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WATER QUALITY TRADING UNDER THE NATIONAL POLLUTANT
DISCHARGE ELIMINATION SYSTEM LISTENING SESSION

Conducted by Christy Williams

Monday, October 21, 2019

12:10 p.m.

U.S. EPA Headquarters

William Jefferson Clinton East Building, Room 1153

1201 Constitution Avenue NW

Washington, D.C. 20004

Reported by: Natalia Thomas

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Christy Williams, Eastern Research Group

Amanda Forsey, Eastern Research Group

Anna Wildeman, Deputy Assistant Administrator, Water

Amelia Letnes, EPA

Seth Brown, Storm and Stream Solutions

Clay Detlefsen, National Milk Producers Federation

Albert Ettinger, Clean Water for All

Steven Rowe, Newtrient

Bruce Knight, Strategic Conservation Solutions

Ecosystem Services Market Consortium

Frederic Andes, Federal Water Quality Coalition

Jeff Corbin, Restoration Systems

Laurie Hawks

North Georgia Water Resources Partnership

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

2 MS. WILLIAMS: Hello, everyone. And welcome
3 to today's Water Quality Trading Baseline Policy
4 Proposal Public Listening Session. I'm Christy
5 Williams with Eastern Research Group.

6 Today's in-person listening session is also
7 being presented as a webinar. I'll be moderating the
8 in-person session, and Amanda Forsey, my colleague at
9 ERG, will be moderating the webinar portion.

10 Louis Niera is helping with registration
11 along with Danielle Stephan and Sean Ramach from EPA.
12 They're outside at the registration table.

13 Before we get started, there's a few
14 housekeeping items. So for those of you in the room,
15 as a reminder, this is a federal government facility,
16 and you'll need an escort basically to go out of this
17 area. So go to the registration table, and they'll be
18 more than happy to help you get to where you need to
19 go.

20 If you'd like to make a statement and you
21 haven't done so already, you can go out and sign up at
22 the registration desk quickly, or you can wait until

1 after the first webinar participants make their
2 statements. Line up behind the microphone, and we'll
3 take your statement at that time.

4 Note that verbal statements today will not be
5 considered formal Federal Register comments. However,
6 the transcript from the listening session will be
7 submitted to the docket in its entirety. We have a
8 court reporter here to do that.

9 Participants in the room will give their
10 statements in the order that we call you, and then we
11 will go to webinar participants. Again, if you decide
12 either during the presentation or during the webinar
13 statements that you do, indeed, want to make a
14 statement and you've not signed up, line up behind the
15 microphone in the room, and we'll take your statement
16 after the webinar participants.

17 For our online webinar attendees, audio is
18 available for this presentation through your
19 computer's mic and speakers or by telephone. Your
20 call-in number and access code are in the control
21 panel box on the right-hand side of your screen.

22 If you'd like to make a statement today,

1 please call in using your telephone to ensure a higher
2 quality of sound. If you call in using your phone,
3 please make sure you enter your PIN number, visible in
4 the control panel after you call in.

5 All participants have been muted to minimize
6 background noise. We'll individually unmute you if
7 you've requested to make a statement. When you make
8 your statement, please do not use your phone's
9 speakerphone, as there will be background noise that
10 we'll be able to hear.

11 If you didn't sign up to make a statement,
12 but you decide to today, please let us know in the
13 chat box. You'll be given an opportunity to speak
14 after the second round of in-person comments -- I mean
15 statements are given. Amanda will be moderating that,
16 and she'll let you know in plenty of time.

17 For those attending both online and in
18 person, we currently have four in-person participants
19 and six webinar participants who wish to make a
20 statement. We will take in-person statements first
21 and then go to webinar, as I've stated. We'll
22 continue to take statements as necessary until all who

1 wish to make a statement have made them, or 5:00 p.m.,
2 whichever comes first. We will call each person and
3 also let the next person know that they -- they're on
4 deck so that they'll know that they'll be next.

5 All comments will be limited to three minutes
6 or less. I have warning cards, and I'll give you a
7 warning when you start to reach the end of your time.
8 I'll give you a one-minute warning. Amanda will give
9 the webinar participants a one-minute warning as well.

10 It's important that you state your name and
11 any organization that you wish to be associated with
12 at the beginning of your statement.

13 Everyone who wishes to make a comment -- a
14 statement in the room must speak into the microphone
15 that's in the center of the room to be sure that
16 everybody in the room can hear you and the folks on
17 the webinar can hear you as well.

18 And now I'll turn it over to Anna Wildeman,
19 Deputy Assistant Administrator for Water.

20 MS. WILDEMAN: Good afternoon and also good
21 morning to those on the phone. Welcome to EPA and to
22 our listening session on our recent Federal Register

1 Notice on Water Quality Trading and Baselines.

2 You know, we really began this conversation
3 back in February when we issued a memo laying out six
4 principles to promote market-based approaches and --
5 including water quality trading for water quality
6 improvements. One of those principles was the need
7 for more flexible treatment of baselines in trading
8 programs and other market-based programs.

9 So our recent Federal Register Notice is
10 really the next step in moving forward with that
11 discussion in trying to build opportunities to create
12 more flexible baselines. EPA is committed to
13 continuing to create real change in this space and
14 break down barriers that have, to date, you know,
15 really prevented widespread adoption of market-based
16 approaches.

17 We talk a lot about nutrients when we talk
18 about water quality trading, and that's for good
19 reason. Nutrients remains one of our biggest water
20 quality challenges. But I do want to note that our
21 2019 memo is not limited to nutrients. It should be
22 considered by policymakers and the stakeholders to

1 apply to all tradeable pollutants.

