correctly attribute
18 those septic systems and get the right
19 numbers.

20 Now, what happens, you're right, the
21 model does capture it because the model is

1 calibrated against actual monitoring data. So
2 when the model projection and the monitoring
3 data don't match up, it means that we
4 misattributed or missed something entirely,
5 which is why we do the calibration in the
6 first place so that we could account for it in
7 some way.

8 The new model, hopefully we will be
9 getting better data into it because this has
10 become so much more important and hopefully
11 the calibrations will be better which would
12 mean that we will not have misestimated as
13 much.

14 So that won't happen until 2016/2017
15 when we revise the model. But we are working
16 on it. We are aware of the issues.

17 MS. HORSEY: Getting back to the
18 question about State Highways. The State
19 Highway plan is under Appendix E which is
20 listed up here, and if you look also on
21 Appendix A on page A11, it talks about the

1 storm water permits for State Highways.

2 MR. ESKIN: Good. We've already got
3 that covered. Anybody else?

4 MR. SEIPP: Brian Seipp, Center for
5 Watershed Protection. You mentioned in your
6 presentation that if a total jurisdiction
7 submitted a Phase II plan and it was deficient
8 in some manner, then the state interjected. I
9 think you called it a gap filler or filling
10 the gap.

11 How do we or where can we find the
12 information for where MDE sort of filled in
13 the gap? I know you went through a number of
14 steps that you kind of went through. Is there
15 sort of an analysis that said this is what the
16 local jurisdiction submitted and this is what
17 MDE is adding in order to make it, you know,
18 to the goal?

19 MR. ESKIN: We're working on that
20 right now. We're obviously kind of busy as
21 well trying to finalize everything. That

1 information will be available out to the
2 counties and the public at the end of April,
3 where we're trying to put it into a form
4 that's readable and interpretable and useful
5 to local governments and to anybody else who
6 wants to look at it, but that will be
7 available the end of April on a
8 county-by-county basis.

9 MR. CHEN: Can I have another
10 question?

11 MR. ESKIN: Yes.

12 MR. CHEN: Chen again. The question
13 I have relates to the urban nutrient
14 management, and I know this is a program MDE
15 is managing. The county Phase II plan is
16 pretty much using state's Phase I plan and one
17 of them is to implement urban nutrient
18 management plan.

19 And my question to you two is, well,
20 you will implement; how do we take credit or
21 how do we trade it because it's managed by

1 MDA, not by us. And secondly, how is MDE
2 going to give us the credit for that?

3 MR. RHODERICK: Okay. It is, as you
4 talked about some of these state regulatory
5 programs, a component that gets taken off the
6 top. But as you said, it's all about the
7 management of the program. We are looking at
8 an efficiency, a very low efficiency.

9 There is one aspect of us rolling
10 the program out and training and educating
11 people. It's another thing, as you just
12 talked about, a responsibility that the county
13 would take on for actually monitoring or going
14 out and making sure that homeowners are
15 actually applying it.

16 And again, if you're coming up with
17 better information, then we would look at,
18 say, higher reduction for the county because
19 the county is implementing it to a higher
20 degree than what the state would be
21 suggesting.

1 MR. ESKIN: Anybody else?

2 Thank you all for taking the time to
3 participate and for your questions and this
4 whole effort. I hope you found it a
5 productive two hours.

6 (Proceedings concluded at 3:58 p.m.)

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1 STATE OF MARYLAND

2 HOWARD COUNTY

3 I, Dawn Michele Hyde, a Notary

4 Public of the State of Maryland, Howard

5 County, do hereby certify that the

6 above-captioned proceeding took place before

7 me at the time and place herein set out.

8 I further certify that the

9 proceeding was recorded stenographically by me

10 and this transcript is a true record of the

11 proceedings.

12 I further certify that I am not of

13 counsel to any of the parties, nor an employee

14 of counsel, nor related to any of the parties,

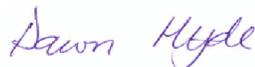
15 nor in any way interested in the outcome of

16 the action.

17 As witness my hand and seal this 5th

18 day of March, 2012.

19



20

**DAWN M. HYDE
NOTARY PUBLIC
HOWARD COUNTY, MD**

Dawn M. Hyde

21

My Commission Expires 10/7/2015

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DEPARTMENT OF THE ENVIRONMENT MEETING
PHASE II WIP INFORMATIONAL MEETINGS

* * * *

The above meeting was held on
Monday, March 5th, 2012 at Maryland
Department of the Environment, 1800 Washington
Boulevard, Baltimore, Maryland, commencing at
2:00 p.m., and was reported by Dawn Hyde, a
notary public.

EVANS REPORTING SERVICES

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<p>1 ATTENDEES:</p> <p>2</p> <p>3 MR. RICHARD ESKIN</p> <p>4 Director of Science Services Administration</p> <p>5 Maryland Department of the Environment</p> <p>6</p> <p>7 MR. JOHN RHODERICK</p> <p>8 Administrator</p> <p>9 Maryland Department of Agriculture</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p>	<p>1 three restrooms on your right.</p> <p>2 Okay. I'd like to begin by</p> <p>3 acknowledging with great appreciation the</p> <p>4 assistance of the Town Creek Foundation and</p> <p>5 the Hughes Agro-Ecology Center. Town Creek</p> <p>6 provided funding to the Agro-Ecology Center</p> <p>7 and they have done all the work in setting up</p> <p>8 these meetings.</p> <p>9 This is the last of this series. We</p> <p>10 had a meeting out in Chestertown, we had a</p> <p>11 videoconference that included four different</p> <p>12 locations. I was actually present in College</p> <p>13 Park but we videoed into Frostburg, the</p> <p>14 College of Southern Maryland and Salisbury.</p> <p>15 We had one in Hagerstown, and now this will be</p> <p>16 the final meeting.</p> <p>17 And so the Agro-Ecology Center set</p> <p>18 all of that up for us and we probably couldn't</p> <p>19 have had this level of outreach without their</p> <p>20 assistance. I know we couldn't have had it.</p> <p>21 Very quickly, let me go over some of</p>
Page 3	Page 5
<p>1 PROCEEDINGS</p> <p>2 * * * *</p> <p>3 MR. ESKIN: My name is Richard</p> <p>4 Eskin. I'm the director of science services</p> <p>5 here at the Maryland Department of the</p> <p>6 Environment. I'm the department's lead on the</p> <p>7 Watershed Implementation Plan.</p> <p>8 The way things are going to go, I am</p> <p>9 going to give a 15-, 20-minute presentation,</p> <p>10 make sure everybody's on the same page, has</p> <p>11 the basics. Then John Rhoderick from the</p> <p>12 Maryland Department of Agriculture is going to</p> <p>13 do the same thing essentially for the</p> <p>14 agricultural side, 15, 20 minutes, and then</p> <p>15 we'll be here to answer your questions until</p> <p>16 four o'clock, you run out of questions, or we</p> <p>17 all decide we've had enough.</p> <p>18 So I will just get right into it.</p> <p>19 Anybody have any questions? There are</p> <p>20 restrooms. If you go out that back door and</p> <p>21 go to your right, there are two restrooms or</p>	<p>1 the basics for the TMDL. A TMDL is total</p> <p>2 maximum daily load. It's the maximum number</p> <p>3 of pollutants that can enter a water body and</p> <p>4 still allow that water body to meet the water</p> <p>5 quality standards. The water quality</p> <p>6 standards are a regulation in COMAR in</p> <p>7 Maryland. They have to be approved by EPA.</p> <p>8 And basically they set goals for every water</p> <p>9 body.</p> <p>10 For the TMDL the two main goals that</p> <p>11 we're concerned with are the dissolved oxygen</p> <p>12 in the main part of the bay and water clarity</p> <p>13 in the shallow parts where SAV is a critical</p> <p>14 habitat component and they need clear water</p> <p>15 with good light penetration to thrive.</p> <p>16 There is three basic parts to the</p> <p>17 TMDL: the waste load allocation, which is</p> <p>18 critical, that is the sum of the loads from</p> <p>19 all of the regulated sources. Any source that</p> <p>20 needs a permit: municipal wastewater treatment</p> <p>21 plant, storm water, CAFOs, all of those are</p>

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<p>1 captured in the waste load allocation. The</p> <p>2 load allocation is basically everything else</p> <p>3 that is left, largely unregulated urban areas,</p> <p>4 agriculture and atmospheric deposition.</p> <p>5 The margin of safety in this case is</p> <p>6 what we call implicit. We did not set aside</p> <p>7 some specific amount of load for the margin of</p> <p>8 safety; rather, we made a series of</p> <p>9 conservative assumptions that are built right</p> <p>10 into the model.</p> <p>11 I am sure many of you know that</p> <p>12 we've been working to restore the bay since</p> <p>13 the first bay agreement in 1983. During most</p> <p>14 of that period, all of that period, really,</p> <p>15 it's been a voluntary approach and we have</p> <p>16 made a lot of progress.</p> <p>17 It's not fair to say it didn't work.</p> <p>18 It wasn't enough but it did work. We did do a</p> <p>19 lot of good stuff. We did get a lot of</p> <p>20 programs up and running and we did at least</p> <p>21 stabilize the loads. It would have been a lot</p>	<p>1 For those of you who are from local</p> <p>2 governments, I want to emphasize again how</p> <p>3 important developing your tracking systems</p> <p>4 are. We cannot credit you for things that you</p> <p>5 have done that we're not aware of unless you</p> <p>6 report them to us. We want to give you full</p> <p>7 credit for everything that you've done to</p> <p>8 avoid the consequences that I'll talk about in</p> <p>9 a moment.</p> <p>10 But if you don't report them to us,</p> <p>11 you can't get credit for it. So you need some</p> <p>12 system internally to track, you know, all of</p> <p>13 the stream restorations you've done, the</p> <p>14 conversions of dry ponds to wet ponds.</p> <p>15 Whatever it is, that needs to be recorded.</p> <p>16 On the agriculture side, John's</p> <p>17 working directly with the conservationists</p> <p>18 using conservation tracker to track that, but</p> <p>19 for local governments, we need you guys</p> <p>20 reporting to us. Then what we have also done</p> <p>21 in the past, unfortunately, is we have had a</p>
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<p>1 worse without those voluntary programs. But</p> <p>2 right now we're moving into a greater level of</p> <p>3 accountability, starting with the TMDL itself.</p> <p>4 The TMDL is not directly enforceable</p> <p>5 but permits that are enforceable need to be</p> <p>6 consistent with the loads in the TMDL. So</p> <p>7 immediately once the TMDL is completed, we're</p> <p>8 moving more into a regulatory framework.</p> <p>9 The Watershed Implementation Plans.</p> <p>10 That's part of what EPA calls reasonable</p> <p>11 assurance. Particularly for the load</p> <p>12 allocation where you don't have compliance</p> <p>13 with the permit, if you have a plan in place,</p> <p>14 if that plan is public, if it's transparent,</p> <p>15 then it will hold us accountable basically for</p> <p>16 making sure that the plan gets implemented and</p> <p>17 therefore that the loads are reduced.</p> <p>18 If you have a plan, you want to</p> <p>19 follow that plan, you need to track whether or</p> <p>20 not you're doing what's required by the plan,</p> <p>21 so that is very, very important.</p>	<p>1 decade-long goal and then we haven't checked</p> <p>2 on that periodically. We came to the end of</p> <p>3 that decade and we found, well, we didn't make</p> <p>4 satisfactory progress. That's not going to</p> <p>5 happen this time.</p> <p>6 So we set two-year limitation goals,</p> <p>7 we've set milestones as part of that, and if</p> <p>8 you're not meeting your milestones, that's</p> <p>9 when we start talking about consequences.</p> <p>10 Start talking about it. So what are those</p> <p>11 consequences?</p> <p>12 EPA sent us a letter December of</p> <p>13 2009, five- or six-page letter detailing the</p> <p>14 kinds of actions they could take for lack of</p> <p>15 implementation. They can -- the permit</p> <p>16 programs, for example, aren't delegated</p> <p>17 programs. EPA still retains authority. EPA</p> <p>18 can come back in, open a permit and say, well,</p> <p>19 you may have built this plant to have two</p> <p>20 million gallons of capacity but you're not</p> <p>21 making progress anywhere else, we're going to</p>

