

1 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

2 REGION 5

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5 IN THE THE MATTER OF:)
)
 6 ROBERT J. HESER, ANDREW) DOCKET NO.
 HESER, and HESER FARMS,) CWA-05-2006-0002
)
 7 Respondents.)
)
 8 Proceeding to Assess a Class)
 II Civil Penalty Under)
 9 Section (g) of the Clean)
 Water Act, U.S.C. Section)
 10 1319(g).)

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14 Hearing held, pursuant to notice, on Thursday,
 15 May 3, 2007, at the hour of 9:00 a.m. at Clinton
 16 County Courthouse, 850 Fairfax, Carlyle, Illinois,
 17 before HONORABLE WILLIAM B. MORAN, United States
 18 Administrative Law Judge.

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I N D E X				
WITNESS	DIRECT	CROSS	REDIRECT	RE CROSS
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1 objections if they come up.

2 MS. PELLEGRIN: I am ready for Ms. Melgin.

3 JUDGE MORAN: Ms. Melgin, you ready? And you
4 know you are still under oath?

5 THE WITNESS: I do.

6 WENDY MELGIN

7 recalled as a witness on behalf of Complainants,
8 having been first duly sworn, was examined and
9 testified as follows:

10 DIRECT EXAMINATION (Continued)

11 BY MS. PELLEGRIN:

12 Q. Good morning again, Ms. Melgin.

13 A. Good morning.

14 Q. Ms. Melgin, I believe yesterday you
15 testified that you had delineated wetlands in the
16 past; is that correct?

17 A. Yes.

18 Q. And did you personally delineate any
19 wetlands in this particular case?

20 A. No.

21 Q. In your role as a deputy branch manager
22 for the Water Sheds and Wetlands Branch of the Water
23 Division of U.S. EPA Region 5, have you relied in the
24 past on wetlands delineations made by any members of

1 your staff?

2 A. Yes.

3 Q. And have you relied in the past on
4 wetlands delineations made by the U.S. Army Corps of
5 Engineers?

6 A. All the time.

7 Q. And for your expert testimony here today
8 have you relied on the wetlands determination or
9 wetlands delineation made by Mr. Greg Carlson and Mr.
10 Ward Lenz in this case?

11 A. Yes.

12 Q. Ms. Melgin, do you know the acreage of
13 wetlands delineated by Mr. Greg Carlson and Mr. Ward
14 Lenz in this case?

15 A. I believe it is 2.1 acres.

16 Q. And in fact do you know if anyone else
17 delineated any wetlands in this particular case?

18 A. I understand their consultant delineated
19 the site.

20 Q. And do you know what acreage, if any,
21 wetlands were found by Respondents' consultants in
22 this case?

23 A. Yeah, their report said 1.5 acres.

24 Q. And I would like for you to turn your

1 attention to Respondents' Exhibit Number 18.

2 A. Okay.

3 MR. SMALL: Hold on a minute.

4 Q. And looking through --

5 JUDGE MORAN: You have to wait. They are not
6 going to have 18.

7 Q. Okay. And Respondents' Exhibit 18, Ms.
8 Melgin, looking through this document have you
9 reviewed this document before?

10 A. Yes.

11 Q. And did you review this document in
12 preparation for your testimony today?

13 A. Yes, and I have seen parts of it from --
14 I have heard about it in prior testimony and I have
15 seen parts of it before this week.

16 Q. And, Ms. Melgin, can you just either put
17 the microphone lower or a little closer to you, just
18 make sure it is on?

19 A. It is on.

20 Q. Turning your attention to a specific page
21 within this document, Hesel Exhibit Number 153.

22 A. Okay.

23 Q. Are you there?

24 A. Yes.

1 Q. And the document I have in front of me,
2 153, has a number five and the word "Conclusion" in
3 bold toward the middle bottom of the page; is that
4 right?

5 A. Right.

6 Q. And I would like for you under Conclusion
7 for you to read the final paragraph of this document,
8 of the Conclusion section on this page, into the
9 record, please.

10 A. "It is alleged that approximately 1,885
11 feet of Martin Branch and its tributaries were filled
12 in, as well as 2.1 acres. According to the field
13 investigation conducted by Rapps, approximately 1.5
14 acres of wetlands were disturbed, notwithstanding the
15 Martin Branch acreage."

16 Q. Okay. You can put that aside, Ms.
17 Melgin. Now, Ms. Melgin, assuming that in this case
18 on this site, the site of the alleged violations,
19 there were at least 1.5 acres of wetlands, up to 2.1
20 acres of wetlands as delineated by Mr. Carlson and
21 Mr. Lenz in this case, and 1800 or so feet of Martin
22 Branch and its tributaries on the site that were
23 filled in and channelized, assuming all that, in this
24 case what were the effects to the physical integrity

1 of downstream waters?

2 MR. SMALL: Objection, I don't -- you know,
3 if she is going through her personal knowledge of
4 what happened. I mean, it is a hypothetical unless
5 there is --

6 JUDGE MORAN: There has to be a foundation
7 laid as to -- you are suggesting there has to be more
8 of a foundation laid as to how she would know about
9 the physical effects?

10 MR. SMALL: Correct.

11 MS. PELLEGRIN: Your Honor, I believe Ms.
12 Melgin talked about the physical, chemical and
13 biological effects generally of wetlands, and
14 generally --

15 JUDGE MORAN: Stop. So you mean you are
16 going to ask her generally, not as to this area?

17 MS. PELLEGRIN: No, Your Honor. I am going
18 to ask her specifically as to this area. Yesterday I
19 asked her --

20 JUDGE MORAN: You have to lay a foundation
21 more or refresh my recollection that you already did
22 as to how she would know and the basis for her
23 knowing it. That's the objection of Mr. Small.

24 MS. PELLEGRIN: And, Your Honor, citing Rule

1 703 my understanding is that her opinion can be based
2 upon her personal knowledge visiting the site and
3 also prior testimony and her reliance on --

4 JUDGE MORAN: Well, lay that foundation. Ask
5 those questions first and then --

6 MS. PELLEGRIN: Okay. I thought I did, but I
7 will do some more of that, Your Honor. I am happy to
8 do that.

9 Q. Ms. Melgin, do you know if there were any
10 wetlands delineations performed at the site of the
11 alleged violation in this case?

12 A. Yes.

13 Q. And to your knowledge who performed
14 wetlands delineations on the site of the violation in
15 this case?

16 A. The Army Corps of Engineers water plant
17 engineer. Her name is Kathy Kelly. And Brad
18 Carlson, and the Respondents' consultant.

19 JUDGE MORAN: Let me just stop for a second
20 so I can understand this better, Ms. Pellegrin. Your
21 question was the effects downstream from this?

22 MS. PELLEGRIN: Yes, Your Honor.

23 JUDGE MORAN: The questions you have asked, I
24 heard them a few minutes ago, about that they were

1 wetlands determinations. But the question is focused
2 on the basis for her opinion of saying that there
3 were effects downstream. I haven't heard questions
4 about that yet.

5 MS. PELLEGRIN: Okay. Well, I will be happy
6 to do that.

7 Q. Ms. Melgin, you testified yesterday that
8 you were at various areas adjacent to and downstream
9 of the cite; is that correct?

10 A. Correct.

11 Q. And I believe you testified that, if my
12 recollection serves, the areas denoted on Exhibit A,
13 GC1 through GC8, that Mr. Carlson had noted and
14 written on Exhibit A as to where he had visited, you
15 also visited along with him as well; is that correct?