2 Before we get started today, I do want to
3 acknowledge and thank our dedicated career staff who
4 have worked on this issue for the last many, many
5 months to get to a place where we're here today to
6 talk about a number of different policy options that
7 may be appropriate, depending on the state and the
8 circumstance and the community. So we would not be
9 having this discussion today without you guys. So
10 thank you.

11 Today we are not only asking for comments on
12 the proposal, the proposed policy options that we put
13 out, but also in other areas where EPA can better
14 align the themes from the 2003 Water Quality Trading
15 Policy with those that were incorporated into our
16 February memo from this year.

17 So we look forward to hearing all of your
18 comments, both on the baseline policies and beyond
19 that. So thanks again for coming today and look
20 forward to hearing from you.

21 Now we're going to hear from Amelia to walk
22 through the Federal Register Notice and facilitate a

1 discussion.

2 MS. LETNES: Thanks, Anna. Hi, everyone.

3 Let me check that my clicker works from this
4 distance. And it does.

5 So I want to start out talking a little bit
6 about what water quality trading is. We can't get
7 into the details of how we're going to set up a
8 program until we understand what that program is.

9 So water quality trading at its heart is a
10 voluntary program. It's the voluntary exchange of
11 water quality credits generated through pollutant
12 reductions. So what we do is we see what is the most
13 cost-efficient way we can do this. We allow sources
14 that have higher pollutant control costs to purchase
15 credits from pollutant -- from sources with lower
16 costs, creating a net environmental improvement and at
17 a lower cost.

18 This flexibility lets us innovate. It lets
19 us innovate not just in the point source sector, but
20 also in the nonpoint source sector. It gives us an
21 opportunity to leverage point source requirements to
22 encourage nonpoint source voluntary reductions. And

1 it lets us really look at a wide variety of factors
2 that reduce overall pollutant loads whether or not
3 they line up exactly with a permit condition.

4 So that's water quality trading. The next
5 question is: What is baselines? You know, this
6 Federal Register Notice is about the baselines
7 component, specifically. Well, a credit is a unit of
8 reduction available for trading. Well, how do you
9 know what is available to trade? That's the heart of
10 the baselines question.

11 The baseline level is the discharge level
12 expected of the source. It applies both to buyers and
13 sellers. With point source, it's pretty clear. We
14 know what our limits are. With nonpoint sources, it
15 can be a little more complex. My next slide is going
16 to walk through all of this.

17 Previously, we had a policy that really
18 expected credit sellers to meet their baseline on
19 site-specific bases before they could generate
20 credits. And what we're saying is we might need to
21 shift away from that to create that flexibility for
22 innovation that we talked about.

1 So I want to talk about what exactly was the
2 intent of this Federal Register Notice. What are we
3 talking about here? When we talk about baseline, we
4 could be talking about buyers or sellers. Buyers
5 typically are point sources. They have NPDES permits
6 that require reductions in their pollutant discharge.
7 They are our primary buyers. You can't have a fully
8 voluntary market, but that's not the focus here.

9 You can also have baselines for sellers. For
10 buyers, it's pretty simple. You need to meet your
11 permit limit. You can do that through trading. That
12 is the basis of trading, is being able to meet your
13 permit limit through trading.

14 For sellers, it matters if you're a point
15 source or a nonpoint source. For point sources, once
16 again, you have a permit limit. You must meet your
17 permit limit. Anything you reduce beyond your permit
18 limit becomes available for a trade.

19 For nonpoint sources, we want to look at
20 whether or not you're subject to a total maximum daily
21 load. If you're not subject to total maximum daily
22 load, if you're in a watershed that is either not

1 impaired, or it's impaired and a TMDL has not yet been
2 developed or does not need to be developed, we look at
3 our state and local requirements and current practice
4 to determine what's expected.

5 If you are subject to total maximum daily
6 load, then your expectations have changed with this
7 Federal Register Notice, potentially. So previously,
8 this had been where we would say you were expected to
9 meet your portion of the TMDL load allocation. That's
10 what we say in the 2003 policy, and that's what we're
11 looking to shift.

12 So I want to show you we're really looking at
13 a very narrow sliver. But the options that we provide
14 could apply in many of these other scenarios. They
15 are not limited to nonpoint sources subject to a TMDL.
16 That was just the challenge that we were looking at.
17 So when you look at these options, they were written
18 to -- with a view to the TMDL, but they could
19 absolutely be applied -- in many cases, would
20 absolutely be appropriately applied -- in other
21 scenarios, such as for a nonpoint source that is not
22 subject to a TMDL.

1 So I want to talk a little bit about the memo
2 that Anna mentioned. This established a new vision
3 for market-based approaches. It took us on a new
4 direction, thinking about how to make it more
5 flexible, more innovative, and breaking down those
6 barriers.

7 This does take precedence over existing
8 policy. However, it is not comprehensive. It does
9 not address every aspect of the existing policy. So
10 that existing policy still is somewhere to look, but
11 then check and see whether or not it's been updated in
12 2019.

13 There were six market-based principles --
14 watershed scale implementation; adaptive management;
15 banking credits, which is the ability to use credits
16 over time; flexibility and baselines; credit stacking,
17 which is the ability to use multiple markets for the
18 same activity -- for example, if you had a riparian
19 buffer that was both a carbon sink and a nutrient
20 filter, you could get credits for both of those; and
21 financing for nonpoint source practices, getting that
22 financing on the ground to encourage nonpoint source

1 reduction.

2 So we are obviously here to talk about the
3 flexibilities and baselines component of it. We
4 issued a February -- we issued a Federal Register
5 Notice to implement this memo. It is not the last
6 thing that we will be publishing to implement the
7 memo, but it is the first big published document.