Page 10	Page 12
<p>1 take away half that capacity. No more 2 hookups, no more growth to this wastewater 3 treatment plant. 4 Obviously, that's not something that 5 most counties will find desirable. That's one 6 of the types of consequences that could occur. 7 They could expand NPDES coverage for storm 8 water, for example. Not all counties have 9 storm water permits. 10 Well, under something called 11 residual designation, EPA could say, look, 12 County X, you are not making satisfactory 13 progress, we're going to have to impose a 14 storm water permit on you with all the 15 implications of additional staff, consequences 16 for enforcement, possible penalties. All of 17 that could happen. 18 So I think that what we all really 19 want to do is do our best to meet our 20 milestones and avoid even the possibility of 21 these consequences.</p>	<p>1 has a role to play in this. So we set up 2 those teams but then we -- okay, you have a 3 team, you have people together. This is kind 4 of complicated. How do we actually determine 5 what we want to do. 6 We developed a software tool called 7 MAST, Maryland Assessment and Scenario Tool. 8 You can think of that as a spreadsheet 9 designed to help you develop a local strategy. 10 It has all of the best management 11 practices. It has the relevant land uses. 12 Basically, you put in a percentage of the land 13 use to which you want to apply that best 14 management practice and it calculates your 15 load reduction. It's much, much better than a 16 spreadsheet and that spreadsheet's going to 17 take into account, for example, the relative 18 effect of this depending on your distance from 19 the bay. They don't take into account the 20 change in efficiencies when you add multiple 21 best management practices on the same land</p>
Page 11	Page 13
<p>1 That said, I want you all to also 2 understand EPA is not anxious to impose 3 consequences. They don't want to do it but 4 they have assured us they will if it's 5 necessary. Enhanced oversight, federal 6 enforcement. All of those are other 7 possibilities. 8 So what has happened so far through 9 the process? One, because local governments 10 are so critical to the implementation, we set 11 up teams at the county scale, and what do I 12 mean by county scale? Well, the county scale 13 includes not only county government but 14 municipalities as well. 15 In Anne Arundel County, which was a 16 pilot jurisdiction, we worked with DOD, the 17 military, Fort Mead was there. We worked with 18 the airport because they're a large 19 landholder. We worked with SHA because they 20 also have a storm water permit. 21 So we want to involve everybody who</p>	<p>1 area. 2 This does all of that. What it is 3 is a simulation of EPA's watershed model and 4 the reason that is important is that when we 5 submit our strategy, EPA runs them in this 6 watershed model and that's how they know if 7 they're okay or not. So if we don't have a 8 tool that does it quickly, we can't really 9 experiment and come out with the most 10 efficient strategy. 11 What happened before MAST is we 12 would develop a strategy, EPA would take a 13 week to get it back. Well, obviously you're 14 not going to do a lot of what-ifs with that. 15 But here, you get instant feedback. You can 16 do those what-ifs so you could tweak your 17 strategy much better. 18 EPA requires that we submit two-year 19 milestones statewide. That was done by 20 January 6th and we submitted the overall 21 strategies for the bay 2017 and 2025 on</p>

Page 14	Page 16
<p>1 January 27th. We are now in the review and 2 revision period which closes at the end of 3 this week: March 9th, comments close. 4 I would strongly recommend that 5 particularly counties of local government, but 6 everybody else as well, submit comments. To 7 some extent, submitting those comments holds 8 open the door to this process if you want the 9 make changes later. 10 So if you're a local government, you 11 say you want to go back once you get some 12 information from us in April, which I will 13 talk about more in a moment, you'll have that 14 door open to allow you to do that. 15 Why 2017 and 2025? 2017 is one of 16 those sort of interim milestones. That is 17 when EPA expects us to have completed 60 18 percent of the required implementation that we 19 will need to get to of the total 20 implementation. It's all supposed to be done 21 by 2025.</p>	<p>1 best management practices on farmland, as we 2 improved our storm water permits, we were 3 still growing. 4 So we had more septic systems, we 5 had more hookups to wastewater treatment 6 plants, we had -- we didn't get more 7 agriculture, but we had all these things that 8 were adding to the loads as we were reducing 9 the loads, and so we sort of neutralized the 10 progress. That's why we haven't made as much 11 progress as we hoped. 12 This time, new load that comes in 13 that's not in the TMDL, it needs to be offset 14 by some additional reductions over and above 15 what is in our strategies. 16 Talk a little bit about cost and 17 funding, and I'm sure that that is probably 18 the foremost question on your mind which we 19 will get to to some extent in the question and 20 answer. And we do -- I mean, there is a lot 21 of funding that is available.</p>
Page 15	Page 17
<p>1 What is in the WIP? Four sections. 2 Section I has those specific strategies, 2017, 3 2025. Shows it by sector, shows it statewide 4 and it references an appendix which actually 5 has it by basin. Now, there are five basins 6 in Maryland. There is the Potomac, the 7 Patuxent, the Susquehanna, the Western Shore 8 and the Eastern Shore. 9 So as you start having a lot of 10 tables, that is why we put it into the 11 appendix because you have tables for each 12 basin times nitrogen, times phosphorus, times 13 sediment. So it's getting to be a pretty long 14 list of tables and we felt that that would 15 interfere with working your way through it. 16 We have the milestones in there 17 accounting for growth. They're all in 18 Section I. There was accounting for growth. 19 One of things that happened over the years in 20 the voluntary process is that as we upgraded 21 our waste treatment plants, as we put more</p>	<p>1 The Bay Restoration Fund, which we 2 are sincerely hoping to at least double. The 3 trust fund, the 319 grants, the Chesapeake Bay 4 Implementation grants. There is local money 5 as well. It's not enough. We know that but 6 we don't have all the answers right now. So 7 that will be something that we will have to 8 move on together moving forward. 9 In Section II we talk about the 10 engagement that we've had through the various 11 meetings, all of -- how many meetings did you 12 have, John, forty-six? 13 MR. RHODERICK: Forty-six. 14 MR. ESKIN: Forty-six meetings they 15 held with the conservation districts for the 16 local team meetings as well as the regional 17 meetings that we had, meetings with DOD. And 18 in fact we also provided hands-on training for 19 the MAST tool here at our computer lab, and 20 the person who wrote the program was actually 21 the trainer and she understands the bay model</p>

Page 18

1 very well.

2 Section III is basically what we got

3 back from the local governments exactly as we

4 got them, which is posted there on the Web for

5 folks to see. And then finally we talk about

6 where we're going in a little bit.

7 I'm not going to go through all the

8 appendices but there is a lot of supporting

9 information, a lot of detail in support of

10 what's in the WIP.

11 We set milestones, we set time

12 frames, so pace is very important to keep up

13 with that, and I noted earlier 60 percent by

14 2017. We had originally been trying to get to

15 full implementation by 2025. That really

16 didn't seem feasible when we looked carefully

17 in detail about what needed to be done and how

18 much it would cost and how long to raise that

19 money.

20 So we went back to basically what

21 everybody else is doing, which is 60 percent

Page 19

1 by 2017 and completion by 2025.

2 The ENR upgrades are proceeding at

3 pace which is really critical. That program

4 has been established since about 2003, so it's

5 up and moving and as we upgrade the largest

6 plants, we are making real progress. Getting

7 the remainder of the Bay Restoration Funds

8 will be critical to keep that pace going.

9 However, although we're doing really

10 well in wastewater treatment plants, we're

11 also doing well with agriculture, but we need

12 to have incremental progress across all of the

13 sectors. We can't sit back and say, well,

14 they're ahead of the game, we'll just take our

15 time because you need to ramp up now,

16 otherwise you won't have the program capacity

17 when you need it.

18 Scale. I mentioned the five basins.

19 We developed the strategy at the county scale.

20 We are going to continue working with counties

21 as this moves along. That level of

Page 20

1 responsibility is critical. Watershed,

2 basins, they don't have budgets. They don't

3 have planners. It's the counties, the

4 governmental units that have these things that

5 are, you know, important to actually get the

6 implementation. So although we're reporting

7 to EPA at the basin level, we're going to

8 continue working locally at the county scale.

9 I talked about this already. We had

10 thought about moving forward to about 2013,

11 then we more recently decided, well, this task

12 force that met over the summer, the septic

13 task force, more properly known as the

14 sustainability and wastewater disposal task

15 force, had some very good recommendations.

16 They've gone to the General

17 Assembly. So to make sure we're not stepping

18 on any toes, we just said let's see how the

19 General Assembly handles this and then we will

20 take off from wherever they leave us in April.

21 Offsets for growth and future loads.

Page 21

1 I know that local funding is a critical issue

2 but a way to bring in the private sector is

3 that developers, as they want to develop, will

4 increase loads. I mentioned before to account

5 for loads, they need to offset that. One of

6 the ways to offset that is to help pay for

7 septic upgrades, help pay for storm water

8 retrofits and so forth.

9 And we are assuming -- well,

10 accounting for growth is coming out probably

11 this spring for discussion but at this point,

12 we're sort of assuming it's not necessarily

13 going be on a one-to-one -- the offsets won't

14 be on a one-to-one basis. You might have to

15 offset at two to one and that's how you get

16 some help there.

17 Not all counties submitted complete

18 strategies, and that's fine. I mean, they're

19 independent governmental units. We can't make

20 them do this. There may still be consequences

21 but we couldn't make them submit that. So

Page 22	Page 24
<p>1 what we did because MDE, State of Maryland, 2 had to submit a strategy that will meet water 3 quality standards for EPA, we filled in the 4 gaps. 5 So if we got from a county a 6 complete strategy that met water quality 7 standards, for their allocation we used that 8 exactly as we got it. If it was -- made 9 progress but wasn't all the way there, we 10 filled in the remainder. And if we got 11 nothing in terms of an explicit strategy for 12 what we call an input deck which is all best 13 management practices as opposed to the model, 14 then we developed that in its entirety. 15 It requires, first, anything that 16 would be required by a permit because that has 17 to be done. And then we looked at more 18 programmatic approach like urban nutrient 19 management that are very cost effective. And 20 then finally we allocated the remaining BMPs 21 based on the allocation strategy.</p>	<p>1 After July we'll have to work 2 through an adaptive management process. We're 3 not completely sure that what means but we 4 know that we can't have a perfect plan at this 5 time that won't change between now and 2025. 6 Again, tracking and reporting. I 7 can't emphasize that too much. And then we 8 would like to work with locals and with EPA to 9 get better numbers on land use, better numbers 10 on septic systems. Make the input to the 11 model better while we're working on making the 12 model itself better. 13 The schedule. January 6th we handed 14 in the milestones. We are now in the public 15 comment period. Between March 9th and 16 March 30th we'll be looking at your comments. 17 We will be making revisions to what was 18 submitted, and then March 30th it goes to EPA. 19 EPA then essentially has to make a 20 decision on whether they change the TMDL and 21 then go out and get comments again or not</p>
Page 23	Page 25
<p>1 These are the numbers of where we 2 are and where we need to get to. So for 3 nitrogen we need to -- from 2010 we need to 4 reduce by another 11 and a half million pounds 5 which is a 22 percent reduction. Phosphorus, 6 similarly, 500,000 pounds and 15 percent 7 reduction, and 26 million pounds for sediment, 8 another two percent reduction. 9 Where do we go in the future? We're 10 going to accommodate refinements to local 11 plans through July. Many local plans will 12 probably be constructed based on the 13 expectation they need to be completed by 2020. 14 If you want to go back and until you have 15 given us the 2025 now, say it's 60 percent, 70 16 percent, well, that will probably, at least to 17 a little extent, mitigate some of the concern 18 because if the costs are stretched out, then 19 they're lower on an annual basis and that 20 makes that a lot more feasible, or more 21 feasible anyway.</p>	<p>1 depending on the nature of the revisions that 2 we request. 3 And then basically July 2nd we move 4 from the planning phase more strongly into the 5 implementation phase. I know that many of you 6 are doing implementation but we need to 7 accelerate over what we've been doing in the 8 past. 9 And that is it. And now I will turn 10 it over to John. 11 MR. RHODERICK: Thank you, Rich. 12 Good afternoon. My name is John Rhoderick for 13 those who aren't familiar with me. I'm from 14 the Maryland Department of Agriculture and for 15 the last year I was asked to help facilitate 16 the Watershed Implementation Plans that were 17 developed at the county level across all the 18 counties in Maryland for agriculture. 19 So what I want to do is kind of give 20 you a brief synopsis of that exercise but I 21 think first off one of the questions that</p>