16 A. Correct.

17 Q. And it is your recollection that you
18 testified about all the areas that you saw that
19 Mr. Greg Carlson drew on Exhibit A that he saw
20 yesterday; is that correct?

21 A. Correct.

22 Q. And I will ask you again today, Ms.
23 Melgin, did you observe areas downstream of the site
24 of the alleged violations?

1 A. Yes, I did.

2 Q. And, Ms. Melgin, did you observe any
3 effects to the physical, chemical or biological
4 integrity of downstream waters while you were
5 observing the site, the areas downstream of the site,
6 of the alleged violations?

7 A. Yes.

8 Q. And besides your observations and besides
9 your knowledge of the delineations performed on the
10 site, what, if anything, else do you know about
11 effects on downstream waters? By downstream I mean
12 downstream of the site of the alleged violation in
13 this case.

14 A. Let me just clarify, information that I
15 used to determine that or things that I observed?

16 Q. Let me rephrase my question. What, if
17 any, documents have you reviewed that inform your
18 expert opinion that there may be effects downstream
19 of the site of the alleged violations on physical,
20 chemical and -- of a physical, chemical and
21 biological nature on downstream waters?

22 A. Well, I reviewed several things that -- I
23 will try to explain it in a way that -- we normally
24 review aerial photos and maps to determine areas

1 before they are impacted. If you are not on the site
2 at the time of impact, then you have to rely on
3 aerial photography and that's just a standard
4 practice.

5 We also had the opportunity to look at a
6 video of what was being done to the site. So I saw
7 the very significant small scale impact right on site
8 through the video. I could tell what had been on the
9 site through various aerial photography. I walked
10 adjacent to the site. I walked downstream of the
11 site, saw, read scientific papers and have a lot of
12 experience of walking these types of streams, and
13 before impacts and after impacts, and trying to
14 relate what is happening in the stream and to
15 downstream waters.

16 Q. And to follow up, you talked yesterday
17 about impaired waters. Have you reviewed any
18 documentation about the impaired nature of any waters
19 downstream of the site of the alleged violation?

20 A. Yes, I have.

21 Q. And just generally what are those
22 documents?

23 A. The Illinois Environmental Protection
24 Agency has a draft, a Stage I Report, on the Crooked

1 Creek TMDL which includes Lake Centralia. And the
2 State also prepared a list which they have to do
3 every two years, and it lists Lake Centralia as
4 impaired.

5 MS. PELLEGRIN: Your Honor, I believe I have
6 had laid a foundation that Ms. Melgin has --

7 JUDGE MORAN: Ask your next question.

8 BY MS. PELLEGRIN:

9 Q. Okay. Ms. Melgin, assuming that there
10 were at least 1.6 acres of wetlands and up to 2.1
11 acres of wetlands on the site of the alleged
12 violations in this case, and 1800 feet of Martin
13 Branch and its tributaries on site that were filled
14 in and channelized in this case, what, if anything,
15 were the effects to the physical integrity of
16 downstream waters in this case?

17 MR. SMALL: Objection, foundation, again.

18 JUDGE MORAN: No, I disagree now.

19 MR. SMALL: There wasn't.

20 JUDGE MORAN: Okay. Go ahead, counsel, but
21 then I will tell you my thing.

22 MR. SMALL: I don't believe there is any
23 foundation laid whatsoever about the filling in of a
24 section of Martin's Branch, period. I don't recall

1 hearing any of that.

2 JUDGE MORAN: Is that the extent of your
3 objection?

4 MR. SMALL: Yes.

5 JUDGE MORAN: All right. Here is my
6 response.

7 You know, under the federal rules the
8 expert can, if this is in federal district court,
9 this expert could jump right to the conclusion. You
10 don't even have to do any of this. And then the way
11 those rules work is that it would be subject to cross
12 examination. But you can then, if you are very
13 successful, explode the foundation for the expert's
14 opinion.

15 But the way the modern rules work, the
16 expert can jump right to the conclusion. So that's
17 my ruling. Sustained. I overrule the objection.

18 MS. PELLEGRIN: Ms. Melgin, would you like me
19 to repeat the question?

20 THE WITNESS: Yes, please.

21 BY MS. PELLEGRIN:

22 Q. Ms. Melgin, assuming that there were at
23 least 1.5 acres of wetlands on the site of the
24 alleged violation and up to 2.1 acres of wetlands on

1 the site of the alleged violations and 1800 feet or
2 so of Martin Branch and its tributaries on site that
3 were filled in and channelized, in this case in your
4 expert opinion what were the effects, if any, to the
5 physical integrity of downstream waters?

6 A. Impacts such as this that clear the site
7 would contribute to further impairment of downstream
8 waters by increasing sediment and nutrient loads to
9 that water body, in this case Lake Centralia.

10 Q. And, Ms. Melgin, how in your opinion
11 would it increase sediment and nutrient loads?

12 A. By impacting five acres, and 2.1 of those
13 being forested wetlands which is the most -- one of
14 the most beneficial types of wetlands and hardest to
15 restore. You reduce the nutrient filtering capacity
16 of that area by filling in the natural stream channel
17 and conveying water, during high flow at least we
18 showed yesterday, quickly through the site. You
19 reduced any nutrient retention of the actual stream
20 channel.

21 Q. And what do you mean by sediment and
22 nutrient loads? How do those in your opinion get
23 conveyed? Or let me rephrase, actually.

24 First of all, what do you mean by

1 sediment and nutrient loads?

2 A. Well, load is simply the pollutant times
3 they flow. So, yeah, flow and you have a certainly
4 amount of pollutants in there, and that in
5 combination is considered the load, so what the
6 stream is carrying.

7 Q. And what, if any, pollutants do you know
8 of in this case that you are referring to?

9 A. Well, the typical agricultural pollutants
10 would be phosphorous that's applied to the field. I
11 mean, it is found --

12 MR. SMALL: I am going to object. Your
13 Honor, there is no basis for this.

14 JUDGE MORAN: But, Mr. Small, you should be
15 able to -- no pun intended -- make hay on cross
16 examination by exposing all of these, from your
17 perspective, weaknesses in her conclusion. You
18 should be able to have -- another pun -- field day
19 with that; right? I mean, there is a lot of -- going
20 through my mind, there is a lot of territory.

21 And that's the way the rules operate.
22 Again, under the federal rules the expert can jump --
23 once qualified as an expert, the expert can jump to
24 the conclusion, and then that can either be -- the

1 basis for that can be explored on direct or it can be
2 left up to cross examination to explore that basis.

3 BY MS. PELLEGRIN:

4 Q. Ms. Melgin, I am going to either repeat
5 or rephrase the question here.

6 You use the term "pollutants." What, if
7 any, pollutants do you know about in this case? And
8 let me back up. Let's start with, because this is a
9 -- well, first of all, you mentioned the term "point
10 source," yesterday. If I use the term "point source
11 pollutants," do you know what I meant by that term?

12 A. Yes.

13 Q. And what, if any, point source pollutants
14 in your opinion are there in this case?

15 A. Well, the discharge of trash and fill
16 material into the wetlands and the channel would be
17 considered point source discharge.

18 Q. And what, if any, non-point source
19 pollutants in your opinion are there in this case?

20 A. Like I said, non-point source pollution
21 is those diffuse sources of pollution that come from
22 surrounding land areas like agricultural fields, that
23 would be in this case. Your typical agricultural
24 runoff would be considered non-point source

1 pollution.

2 Q. And a follow-up question, what is
3 agricultural runoff?

4 A. Agricultural runoff is that runoff that
5 comes off the field, carrying with it all the
6 constituents that were applied to that field. So the
7 water, when it rains and water hits the field, if it
8 runs off it is transporting materials that were
9 applied to the field.