8 We are asking for comment on the specific
9 policy options I'll be discussing today. But as Anna
10 mentioned, we're also looking for other areas where we
11 need clarification where there might be a difference
12 or ambiguity between the 2003 and the 2019 policies.
13 So we're looking broader than just whether or not
14 people like the options available.

15 I also do want to point out we're not looking
16 for a vote on which option is the best. We believe
17 that whichever these options are supportable, we want
18 to move forward and that state programs can decide
19 which of them are most appropriate. So we are not
20 looking to pick one of the options. We're, rather,
21 looking to see which of these options are supportable.

22 So we have a variety of options, as I

1 mentioned. Some are policy changes; some are not.
2 Some are just clarifying existing policy. They're an
3 area that we never addressed in writing before, and we
4 want to give that clarify to the public.

5 These options can be used individually or
6 together in a program. We don't think that any
7 program needs to pick one. Some of them you kind of
8 need to pick, but many of them can be used overlapping
9 in a program.

10 So the first area that we're talking about is
11 redefining baseline. And this is really the biggest
12 change to policy, and this is what I was talking
13 about, about that subject to a TMDL, nonpoint source
14 baseline.

15 Our 2003 policy require -- recommended that
16 individual nonpoint sources would make their portion
17 of the load allocation, called the baseline, before
18 they could generate credits or offsets. So you had to
19 do your portion, however that was determined, of load
20 allocation. Say it was a 50 percent reduction on your
21 farm. You'd have to make that 50 percent reduction
22 and the 50 percent plus one pound. You could sell

1 that pound. This was seen as a really challenging
2 barrier to make all those reductions up front.

3 And in 2019, our proposed new policy
4 recommends that nonpoint sources be allowed to
5 generate credits for any pollutant reductions that are
6 not included in the assumptions that support the TMDL
7 load allocation. So they can't be something the TMDL
8 load allocation already said we need to do this
9 specifically to meet the load allocation. Any such
10 pollutant reductions would be immediately available
11 for use by point sources extra credits.

12 I've gotten a lot of questions. I've been
13 talking to the stakeholders about this, about what
14 exactly does that look like. The easiest example I
15 have is a practice-based example. If you had a TMDL
16 and it was determined that all you needed to do for
17 every nonpoint source to meet the TMDL was install
18 fencing -- we want to keep the cows out of the water,
19 and if we do that, we will meet our TMDL.

20 Say you wanted to, instead, install cover
21 crops. Under the previous policy, you would have to
22 install your fence, and then you could install cover

1 crops and get credits for them.

2 Now what you can do is you can install those
3 cover crops, not do the fence yet, and you can get the
4 credit for the cover crops. You couldn't do fencing
5 and get credits because that was assumed as part of
6 the TMDL. But you could do a different activity that
7 gets you reductions and immediately get those credits.
8 So that's just one kind of very simplified example to
9 help people think through the difference between the
10 old and the new policy.

11 So the next option is incremental baselines.
12 These baselines are really nice interim alternative
13 between this new definition where you can generate
14 credits immediately -- and all those credits can go
15 towards saleable credits, as opposed to towards load
16 allocation -- and the previous policy that expected
17 the TMDL load allocation to be met in advance.

18 In this situation, we would actually split
19 whatever reductions you make. As a policy position,
20 the state would decide at what percent. It could be
21 10. It could be 20. It could be 50. It could be 5,
22 whatever makes sense in that watershed. And some

1 portion would go towards meeting that load allocation,
2 and some portion would go toward saleable credits. So
3 if you made a 10-pound reduction, you were expected to
4 do a 20 percent towards the load allocation. Two
5 pounds would go to the load allocation. Eight pounds
6 would be available for sale.

7 Compliance schedules -- both compliance
8 schedules and our next topic, variances, to me, are in
9 a similar category in that they are existing policy
10 options that we believe are appropriate with trading,
11 but we've never talked about them before. And when we
12 had individual conversations, we might say,
13 absolutely, you can use a compliance schedule with
14 trading; absolutely, you can use a variance. We
15 hadn't talked through what that would look like.

16 So for both compliance schedules and
17 variance, what this policy really does is set out how
18 those would interact -- how they can interact together
19 and how they interact together with trading. Again,
20 there is -- this is not new policy. It's just the
21 first time that it's come out in this kind of format.

22 Alternative approaches to disaggregation is

1 most appropriate for states that continue to use their
2 TMDL baseline, that want to continue -- that
3 established their programs under the previous policy.
4 They want to keep that policy. But they might realize
5 when we said 50 percent reduction, we didn't actually
6 think that was going to happen in every sector or in
7 every watershed -- sub-watershed in the same way.

8 So previously, I think we had short-handed,
9 you know, 50 percent reduction. You know, TMDL means
10 50 percent reduction across the watershed. And what
11 we're saying here is that might not be the case. You
12 want to do this analysis on a TMDL-wide basis. But
13 you might say I have a sector that has been -- spent
14 the last 10 years installing incredible technology and
15 has really put their money where their mouth is and
16 made those improvements, and I don't think they need
17 to do more to meet a baseline. However, I have
18 another sector that really has lagged behind. And
19 that's where I think they need to pick up the pace,
20 get to the baseline level.

21 It also might be done by watershed. You
22 might say, you know, I have this sub-watershed that

1 really can't make reductions and this sub-watershed
2 that can.

3 You could do it on a socio-economic basis.
4 You could say, you know, we're going to look at MHI to
5 determine which cities should make which reductions.

6 So what we're really just saying here is
7 there are other ways to do it as long as it all adds
8 up to the load allocation reduction that you need.