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<p>1 comes up right away is, as Rich has talked, he 2 has talked about, you know, looking at county 3 governments to help develop plans for what I 4 call the septic load, the wastewater load and 5 the storm water load. So why do we pull 6 agriculture out differently? Why didn't that 7 just get rolled into it? 8 Well, for the most part, when you 9 look at the county areas, when we're dealing 10 with agriculture, there is a set of different 11 players. County government certainly provides 12 the support and operating assistance for 13 conservation districts, essentially agencies, 14 et cetera. 15 But the people that work in the 16 day-to-day, boots on the ground with the 17 landowners and with the farmers, are the ones 18 we felt we needed to get into the room because 19 those are the only guys that could make these 20 direct commitments we were looking for to say 21 that we believe these are the opportunities</p>	<p>1 you look up here and again depending on what 2 you've been reading in the paper, we're in 3 Maryland, and in Maryland agriculture is not 4 the dominant pollution source. This is a more 5 urbanized state. 6 If we were in Pennsylvania, I could 7 sit here and tell you 75 percent of the loads 8 are agriculture, but in Maryland about 35 9 percent of the loads are agriculture. So as 10 we say, if you think of it as a chair, there's 11 four components to it: There is wastewater, 12 there's urban, there's storm water and there's 13 ag. 14 Agriculture can't do it alone. It's 15 not going to get done with agriculture. So 16 it's all four components pulling together. 17 But having said that, having said 18 that overall 35 percent of the load comes from 19 agriculture, depending on what as you see 20 here, what watershed we're in, it's a 21 completely different game. And so when we're</p>
Page 27	Page 29
<p>1 going forward and we're committed to 2 fulfilling the goals of the plan. And that's 3 really what it was about, was to get some very 4 concrete goals that we felt we could deliver 5 on at the local level. 6 So as Rich mentioned, we had a 7 series of 46 meetings, two in each county with 8 this work group we called ag work group. Now, 9 obviously we were focused on making sure 10 certain stakeholders were there because we 11 thought they were critical, but it was an open 12 meeting. County planning officers were there, 13 public works, commissioners, et cetera, 14 watershed organizations, waterkeepers. 15 So it was a very good meeting 16 overall to sit down and talk comprehensively 17 about agriculture. And as you will see from 18 this first slide, this is one of the reasons 19 we felt we really needed to focus in on this 20 methodology. 21 It's a little hard to see, but when</p>	<p>1 on the Eastern Shore, certainly talking within 2 those counties and with those ag workers, the 3 focus of the plan is going to be on 4 agriculture. It's not going to get done 5 without agriculture. 6 But if we're here like in the 7 Patapsco/Back River region, only three percent 8 of the load of the Patapsco/Back is from 9 agriculture. So it's not going to be a plan 10 that will be centric on ag's accomplishments. 11 So again, it's very helpful 12 depending on where you are as to what 13 agriculture plays in those plans. So as I 14 mentioned, what we set up with these ag work 15 groups in each county, we basically said 16 here's your assigned load, we got those from 17 MDE. It's a very helpful chart to have to see 18 all the loads broken down by county. So we 19 could say, all right, here's your targets, now 20 let's talk about a plan. 21 Originally, as most of you worked on</p>

Page 30	Page 32
<p>1 it, as we did, it was a 2020 plan because we 2 said based on our governor's initiative, we 3 wanted all the information gone in the ground 4 by 2020, and that actually for the focus of 5 these meetings was very helpful to look at 6 that concept.</p> <p>7 As you know, subsequent to that we 8 took the information we got from those county 9 plans and for agriculture and just extended 10 them out five more years. We got some 11 feedback from our ag work groups that that 12 was -- they were comfortable with that.</p> <p>13 We also developed two-year plans and 14 that was critical because that's how we 15 operate in the field. We operate these yearly 16 plans and goals. That is something we have 17 been doing for years and years in the 18 conservation districts extension, et cetera, 19 so it's not a new concept.</p> <p>20 Each year, we sign memorandums with 21 the conservation districts of how much</p>	<p>1 we used, and you'll see those in a minute, and 2 we had two strategies we used. The first 3 strategy when we went out in June and July, we 4 said, okay, based on what you know of the 5 existing resources you have, your manpower 6 requirements and your programs, whether it be 7 farm-built programs or state-run programs, how 8 far can we get. What do you think we can get 9 done. And so that was one exercise.</p> <p>10 The second one, once we got the new 11 model information, we saw a much more 12 aggressive goal we had to meet so we changed 13 the scope. We said forget the concept of what 14 you have available to get there with, throw 15 that out. Now let's talk if you had unlimited 16 resources, unlimited manpower, how much more 17 can you do and can we get there.</p> <p>18 So I'm going to -- we also had, as 19 Rich mentioned, conservation tracker which 20 we've been using for a number of years. For 21 agriculture, we're able to track no matter</p>
Page 31	Page 33
<p>1 implementation, how much farmer outreach 2 they're going to do, so we were comfortable in 3 that role.</p> <p>4 We utilized the ag work groups. You 5 see up here it says we set two sets of goals. 6 Well, we wanted to get out in front of this 7 and prior to having the final numbers and 8 final model versions, which we didn't get 9 until August, we actually had a whole set of 10 meetings in every one of the counties in June 11 and July using the old model and the old 12 numbers just to start the process.</p> <p>13 To sit down and say, okay, here is 14 what you have done to date, here is a 15 theoretical goal. How far or what 16 opportunities are there going forward to meet 17 it. So we did that. And then once we got the 18 new numbers and the new model, we went back 19 out using that format and upped the 20 information.</p> <p>21 We actually had two planning tools</p>	<p>1 whether it's through grant programs, federal 2 programs, state programs, watershed 3 organizations, we can track information about 4 conservation practices that landowners and 5 farmers have installed.</p> <p>6 And that's valuable because that 7 gives us the lay of the land, as we say, and 8 it allows people to sit down and say how much 9 more can we do. So we have the database in 10 place that was -- it's a valuable component of 11 these analyses.</p> <p>12 This is a little blurry but you've 13 got copies in front of you. This is what we 14 attempted the first time, back in June and 15 July. As you can see, on the far side we 16 stuck with what the model said we could use. 17 Now, in the model, what we listed here was 18 only those things the model said we would get 19 credit for. These are certainly not all the 20 conservation practices that we worked with the 21 farm community on, but this is all the model</p>

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1 reads.

2 So we took that concept, we had some

3 old loading information for nitrogen and

4 phosphorus for each one of the practices. We

5 created a simplistic spreadsheet. We said in

6 the next column how much we got from

7 conservation tracker, how much we had done of

8 these practices by county.

9 So we had that in front of people

10 when they sat down and talked to us. And from

11 that we moved forward and said, okay, so for

12 barnyard runoff control, if we have already

13 done your county a hundred runoff control

14 systems on farms, how many more farms out

15 there is an opportunity to install this type

16 of practice.

17 And they would give us the feedback

18 because these guys dealt with the farm

19 communities, familiar with the farms that were

20 there, and they could say we know about this

21 guy who's been saying for a long time I would

Page 35

1 like to get this practice installed, and we

2 think this other guy could benefit from it as

3 well.

4 So that is what we got was an

5 assessment of what we thought we could do by

6 2020 with our existing resources and programs.

7 We were able to track, again as a simple

8 spreadsheet, a load reduction because we just

9 calculated on the fly using the spreadsheet.

10 So we were able to say the target is X, we

11 would start adding BMPs to see how far we

12 could get.

13 So the next slide kind of gives you

14 an overall summation of that process back in

15 June and July. And basically using the old

16 model, what the old model was telling us at

17 the time was that the raw load for agriculture

18 in Maryland -- this is the model number -- if

19 we weren't doing any conservation practices on

20 the ground, then a raw load going into the bay

21 would potentially be about 22.6 million

Page 36

1 pounds. But because we are doing all these

2 conservation practices and they're there

3 annually, we have a potential of what we think

4 we're putting in is about 17.7.

5 So on an annual basis we're already

6 providing mitigation for almost nine million

7 pounds of potential agricultural nitrogen

8 loads into the bay based on the conservation

9 practices the farmer and landowners have

10 installed.

11 The next one is the target. Again

12 based on the old model, we were told that we

13 needed a plan to get down to 13.7 million

14 pounds. So, in essence, if we're already at

15 17.7, we've got to get to 13.7, we needed a

16 plan for about four million more pounds of

17 reduction. We're already doing 9 million

18 pounds annually. Give us a plan for four

19 million more.

20 So in taking the counties again

21 through the exercise, saying based on existing

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1 resources, existing programs and a 2020

2 deadline, how far can we get, and this is what

3 we ended up with. We can make progress. We

4 can get down to about 17.7 to about 15. It

5 doesn't quite hit the target that we were

6 looking for but it gives us a very good

7 estimate of what we can do with what we have

8 and it would get us part of the way there.

9 Obviously, to get the other part,

10 given this exercise, there is more manpower or

11 more time.

12 Okay. So then we have -- in August,

13 as I mentioned, the new bay model came out.

14 We had new numbers to work with. We took that

15 spreadsheet and information back to our groups

16 and said MDE is actually helping us quite a

17 bit more here. They've come up with this tool

18 called MAST, and what it allows us to do is

19 actually get a much better look at how the

20 model works.

21 When we were working in the

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1 spreadsheet world, the assumption is that in
2 the spreadsheet, as you're familiar, it's
3 additive. But that's not how the model works.
4 In a model, if you put a
5 conservation practice on an acre of land, you
6 have one load reduction for that. If you put
7 another conservation practice on that same
8 acre of land, you don't get an additive
9 effect. You get what's called stacking or a
10 train. You get less and less effectiveness.
11 So as an example, if everybody's
12 doing cover crops, so every acre of land has
13 cover crops -- or, I'm sorry, has nutrient
14 management on it. So we have nutrient
15 management. That's one input into the model.
16 For that same acre of land, we say
17 in addition we're going to do cover crops on
18 this acre. Well, the model doesn't give us
19 for those cover crops the full load reduction.
20 It gives you a partial because you have
21 already got one conservation practice on it.

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1 So in many cases we do five or six
2 management practices on the same acre of land.
3 They may be grass buffers, cover crops,
4 nutrient management, precision agriculture,
5 et cetera, et cetera. It's not an additive
6 effect in the model. It's a treatment train
7 and you get less and less reduction.
8 So what was great with that was we
9 had MAST, which was for the first time able to
10 mimic that. So we were getting much truer
11 readings as we put these BMPs in to get an
12 estimate of what our load reduction potentials
13 would be.
14 Now, we were on the front end of
15 using MAST. The ag workers were one of the
16 first to use it so not all of the pieces of
17 the MAST tool were activated. The
18 agricultural portion was but the animal
19 component and the manure transport component
20 weren't active at the time we worked with our
21 groups. So we didn't get a true read from

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1 those. However, it was very valuable because
2 it allowed us to peek into the model to see
3 what the model does and how it works.
4 Okay. And so here is what we ended
5 up with. Two things up here. As you notice,
6 the numbers changed. Model-to-model numbers
7 shift and this shows a significant shift. In
8 the previous model we said the raw load for
9 agriculture was 22 million pounds. New model
10 says it's 28 million pounds. That's quite a
11 shift. That's about a 20 percent difference.
12 The implementation rate we had under
13 the previous model said it was about 17.6
14 billion pounds of implementation. This model
15 said no, it's only 19.7. That's two million
16 pounds less implementation credit I'm going to
17 get.
18 So on and on. And as you see, the
19 goal's shifted as well. Instead of 13.7, it
20 moved up to 15.2. So again, model-to-model
21 you get different numbers. The good news is

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1 under the scenario we worked with, which is we
2 said take all the brakes off, forget funding
3 limitations or personnel changes. Tell me how
4 much more we can get done. What we ended up
5 with was a plan that got us just under the
6 target. This was for nitrogen, which is the
7 most difficult.
8 So overall, we have a state plan for
9 agriculture that says given the goals these
10 guys committed to, we can get there. However,
11 it's an aggressive strategy and it will need
12 some help. The phosphorus, it became actually
13 easier. Nitrogen was the difficult one.
14 Phosphorus we seemed to easily get under the
15 goal.
16 However, don't hold to that number
17 because, again, in the model world we know
18 there is an issue with the model on
19 phosphorus. It's not doing a good job of
20 modeling phosphorus. So while we have a plan
21 that suggests we're under it, the model --

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1 we're not holding our breath and jumping up
 2 and down yet because we need to see the model
 3 corrected and see where we stand.
 4 Okay. And again, as Rich said, this
 5 is what it looks like on the basin load
 6 because there is how we send it to the model.
 7 And as you can see, the two major basins of
 8 concern when we talk about agriculture are the
 9 Eastern Shore and the Potomac.
 10 While the other basins obviously
 11 have a load to them, where our significant
 12 outreach lies is in those two areas.
 13 And overall, on the Eastern Shore
 14 our overall plan, we just about make it for
 15 nitrogen. And in the Potomac we easily make
 16 it. We make it well under. And again from a
 17 state perspective we make it overall.
 18 For phosphorus, remember how
 19 difficult it was to get nitrogen on the Shore.
 20 Phosphorus we easily make it. Again, this is
 21 that model thing, we don't think it's reading

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1 right because as some of you know, when we
 2 talk about issues with agriculture, we
 3 continue to talk about manure and poultry,
 4 which is on the Eastern Shore. And so the
 5 suggestion there is an overload of phosphorus
 6 on the Shore doesn't seem to be supported by
 7 the model.
 8 Anyway. Okay. So this is what the
 9 state plan looks like. It's broken down
 10 obviously by 2013, by 2017 and 2025 and it's
 11 in your packet. There are two pages. One of
 12 the things that I should point out because
 13 people don't see them when they look at some
 14 of these goals, some of them say, that doesn't
 15 look too impressive.
 16 You have to remember where we are
 17 currently, and I'll take the example of forest
 18 buffers. When you look here on the plan, it
 19 says okay, by 2013 we're going to be 335 acres
 20 additional. That is one number. And by 2025,
 21 2300 acres. You go, well, that's not much.