10 Q. And can you give me any examples of
11 agricultural fertilizers?

12 A. Your typical -- a lot of these things are
13 found in the earth, nitrogen and phosphorous. Some
14 are in more quantities than others. And the ones
15 that aren't, that are needed when you transfer
16 plants, that are required for plant growth, like
17 phosphorous, they are applied to fields. It is a
18 common -- I think it has been testified here prior
19 that fertilizers were purchased and applied to ag
20 land to promote plant growth.

21 Q. Is it your recollection that specifically
22 phosphorous, that there has been prior testimony
23 regarding phosphorous applied to these areas?

24 A. There might have been potash or

1 something, too, but I tend to remember phosphorous.

2 Q. And let me ask you, how does -- in your
3 experience as a hydrologist, how is phosphorous
4 transported via surface runoff?

5 A. Phosphorous attaches to sediment
6 particles. And sediment itself being a pollutant,
7 again it can be natural, but if it is accelerated and
8 there is erosion and it gets into the waterway, it
9 can be considered a pollutant. Sediment transports a
10 lot of materials by having been attached to. So in
11 comparison to nitrogen which doesn't attach, it is
12 soluble, it will run in water, phosphorous usually is
13 transported by sediment particles.

14 Q. That was the question about how was
15 phosphorous transported via surface runoff. Once it
16 gets to a stream, how, if at all, is phosphorous
17 transported?

18 A. Usually in the phases of sediment
19 transport, which would be either the bedload material
20 or a suspended component. So you could have sediment
21 that's a little bit larger and would be transported
22 at the bottom of the channel through bedload
23 material, or it would be suspended and considered
24 part of the total suspended solid or a total

1 suspended sediment, part of the water column.

2 Q. And I have some follow-up questions about
3 what you just said.

4 JUDGE MORAN: Before you ask any more
5 questions, Ms. Pellegrin, could you please point to
6 where in the complaint there is a reference to
7 non-point source pollutants? Please direct me to the
8 paragraph in the complaint that mentions that.

9 MS. PELLEGRIN: Your Honor, I don't believe
10 there is any reference to non-point source pollution
11 in this case, but --

12 JUDGE MORAN: That's what you are asking the
13 witness about; is it not?

14 MS. PELLEGRIN: Yes, Your Honor. I don't
15 believe that there is a reference to non-point source
16 pollution in this complaint. But I plan on having my
17 witness tie together the point and non-point source
18 of pollution in this case. And I can do that right
19 now, if you would like.

20 JUDGE MORAN: You are going to tie together
21 that?

22 MS. PELLEGRIN: Yes, Your Honor.

23 JUDGE MORAN: And why should I be considering
24 non-point source pollution when it wasn't alleged in

1 the complaint?

2 MS. PELLEGRIN: Well, Your Honor, because
3 when we were talking about the effects of the
4 physical, chemical and biological integrity of
5 downstream waters, I think my witness will testify
6 that the point source pollution in this case, that is
7 the filling of the wetlands, has exacerbated the
8 transport of non-point source pollution into the
9 water immediately at the site, on the site and
10 downstream of the site. So you are seeing --

11 JUDGE MORAN: Doesn't there have to be an
12 allegation? Doesn't that have to be covered by the
13 Clean Water Act, Ms. Pellegrin?

14 MS. PELLEGRIN: Your Honor, non-point source
15 pollution is not regulated by the Clean Water Act.
16 In our case, proving under Rapanos a significant
17 nexus issue, that is, that these wetlands, alone and
18 in combination with similarly situated lands in the
19 region, significantly affect the chemical, biological
20 and physical integrity of downstream waters in this
21 case. We are demonstrating through our expert
22 hydrologist that the point source pollution, the
23 filling in of the wetlands which prior served as a
24 filter and a sponge and a sink for these non-point

1 source pollutants, now act as a source of non-point
2 source pollution.

3 In other words, it is exacerbating
4 through -- point source pollution is exacerbating the
5 non-point source pollution which affects downstream
6 waters.

7 JUDGE MORAN: Mr. Small?

8 MR. SMALL: Your Honor, it is not alleged in
9 the complaint, the amended complaint. Here we are
10 back to Monday again, big arms, you know, let's make
11 this into some big deal. The world is not on trial
12 here, you know. These two gentlemen right here are
13 the only people that it concerns and those
14 allegations in the complaint.

15 JUDGE MORAN: And I will tell you,
16 Ms. Pellegrin, I am going to allow this testimony but
17 that doesn't mean that I would not consider -- in
18 fact, I suggest that counsel for the Respondent file
19 a motion that this not be considered in any part of
20 my decision, because non-point source pollution in
21 the Rapanos decision, there is no connection of
22 non-point source pollution.

23 And I think it is very tenuous for you to
24 somehow attempt to capture non-point source pollution

1 which you have -- I believe you have acknowledged, is
2 not regulated under the Clean Water Act. And to sort
3 of -- to find some way to back door in information
4 about non-point source pollution, I don't know that
5 it is even critical at all to the hydrologic
6 connection which is necessary to show for a
7 significant nexus. That doesn't get into non-point
8 source pollution. That gets into water and water,
9 how it is connected from different tributaries to
10 navigable waters, etcetera.

11 So I am going to let you ask some more
12 questions about this, but I am putting you on notice
13 that I have big problems with where you are going on
14 this. And the number one problem is that it is
15 nowhere mentioned in the complaint, which is why I
16 asked you to point it out to me, and you have
17 acknowledged it is not in there.

18 MS. PELLEGRIN: To my knowledge it is not in
19 there, Your Honor.

20 JUDGE MORAN: Well, you can tell me during
21 the break if you find it, because I will be surprised
22 if you can.

23 MS. PELLEGRIN: Sure. And I would be
24 surprised if I found it, too, Your Honor. As I

1 understand it, what I was quoting to you was Justice
2 Kennedy's holding in the Rapanos case.

3 JUDGE MORAN: And does Justice Kennedy talk
4 about non-point source pollution?

5 MS. PELLEGRIN: I believe Justice Kennedy
6 included -- when you are looking at --

7 JUDGE MORAN: No, no, my question is does he
8 talk about non-point source pollution.

9 MS. PELLEGRIN: I will look at the Rapanos
10 case during the break.

11 JUDGE MORAN: You ask your questions here,
12 but you are on notice that I have great problems with
13 trying to expand this case into issues that are not
14 in the complaint and that I don't think are relevant
15 to the determination of significant nexus in any
16 event.

17 So proceed with your questions.

18 MS. PELLEGRIN: Certainly. Okay. Ms.
19 Melgin -- actually, could I have Madam Court Reporter
20 read to me my last question?

21 (Whereupon the requested portion
22 of the record was read back by
23 the Reporter.)

24 BY MS. PELLEGRIN:

1 Q. Ms. Melgin, my last question, which I
2 will repeat, is you testified about phosphorous going
3 with surface runoff into a stream or a body of water.
4 How, if at all, is phosphorous transported once it
5 gets to a stream?

6 A. Through the sediment. And water is
7 flowing, carrying sediment with it, depositing. It
8 will be, like I said, in the sediment or in the
9 suspended part of that.

10 Q. And I believe you mentioned earlier
11 bedload material versus suspended sediment. Can you
12 talk a little more about bedload material and
13 suspended sediment and where phosphorous falls into
14 that?