9 Last but not least is our in-lieu fee
10 program. This is a program -- I think of it as
11 setting up the state in some ways as a bank. In this
12 situation, it allows NPDES-permitted facilities to
13 meet their WQBELs by paying into a state fund
14 specifically allocated for nonpoint source loading
15 reductions. So it can't go into the state general
16 fund or the state environmental fund. It needs to be
17 a fund that actually funds nonpoint source reductions
18 on the ground in that TMDL watershed. But it does
19 allow the state to focus those resources in the most
20 environmental impactful way possible.

21 So when we're looking at a straight market,
22 we might see that it's the cheapest credits that are

1 done first. But if you are looking at a state-driven
2 market, you're going to have a more holistic view of
3 the watershed and be looking at where you're going to
4 get the most environmental benefit, not necessarily
5 the cheapest credits.

6 So I have a couple of additional resources
7 here. Here is our website and our -- the policy
8 proposal, which is a tab on the website. The easiest
9 way is probably just Google EPA water quality trading,
10 and this will pop right up. But this is the official
11 link.

12 I want to come back to what we're actually
13 requesting for our comments now that we've hit all of
14 the options. We want comments on those options. I
15 want to know what you think is functional on the
16 ground. I think you want to know -- I want to know
17 what is going to make the biggest difference. I want
18 to know what you think is defensible and how you think
19 it might be more defensible. What's clear and what's
20 vague?

21 Let me know how this policy can stand. At
22 the end of the day, I can tell you what I think this

1 policy is. But if it's not written down in the final
2 policy, then it's not an EPA policy. So we want to
3 make it as clear as possible.

4 And again, I want those other areas. What's
5 next? This is what I do all day every day, is water
6 quality trading. And so as we think about what to do
7 with baselines, I'm also looking towards what the next
8 project is going to be. What other areas from the
9 2019 memo do we want to get some more clarity on or,
10 yeah, more direction from EPA?

11 How to comment -- our comment period is open
12 through November 18th. If you go to that policy
13 proposal website, you will find a link to the docket.
14 It's also here. Only written comments will be
15 accepted into the docket. So we're listening to what
16 you're saying here, and it's certainly influencing how
17 we view this policy proposal. But if you want a
18 formal comment, you're going to need to submit it.
19 You can -- if you've written down what you want to say
20 here, you can absolutely just submit that transcript
21 as your comment. But we do need it submitted to the
22 docket.

1 And that's it. Thank you so much. I think
2 I'm going to turn it over to Christy so we can hear
3 from you.

4 MS. WILLIAMS: Okay. We're going to get
5 started with the in-person comments. And I'm going to
6 let you know there's four of you so far. I'll let you
7 know the order that we have you speaking in.

8 Again, please come to the mic in the middle
9 of the room. Stand pretty close to the microphone so
10 that everyone not only in the room can hear you, but
11 also those on the webinar.

12 And remember, you have three minutes. You
13 will see this when you have one minute left. And
14 we're going to do the same thing for folks on the
15 webinar. They will go after the in-person.

16 So the order we have right now is Seth Brown,
17 then Clay Detlefsen, Albert Ettinger, Steven Rowe, and
18 Bruce Knight.

19 If you guys want to -- Seth, if you want to
20 go ahead and come up.

21 And Clay, you will be next.

22 MR. BROWN: Hello. My name (inaudible - off

1 mic).

2 How many EPA employees does it take to turn
3 on microphones?

4 All right. My name is Seth Brown, and I am
5 with a firm called Storm and Stream Solutions. But
6 I'm also here representing the Water Environment
7 Federation, Stormwater Institute, and the National
8 Municipal Stormwater Alliance, as well George Mason
9 University. I don't think I can wear many more hats
10 than that.

11 And I just -- I don't have a whole lot of
12 specifics on this at this time. I think it's -- I
13 just wanted to generally state that all the
14 organizations that I'm affiliated with are very
15 encouraged by the memo in February as well as the
16 event in August as well as this event in the -- and
17 the opportunity to provide some comments on this.

18 I am closely tied with the stormwater sector,
19 urban stormwater sector. So in that context, there is
20 huge needs, as I think most folks know here, in
21 challenges in meeting requirements. And there's great
22 potential in market-based trading and water quality

1 trading. Generally, that has not been realized as to
2 this point.

3 And I can just tell you that there's a high
4 amount of interest across the country that I've seen
5 through the organizations that I'm involved with, with
6 as much flexibility as can be provided and policy
7 clarification and consistency and just additional
8 flexibilities, I'll say.

9 Again, the -- there's a huge funding gap in
10 between what is -- what's needed and the funding
11 that's available. EPA has been involved with that and
12 shown leadership in that area, which is greatly
13 appreciated as well. Using market-based approaches
14 obviously gets us efficiencies that we may not
15 otherwise have. And there's a lot of states who are
16 challenged in meeting the requirements and wanting to
17 do more.

18 So I just want to -- I'll wrap up and just
19 say that. And I appreciate this and encourage, you
20 know, EPA to do more. And if there's anything that
21 the organizations that I'm involved with can help out
22 in any way, we have help -- we've worked with EPA put

1 out publications, conferences, events like that,
2 webcasts. We're happy to do more of that to try to
3 get the word out and try to flush out more details.
4 And we will be providing comments on everything that
5 was presented here.

6 So thank you.

7 MS. WILLIAMS: Okay. Up next is Mr.
8 Detlefsen. And after that will be Albert Etinger.

9 MR. DETLEFSEN: Good afternoon. My name is
10 Clay Detlefsen, and I work for the National Milk
11 Producers Federation.

12 I want to thank you for holding this meeting
13 and for creating an opportunity to advance
14 environmental markets and water quality trading.
15 National Milk was organized in 1916 to provide a forum
16 for dairy producers and the cooperatives they own to
17 participate in public policy discussions. National
18 Milk advocates policies to Congress, the U.S., and
19 foreign government agencies, industry organizations,
20 the news media, and the public.