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1 You have to understand where we are to date.
 2 To date we've already done 26,000 acres of
 3 forest buffers in agriculture. So we have
 4 done all the load hanging through easy stuff
 5 and that's a significant amount of acres
 6 already in forest buffers.
 7 So these are the additional
 8 opportunities. And again, for some of these
 9 BMPs, we've worn these BMPS out. This is one
 10 of them. Same with grass buffers. We've done
 11 over 47,000 acres of grass buffers currently.
 12 So it's 47,000 acres, plus the additional 533,
 13 2,200 and 3,700. So again, you have to
 14 understand where we are currently versus where
 15 we're going.
 16 And that was the value of the work
 17 groups because these guys could say we have
 18 been beating on doors, we have been selling
 19 this BMP for a number of years right now and
 20 it's just not going to go any further.
 21 Okay. What I want to show you is

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1 the value we saw of having the two sets of
 2 meetings because information changed. As you
 3 can see, when we went out to these ag work
 4 groups in the first meeting, we said based on
 5 existing resource, existing programs, how much
 6 more can we do. Well, we did a -- we pulled
 7 some of the more significant things they gave
 8 back to us to say where are we going to see
 9 the most activity.
 10 Now, we went out and said under an
 11 aggressive strategy, forget the funding
 12 constraints or the boots-on-the-ground
 13 constraints, where are we going to get to or
 14 where is the emphasis going to shift, you can
 15 could see how the pie chart shifted. One I'll
 16 point out particularly is decision/precision
 17 agriculture, which as you see, shifted
 18 significantly between the two concepts.
 19 I want to touch briefly on the
 20 watershed model particularly in terms of
 21 agriculture because, again, there are some

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1 things that we need to point out, one being
 2 that you know with the watershed model -- and
 3 again, EPA came out with this model under a
 4 consent order. They gave it to us in August,
 5 they didn't have a lot of time to QA/QC it so
 6 our process of working with it, we have
 7 actually been providing a lot of input where
 8 something seemed to not be working correctly.
 9 So for agriculture, as you see, we
 10 had to actually submit that about three
 11 different times because of some things that
 12 weren't working correctly and we're still
 13 looking and working with confirming some of
 14 those ag reductions. Just like I talked to
 15 you about the phosphorus issue.
 16 So again, with using the MAST tool
 17 that we used, again we talked about being one
 18 of the first to use it, the ag workers. There
 19 was some issue with people that attended those
 20 meetings. I want to, you know, we all saw it
 21 so I wanted to tell you that we recognize it.

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1 There were some issues with the tool as well
 2 because, again, it hadn't had a chance to be
 3 QA/QC validated.
 4 So since that time we adjusted -- we
 5 developed or called some adjustments to that
 6 tool. And we are looking at some other input
 7 issues principally from as far as the ag loads
 8 and the number of animals, and manures that
 9 the model suggests is being generated by those
 10 animals.
 11 This is very light but again, this
 12 is something MDE did a great job in assessing
 13 in looking at the MAST tool and how it fit
 14 with the model. In some cases, some
 15 counties -- and this is what I'm referring to,
 16 for those people that were in these counties,
 17 were there with us using the tool. When it
 18 seemed like something was running right, there
 19 were some errors where it clearly was off
 20 significantly.
 21 Look at like Somerset County for

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1 crop loads. It was off 177 percent. And I
 2 should thank Lee in the back and his group for
 3 numerous efforts in helping to identify this.
 4 So this was for nitrogen, and you
 5 can see another chart for phosphorus. And
 6 again, you know, we had very short times so
 7 these are things that we've recognized hence
 8 that we're going to work on.
 9 Okay. Next steps. As I mentioned,
 10 the EPA has been very gracious in recognizing
 11 and working with us to say when these model
 12 issues come up, they want to correct this
 13 model, they want it to work correctly. So
 14 they've formed work groups. There's an ag
 15 work group, there's an urban work group,
 16 there's a septic work group, et cetera, at the
 17 bay programs.
 18 This is composed of people from all
 19 the five states that work in those areas and
 20 where they have solved some things with the
 21 model, they formed some work groups.

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1 For agriculture, we have our ag work
 2 groups. We have a list of about 40 things
 3 from all five states that said these are
 4 things with the model we would like to take a
 5 second look at.
 6 For this year -- and I apologize, it
 7 says 2013 up here. It should be 2012. For
 8 this year, we have three panels,
 9 subcommittees. One is nutrient management and
 10 it's looking at, as you see up here, a list of
 11 items that we think are a top priority. One
 12 that's very dear to Maryland is this third
 13 item, nursery BMPs.
 14 For those that work with us, and
 15 again because we're working with first time
 16 understanding the model. Nursery BMPs. In
 17 the model currently, the way it's set up,
 18 there is only one management practice that we
 19 can apply for nursery loads and that is water
 20 recapture.
 21 It was very clearly demonstrated to

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1 us in our ag work groups. When we talked to
 2 the nurserymen and we talked to others, they
 3 said there is a whole suite of practices that
 4 we use but we're not getting credit for. And
 5 in fact we found out that if we use just this
 6 one BMP, we can only reduce the load for
 7 nurseries by about ten percent maximum which
 8 wasn't going to get us to our goal.

9 So again, the model is limiting us
 10 on our ability to address a load because it
 11 only allows one BMP. So they're going to be
 12 looking at that.

13 The other one is down here under
 14 cover crops, and again, one of the things that
 15 jumps out is this thing called additional
 16 species. Currently, Maryland's cover crop
 17 program actually pays for forage radish,
 18 rapeseed, et cetera. In the bay model there's
 19 only three types of cover crops that we get
 20 credit for, and yet we have about seven or
 21 eight that we know are cover crops that have

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1 real quality benefit.

2 So again, working with the bay
 3 program we're trying to get these to get
 4 credit in the model because, again, we're
 5 implementing these things and not getting
 6 credit. And again, this is the third work
 7 group on conservation tillage and these are
 8 some of the things they're working on.

9 Just like Rich said, what I want to
 10 do is shift gears now. Accounting-for-growth
 11 strategy and how agriculture fits in this. As
 12 Rich mentioned, under EPA's guidelines we have
 13 to develop a strategy that basically the bay's
 14 capped at this point. No new loads going into
 15 the bay unless they're offset.

16 So basically, whether it be a new
 17 industry or a new development, there's got to
 18 be an offset, you can't continue to add load
 19 to the bay. Everybody's capped.

20 So with that in mind, we have
 21 already had and set up for the last year and a

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1 half a trading program that has a point source
 2 program and a point to ag offset program. So
 3 we have that set up. We have some tools in
 4 place to assist.

5 This is just to give you a status
 6 update that if you haven't been to the
 7 website, Maryland's trading program is
 8 mdnutrienttrading.org. And as of the end of
 9 the year we had over 5,000 hits, we had 160
 10 accounts opened. We've already run -- on
 11 farms we've already run about 80 assessments
 12 on farms looking for credits or offsets and
 13 we've got about 200 farms right now that are
 14 currently lined up that we're doing
 15 assessments on.

16 We've hired some additional staff,
 17 and a few counties, the county governments are
 18 actually working with the soil conservation
 19 district where they're providing funding for
 20 them to go out and assess farms. And again,
 21 assist the county so that when a developer

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1 comes in, they have the ability according to
 2 where the offsets are.

3 Okay. I'll end with this because
 4 this kind of ties it all together. This is
 5 what we end up with statewide, whether it be
 6 for agriculture or any other sector.

7 Basically, as of 2009, according to the model,
 8 we were putting almost 52 million pounds into
 9 the bay. The target we had to get down to was
 10 41.0 and -- I'm sorry, 41.1 and the plan we
 11 came up with gets us to 41.0.

12 For agriculture for nitrogen, again
 13 our loading into the bay is about 19.7
 14 currently. We have to reduce that down to a
 15 plan for 15.2 and the plan we sent in gets us
 16 to 15.1, and similar numbers for phosphorus
 17 are down below.

18 And at this point I'm going to stop.
 19 I think Rich and I will field some questions.

20 MR. ESKIN: This is where we're
 21 going to get into trouble. We only have one

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1 microphone today. So those of you who have
 2 questions -- and we do have a stenographer
 3 here who is taking down information for a
 4 transcript so we can post it on the Web for
 5 those who have not had an opportunity to be
 6 here.

7 What I'd like to ask you to do, if
 8 you have a question, is just come up here,
 9 line up right down this row and then we'll
 10 take a question one at a time. And please
 11 identify yourselves and your affiliation when
 12 you come up.

13 Come on, guys, don't be bashful.
 14 This has never happened before.

15 MR. DiNUNNO: When you get old, you
 16 don't mind making comments because you don't
 17 live long enough to have anybody refute them.
 18 So I am coming up.

19 My name is Joseph DiNunno. I'm
 20 simply a retired engineer who has worked in
 21 the environmental protection field for a long

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1 time. But more than that, I am a 50-year
 2 resident in the area and I have been on the
 3 bay and I've watched it degrade. So I am one
 4 of those many citizens who are concerned about
 5 what is happening in the bay.

6 The thing I noticed most about your
 7 presentation which, incidentally, was very
 8 informative as well as well done, is that a
 9 root cause of all of this doesn't seem to be
 10 addressed and that is the control of the land
 11 use in the bay other than the penalty system
 12 you talked about.

13 But as long as zoning and
 14 authorization to build and construct is at the
 15 local level, that seems to be totally out of
 16 keeping in today's requirement for control of
 17 the watershed which requires six states and
 18 the District of Columbia to have some common
 19 program.

20 So without the root cause analysis
 21 of this, which I don't see in this, I think

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1 that we've got a lot of things going on, a lot
 2 of actions going on, but it's all action and
 3 not substance unless you get to the root cause
 4 of this which is control over development in
 5 the watershed and that can't be at the local
 6 level, I submit. Anyway.

7 MR. ESKIN: John would love to take
 8 this. No, I think that you make a very good
 9 point. It's actually implicit in what we're
 10 doing. The problem is not who controls it,
 11 who controls local growth. It's more in how
 12 we grow.

13 And part of the problem has been
 14 that while in many cases local governments
 15 take potentially their school capacity, their
 16 road capacity, you know, they say we have
 17 adequate facility ordinances and things like
 18 that. They have not paid attention to the
 19 assimilative capacity of their waters.

20 We actually started to begin
 21 addressing this issue a number of years ago

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1 with what we called the water resources
 2 element which is an add-on to the
 3 comprehensive plans where at least to a
 4 limited extent sensitive areas, drinking water
 5 capacity and wastewater capacity, the local
 6 governments now, as part of their planning
 7 process, had to address whether they had
 8 adequate water resources.