15 A. Well, it is --

16 JUDGE MORAN: Do you have an objection?

17 MR. SMALL: Yes, Your Honor, we are going to
18 make a verbal objection to any of this testimony that
19 relates to non-point source pollution, and we will
20 follow up with a written motion to this Court for its
21 consideration. And I would further move that any of
22 this testimony on non-point source pollution be
23 stricken from the record.

24 JUDGE MORAN: Yes. And just because the case

1 is of such importance and wanting to have a complete
2 record, I am going to hear to some extent what Ms.
3 Melgin has to say here. But I guess it would be
4 framed in terms of a post-hearing motion in limine or
5 something. That isn't an exclusive way to capture
6 the motion, but I have already expressed, Mr. Small,
7 my concerns. In fact, I am the one that raised it
8 first, I believe.

9 So it is noted, and the EPA is on notice
10 that this may be excluded from the record for the
11 reasons we have already discussed.

12 MR. SMALL: And just so that I don't -- you
13 know, I don't want to be hopping up and down all the
14 time. This is a continuing objection on that whole
15 line of questioning.

16 JUDGE MORAN: Anything related to non-point
17 source information; right?

18 MR. SMALL: Correct, Your Honor.

19 JUDGE MORAN: And I hope that you will still
20 make an objection if EPA attempts to introduce, what
21 I consider to be and I told you at the beginning of
22 the second week, something that isn't even within the
23 ambit of legislative history but is a committee
24 report which EPA made as a supplemental prehearing

1 exchange before we convened here last Monday.

2 MR. SMALL: Thank you, Your Honor.

3 MS. PELLEGRIN: And, Your Honor, just to
4 briefly respond, just one sentence to what Mr. Small
5 just said, I would add not only does the U.S. EPA
6 feel it goes to jurisdiction in this case under
7 Rapanos, but we also feel --

8 JUDGE MORAN: You feel that non-point source
9 pollution questions go to jurisdiction?

10 MS. PELLEGRIN: We feel that the information
11 that will come from Ms. Melgin's testimony will,
12 among other things, go towards, like I said, Justice
13 Kennedy's holding on the biological, physical and
14 chemical integrity of downstream waters and how that
15 relates to this site. We do feel that.

16 JUDGE MORAN: Fine.

17 MS. PELLEGRIN: We also feel that the issue
18 of non-point source pollution in this case will go
19 toward harm, so not just on the liability aspect, but
20 also under the penalty aspect in the rubrics that
21 Mr. Carlson testified under harm. We feel that
22 non-point source issues will go to that as well.

23 JUDGE MORAN: Right. So non-point source
24 pollution which is not covered by the Clean Water

1 Act, you consider to be part of the gravity in terms
2 of the penalty?

3 MS. PELLEGRIN: Correct.

4 JUDGE MORAN: Really. And let me just inform
5 you that my reading of the Rapanos decision is that
6 Justice Kennedy -- the only thing that really was
7 involved in that decision that mattered was the
8 remand. Justice Kennedy, he did not form part of a
9 majority. It was four, four and one. And the one
10 was to remand it. Then he expounded about his
11 different points of view. But Justice Kennedy is one
12 member of nine, okay.

13 So that's -- I have a little different
14 take of that Rapanos decision than you do. All
15 right. And that's all I want to hear from you about
16 that now. You can proceed with your next question.

17 MS. PELLEGRIN:

18 Q. Okay. Ms. Melgin, let me ask you some
19 follow-up questions. I believe the question I asked
20 you was you were talking about bedload material and
21 suspended sediment as vehicles, I guess we could use
22 that term, to transport phosphorous in the stream.
23 Could you elaborate some more about that?

24 A. Bedload is simply that sediment that is

1 traveling along the bottom of the stream. It is
2 being transported at the bottom. It is usually a
3 little larger particles.

4 The suspended load, either total
5 suspended solids, which could include sediment, it
6 could include organic material, it could include some
7 chemical constituents that's suspended in the water,
8 just like it sounds, that it gets deposited, all this
9 stuff gets deposited depending on the flow.
10 Suspended sediment gets a lot more when flow is high.
11 So the flow tends to scour and resuspend everything
12 that might have been deposited in sediments and
13 carries it downstream.

14 Q. And, Ms. Melgin, I believe you testified
15 yesterday that you observed some, on the site of the
16 alleged violation, some, I believe you called them,
17 drainage features on the site of the alleged
18 violation; is that correct?

19 A. Yes.

20 MS. PELLEGRIN: And, Your Honor, if we can go
21 off the record, I am going to put a document up?

22 JUDGE MORAN: Sure.

23 (Whereupon there was then had an
24 off-the-record discussion.)

1 JUDGE MORAN: We will go back on the record.

2 MS. PELLEGRIN: Your Honor, permission for
3 Ms. Melgin to approach Exhibit D.

4 JUDGE MORAN: Yes.

5 BY MS. PELLEGRIN:

6 Q. Ms. Melgin, if you can move a little to
7 that side so we could see you better.

8 Okay. Ms. Melgin, I will refer you to
9 the two gold hand drawn lines on Exhibit D labeled
10 Channel 1 and Channel 2 by Mr. Greg Carlson, I
11 believe. Do you see those?

12 A. Yes.

13 MR. SMALL: May I approach?

14 JUDGE MORAN: Yes, Mr. Small.

15 BY MS. PELLEGRIN:

16 Q. Ms. Melgin, did you have occasion when
17 you were adjacent to the site of the alleged
18 violations on any of the times that were there to
19 observe what's been drawn on the Exhibit D as Channel
20 1 and Channel 2?

21 A. Yes.

22 Q. You personally observed what is
23 approximately drawn Channel 1 and Channel 2 on this
24 sheet?

1 A. Yes.

2 Q. Ms. Melgin, I would ask for you to
3 describe what you saw as Channel 1 and Channel 2 on
4 the site of the alleged violations. And you can take
5 a seat.

6 A. Thank you. I observed drainage features
7 going out into the field and discharging into the
8 Martin Branch channel.

9 Q. Now, by discharging, let's be very clear.
10 Did you see any water or anything discharging from
11 the features into the -- personally did you view
12 water discharging?

13 A. I don't remember.

14 Q. Did you view -- first of all, let me ask
15 you, as a hydrologist do you have experience in
16 viewing drainage features on sites?

17 A. Yes.

18 Q. And as a hydrologist in your experience
19 have you viewed natural drainage features on sites?

20 A. Yes.

21 Q. And have you ever viewed any handmade
22 drainage features in your experience as a
23 hydrologist?

24 A. Yes.

1 Q. Now, in your experience where water, I am
2 going to say, cut, where water itself cut a natural
3 channel, what does that look like in your experience?

4 A. Well, it looks like an irregular pattern.
5 Like I said before, any channel will start to form
6 its own pattern based on the flow and the amount of
7 material it is transporting. So you will see, if it
8 is a newly cut feature or if it has been there for
9 awhile, you will be able to tell by the pattern of
10 the concentrated channel.

11 Q. And looking at what I am going to
12 describe as sort of a channel and the sides of a
13 natural feature, how would you describe that if you
14 were to describe a, like a U-shape or something that
15 would be a natural drainage feature, what would that
16 look like generally? How would the sides and bottom
17 look generally?

18 A. Well, like I said, irregular. It
19 wouldn't be uniform. It would be you could have
20 material in the bottom. It would be -- you could
21 tell that water has formed that channel. It wasn't
22 done by any mechanical method.

23 Q. And what's been marked Channel 1 and
24 Channel 2 on Exhibit D, you said you personally

1 observed that. How many times were you able to
2 personally observe Channel 1 and Channel D -- I am
3 sorry, Channel 1 and Channel 2 on Exhibit D?