21 NMPF addresses policies concerning milk
22 pricing, domestic and international market

1 development, agricultural credit and taxation,
2 environmental issues, food safety and health, animal
3 welfare, product standards and labeling, and research
4 and biotechnology. Obviously, we keep busy.

5 With respect to environmental issues,
6 National Milk is a strong supporter of pursuing
7 market-based solutions to environmental challenges.
8 National Milk firmly believes in water quality trading
9 and was on the steering committee of the National
10 Network on Water Quality Trading, which published
11 Building a Water Quality Trading Program: Options and
12 Considerations and Breaking Down Barriers: Priority
13 Actions for Advancing Water Quality Trading. I know
14 EPA is familiar with both of those documents.

15 National Milk has been involved with
16 Maryland's effort to launch a water quality trading
17 program, and we have been engaged with water quality
18 procurement legislation in Pennsylvania. We are
19 anxious to see the water quality trading program take
20 off and deliver what traditional regulatory approaches
21 have failed to do.

22 We strongly support EPA's efforts to promote

1 water quality improvements at a lower cost than
2 traditional regulatory approaches. We agree with EPA
3 that the Clean Water Act allows for pollutant
4 reductions from water quality trading to achieve
5 compliance with the regulatory requirements. National
6 Milk appreciates EPA's efforts in 2019 to update your
7 water quality trading policy to incentivize the
8 implementation of technologies and practices to reduce
9 nonpoint source pollution. And we concur with the six
10 principles laid out in the 2019 memorandum.

11 NMPF commends EPA's actions and believes that
12 it has raised a number of important questions in the
13 Federal Register Notice on September 19th that need to
14 be answered.

15 To that end, National Milk will submit
16 written comments to more fully address those issues
17 and questions raised. Prior to do so -- doing so, we
18 can state that EPA is correct in asserting that
19 expecting nonpoint source pollution -- a nonpoint
20 source to meet a pollution reduction baseline derived
21 from a TMDL allocation before the nonpoint source can
22 generate credits is a problem.

1 Thank you for your time in this matter.

2 MS. WILLIAMS: Okay. Next is Mr. Albert
3 Ettinger. And after that will be Steven Rowe.

4 MR. ETTINGER: Hello. I'm shorter than the
5 last two speakers.

6 I'm Albert Ettinger. I'm an employer in
7 Chicago, private practice. I represent environmental
8 organizations. Particularly today, I'm here
9 representing a coalition of groups called Clean Water
10 for All, which is focused on drinking water and
11 surface water and creating fishable, swimmable waters.

12 I'm also working with the Mississippi River
13 Collaborative, which has worked on nutrient pollution
14 for over a decade. I would have to say that
15 Mississippi Basin is kind of ground zero for nutrient
16 pollution, and we're particularly concerned with the
17 trading policy, given the lack of progress that has
18 been made on nutrient pollution over the years.

19 We just heard -- you want to know what would
20 make the biggest difference. Well, the biggest
21 difference would be if U.S. EPA did its job and
22 required the states to require water quality-based

1 effluent limits and NPDES permits. Right now, nobody
2 wants to buy a trade, or very few people want to buy a
3 trade, because there's no incentive to buy a trade if
4 you don't have a requirement. In most places, there
5 is no requirement.

6 And so you don't have trading. You don't
7 have trading in Illinois for the same reason that you
8 can't sell hurricane insurance in Kansas. There is no
9 demand.

10 We -- I just attended several meetings in
11 Illinois in which I looked at trading schemes for
12 years and decided there was not a regulatory driver to
13 cause anyone to want to trade, not at this point. And
14 Illinois has more permit limits than most other
15 states. That's a result of legal action taken under
16 the Clean Water Act. It's not as a result of
17 voluntary programs.

18 I'd like to talk now -- I'm sorry. A couple
19 of other things -- just basically, the whole scheme
20 has got to lead to a reduction in pollution. It has
21 to lead to improved water quality. This is not a get
22 out and go -- jail free card.

1 But then let's look at the classical
2 problems. First of all, there's got to be a cap. We
3 are pleased to see that this proposal contemplates
4 that there will be a TMDL in place, so there will be a
5 cap.

6 The second problem is we can't have hot
7 spots, of course. We can't be trading. We can't have
8 a Peter versus Paul and having one place violating
9 water quality standards or being allowed to continue
10 violating water quality standards.

11 We're very concerned about enforcement. If a
12 nonpoint source is going to get -- have less pollution
13 and point source is going to have more, how is that
14 going to be enforced? Typically, now, nonpoint
15 sources are not filing any sort of DMRs or other
16 requirements. So how are we going to know whether
17 that practice was, in fact, put into place?

18 If -- further, how are we going to measure
19 these reductions? You say you're going to put in a
20 fence. How much reduction is that actually going to
21 result in? These ratios are not very clear. I can
22 put a meter on a point source, and I know how much

1 pollution they're putting out. It's not clear that we
2 can do that with a corn field or that it can be done
3 as easily.

4 Finally -- or not quite finally -- funding.
5 We're asking the states to set up in these trading
6 schemes in most places. While EPA has been reducing
7 the amount of regulation done by the federal level and
8 deferring to the states, the states have all been
9 cutting their enforcement budgets in many cases. I
10 certainly hope it's not contemplated they're going to
11 take further money out of enforcement budgets in order
12 to run trading schemes.

13 Finally, we're extremely suspicious of the
14 whole in-lieu program. Any sort of in-lieu program
15 that we have seen in the past has simply not worked.
16 It's led to funds sitting in state treasuries that are
17 never spent. And certainly, there is very -- been
18 very little incentive to do so. Also, in places like
19 Wisconsin, we've seen caps on in-lieu fees that are
20 utterly absurd. And frankly, who's going to buy --
21 pay any in-lieu fee unless they think -- realize a
22 reduction through it?