9 In essence, although it's implicit,
 10 we're expanding that now by saying here is
 11 your allocation, you're over your allocation,
 12 you need to get your allocation of pollutants
 13 down to this level. And so -- and if you
 14 don't, there will be consequences.

15 So that will force the thinking
 16 about do we have the assimilative capacity in
 17 our waters to do this or if we really need to
 18 do this, how can we offset this somewhere else
 19 so that we don't exceed assimilative capacity
 20 of our waters.

21 So you're right, it is a sound

<p style="text-align: right;">Page 58</p> <p>1 concept. We're just approaching it a little 2 indirectly. Local governments should have a 3 decision making capability. They just have to 4 make those decisions based on a broader 5 understanding of other implications of their 6 growth. 7 MR. RHODERICK: Just to follow up 8 with Rich, EPA has made it very clear to us 9 that we have to have a very transparent and 10 accountable verification system that they can 11 look at that assures them that at the county 12 level through the state that we are indeed 13 maintaining the zero load and we are 14 offsetting those parameters. 15 So yes, we have to establish our 16 whole system but EPA has made it very clear 17 they want to see that in place. 18 MR. TITUS: Timothy Titus with the 19 Friends of the Patapsco Valley and Heritage 20 Greenway. We're now calling ourselves the 21 Patapsco Heritage Greenway.</p>	<p style="text-align: right;">Page 60</p> <p>1 If you look at the numbers that I 2 presented at the end of my presentation, it's 3 showing you only one percent, two percent 4 reduction in sediment. So we're pretty 5 confident that if we meet our phosphorus goal, 6 we will also meet our sediment goal, broadly. 7 There may be locations where that is 8 not -- does not prove to be true, particularly 9 if you're getting most of your phosphorus 10 reductions from the wastewater treatment plans 11 because then you're not controlling sediment 12 to control phosphorus. 13 But that will be localized. We're 14 not too worried about it now but we'll take 15 care of that in Phrase III after 2017. And -- 16 I'm sorry, what was your other question? 17 MR. TITUS: Marginal cost analysis. 18 MR. ESKIN: Oh, the cost analysis. 19 We did -- EPA is doing a cost analysis. We 20 have done some work on that. It takes a while 21 to put it together. We have Dr. Dennis King</p>
<p style="text-align: right;">Page 59</p> <p>1 Two questions of a general sort but 2 difficult questions. Number one, could you 3 expand a little bit about sediments. 4 Especially about phosphorus and sediment. 5 And second, have you been able to 6 build in any sort of cost data so that we can 7 think about at the margins where our best bang 8 for the buck is. 9 MR. ESKIN: Through the model with 10 the bay program, we have been working on 11 nutrients and modeling nutrients, 12 understanding these dynamics for many years. 13 We have not really paid that much attention to 14 sediment at this point. So we're much less 15 sophisticated there. 16 As a general rule, phosphorus sticks 17 to sediment. So insofar as you are 18 controlling phosphorus, it's likely that in 19 most cases you will also be controlling 20 sediment because that's the way you control 21 phosphorus.</p>	<p style="text-align: right;">Page 61</p> <p>1 from the University of Maryland do storm water 2 costs for us and he did a great job. That's 3 up on the Web. I'm not sure if it's one of 4 the appendices but it's certainly available. 5 That was the area that we felt we 6 had the least certainty about what the costs 7 would be. We know because we fund many 8 agricultural best management practices about 9 what they cost. We have a ballpark. 10 Wastewater treatment plants, we know 11 exactly what they cost because we're funding a 12 large part of that and we have a pretty good 13 handle on septic. 14 What we'd like to do is convince EPA 15 that we should be able to add the costs into 16 the MAST model so that when you do that, you 17 get not only the reduction in the amount of 18 pollution that you get with the given set of 19 practices, but you will also get a total cost 20 as well as the cost per pound, and that could 21 really inform what you need to do. There</p>

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<p>1 hasn't been time to do that but we are 2 recognizing that that would be extremely 3 helpful to everybody if we could do that. 4 MR. TITUS: Thank you. 5 MR. CHEN: Dr. Chen from Prince 6 George's County government. The county's 7 spent a lot of money to develop an 8 implementation plan and submitted it to the 9 MDE in November last year, and is MDE planning 10 to give us a comment on our plan? 11 The reason I ask that is because you 12 told us that from March 30th to June 30th we 13 have time to revise our plan. But we don't 14 have a comment from you on our plan. We 15 really don't know how to improve our plan. 16 Thank you. 17 MR. ESKIN: We were actually -- I 18 was reviewing it today. We're going to get a 19 communication out on that. We're not going to 20 specifically approve or disapprove your plan. 21 What we are going to do, as I said before,</p>	<p>1 April we will be getting this detailed 2 information out to you. We will work with you 3 on that and then before July you could make 4 revisions, if you want, to your plan. But we 5 are not going to approve or disapprove or look 6 at your milestones. And that's another thing 7 that we're working on separately. 8 We trying to get contractor 9 assistance to estimate what is the maximum 10 feasible implementation that you could do on 11 an annual basis, and then we sort of 12 back-calculate from that to 2025 as to whether 13 your milestones as they're currently 14 constructed would get you to where you need to 15 be: Are you going too slow, are you going 16 faster than you need to. We don't want you to 17 put yourself in a corner where you build your 18 milestones and they're not going to be 19 sufficient to get you to there and then there 20 will be possible consequences. 21 So we're working on that too as part</p>
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<p>1 some counties gave us a complete listing of 2 all the BMPs, others did not. We're going to 3 get all of the information at the county scale 4 that went into the model out to you. Some 5 things that you might want to think about. 6 You probably constructed that model to achieve 7 the 70 percent by 2017, and the 2025 you did 8 everything. 9 Well, now we have a little more 10 time. That might be a revision that you want 11 to make. You might have thought about trading 12 a little bit more since you first submitted 13 your plan. 14 Do you want to -- will you be able 15 to proceed fast enough on your storm water? 16 Do you want to try and stretch that out by 17 maybe trading with a wastewater treatment 18 plant. 19 Do you have a better idea now just 20 because you have had more time to think about 21 it? All of those are options. So the end of</p>	<p>1 of improving our plans. As a practical 2 matter, I would accept that we're going to 3 have a much better handle on all of this as we 4 come up to evaluation of 2013 milestones. 5 That will be the first run. We need to show 6 progress. I can't emphasize that too 7 strongly. I would expect that the 8 consequences are going to be somewhat 9 situational. 10 Say, for example, you had a plan to 11 do some storm water retrofit. You had to 12 purchase some land and that's taking longer 13 than you thought but the money's there, you 14 purchased that one, you're behind schedule but 15 you'll catch up in the next few months. I 16 would not expect any consequences for that. 17 If the county digs in their heels 18 and says no, this is just too expensive and 19 we're not going to do it, then we might look 20 for early consequences because we need to make 21 progress across the state.</p>

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1 So somewhat situational on that but
2 we will get more detailed information out for
3 you to review. The important thing is to
4 start developing your programmatic capacity
5 now to do what you need to do going forward to
6 2025.

7 MS. VANDER GAAG: I'm Helen Vander
8 Gaag, Blue Water Baltimore. You spoke earlier
9 on about tracking and you said that
10 jurisdictions really need to be setting up
11 their tracking program.

12 I am curious as to how MDE is going
13 to track the tracking in the sense of how are
14 you going to be having folks go out doing
15 inspections, monitoring, recognizing these are
16 complicated processes.

17 And I do have one question
18 additional to that. I'll say them both at the
19 same time which is that you said we might wait
20 until the end of Session to figure out how we
21 might be funding these. Do we have a plan C

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1 about funding if we don't get plan A or
2 plan B?

3 MR. ESKIN: I'll take the tracking
4 first. We use an application that is actually
5 being used across the whole bay watershed
6 called NEIEN, it's National Environmental
7 Information Exchange Network. Ron Pell kind of
8 reminds me that he collects the information
9 from everybody.

10 Some of the information, and it's
11 going to vary sector by sector, the
12 information that we're getting on agriculture
13 is going to come out of conservation tracker.
14 John's folks are going to be out there.
15 They're going to provide confirmation of
16 what's happening.

17 Septic systems typically are funded
18 from the Bay Restoration Fund. Because we're
19 spending money on it we can have confidence
20 that the information we're getting back is
21 going to be reasonably accurate.

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1 Storm water we mostly collect from
2 storm water annual reports. So basically, you
3 know, they're reporting under a permit, there
4 would be penalties if anybody is faking it.

5 And finally, septic systems -- I
6 mean wastewater treatment systems, we're
7 funding from BRF so we have a real good handle
8 on that. We get the monitoring reports and so
9 forth so we have a pretty good handle on that
10 so I really don't see the issue there.

11 MS. VANDER GAAG: Do you do any
12 monitoring other than just the annual reports
13 for storm waters?

14 MR. ESKIN: What we're also doing is
15 a whole nontitle and title work quality
16 monitoring network. So we're actually running
17 in parallel. One, we're monitoring the
18 implementation. In parallel to that we're
19 monitoring water quality.

20 Now, they're not going to go forward
21 at the same pace. We know that there are

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1 lags. The U.S. Geological Survey has done a
2 fair amount to quantify the rate of those lags
3 but that is why -- in fact, we're talking
4 about 2017, 60 percent of the implementation,
5 not a 60 percent in terms of water quality.

6 As to cost. We are favoring local
7 storm water utilities as the means for at
8 least acceleration in local implementation.
9 There is a new bill in the General Assembly,
10 not one that the department has submitted, but
11 we know almost for sure that regardless of the
12 amount of state and federal funding, there is
13 going to be an increased contribution locally.

14 And your storm water utility does
15 not necessarily have to fund the whole
16 difference, but it should show some
17 improvement, some acceleration. Get one more
18 position, do ten percent more than you did
19 last year. Make some progress. Show
20 willingness to move on this and start doing
21 better than we have done in the past. Start

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1 building your programmatic capacity.
2 And in fact, actually just simply
3 the act of authorizing a storm water utility
4 would be viewed as progress, even if you
5 didn't actually implement it yet. So that has
6 to be a part of the program.
7 Continuing to talk to EPA about
8 additional funding as well. In fact, I just
9 sent something out today that hopefully will
10 get to Congress, saying that we need storm
11 water funding. And it's infrastructure.
12 Prevents flooding. It's not only fixing the
13 bay. So we need to work on that.
14 MS. BEAUREGARD: Hi, I'm Carol
15 Beauregard. I've been involved in
16 environmental issues now since 1987 and with a
17 lot of other people who are very chemically
18 sensitive. And I had a question -- several
19 questions actually. One is the enhanced
20 treatment, a nutrient management on this page.
21 Does that mean only for farms or is that for

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1 private land also, that that would be a
2 commercial or homeowners?
3 MR. RHODERICK: That is the ag
4 cropland, specifically for ag cropland.
5 Instead of fertilizer, variable rate
6 fertilizer applications. There is an urban
7 nutrient management component in the urban
8 strategy but that's not what that is referring
9 to.
10 MS. BEAUREGARD: So I'm really
11 concerned about the part of urban because when
12 I was poisoned in 1987, the pesticide
13 fertilizing season started in approximately
14 end of March and then went to approximately
15 mid to late October, and now we're being hit
16 with this every month of the year and we're
17 watching the landscape companies put down
18 fertilizers and pesticides during the winter
19 months when the ground is frozen.
20 So when we have rain, all that goes
21 off into our storm water. And we're also

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1 watching signs being put up for pesticides and
2 for lime use, not just on homeowners'
3 properties but also on, in like restaurants
4 like *****. I don't want to pick on *****.
5 Don't put that down or they'll sue me.
6 But, you know, like restaurants and,
7 you know, commercial buildings, state
8 buildings and we're also seeing pesticides
9 used much more now.
10 So those of us who are chemically
11 sensitive are being hit constantly by this
12 stuff and we're getting very sick from it.
13 So, you know, we're more aware of it than
14 maybe the general public because of our
15 sensitivity to it and the ill health we get
16 from it.
17 So we're curious about what is
18 happening with the program to save the bay in
19 terms of looking at the amount of pesticides
20 and fertilizers we use? You have already
21 touched on what's happening over at the

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1 airport because I know they use fertilizer on
2 their fields -- on their runways to get rid of
3 the ice and the snow, but also we're having --
4 well, they used to. Have they changed it?
5 Oh, great. That's good news.
6 But the other thing we're concerned
7 about is all the roadside spraying for
8 pesticides. A lot of county and state and
9 federal roads are being sprayed several times
10 a year with pesticides and things so that also
11 provides more runoff into our bay. So I would
12 like to know, you know, if that is going to be
13 addressed in this program.
14 MR. RHODERICK: You hit on a lot of
15 points there. Let me see if I can go through
16 some of them. We actually have an urban
17 fertilizer program, regulatory program, where
18 the lawn care companies that manage more than
19 ten acres or more, we -- they have to go
20 through a certification process. I'm very
21 concerned when I'm hearing what you're saying

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1 about a winter application because that is not
 2 supposed to be occurring. If it is, we need
 3 to know about it.
 4 MS. BEAUREGARD: But it is.
 5 MR. RHODERICK: Well, that's what I
 6 want to understand is when you say that, where
 7 that's occurring because at this time
 8 currently through a managed company it should
 9 be. That's one piece. And again, is it
 10 actual fertilizer or is it just liming?
 11 Again, I mean potash or liming, sure, they
 12 could do it. So you have to be very careful
 13 when you say --
 14 MS. BEAUREGARD: I know lime has
 15 been used in my neighborhood but I'm on the
 16 Maryland Sensitive List for Pesticides so I'm
 17 notified and I have gotten notification from
 18 other areas that I go that they have
 19 fertilized already this year, days when we had
 20 freezing temperature and freezing ground and
 21 the ground was frozen.