4 A. Twice.

5 Q. And, Ms. Melgin, what was the ground
6 cover either generally or, if you know, specifically
7 at the site of the alleged violations the first time
8 you viewed Channel 1 and Channel 2?

9 A. I believe it was winter wheat at its very
10 initial stages.

11 Q. How tall or short was the winter wheat
12 that you observed on the site?

13 A. I don't remember how tall it was, but I
14 just know that we could observe all the land surface.
15 So it wasn't that tall.

16 Q. So you could -- you are saying through
17 the winter wheat you could observe the bottom of the
18 land surface?

19 A. Right.

20 Q. And when was the first time you observed
21 the drainage features?

22 A. That was March 25, 2007.

23 Q. When was the second time?

24 A. It was April 29, 2007.

1 Q. And the second time you observed the
2 drainage features, what was the, if you know, the
3 ground cover on the site of the alleged violation?

4 A. It was winter wheat.

5 Q. And what did the winter wheat look like
6 at that time?

7 A. It was a fairly good growth.

8 Q. And could you, using the terms you used
9 earlier, could you see the ground cover through the
10 winter wheat this time?

11 A. Not really.

12 Q. Now, having observed Channel 1 and
13 Channel 2 on Exhibit D, do you have an opinion about
14 whether or not Channel 1 and Channel 2 are natural
15 features?

16 A. Yes, I do.

17 Q. And what is that opinion?

18 A. Well, that they are not natural features.

19 Q. I am sorry, I didn't hear you.

20 A. They are not natural features.

21 Q. And upon what do you base that opinion?

22 A. By the way that they looked and the way
23 that the discharge is coming into Martin Branch. So
24 again the channel is very small, very uniform, smooth

1 sides. You could tell the water did not cut that.
2 It was done by mechanical means.

3 Q. What did the sides -- compare what the
4 sides and bottom of Channel 1 and Channel 2 look like
5 in your experience to what a naturally carved water
6 feature looks like in your experience?

7 A. Well, water naturally carved, like I
8 said, would be very irregular and there might be
9 rocks falling in and there would be the vegetation
10 there. If it was going through grass or vegetation,
11 some of that would still be left. It would be very
12 irregular and you wouldn't have your nice, smooth
13 cut, you know, side on the surface or on the sides of
14 the drainage channel or a smooth bottom. That's
15 like, you know, if you took a hoe or whatever to your
16 own property and drug it through, it would look
17 different than if the water created it. You could
18 just tell.

19 Q. And, Ms. Melgin, if I asked you to draw,
20 I guess, a diagram of an intersection of a natural
21 feature versus a handmade feature on the easel, could
22 you do that?

23 A. Well, I think so.

24 MS. PELLEGRIN: Your Honor, permission for

1 Ms. Melgin to approach the easel.

2 JUDGE MORAN: Yes. We will go off the record
3 for a second while they get that ready.

4 (Whereupon there was then had an
5 off-the-record discussion.)

6 JUDGE MORAN: We are back on the record.

7 BY MS. MELGIN:

8 Q. Ms. Melgin, you have just labeled a blank
9 easel Exhibit L; is that correct?

10 A. Yes.

11 Q. Ms. Melgin, if I use the term "cross
12 section," are you familiar with that term?

13 A. Yes.

14 Q. Can you draw -- let's start out with a
15 natural drainage. Could you draw just generally what
16 the cross section of a natural drainage feature might
17 look like?

18 A. This is not going to be scale or
19 anything. You know, you would kind of have these
20 irregular channel bottoms. Prior testimony had
21 talked about shelving and different things. Even
22 small little drainages will create some sort of
23 irregular surface, depending on how things are cut
24 and deposited.

1 the exhibit accordingly.)

2 And, Ms. Melgin, if I asked you to,
3 could you draw generally a cross section again of the
4 Channel 1 and Channel 2 that you observed on the site
5 of the alleged violation?

6 A. Yeah, it would look like this.

7 (Whereupon the Witness marked
8 the exhibit accordingly.)

9 Q. And can you give me sort of an
10 approximate, I guess, the approximate width of that,
11 if you know?

12 A. No greater than a foot.

13 Q. And can you put "W equal one foot" next
14 to the -- (Whereupon the Witness marked
15 the exhibit accordingly.)

16 And do you know, if you know, the
17 approximate depth of that natural drainage -- I am
18 sorry, the Channel 1 and Channel 2 on the site of the
19 alleged violation?

20 A. Six inches, eight inches, something like
21 that.

22 Q. And can you put D for depth equals eight
23 inches, six to eight inches?

24 (Whereupon the Witness marked

1 the exhibit accordingly.)

2 Ms. Melgin, you can be seated. And,
3 Ms. Melgin, were you present during the testimony of
4 Bill Hesel when he was asked questions and answered
5 questions about when he described the natural
6 drainage channel on his site?

7 A. Yes.

8 Q. And, Ms. Melgin, after you heard that
9 testimony did you have an occasion to observe on Bill
10 Hesel's land the natural -- some natural drainage or
11 some, let's just call it, drainage channels on Mr.
12 Bill Hesel's site after hearing his testimony about
13 them?

14 A. Yes, I observed the stream.

15 Q. And can you please describe what the
16 channels on Mr. Bill Hesel's property looked like?

17 A. They were similar to the first one where
18 it looked like water had just formed it. Water was
19 coming off the field and concentrating, you know,
20 into a channel and forming its own channel as an
21 outlet to Martin Branch. That's what happens with
22 drainages.

23 JUDGE MORAN: Water was coming off of the
24 field?

1 THE WITNESS: We didn't see water. We didn't
2 observe water. But the channel was formed by -- the
3 channel was formed by water coming off the field.
4 That's how the channel was formed. And then when
5 water does come off, it would follow that route into
6 what's now, I guess it would be, the artificial
7 channel.

8 BY MS. PELLEGRIN:

9 Q. And in your experience what properties of
10 water allow it to come off of a field and form a
11 natural channel? What would cause it to do that in
12 your experience?

13 A. Well, like I said, any water that
14 comes -- water tries to find its natural course down
15 to a drainage following topography. So when rain
16 falls on the field and the field is -- you know,
17 that's what happens. We were talking about
18 agricultural runoff. I mean, just in basic -- water
19 tries to find its way out. If it falls on the field,
20 it is going to form a channel and flow out.

21 Q. And if I haven't asked you this already
22 specifically, can you compare natural versus manmade
23 or can you tell me whether the Channel 1 and Channel
24 2 that you observed on the Hesper brothers' site of

1 the alleged violations, in your opinion as a
2 hydrologist, were they a natural or a manmade
3 drainage feature?

4 A. I believe it is manmade.

5 Q. And can you tell me, having observed the
6 drainage features on Mr. Bill Hesper's property in
7 your expert opinion as a hydrologist, if those
8 appeared to be more natural or more manmade?

9 A. No, those looked like a natural water
10 course, that the water formed its own path.

11 Q. Okay. Ms. Melgin, were you present
12 during the cross examination of Mr. Bill Hesper when
13 Mr. Small asked him questions about those drainage
14 features on Mr. Bill Hesper's property?

15 A. Yes.

16 Q. And I am reading from the transcript for
17 Thursday, March 29, 2007. I am on page 175, for the
18 record.

19 "Q. (By Mr. Small) Are you aware of two
20 waterways -- we will characterize it like that for
21 right now -- that go to your property adjacent to the
22 L into the L proper?