1 With that, I will say we're not totally
2 opposed to trading. We think there's an implicit --
3 there -- certainly, we want to see the reductions made
4 at the best cost possible. But a open-ended scheme,
5 that's just going to result in inaction or further
6 inaction is not acceptable.

7 MS. WILLIAMS: Up next is Mr. Rowe. And
8 after Mr. Rowe will be Bruce Knight.

9 MR. ROWE: Thank you. So I'm Steve Rowe, an
10 environmental practitioner and President and CEO of an
11 organization called Newtrient. We're a company that
12 represents the interests of more than half the milk
13 produced in this country and the tens of thousands of
14 dairy farmers of all sizes across the country. Our
15 mission is to reduce the environmental footprint of
16 dairy and make it economically viable to do so.

17 And thank you for the opportunity to provide
18 these informal comments. And then subsequently, we
19 will provide more formal and technical comments on the
20 policies that are being talked about today.

21 Market mechanisms certainly pose some
22 challenges. And I agree with many of the things that

1 Mr. Ettinger has listed. But the opportunities of
2 what this can provide are so great it's worth the
3 effort. And that's what we need to work through.

4 It provides opportunities to engage an
5 entirely new community in pollution prevention --
6 agriculture, forestry, open lands, really, this
7 nonpoint source world that we have not really put our
8 weight into since the beginning of the Clean Water
9 Act.

10 It creates new sources of incomes for these
11 farms that we know, if you've been watching, have been
12 struggling over the last few years. And it encourages
13 the next generation of farmers to engage in issues
14 that, until this discussion, they may not have really
15 been able to participate.

16 It may also contribute to preventing the
17 hollowing out of our rural communities and could
18 rebuild the damaged relationship between urban and
19 rural producers and consumers.

20 Significantly, it can improve the
21 environmental performance overall at a lower cost.
22 And what a better conversation to have across this

1 country surrounded -- surrounding food and the
2 environment. I think it's a very healthy
3 conversation, and I continue to encourage it.

4 This is working around the world. Globally,
5 there's about \$40 billion a year -- that's billion
6 dollars a year -- spent on some sort of environmental
7 market mechanism. And \$27 billion a year is being
8 spent on water quality-related programs around the
9 world. It is not a substitute for regulation, but is
10 an added tool that can really be very effective across
11 the country and in most watersheds.

12 We commit to no backsliding. And if we
13 channel funds properly, it can actually improve the
14 condition of environmental justice issues today.

15 There's a new world around this.
16 Environmentally, since this discussion started decades
17 ago, technologies and practices have improved.
18 Measuring and modeling tools have improved. It's the
19 economics that really needs to be flushed out.

20 Commodity pricing in agriculture is a
21 challenge. In the past, when we put on new
22 regulations on point sources, it could raise prices of

1 certain products or services being provided. In the
2 agricultural world, commodity pricing does not allow
3 that. And so the economics, the positive incentives,
4 need to be generated in this space. We need to engage
5 in a positive way.

6 Specific to the water quality policy being
7 discussed today and in our subsequent comments,
8 baselines should not be tied to sector allocations,
9 but more based on the specific law required of that
10 specific facility providing the credit.

11 Directionally, we are so pleased with this
12 conversation that's been going on for a couple of
13 years, and we encourage it and participate in any way
14 we can. One thing to keep in mind is that we can now
15 separate the buyer from the seller and that there does
16 not have to be a connection between a particular buyer
17 and a particular seller. And I believe that is
18 something we have not yet flushed out, much like
19 banking, which we've started to talk about. But I
20 think there's much more room here.

21 The last thing hasn't really come up -- and
22 then I'll stop -- is that we're trying to add

1 clarification to an old policy. And I would ask staff
2 to consider are there portions or is the entire policy
3 in 2003 time to be rescinded and rebuilt -- open,
4 honest question about are we trying to make it fit,
5 you know, square peg into a round hole, and should we
6 step back and say what we're building now really is a
7 modern-day, forward-looking policy -- something I
8 would ask them to consider.

9 So thank you.

10 MS. WILLIAMS: Thank you.

11 Up next, Mr. Bruce Knight.

12 MR. KNIGHT: Good afternoon. Thank you so
13 much for doing this listening session.

14 My name is Bruce Knight. I have a consulting
15 firm called Strategic Conservation Solutions. I was
16 previously the Chief of the Natural Resources
17 Conservation Service at USDA at the time of the 2003
18 memo and then, following that, Undersecretary of
19 Agriculture.

20 I'm speaking now on behalf of the Ecosystem
21 Market Consortium. The ESMC is a market consortium of
22 nearly 40 different foundations, think tanks, and

1 companies who have come together believing that now is
2 the time and a ripe time in -- or -- which we can
3 advance ecosystem market trading.

4 We have developed a protocol and are now
5 doing our first level of pilots on being able to trade
6 not just one credit associated with one ecosystem
7 service, but, rather, three ecosystem services --
8 carbon, water quality, and water quantity. And the
9 justification is this -- that, for much of
10 agriculture, it's going to be much more practical to
11 be able to do a multimodal approach and be able to
12 develop one uniform platform that will do all of
13 those.

14 This opportunity is very rare. This
15 opportunity has been furthered by means of the memo
16 that EPA just issued because we needed this additional
17 flexibility.

18 When I was Chief of the Natural Resources
19 Conservation Service at that time working with EPA in
20 creating the 2003 memo, we had never intended it to be
21 as rigid and structured in interpretation as it has
22 been over the last decade and a half. And this

1 revisit is a great opportunity to take the lessons
2 learned from the regulatory side at EPA and each of
3 the state agencies and look at how we can proceed
4 forward into the future.