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1 MR. RHODERICK: Well, again, I need
 2 to know about if that currently is through a
 3 managed company?
 4 MS. BEAUREGARD: It is.
 5 MR. RHODERICK: If there is signs, I
 6 would like to know who it is.
 7 Anyway. So that is one component.
 8 The second, as I said, what just recently got
 9 passed is finally, for our ability to deal
 10 with the other component which is the
 11 residential use. There was a fertilizer bill
 12 just passed last year that we're in the
 13 process of enacting.
 14 One component of that is that the
 15 retail stores, if you go in and now look at
 16 the fertilizer bag, you're going to see a
 17 change in the formulation. The phosphorus is
 18 out. And that is one component.
 19 The second piece we have to do is
 20 working again with the residential community
 21 on education and outreach, continue, like you

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1 say, that this stuff doesn't get applied on
 2 the walkways, et cetera. So we're working on
 3 that component as well at this time.
 4 The tagging you see, and you're
 5 right, you'll see stuff that says pesticides.
 6 Well, a lot of times they put down fertilizer.
 7 It's the tags they're using. So again it's
 8 not necessarily a pesticide application.
 9 What they're trying to do is inform,
 10 especially if it's on public lands, that
 11 there's been an application, as you said, for
 12 your sensitivity. So yes, that is a
 13 requirement to get those out there, that
 14 information. And the component about the
 15 airport, we worked with them a number of years
 16 ago and it's completely out.
 17 MS. BEAUREGARD: That's encouraging.
 18 Thank you.
 19 MR. BROWNLEE: Dave Brownlee,
 20 environmental planner for planning and zoning
 21 in Calvert County.

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1 We've looked at the analysis of the
 2 load reductions over different counties and
 3 they varied from like a negative nine percent
 4 in Worcester for their nitrogen load, down to
 5 Baltimore County it was 45.1 percent reduction
 6 requirement. Why are they so variable?
 7 MR. ESKIN: I am actually preparing
 8 a written answer for you on that. The way we
 9 have allocated to the various counties, and
 10 Lee, I may call on you to elaborate on what I
 11 am saying -- is that we the point source, so
 12 let's just take -- we had a strategy, it's
 13 called an ENR, four milligrams per liter:
 14 Everybody, every plant, every major plant got
 15 the same requirements. So that's what happens
 16 on the nonpoint source, agriculture, septic
 17 and storm water although technically storm
 18 water is a point source as far as EPA is
 19 concerned. But for our references here it's
 20 really a nonpoint source.
 21 We used two strategies or two

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1 scenario runs from EPA. One called no action,
 2 the other is called maximum feasible. No
 3 action is do nothing, maximum feasible is do
 4 everything. The difference between those is
 5 your reducible load. For any given nonpoint
 6 source sector you took the same percentage
 7 reduction of the reducible load.
 8 Now, where does that put you. Well,
 9 there's a couple reasons now why there could
 10 be other differences. Your proximity to the
 11 bay, your percentage of point to nonpoint
 12 source. All those would have an impact on the
 13 actual amount of reduction. How much
 14 reduction you have done to date. All of those
 15 things factor into that.
 16 I can't give it here now, you know,
 17 very specifically. You can come up to my
 18 office if you want afterwards and we could
 19 look at the numbers that I'm preparing in
 20 response. This is from the bay. So all of
 21 those factor into that.

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1 Now, with Worcester County, where
 2 there's like minus nine percent, we know
 3 that's a problem with the model. It's not
 4 handling excess manure very well. And that
 5 was one of the reasons why we are now
 6 reporting to EPA at a basin scale rather than
 7 the county scale because the model is
 8 basically designed to handle a
 9 64,000-square-mile area. And when you start
 10 getting down to, you know, a few dozens of
 11 square miles, it doesn't work as well at that
 12 scale.
 13 The thing is with larger scales, the
 14 pluses and minuses even out, you get a real
 15 good answer. But when you start getting too
 16 local, it doesn't work as well.
 17 So that is -- all of that is part of
 18 the answer.
 19 Lee, anything you want to add?
 20 SPEAKER: No, I think that's good.
 21 MR. ESKIN: Anything else, Dave?

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1 MR. BROWNLEE: Another question.
 2 Also we found out there were cost
 3 discrepancies in terms of the cost per county
 4 in terms of household, and Calvert County and
 5 Frederick County were very high compared to
 6 others.
 7 Maybe because we're not fully
 8 agriculture and we don't have a large
 9 population so the cost to the county per
 10 household to meet the plan, to meet the goal
 11 are more than we can charge. I mean, a
 12 reasonable storm water fee was not going to
 13 cover it.
 14 MR. ESKIN: Yes. I mean, we did not
 15 look at cost per household so I can't talk --
 16 I can't speak to that point. There are
 17 different approaches to cover your storm water
 18 cost, for example. That could make a big
 19 difference in the cost effectiveness. Anne
 20 Arundel, for example, they said they want to
 21 do a lot of stream restoration. Stream

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1 restoration isn't necessarily the most
 2 cost-effective approach. It may give you the
 3 best value for your dollar because you're not
 4 only getting your nutrient reductions but
 5 you're fixing the stream, reducing sediment,
 6 you're getting better biological values,
 7 recreational values, all -- very valid
 8 strategy but not necessarily the lowest cost.
 9 So there may be ways to reduce the
 10 cost and I don't know exactly what is in your
 11 strategy but that's something you could look
 12 at.
 13 You could probably further lower the
 14 cost -- I mentioned earlier if your strategy
 15 is designed to meet by 2020, well, extend it
 16 out five years to 2025. It will help a little
 17 bit but it's not the answer. If you have
 18 wastewater capacity that you're not going to
 19 be using, say, in the next 20 years, some
 20 trading between your storm water and your
 21 wastewater, so basically you give back some

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1 capacity as load and then you buy that back as
 2 you build to your storm water allocation.
 3 That would have the effect of extending the
 4 period and so lowering the annual costs as
 5 well.
 6 We're very aware -- I mean, it's
 7 like the difference between getting the
 8 30-year mortgage and the 15-year mortgage.
 9 It's the same amount of money but you may be
 10 able to afford that 30-year but not the
 11 15-year. So if you could find ways by
 12 bonding, by trading to extend those costs into
 13 the future, you're then lowering the annual
 14 costs for your rate payers. So we will be
 15 glad to talk to you about that.
 16 I left you actually a voice message
 17 about coming to speak to your commissioners,
 18 so we'll work that out.
 19 MR. BROWNLEE: Another question.
 20 The plans on the agriculture for Calvert
 21 County came out in excess of -- at least the

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1 last time I saw it -- excess nutrients, and I
 2 understand that they can't be given back to
 3 the county -- you know, it will go against our
 4 storm water. They're going to be shared in
 5 the basin wide for ag. That kind of doesn't
 6 seem fair. It seems like we should --
 7 MR. ESKIN: I'll let John answer
 8 that.
 9 MR. BROWNLEE: And another thing.
 10 If we -- if we see our cover costs are a
 11 little high, we're thinking, well, maybe we
 12 can take some of that money from the storm
 13 water utility and throw it toward ag. If
 14 we're not going to get credit for that for the
 15 county, it's going to be shared around the
 16 basin, we're not going to be very happy about
 17 that.
 18 MR. ESKIN: I think this is two
 19 different situations.
 20 MR. RHODERICK: Okay. The first one
 21 as you said, yours was one of the counties

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1 where, strategywise, we broke it down to
 2 county level. It seemed like we could get
 3 there using an aggressive strategy.
 4 Obviously, there's inherent issues in that
 5 strategy. As I said, it's aggressive, it's
 6 going to require additional resources. So
 7 that's one piece.
 8 The second one is, as Rich and are
 9 being very clear at this point, we're very
 10 reluctant at this point on the model and the
 11 ag loads. We think there's some adjustments
 12 that are going to occur, and so suggesting on
 13 the front end that, you know, yes, you have
 14 got this excess so you don't have to do as
 15 much storm water, I'm really scared about
 16 doing that, Dave, because I'm not settled on
 17 this model yet.
 18 And, you know, if down the road
 19 that's where it plays out, then great. But
 20 there is a lot of questions out there right
 21 now. And then what was the second piece,

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1 sorry?
 2 MR. BROWNLEE: Let's say we use some
 3 of our storm water money, throw it toward ag,
 4 you know --
 5 MR. RHODERICK: Get some additional
 6 credit, right.
 7 Again, because I'm leery as to where
 8 you stand, whether we're above and beyond
 9 meeting our obligation. I know overall, when
 10 we talk about ag, we're talking about
 11 statewide a 70 percent reduction of all
 12 possible loads.
 13 As we said, this E3 load, maximum we
 14 can do. The baseline for ag is 70 percent
 15 reduction. That means there's a potential
 16 maybe for 30 percent additional, maybe.
 17 Again, given -- but that is the component that
 18 we're holding back and saying that is what you
 19 need for growth and offset going forward. So
 20 if you snatch that now just to meet your
 21 obligation, what are you going to do, because

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1 Calvert County's a growing area.
 2 Are you willing to say to your
 3 planning office just shut it down and say you
 4 can't -- no more houses here because you don't
 5 have any way to offset those loads now?
 6 MR. ESKIN: So what he's saying is
 7 hold that for future growth.
 8 MR. RHODERICK: You need to hold
 9 that for future growth is what we're
 10 recommending.
 11 MR. BROWNLEE: We have an ag need
 12 and it's apparent we have money. Rather than
 13 spend all our expenses on storm water, we
 14 spend it to upgrade and implement an ag BMP,
 15 the county should get credit and not share it
 16 among, you know, other jurisdictions.
 17 MR. RHODERICK: That is what I am
 18 saying. I have got to get a 70 percent
 19 reduction overall in your account. So we've
 20 got to speak [inaudible]. For me to sit here
 21 and say yes, that's an urban piece count

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1 because the county paid for it, I may not have
 2 enough on that plan to get there. Those are
 3 what we recently said we can get to so, you
 4 know --
 5 MR. ESKIN: I think there is one
 6 more point to make before you leave. An
 7 important consideration is that right now
 8 we're in this Phase II, you only need 60
 9 percent. Do you have a storm water permit in
 10 Phase I or Phase II?
 11 MR. BROWNLEE: [Shakes his head.]
 12 MR. ESKIN: No, you don't. Okay. I
 13 think the way to think about this, at least
 14 the way I think about it is don't worry about
 15 the whole big chunk you can't possibly swallow
 16 now. Worry more about how you could make
 17 progress in your 2013 budget and your 2014
 18 budget. Think about the end game in terms of
 19 not going too slow now but when we get a
 20 revised model in 2017, could be a whole new
 21 game so don't worry so much about swallowing