23 A. (By Mr. Bill Hesper) I am aware of
24 those, yes.

1 Q. Okay. And how would you characterize
2 those? Let's take the one. First off, there was
3 testimony that there was about a hundred feet
4 south -- that there was one about a hundred feet
5 south of the north part of the L. Can you
6 characterize that waterway?

7 A. As best I can recollect, that is
8 where the water went out of the field, into their
9 property, previously.

10 Q. And when you say out of the field,
11 you mean out of your field?

12 A. Out of my field.

13 Q. So it is draining water from your
14 field into that L; correct?

15 A. It is now, yes.

16 Q. Okay. Let's go down to the other
17 waterway, which there was testimony that it was about
18 a hundred feet north of the intersection of the two
19 legs of the L. How would you characterize it?

20 A. That was a natural place the water
21 also went out.

22 Q. Natural place that what?

23 A. That was a natural place that water
24 went out.

1 Q. Okay. And does it go from your
2 property into the L?

3 A. It does now.

4 Q. Okay. When you say it does now, does
5 that mean you use some kind of mechanical equipment
6 to help get it through the L?

7 A. No, sir. I had never cut a drain
8 through that.

9 Q. And you are saying that as to both of
10 those you characterize as natural waterways; is that
11 correct?

12 A. The water cut a channel out there,
13 yes.

14 Q. Okay. Before the L was there, where
15 did it go?

16 A. It went over onto their ground." And
17 then there is a --

18 "JUDGE MORAN: I'm sorry, went over what?

19 THE WITNESS: I should get up to the mic.
20 Sorry, sir."

21 One more sentence, this is the witness,
22 Mr. Bill Heser.

23 "The water went out across their ground.
24 It probably didn't go out as fast a rate as it did

1 after it could fall right into that L."

2 Q. Now, Ms. Melgin, I have just read to you
3 from day four of this proceeding, the cross
4 examination and answers of Mr. Bill Hesel by
5 Mr. Bradley Small. In your expert opinion what, if
6 anything, does what I just told you about the natural
7 features in the water going into the L from that,
8 that formerly went out onto the Hesel brothers'
9 property, what impact, if any, does that have in your
10 opinion?

11 A. Well, with the water flowing --

12 MR. SMALL: Your Honor, I am going to object.
13 This is a piggyback situation again. And, I mean, I
14 think, number one, they are doing that; number two,
15 they are asking for what's her opinion about what
16 Bill Hesel had to say. What's that?

17 JUDGE MORAN: So deal with it on cross
18 examination. So overruled. Go ahead. Answer the
19 question, Ms. Melgin.

20 THE WITNESS: A. Before the L was
21 constructed, there was a forested wetland system
22 there. The runoff from Bill Hesel's property would
23 have flowed into the wetland area or forested area,
24 forested wetland area, before discharging into Martin

1 Branch.

2 BY MS. PELLEGRIN:

3 Q. And what, if any, impact, Ms. Melgin,
4 does that have on water quality if water is now
5 throwing from Bill Heser's land straight into the L
6 channel as Mr. Heser testified?

7 A. Well, other than he has -- Bill Heser put
8 a filter strip in on his part of the land, but now
9 that water is being conveyed directly into the
10 channel. Any, again, agricultural chemicals that
11 were applied to bill Heser's property would be
12 discharged directly into the L now and into Martin
13 Branch, rather than being through the forested
14 wetlands where it had a chance to have some water
15 quality improvement through nutrient uptake.

16 Q. And can you explain what you mean by
17 water quality improvement through nutrient uptake as
18 it relates to wetlands?

19 A. Well, wetlands, one of the benefits is,
20 like we talked about, the nutrients and sediment
21 retention where water would flow through. Wetlands
22 have the opportunity for plants to take those up, and
23 there is bacteria in the soil in wetlands that can
24 convert certain nutrients to less biologically

1 available forms, meaning that it wouldn't go into the
2 water.

3 Q. And so is it your testimony that whereas
4 water would have or may have gone into wetlands at
5 the site of the alleged violation that were there
6 previously, they now do not enjoy the same benefits
7 of going to these wetlands because they drop right
8 into that L?

9 A. That's right, and it also tells me that
10 wetlands were definitely hydrologically connected to
11 Martin Branch.

12 Q. Okay. Ms. Melgin, moving on, I believe
13 yesterday you talked about chemical, physical and
14 biological integrity. Let me ask now, in your expert
15 opinion in this case what, if any, effects were there
16 to the chemical integrity of downstream waters from
17 again the filling in of 2.1 acres or 1.5 acres of
18 wetlands at this site and the filling in and
19 channelizing of Martin Branch?

20 A. Excuse me, did you say physical?

21 Q. No, Ms. Melgin, I said chemical, the
22 chemical integrity.

23 A. Like I just talked about, the potential
24 for a fairly large --

1 MR. SMALL: I am going to object on the
2 foundation. I don't think they have ever shown those
3 elements.

4 JUDGE MORAN: Again, for the reasons I have
5 already explained, Mr. Small, you should have -- I
6 have made some notations myself here. This should be
7 a lengthy cross examination. It is just the way it
8 works.

9 MR. SMALL: Okay.

10 THE WITNESS: Could you repeat the question?

11 BY MS. PELLEGRIN:

12 Q. Sure, Ms. Melgin. Okay. Again, assuming
13 there were at least 2.1 acres -- I am sorry, assume
14 there are at least 1.5 acres and up to 2.1 acres of
15 wetlands on this site and 1800 feet of Martin Branch
16 and its tributaries on this site that were filled in,
17 in your expert opinion what were the effects to the
18 chemical integrity of downstream waters?

19 A. The capacity to absorb and transform
20 those nutrients has been lost in this part of the
21 water shed. So it would increase the nutrient load,
22 the sediment load, moving downstream ultimately to
23 Lake Centralia.

24 Q. And you testified -- you said nutrient

1 load. Would that include phosphorous as you
2 testified previously?

3 A. Yes.

4 Q. And what, if anything, do you know about
5 phosphorous as it relates to any downstream waters in
6 this Martin Branch water shed?

7 A. Lake Centralia is impaired for
8 phosphorous.

9 Q. And by impaired, what do you mean by
10 impaired?

11 A. That means the lake is not meeting its
12 water quality standards for phosphorous.

13 Q. And who makes that designation of whether
14 something is or is not impaired, Ms. Melgin?

15 A. The Illinois Environmental Protection
16 Agency.

17 Q. And how do they do that?

18 A. They have a monitoring program, an
19 assessment program, that they use to assess their
20 waters in the state. Like I think I testified
21 yesterday, they prepare a list. It can be called the
22 303(d) list or the TMDL list or the Integrated
23 Report, depending on the state and how they prepare
24 this list. That list is due to be submitted to the

1 EPA every two years on April 1. And that list, the
2 part that we approve, is the list of impaired waters.
3 So any water that's not meeting the state that's been
4 assessed will be listed on their list and submitted
5 to the EPA.

6 Q. And what, if anything, do you know about
7 whether or not any downstream water in this case, or
8 specifically Lake Centralia in this case, of whether
9 or not it is listed?

10 A. Lake Centralia is listed for three
11 pollutants. The first one is phosphorous. The
12 second is manganese, and the third is total suspended
13 solids.

14 Q. What's total suspended solids mean?

15 A. That's that constituent of the water, the
16 load, that has the suspended component. And
17 suspended solids can mean sediment, it can mean parts
18 of animals, parts of leaves, or chemicals. So it is
19 all that suspended component of the flow.

20 And it can be -- like when you look at
21 a -- if you put mud in the bottom of a jar and you
22 shake it up and there is parts of it suspended,
23 that's what a suspended solid would be.