5 At Ecosystem Markets Consortium, we've taken
6 the same effort and looked at the last two decades of
7 attempts at water markets, water quantity markets, and
8 carbon markets, and tried to do the same lessons
9 learned. And what we've learned is that one of the
10 biggest challenge is actually the cost of measurement,
11 reporting, and verification.

12 And so we're striving to find rapid ways in
13 which we can maintain the integrity needed in a
14 trading platform using modern, modern technologies and
15 measurement and randomized nations (sic) of it in
16 order to be able to achieve each of those efforts.

17 We support the six points that have been
18 outlined in the EPA memo. We will be providing
19 comments during the comment period on behalf of the
20 Ecosystem Market Consortium. We appreciate what has
21 been done there.

22 And I want to stress with folks the

1 importance of also approaching this with a mindset
2 towards scale. We have a target market here of 200 to
3 250 million acres that we believe we can be generating
4 ecosystem market credits on, on active agricultural
5 lands over the next 10 years. We will, in fact, over
6 the next two to three years, during our piloting
7 stage, do this on 300,000 acres, which means that our
8 pilots alone will exceed what has been done in the
9 last two decades in many of the other trading
10 mechanisms.

11 Thank you again for this opportunity to
12 provide comments.

13 MS. FORSEY: Thank you, Mr. Knight.

14 We will now move to the online attendees who
15 have indicated that they would like to make a
16 statement. So the order today of people who are
17 currently on the line is Frederic Andes. Next, we'll
18 hear from Jeff Corbin, then Laurie Hawks, then Liping
19 Zhang, and last but not least Dereck Winn.

20 If anyone else on the webinar would like to
21 make a statement, please type that into the chat box,
22 and we will call on you at the end of today's

1 presentation.

2 So we will start with Fred Andes. And I do
3 want to note for all of our online attendees please
4 keep an eye on your chat box, and I will give you a
5 one-minute warning.

6 Fred, you're up.

7 MR. ANDES: Thank you.

8 Excuse me. This is Fred Andes (inaudible).
9 I (inaudible) Federal Water Quality Coalition. We
10 will be submitting eco (ph) comments to the docket on
11 the Federal Register Notice.

12 In terms of general principles, I would say
13 that we have supported trading. We believe that --
14 and we support the Agency's goal of promoting water
15 quality trading as an important part of the Clean
16 Water Act program.

17 We believe that Agency policy over the years
18 that -- and somewhat (inaudible) and unclear. And we
19 think this is an opportunity to address those issues.
20 It's important for all stakeholders, we believe, when
21 establishing markets like we're trading for there to
22 be certainty and stability. And we think that that's

1 something we want to continue discussing with the
2 Agency and the other stakeholders not only as to
3 trading with TMDLs, trading without TMDLs; not only
4 trading between point and nonpoint sources, but also
5 between point and point sources. We look forward to
6 addressing those issues.

7 In addition to the baseline issues, we also
8 think that there are other issues that have proved to
9 be significant hurdles in establishing effective --
10 establishing and implementing effective trading
11 programs, including issues about allocations
12 liability, issues about (inaudible), and others.

13 So we will be submitting further comments on
14 these issues by the comment deadline. We look forward
15 to further discussions on all of these issues going
16 forward.

17 Thank you.

18 MS. FORSEY: Thank you.

19 Next up we will have Jeff Corbin, followed by
20 Laurie Hawks.

21 MR. CORBIN: Can you hear me? Can you hear
22 me okay?

1 MS. FORSEY: Yes, we can.

2 MR. CORBIN: Okay. Well, thank you for this
3 opportunity to speak briefly today. My name is Jeff
4 Corbin, and I currently have the privilege of working
5 for an environmental restoration mitigation company
6 called Restoration Systems. We have been in operation
7 for over 25 years and have projects from the ground in
8 more than a dozen states.

9 We are based out of Raleigh. I'm in our
10 Richmond, Virginia, office. Prior to that,
11 (inaudible) with EPA, advisor to the EPA
12 administrators on Chesapeake Bay policy. Prior to
13 that, I had the privilege of being Deputy Secretary of
14 Natural Resources for Governor Kane here in Virginia
15 and, prior to that, almost a decade with an
16 environmental conservation group that was focused on
17 Chesapeake Bay.

18 So (inaudible) comments now that in trading
19 discussions, I think I've been on about every side of
20 the table that there can be. And I've been a strong
21 advocate for market-based programs as anybody can be.

22 I want to thank you for taking a thoughtful

1 and incremental approach to revising the Agency's
2 policy. I'm guessing one option on the table was to
3 throw out the 2003 policy and start from scratch.
4 While that may have had some supporters, I think that
5 would have generated a huge amount of opposition and
6 probably resulted in little, if any, progress.

7 To me, what trading does under TMDL is it
8 makes money and it trades (inaudible) reductions, many
9 of them more cost-effective, can be achieved prior to
10 other more costly reductions.

11 We have very vibrant water quality trading
12 programs in Virginia and North Carolina, and they have
13 significantly reduced the cost of meeting water
14 quality requirements to developers, municipalities,
15 and to large state infrastructure projects.

16 And really, my (inaudible) for years if
17 anybody wants to talk trading is very simple. If you
18 think we're going to have enough public funds to
19 restore all of our impaired (ph) waters, be it the
20 Chesapeake, Great Lakes, or any favorite nearby spring
21 or river, you are delusional. We are simply not going
22 to have enough federal and state and local funds to do

1 it.

2 So to me, the question is not should we
3 (inaudible). The question is: How do we do it? And
4 the when is now. Simply, now is the time to expand,
5 come up with a more robust program.