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1 that whole reduction, worry about the shorter
 2 term, about making progress, setting up your
 3 local capacity, making progress rather than
 4 meeting the goal.
 5 I think that's a more productive
 6 approach to this because it is a big chunk to
 7 swallow. I understand that but -- and you
 8 could choke on it when you try and swallow it
 9 all at once, but if you take off little bites
 10 and say what would could I do in the next
 11 budget, yes, I could find a little bit of
 12 extra money. I could make some progress on
 13 this building capacity. I may have to go a
 14 lot faster later on if I go too slow now so
 15 let me do as much as I can and let's make
 16 progress that way rather than worry, well, how
 17 much is the total cost and what does it add up
 18 to per household.
 19 Who knows what's going to happen
 20 down the road. Who knows what the next
 21 milestone is going to say so we know that the

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1 model has been fairly consistent on the total
 2 for the bay but the efficiencies internally
 3 have changed. So let's see what happens and
 4 we'll be in touch.
 5 MR. BROWNLEE: Thank you.
 6 MS. GHEZZI: Hi, my name's Lisa
 7 Marie Ghezzi. I'm a Talbot County master
 8 gardener, in part writing a in-my-backyard
 9 publication for all of the people in our
 10 community, and this plays a very significant
 11 part of that. I'm also involved with the
 12 Midshore Riverkeepers. So I'm an active
 13 resident in the community volunteer.
 14 I think the first gentleman, excuse
 15 me, I didn't catch your name, made an
 16 extremely important point and I hope I haven't
 17 messed it up, but basically land use being the
 18 root cause of the degradation of our bay and
 19 then the consideration of development.
 20 And I think that the question's been
 21 addressed in a couple of different ways but I

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1 still don't totally understand it from a
2 future development perspective. I hear 30
3 percent might be set aside, certainly
4 communities should consider that. Thirty
5 percent of the plan, you have just mentioned
6 it again, and that's why I need
7 clarification -- well, hold on one second.
8 Mr. Rhoderick also pointed out that
9 the load caps will be established. If we take
10 that -- let's just take a fictitious community
11 that has a hundred acres, 70 of which are
12 developed and 30 of which are not. What in
13 that 30 acres of that fictitious community --
14 what ability do they have to contribute
15 towards load in the future? I know it's a
16 very simplistic way to look at it but how are
17 we accounting for future development's impact
18 on our waters?
19 MR. ESKIN: We didn't really say
20 that, you know, 30 percent is set aside.
21 We're out of that. We're working towards the

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1 60 to 70 percent actually. Now, by 2017 we're
2 still going to have to do the remainder going
3 forward. Just focus on what's right in front
4 of you now.
5 The accounting-for-growth strategy
6 will deal with a lot of this. So let's say
7 that 30 acres that you said and how could that
8 contribute to offsetting future growth. Let's
9 say it's in pasture now, well, you could plant
10 trees on that and that would lower the
11 per-acre loading rate of that area and so we
12 reduce your loads.
13 You could also offset septic
14 systems. You get the most credit for
15 upgrading a septic system that's in the
16 critical area because that's closest to the
17 water. But still, you could do that, you
18 know, you could find other ways to reduce
19 loads.
20 So basically the sort of the way
21 we're thinking about it now, you're a

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1 developer. You're coming in, you're going to
2 build on land that's, say, half pasture, half
3 forest. When this development is done, what
4 would your loading look like. Will it go up
5 over what it is, will it go down. Most likely
6 it would go up. To the extent to which it
7 goes up, you would have to find other
8 reductions to offset that new load. What will
9 they be? Well, it depends on the particular
10 circumstances.
11 MS. GHEZZI: So it's a zero sum in
12 the --
13 MR. ESKIN: That's exactly right.
14 For right now actually it's a negative sum in
15 that we're accounting for growth because we're
16 above where we need to be. If we were just at
17 zero sum, we wouldn't be making progress. So
18 we may have like a two-to-one or a
19 three-to-one ratio that you need to reduce
20 three times as much as you increase your load.
21 Once we get down to the cap, then

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1 it's a zero sum again, everything coming in
2 needs to be balanced and you need to maintain
3 that cap on into the future.
4 MS. BRUTON: My name's Theresa
5 Bruton, Hazen and Sawyer. Two questions. It
6 says in the appendix that the long-term
7 control plan written by the EPA states that
8 the elimination of combined sewer overflows, I
9 read the long-term control plan and it says
10 it's 85 percent reduction on a certain storm.
11 Are you eliminating combined sewer overflows?
12 MR. ESKIN: Honestly, I'm not
13 completely familiar with that issue. It may
14 depend on where you are. I know that there's
15 a different strategy in the District of
16 Columbia where their long-term plan is very
17 expensive. They're building tunnels to store
18 water versus what we're doing with, say,
19 Baltimore County, which is basically
20 disconnecting their storm and their sewer
21 systems.

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1 What level of storm it gets, I don't
2 know. You could submit that comment or
3 question and we'll try and get you a specific
4 answer on that. I just don't know. There is
5 a number of communities that our CSOs have
6 dealt with, not only Baltimore City. I
7 believe Cambridge had some CSO issues and some
8 places further out west.

9 MS. BRUTON: My second question is
10 follow-up to Blue Water. She asked how you're
11 going to be reporting storm water. I am
12 familiar with how you report NPDS permits with
13 the wastewater plant. The permit has a load,
14 how many pounds you're allowed a year, and you
15 report that because there is a sampler that
16 takes and you calculate the load because there
17 is a flow meter. How are you going to do that
18 with storm water?

19 MR. ESKIN: Storm water permits
20 require a whole array of different things.
21 Some of the requirements for storm water, for

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1 example, are to run some video through your
2 lines to see whether you have illegal or
3 illicit connections and things like that. The
4 part we're most interested in would be
5 probably two things. One is the actual
6 implementation that they have done to reduce
7 storm water runoff.

8 There is going to be in Phase I,
9 probably in the Phase II permits -- Phase I is
10 the largest jurisdictions, ten largest.
11 Phase II are two of the medium-sized
12 Washington County and Cecil and they have
13 permits.

14 So that permit is going to have a
15 requirement to retrofit 20 percent of your
16 developed area that does not have storm water
17 controls or areas equivalent to that. If they
18 don't have the maximum controls, you could add
19 more controls up to the maximum. So that's
20 going to be basically they'll report what
21 they've done, how many acres it's done, what

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1 the drainage area is and what the expected
2 reduction would be.

3 MS. BRUTON: So there is no numbers.
4 It's a calculation from what you've done
5 equals --

6 MR. ESKIN: They also have a
7 monitoring requirement which includes what's
8 called event mean concentrations. That's when
9 you have rainfall, you could have your storm
10 water runoff. They have to monitor as the
11 water flow goes up and then goes down and that
12 is called an event mean concentration there.
13 This monitoring shows that this stuff is
14 working. So they also have to report that.

15 What we have seen as we've
16 implemented more and more storm water is that
17 the event mean concentrations of nutrients are
18 going down.

19 So there is both implementation
20 reporting as well as a monitoring reporting.

21 MS. BRUTON: Sampling the water or

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1 in the system?

2 MR. ESKIN: The event mean
3 concentration is not each individual facility
4 but it's at specific locations.

5 MS. BRUTON: In the stream.

6 MR. ESKIN: I think it's coming
7 out -- well, I'm not sure where it is,
8 actually, as I don't do storm water. So I
9 don't want to --

10 MS. EASTMAN: My name is Ajax
11 Eastman. I am just asking a question. What
12 are the assurances that counties that didn't
13 submit the plans are -- that somebody will be
14 tracking and they'll be held accountable by
15 either the county or the state or EPA that
16 those have been achieved?

17 MR. ESKIN: What's going to happen
18 in 2013 and probably before, but most notably
19 in 2013, that we're going to have to submit to
20 them what we call an input deck. A new input
21 deck. 2013 progress. And what that's going

<p style="text-align: right;">Page 98</p> <p>1 to include is the new BMPs that have been 2 implemented since now. And we're going to be 3 developing that, getting information on a 4 county-by-county basis. So we submit that to 5 EPA or, quite frankly, we analyze it in MAST 6 for a good approximation, and if the progress 7 that we're expecting hasn't been made, that is 8 when the uncomfortable discussions will ensue. 9 And, you know, we would work with 10 EPA and we would say, well, you know, 11 statewide we're doing pretty good but this 12 county, they're not reporting much progress. 13 Let's work together with them to figure out 14 what is going on and how we could help them 15 catch up. And then the response, of course, 16 will be critical as to what happens next. 17 So we're taking this information, it 18 is being reported to us, we look for progress 19 both with respect to their milestones as well 20 as implementation, and then we come back if 21 you're not making the progress that needs to</p>	<p style="text-align: right;">Page 100</p> <p>1 part of the state and they're saying, well, 2 it's a difficult conversation, but really 3 where is that time line going to come in with 4 it. 5 MR. ESKIN: I think it's likely 6 we'll be getting some progress from them 7 anyway as they take care of flooding and 8 things like that. In total, if you are a 9 county that doesn't have a permit, you're 10 probably a more rural county. If you're a 11 more rural county, you're probably getting 12 much of your implementation and progress 13 through the ag sector. They're not totally 14 responsible but it's going to be a pretty 15 small component. We'll have to look at that. 16 One of the consequences I know 17 earlier was residual designation. If we're 18 not seeing progress, that would be fairly, you 19 know, drastic. Almost like taking a cannon to 20 a mosquito, but it is a possibility. 21 So we have to see how well that</p>
<p style="text-align: right;">Page 99</p> <p>1 be made and have a hard discussion. 2 MS. EASTMAN: So will you be doing 3 the tracking or they will be doing the 4 tracking? 5 MR. ESKIN: Well, they're reporting 6 to us and we'll be tracking what they report. 7 So let's say it's storm water and let's say 8 it's a county that has a permit. So they 9 would submit to us as part of their annual 10 required report under the permit what they've 11 done. Well, they haven't done anything, well, 12 that is a problem. We need to deal with it. 13 MS. EASTMAN: Thank you. 14 MS. BURGESS: Kim Burgess, City of 15 Baltimore, DAW. Let's go with that different 16 scenario. What if it's a county that doesn't 17 have a permit, you only have the city plus 18 nine counties that actually have an MS4 19 permit. And as you said earlier, the TMDL is 20 not an enforceable action. Just, I think, a 21 lot of people are looking around at that other</p>	<p style="text-align: right;">Page 101</p> <p>1 works, you know, how far behind it's getting 2 and what we could do about it. We don't 3 anticipate that that is going to be such a 4 significantly large load that we really need 5 to worry about it at this point. 6 MR. RHODERICK: I actually forgot, 7 when I was doing the presentation, we've 8 already put up a Web site effective today. If 9 you go to Maryland Department of Agriculture 10 and you click on conservation, you'll see TMDL 11 and you pop up -- there's a map and you'll see 12 county by county there's goals, and you'll see 13 there's a setup where we're going to track 14 progress. 15 So we will have 2013 goals and 16 you'll be able to track and we'll probably 17 annually load up information but you will be 18 able to see county by county the progress 19 based on goals. 20 MS. HORSEY: The conservation tab is 21 across the top towards the right hand of the</p>