24 Q. And, Ms. Melgin, could that sediment

1 include fill material?

2 A. Yes.

3 Q. Total suspended solid of sediment?

4 A. Well, it would be, as far as it would be
5 sediment.

6 Q. And let's see, turning your attention to
7 Complainant's Exhibit 36, and, Your Honor, I have
8 this checked as it is a stipulated document.

9 JUDGE MORAN: This is Complainant's 36?

10 MS. PELLEGRIN: Yes, Your Honor.

11 JUDGE MORAN: I don't have a 36.

12 MS. PELLEGRIN: Your Honor, can we go off the
13 record so we can take care of this?

14 JUDGE MORAN: Yes, we are going off the
15 record now. We will take a five-minute brake.

16 (Whereupon the hearing was in a
17 short recess.)

18 JUDGE MORAN: We will go back on the record.

19 MS. PELLEGRIN:

20 Q. Ms. Melgin, before we went off the record
21 I asked you to turn to Complainant's Exhibit 36.
22 Actually I am going to change my mind here. I am
23 going to ask you to turn to Complainant's Exhibit 28.

24 (Whereupon Complainant's Exhibit

1 28 was presented for purposes of
2 identification as of this date.)

3 A. I am there.

4 Q. And, Ms. Melgin and Your Honor, this is a
5 document that's been stipulated to by both parties.
6 I think Respondents have and both parties have
7 discussed this a bit.

8 Okay. Ms. Melgin, do you recognize this
9 document?

10 A. I do.

11 Q. And what is this document?

12 A. This is the Illinois EPA's draft report
13 of their Stage I Crooked Creek Water Shed TMDL.

14 Q. And, Ms. Melgin, first, I believe
15 yesterday you talked about your role or your agency's
16 role, along with the State's, in TMDL reports. Can
17 you remind us what is that role?

18 A. TMDL is total maximum daily load for
19 those waters that the State has determined have been
20 impaired. They prepare these reports for those
21 impaired waters, basically saying what the problem
22 is, and strategies come later as to how they are
23 going to fix that problem.

24 They submit that to EPA. EPA has TMDL

1 reviewers that review the document, prepare a
2 decision document, and we either approve or
3 disapprove the TMDL report.

4 Q. And, Ms. Melgin, it says a Stage I
5 Third-quarter Draft Report. What, if anything, do
6 you know about that title?

7 A. Well, each state has their own way of
8 preparing TMDLs. Illinois looks at it in three
9 stages.

10 Their Stage I report are their initial
11 assessments, the data that they have, the background
12 information, basically their background document and
13 how they are going to approach TMDL.

14 Their Stage II would be if they decided
15 after they completed the Stage I report that they
16 need more data. So then they would use that Stage II
17 to collect more data.

18 Stage III would be the actual development
19 of the TMDL, the calculation of the pollutant loads,
20 whether they use a model or whatever, but it would be
21 their final report. And that final report would be
22 submitted to the EPA for approval at all stages of
23 public notice.

24 Q. So this stage is public notice?

1 A. Yes.

2 Q. And this is the Stage I. Do you know if
3 this is submitted because is that where Illinois EPA
4 is at this particular water shed?

5 A. Yes.

6 Q. Currently?

7 A. As far as I know.

8 Q. And this is for the Crooked Creek water
9 shed. First of all, how does Illinois EPA divide or
10 decide how to prepare these TMDL water shed
11 documents?

12 A. Well, like I said, every state has their
13 own way of doing things. We have recommended, and
14 Illinois is beginning to do this now, by developing
15 water shed TMDLs, which means there are more than one
16 water body pollutant combinations included in the
17 report. So a TMDL is just a water body times the
18 pollutant. So you could have just one -- they can
19 submit one TMDL. They can submit one TMDL for one
20 segment of Crooked Creek, and that would be it. That
21 would be acceptable to the EPA.

22 But what the states are trying to do, and
23 EPA recommends, is for a more effective and efficient
24 way, a cost effective way, of doing TMDLs is sort of

1 functioning water bodies that have all similar
2 characteristics and similar pollutants into one water
3 shed document.

4 Q. Ms. Melgin, when we are talking about
5 water sheds, I believe Ms. Joan Rogers referred to
6 water sheds within water sheds. I believe she used
7 the term "nested"?

8 A. You could.

9 Q. Do you know what, if any -- I'm sorry,
10 what, if any, water sheds that we are concerned with
11 in this case is nested within the Crooked Creek water
12 shed?

13 A. Well, the Lake Centralia water shed is
14 included within this TMDL.

15 JUDGE MORAN: Remind me, Ms. Melgin, does
16 Martin Branch flow into Crooked Creek?

17 THE WITNESS: It does. Lake Centralia is an
18 impoundment of Martin Branch. At the spillway there
19 is still a channel and that flows directly into
20 Crooked Creek.

21 BY MS. PELLEGRIN:

22 Q. Ms. Melgin, turning your attention to
23 Complainant's Exhibit 519 within this document.

24 JUDGE MORAN: What is your exhibit number

1 now?

2 MS. PELLEGRIN: We are still in Complainant's
3 Exhibit 8. I am at Bates page 519.

4 THE WITNESS: Yes.

5 BY MS. PELLEGRIN:

6 Q. Ms. Melgin, would you please read into
7 the record -- first of all, tell me, in the middle of
8 that page under 5.2.1, do you see that?

9 A. Yes.

10 Q. What does it say after 5.2.1?

11 A. It says Lake Centralia.

12 Q. And could you please read into the record
13 the paragraph underneath Lake Centralia?

14 A. It says, "Constructed in 1910 Lake
15 Centralia has a surface area of 450 acres with
16 approximately 13 miles of shoreline. Lake Centralia,
17 along with Raccoon Lake, serves as a drinking water
18 source for the Centralia community water supply," and
19 in parentheses it says, "Source water assessment
20 program, Illinois EPA 2002."

21 "Located in Marion County northeast of
22 Carlyle, Lake Centralia is located on Martin Branch
23 which is a tributary to Crooked Creek. Table 5-6
24 contains U.S. Army Corps of Engineers dam data."

1 Q. And the dam data you are talking about,
2 you mentioned the term impoundment earlier. Can you
3 tell me is that a dam?

4 A. Right, it forms a dam.

5 Q. And I believe you mentioned that Lake
6 Centralia -- I'm sorry, that, yeah, Lake Centralia
7 was impaired. Would that be contained within this
8 document? Would the indication of that impairment be
9 contained within this document?

10 A. Yes. Lake Centralia is in this document.
11 They are preparing the TMDL for it because it is
12 impaired.

13 Q. And, Ms. Melgin, could you please turn to
14 page number 526?

15 A. Yes.

16 Q. And the area -- the area at the top of
17 the page, 5.4.1, can you tell me what that says?

18 A. Crop Information.

19 Q. And can you read, let's see, the first
20 two sentences of that paragraph into the record?

21 A. "The majority of the land found within
22 the Crooked Creek water shed is devoted to crops.
23 Corn and soybean farming account for approximately 20
24 percent and 32 percent of the water shed

1 respectively."

2 Q. Now, turning to the page before that,
3 page Bates 525?

4 A. Yes.

5 Q. Can you read -- first of all, 5.4, what
6 is the title of 5.4 in this document?

7 A. It says Non-point Sources.

8 Q. And can you please read the following
9 sentence into the record?

10 A. "Since there are many potential non-point
11 sources of pollutant loadings into the impaired
12 segment of the Crooked Creek water shed."