6 I agree what EPA said in the Federal Register
7 and said that, "Trading would represent a relatively
8 small portion of total loadings under a TMDL." I
9 agree with that. And therefore, anybody who might
10 oppose water quality trading should be -- should not
11 be concerned (inaudible) TMDL or whatever other
12 sources of pollution (inaudible). There is great
13 potential to achieve significant pollution reductions
14 (inaudible), especially under a more flexible
15 baseline. But it's equally important for the long-
16 term vitality of my industry, the private
17 environmental mitigation restoration industry, that we
18 have clear and transparent operating rules. So thank
19 you for doing this.

20 In addition to reducing pollution loads, a
21 more flexible baseline helps us achieve other
22 restoration goals as well. Let me give you a very

1 clear example.

2 In the Chesapeake Bay region, there's an
3 annual water statewide goal of planting 900 miles of
4 riparian buffers. Between 2015 and 2017, those -- the
5 year where the last data was available, less than 90
6 miles were planted. The goal was 900, and less than
7 90 were planted. I think the number was actually
8 below 60.

9 Water quality trading (inaudible) more
10 flexible baseline where riparian buffers can be
11 planted in excess of (inaudible) TMDL and, thereby,
12 generate credits. That could increase the miles of
13 buffers planted and a system meeting our statewide
14 goal. In addition, water quality (inaudible) planting
15 more in bigger riparian buffers.

16 (inaudible) most importantly, in the states
17 that I'm familiar with, state and federal funds
18 (inaudible) programs run out long before (ph) the
19 demand for farmers has been met. An influx of private
20 owners by using (ph) market-based trading programs can
21 help minimize that shortfall.

22 While practitioners (ph) such as I certainly

1 want to see water quality trading and other market-
2 based programs expand and thrive, we do not
3 (inaudible) compromise water quality or delay a
4 restoration deadline. Therefore, it is critical to
5 ensure that some degree of TMDL (ph) be required that
6 water quality trading does not disproportionately
7 become an income generator for landowners who have
8 done the least amount of implementation thus far. To
9 address that point, it might be appropriate to
10 implement some sort of a sliding scale whereby a
11 higher percentage of (inaudible) generated (inaudible)
12 on farms where significant pollution reduction
13 practices have already been implemented.

14 MS. FORSEY: Jeff --

15 MR. CORBIN: Thank you for the opportunity to
16 provide (inaudible) comments (inaudible) comments and
17 suggestions to you for consideration (inaudible)
18 deadline.

19 Thank you.

20 MS. FORSEY: Great. Thank you, Jeff.

21 Next up, we are going to have Laurie Hawks,
22 followed by Liping Zhang.

1 Laurie, your line is unmuted.

2 MS. HAWKS: Hi. This is Laurie Hawks. I am
3 from the (inaudible) Atlanta, Georgia. I have been
4 working with a group -- a regional group called the
5 North Georgia Water Resources Partnership for several
6 years that is supportive of nutrient trading, but we
7 don't yet have the nutrient trading mechanism set up
8 in our state.

9 We are fortunate that we -- I guess, in some
10 way, we are fortunate that we are able to learn from
11 other states and see some of the pros and cons of how
12 other states have set up their programs. And we have
13 some state drivers that other states do with the TMDL
14 total (inaudible) with 70 percent, according to the
15 EPA, (inaudible) from a nonpoint sources.

16 What we've determined is that it's a big list
17 (ph) to reach out to private landowners and find the
18 right set of incentives for those landowners to
19 participate in some sort of trading scheme. We've
20 also looked into other things like (inaudible) and
21 regional trading associations.

22 But in order -- my main comment is that, in

1 order to reach out to the individual landowners, we
2 really do need to keep it simple and not be so risk-
3 adverse that we, you know, set up procedures and form
4 an overburden to that individual landowner so that
5 they don't really have incentives to participate.

6 So that's my message. I appreciate the
7 flexibility in the 2019 memo. And we have to just
8 remember that these are individual landowners, in many
9 cases, that need to keep it simple.

10 So I appreciate the opportunity, and I will
11 pass it on to the next person.

12 MS. FORSEY: Wonderful. Thank you, Laurie.

13 Next up, we have Liping Zhang.

14 Liping, are you there?

15 (No audible response.)

16 MS. FORSEY: If you would like to make your
17 statement, I recommend calling in on your telephone
18 since we can't hear you.

19 Liping, please call in using your telephone.

20 We have one more person who indicated that
21 they would like to speak -- Diana Hensley (ph).

22 Diana, I am going to unmute you.

1 (No audible response.)

2 MS. FORSEY: Okay. Liping, I am going to
3 give it another try. Do you mind speaking?

4 (No audible response.)

5 MS. FORSEY: Okay. That may be it for online
6 speakers. Our speaker Dereck Winn indicated that he
7 will be withholding comments today, but he will be
8 submitting formal comments.

9 MS. WILLIAMS: Thank you, everyone, for
10 attending. And please feel free to go on -- does
11 anybody else in the room want to make a statement?

12 (No audible response.)

13 MS. WILLIAMS: So please feel free to go
14 online and submit a written comment to the docket if
15 you'd like to contribute further information to EPA
16 about this rulemaking.

17 Thank you very much for coming.

18 (Whereupon, the meeting was concluded.)

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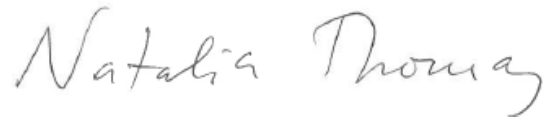
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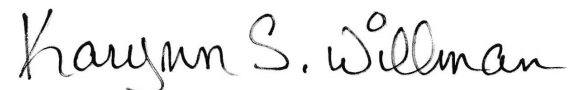
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