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<p>1 screen. Once you get on the conservation 2 page, on the left-hand side you'll see the 3 TMDL, watershed implementation tab. It's 4 about a third of the way down. And once you 5 click on that, you'll be able to click on the 6 state map and click on the county and then 7 you'll be able to navigate from there. 8 MR. ESKIN: More questions? David? 9 MR. CARROLL: David Carroll, Blue 10 Water Baltimore. How do you account for 11 stream bank erosion in the calculations 12 because certainly in areas like metropolitan 13 areas, that is a big number. We remove a 14 couple of hundred thousand cubic yards every 15 year out of the harbor to keep the channels 16 open because right now it's only characterized 17 as farm erosion. 18 I'm afraid we're going to get 19 counted out, the sediment loading is probably 20 counted as farm from the charts, that we're 21 going to get counted out. Stream bank erosion</p>	<p>1 Prince George's County has a stream monitoring 2 program as does Montgomery County. I think 3 Charles County has initiated some. 4 So it's part of their local stream 5 monitoring programs and hopefully some of it 6 will go in to fix that. But as I said, we're 7 not guiding that at this particular point 8 except through whatever sediment erosion 9 controls need to be implemented according to 10 law. We fall behind on our sediment progress, 11 then we'll have to pick it up. But it's 12 something we should probably encourage much 13 stronger than we have been. 14 MR. TITUS: Tim Titus, Patapsco 15 Heritage Greenway. Are you satisfied that the 16 contribution of nongovernmental organizations 17 and volunteers are being adequately reported 18 and any best management practices that those 19 kind of groups contribute are being factored 20 in well enough through the counties? 21 MR. ESKIN: You know, that's a good</p>
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<p>1 has become a less and less important strategy. 2 So how do you account for that? 3 MR. ESKIN: Well, I think that is a 4 potentially very large load. In fact, there 5 is some indication now the stream bed and 6 stream bank erosion far exceeding surface 7 erosion like from agriculture. 8 As I mentioned before, some 9 counties, like Anne Arundel County, are 10 focusing on the issue of restoration which 11 would fix that problem. It's going to be 12 county by county. I think Baltimore County 13 also has been doing a lot of stream 14 restoration. Montgomery County is very 15 interested in that. So we have to look at 16 that plan. 17 If we are falling behind on 18 sediment, I think that that would be, then, 19 the time to try and fix that. I think where 20 we have highly eroded streams, many of it the 21 urban counties are monitoring that. I know</p>	<p>1 question. I really don't know. I don't know 2 how much they're doing. I know John is 3 working on voluntary stuff that's being done 4 by farmers. But as far as the NGOs, I don't 5 know. I would encourage them to report all 6 work locally with the counties. 7 MR. RHODERICK: We actually had at 8 these meetings, at least for agriculture, we 9 had a lot of the NGOs there. Some of those 10 numbers you saw reflected the ag strategy 11 directly from those NGOs where they said this 12 is an area I'm working on. We had 13 switchgrass, 1,000 acres, some of the wetland 14 acres, those were attributed to watershed 15 organizations that were working with the 16 farming community. 17 MR. ESKIN: I have a question for 18 you guys. How many of you have not submitted 19 comments on the WIP yet but are planning to do 20 so by Friday? Okay. Thanks. Just curious. 21 More questions? This side is kind</p>

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<p>1 of quiet. I mean, feeling isolated?</p> <p>2 MR. RHODERICK: That's your staff</p> <p>3 over there. I'm not pushing you for questions</p> <p>4 per se but it's coming up close to the end of</p> <p>5 the comment period. Part of the purpose for</p> <p>6 this meeting was to get your questions</p> <p>7 answered before you had to submit your final</p> <p>8 comments. The better you understand what we</p> <p>9 have done, how we have got there, the better,</p> <p>10 you know, more relevant your comments will be.</p> <p>11 That's why I'm encouraging you that you</p> <p>12 shouldn't feel shy or uncomfortable</p> <p>13 commenting. So we'll leave it at that.</p> <p>14 MR. DiNUNNO: My observation has</p> <p>15 been that the storm water runoff is -- a major</p> <p>16 contributor is our highway system. I know</p> <p>17 locally over where I live you can see water</p> <p>18 gushing in from the sides of the road down</p> <p>19 into the gutter. I am sure this is happening</p> <p>20 all across our state. As far as I know, there</p> <p>21 is no requirement that the highway</p>	<p>1 MS. HORSEY: There's something in</p> <p>2 the draft WIP.</p> <p>3 MR. ESKIN: Yes, they do have</p> <p>4 something in the draft WIP strategy.</p> <p>5 MR. STAINMAN: I came from the quiet</p> <p>6 section. You instigated this. Stuart</p> <p>7 Stainman from the Patapsco/Back River</p> <p>8 tributary team. I have two questions.</p> <p>9 The first is both agricultural and</p> <p>10 urban groups are saying that they're doing or</p> <p>11 considering some modifications that would</p> <p>12 reduce nutrient loads but they're not listed</p> <p>13 in the accepted BMPs. What is being done in</p> <p>14 the schedule for expanding the list of BMPs</p> <p>15 that are acceptable or can be counted? Do</p> <p>16 that first.</p> <p>17 MR. ESKIN: Yes, it's a little bit</p> <p>18 easier.</p> <p>19 MR. RHODERICK: Yes, I know I</p> <p>20 glossed over it real quick. I told you there</p> <p>21 was this ag work group. Part of that, we saw</p>
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<p>1 administration gets storm water permits or</p> <p>2 discharge permits.</p> <p>3 How do you deal with this? You've</p> <p>4 got a state agency is a major contributor for</p> <p>5 this.</p> <p>6 MR. ESKIN: Actually, the state</p> <p>7 highway has a permit. They do. Now, they're</p> <p>8 not responsible for the roads. They're</p> <p>9 responsible for the state highways. If it's a</p> <p>10 local road, then it's a local requirement.</p> <p>11 But they do have a storm water permit.</p> <p>12 We have been working with them. In</p> <p>13 fact, they come up with a load of estimates.</p> <p>14 They have a lot of engineers on staff, so in</p> <p>15 some ways it's easier for them, but they are</p> <p>16 pretty emphatically working on that. State</p> <p>17 Highway administrator Beverly Swaim-Staley,</p> <p>18 met with the bay cabinet early on about this</p> <p>19 so we're all understanding what needs to be</p> <p>20 done, and State Highways has been an active</p> <p>21 participant in the whole process.</p>	<p>1 there were some BMPs that were suggested or</p> <p>2 new. So we have a process, there's about 12</p> <p>3 BMPs that the ag workers have identified that</p> <p>4 they feel they have work quality benefits.</p> <p>5 The component we have is in process with the</p> <p>6 EPA. Unfortunately, it's going to take</p> <p>7 anywhere from three to five years. It's</p> <p>8 gruesome.</p> <p>9 You have to have the literature and</p> <p>10 research to first start this. You pull out,</p> <p>11 you gather, then you send it in and there's a</p> <p>12 whole peer-review process that goes into it.</p> <p>13 Once that's approved, it's passed up to the</p> <p>14 bay work group. It would get into the model</p> <p>15 but it is a process. We're lining that up</p> <p>16 now. As I say, we've got 12 BMPs so we've got</p> <p>17 a dog in the fight for agricultural.</p> <p>18 MR. STAINMAN: Second question.</p> <p>19 There are some pollution loads that you -- I</p> <p>20 don't know if it's assigned to -- I don't know</p> <p>21 if "assigned" is the right word -- but you</p>

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<p>1 said to some jurisdictions that pollution 2 loads are coming from these sources, and as 3 the local jurisdictions have looked, they have 4 found that those are in error, that the 5 pollution loads from those sources are not 6 anywhere near as large as you estimated. 7 But obviously, the pollution is -- I 8 assume that pollution has been measured from a 9 monitor so the pollution is still there but 10 it's coming from some other sources. When 11 are -- as a citizen, when are you going to -- 12 who's responsible for reducing it and when are 13 you going to reassess that? 14 MR. ESKIN: There is two aspects to 15 the accuracy of the model. One is the model 16 itself, how it handles the various processes 17 and how reflective they are of what actually 18 happens in the ecosystem. The other is the 19 data that we feed it. 20 If that is inaccurate, then 21 regardless of how accurate the model is, we're</p>	<p>1 calibrated against actual monitoring data. So 2 when the model projection and the monitoring 3 data don't match up, it means that we 4 misattributed or missed something entirely, 5 which is why we do the calibration in the 6 first place so that we could account for it in 7 some way. 8 The new model, hopefully we will be 9 getting better data into it because this has 10 become so much more important and hopefully 11 the calibrations will be better which would 12 mean that we will not have misestimated as 13 much. 14 So that won't happen until 2016/2017 15 when we revise the model. But we are working 16 on it. We are aware of the issues. 17 MS. HORSEY: Getting back to the 18 question about State Highways. The State 19 Highway plan is under Appendix E which is 20 listed up here, and if you look also on 21 Appendix A on page A11, it talks about the</p>
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<p>1 not going to get accurate results. The old 2 garbage in, garbage out. In doing the model, 3 EPA basically has to use the lowest common 4 denominator on something like land use because 5 it has to be consistent across the whole 6 watershed, and that isn't always very 7 accurate. 8 I did note towards the end of my 9 presentation, one of the things that we need 10 to do in the future in working with EPA is to 11 get more accurate land use. Anne Arundel 12 County, working with Anne Arundel County early 13 on, they found a number of septic systems was 14 way off. That is, I think, a very good 15 example. 16 So as we're working to the revision 17 of the model, we need to correctly attribute 18 those septic systems and get the right 19 numbers. 20 Now, what happens, you're right, the 21 model does capture it because the model is</p>	<p>1 storm water permits for State Highways. 2 MR. ESKIN: Good. We've already got 3 that covered. Anybody else? 4 MR. SEIPP: Brian Seipp, Center for 5 Watershed Protection. You mentioned in your 6 presentation that if a total jurisdiction 7 submitted a Phase II plan and it was deficient 8 in some manner, then the state interjected. I 9 think you called it a gap filler or filling 10 the gap. 11 How do we or where can we find the 12 information for where MDE sort of filled in 13 the gap? I know you went through a number of 14 steps that you kind of went through. Is there 15 sort of an analysis that said this is what the 16 local jurisdiction submitted and this is what 17 MDE is adding in order to make it, you know, 18 to the goal? 19 MR. ESKIN: We're working on that 20 right now. We're obviously kind of busy as 21 well trying to finalize everything. That</p>

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<p>1 information will be available out to the</p> <p>2 counties and the public at the end of April,</p> <p>3 where we're trying to put it into a form</p> <p>4 that's readable and interpretable and useful</p> <p>5 to local governments and to anybody else who</p> <p>6 wants to look at it, but that will be</p> <p>7 available the end of April on a</p> <p>8 county-by-county basis.</p> <p>9 MR. CHEN: Can I have another</p> <p>10 question?</p> <p>11 MR. ESKIN: Yes.</p> <p>12 MR. CHEN: Chen again. The question</p> <p>13 I have relates to the urban nutrient</p> <p>14 management, and I know this is a program MDE</p> <p>15 is managing. The county Phase II plan is</p> <p>16 pretty much using state's Phase I plan and one</p> <p>17 of them is to implement urban nutrient</p> <p>18 management plan.</p> <p>19 And my question to you two is, well,</p> <p>20 you will implement; how do we take credit or</p> <p>21 how do we trade it because it's managed by</p>	<p>1 MR. ESKIN: Anybody else?</p> <p>2 Thank you all for taking the time to</p> <p>3 participate and for your questions and this</p> <p>4 whole effort. I hope you found it a</p> <p>5 productive two hours.</p> <p>6 (Proceedings concluded at 3:58 p.m.)</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p>
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<p>1 MDA, not by us. And secondly, how is MDE</p> <p>2 going to give us the credit for that?</p> <p>3 MR. RHODERICK: Okay. It is, as you</p> <p>4 talked about some of these state regulatory</p> <p>5 programs, a component that gets taken off the</p> <p>6 top. But as you said, it's all about the</p> <p>7 management of the program. We are looking at</p> <p>8 an efficiency, a very low efficiency.</p> <p>9 There is one aspect of us rolling</p> <p>10 the program out and training and educating</p> <p>11 people. It's another thing, as you just</p> <p>12 talked about, a responsibility that the county</p> <p>13 would take on for actually monitoring or going</p> <p>14 out and making sure that homeowners are</p> <p>15 actually applying it.</p> <p>16 And again, if you're coming up with</p> <p>17 better information, then we would look at,</p> <p>18 say, higher reduction for the county because</p> <p>19 the county is implementing it to a higher</p> <p>20 degree than what the state would be</p> <p>21 suggesting.</p>	<p>1 STATE OF MARYLAND</p> <p>2 HOWARD COUNTY</p> <p>3 I, Dawn Michele Hyde, a Notary</p> <p>4 Public of the State of Maryland, Howard</p> <p>5 County, do hereby certify that the</p> <p>6 above-captioned proceeding took place before</p> <p>7 me at the time and place herein set out.</p> <p>8 I further certify that the</p> <p>9 proceeding was recorded stenographically by me</p> <p>10 and this transcript is a true record of the</p> <p>11 proceedings.</p> <p>12 I further certify that I am not of</p> <p>13 counsel to any of the parties, nor an employee</p> <p>14 of counsel, nor related to any of the parties,</p> <p>15 nor in any way interested in the outcome of</p> <p>16 the action.</p> <p>17 As witness my hand and seal this 5th</p> <p>18 day of March, 2012.</p> <p>19</p> <p>20 Dawn M. Hyde</p> <p>21 My Commission Expires 10/7/2015</p>