13 Q. I'm sorry, could you please read the rest
14 of that part?

15 A. "This section will discuss site specific
16 practices and elaboration of area septic systems.
17 Data were collected through communication with local
18 NRCS on the water conservation district (SWCD),
19 public health department and county tax department
20 officials."

21 Q. And, Ms. Melgin, looking at this document
22 as a whole, Complainant's Exhibit 28, can you tell me
23 what, if anything, does this document say about the
24 sources of impairment for Lake Centralia?

1 A. The document basically said that the
2 majority of the source that's coming into Lake
3 Centralia is through non-point sources.

4 Q. And by non-point source does it make --
5 let's see. Strike that.

6 JUDGE MORAN: So if I can understand that,
7 you say the majority of the pollutants coming into
8 Lake Centralia you said is from non-point sources?

9 THE WITNESS: Right.

10 JUDGE MORAN: Okay.

11 BY MS. PELLEGRIN:

12 Q. And actually I believe the document that
13 I wanted to turn to earlier, have you had a chance to
14 find that Document Number 36 in your --

15 A. No, there is no 36 in this.

16 Q. Okay. Can you tell me what your Document
17 Number 37 is?

18 A. It is the Integrated Report.

19 MS. PELLEGRIN: Okay. Your Honor, I have as
20 my Complainant's Exhibit 36, I have Illinois
21 Integrated Water Quality Report.

22 THE WITNESS: Now it says 36. So somebody
23 fixed this. There was nothing in there before. I
24 think it was just misplaced.

1 (Whereupon Complainant's Exhibit
2 36 was presented for purposes of
3 identification as of this date.)

4 BY MS. PELLEGRIN:

5 Q. Okay. So, Ms. Melgin, are you saying now
6 that your Complainant's Exhibit 36 that you are
7 looking at, the title is Illinois Integrated Water
8 Quality Report?

9 A. Yes. It is just another sediment report.

10 JUDGE MORAN: While you are getting ready for
11 the next question, so while the majority of the
12 pollutants into Lake Centralia are from non-point
13 sources according to this one report, has there ever
14 been an estimate as to what percentage comes from
15 point sources into Lake Centralia? Has that ever
16 been done?

17 THE WITNESS: If there are, this report will
18 do that, if there are point sources that need waste
19 water treatment plants. So the TMDL takes this
20 non-point source pollution plus the point source
21 pollution. Sometimes there are no point sources in
22 the water shed.

23 JUDGE MORAN: But my question is has there
24 been an analysis of what the point source pollutions

1 are to Lake Centralia?

2 THE WITNESS: I am not aware of that.

3 JUDGE MORAN: You don't know?

4 THE WITNESS: No. I don't remember if they
5 talk about waste water treatment plants in here.

6 JUDGE MORAN: So when you think of point
7 source pollutions, you are thinking strictly in terms
8 of waste water treatment plants?

9 THE WITNESS: That's what a TMDL takes into
10 account in the waste load allocation which is the
11 point source. It would be waste water treatment
12 plant or storm water runoff that would be included in
13 the point source allocation, regulatory permit
14 programs.

15 MS. PELLEGRIN: And again this document has
16 been stipulated to, Your Honor.

17 Q. Ms. Melgin, can you please flip through
18 this document, starting at 808 all the way through to
19 829?

20 A. Yes.

21 Q. And, first of all, can you read the full
22 title of this document into the record?

23 A. It is the Illinois Integrated Water
24 Quality Report, Section 303(d) List for 2006.

1 Q. And how, if at all, Ms. Melgin, does this
2 document here relate to the TMDL report that we just
3 looked at?

4 A. This report listed Lake Centralia as
5 being impaired, and the TMDL that we looked at is a
6 result of that listing.

7 Q. So looking at this Document 36, is this
8 the entire Illinois Integrated Water Quality Report,
9 Section 303(d) list?

10 A. No.

11 Q. Do you know how large that is just
12 generally?

13 A. Well, an integrated report means that it
14 includes the Section 305(b) report in combination
15 with the Section 303(d) report. So again to make
16 things more efficient to the state so they don't have
17 to submit two separate lists to the EPA every year,
18 the 305(b) report is an assessment of all waters in
19 the state. So that would be a fairly large document.
20 And then in combination would be the Section 303(d),
21 which is the TMDL list, that lists all the impaired
22 waters. That's the only part that EPA approves, is
23 the Section 303(d) list. That alone in Illinois for
24 2006 had over 1,000 impairment water body

1 combinations. So that would also be fairly large.

2 Q. Let me turn your attention to
3 Complainant's Exhibit 826. I mean, I am sorry, the
4 same exhibit but Document Number 826. And looking at
5 826 in conjunction with 827, do you recognize these
6 two documents?

7 A. Yes.

8 Q. And what are these two documents?

9 A. Well, these are sort of the key to,
10 Illinois's key, to pollutants and causes for inland
11 lakes.

12 Q. And do you know if this document lists
13 Lake Centralia?

14 A. Yes. Yes, in the remainder, the actual
15 listing of the water bodies. So starting on 828 is
16 the listing of the water bodies.

17 Q. Okay. Let's look at 828. Where do you
18 see -- do you see Lake Centralia on this list?

19 A. Yes.

20 Q. And can you tell us where you see that?

21 A. It is just, if you cut the page in half,
22 it would be just to the bottom of half, sort of the
23 top of the bottom half.

24 Q. And can you read the column or the row

1 that Lake Centralia is referred to in this document?

2 A. It says Centralia, which is the name of
3 the impaired water, and then it has Appendage
4 Identifier called the Hydrologic Unit Code and that
5 just is a numerical designation for the water body.
6 EPA has its own base of numbers. It is a base of 24.
7 They gave it an assessment unit ID so you can
8 identify Lake Centralia as being IL_, ROI. That must
9 be their sampling station. It gives the size, 460
10 acres.

11 Category 5, now that means what category
12 of the Integrated List it is on. If it is on
13 Category 5, it means it is on the TMDL list or the
14 list of impaired waters which Centralia is.

15 Then it gives -- this is where the keys
16 come in. It gives a whole list of designated uses
17 and obtainments, and you have to go back and figure
18 that out. And the same thing with causes of that
19 impairment and then the sources of that impairment.

20 Q. Okay. Well, the last time I believe you
21 testified that pages 826 and 827 contain the key?

22 A. Yes.

23 Q. And, Ms. Melgin, if you want to do that,
24 I am going to take these out of my binders so I can

1 refer back and forth. I am going to have you note
2 for the record what these mean. A little bit of
3 juggling, but.

4 Okay. Now let's first look at 826 and
5 let's talk about the categories on this page of the
6 legend. What does the -- I am looking at the first
7 box on this page right under Legend, Use Description.
8 Do you see that?

9 A. Yes.

10 Q. If you know, what is a use description?

11 A. This is talking about the designated uses
12 of Lake Centralia. So Illinois is listing what they
13 would consider the use of that lake. So this also
14 describes if the lake is attaining, not attaining or
15 hasn't been assessed for that designated use. So
16 when you see F582 and you look at aquatic life --

17 Q. Ms. Melgin, let me stop you because we
18 are going to go there. I am looking just right now
19 at 826 under Use Description and then I know I said
20 we are going to juggle but we are not going to juggle
21 just yet. Under Use Description and then over to the
22 right, the box at the right of Use Description under
23 Support Code and Use Support Level, that box, can you
24 tell me if you know what that box means?

1 A. Yeah, that's what I was just describing
2 basically, is that the Support Code would mean that,
3 you know, based on their assessment information,
4 that designated use could be either fully supporting,
5 not supporting, they don't have enough information to
6 tell if it is supporting, or they haven't assessed
7 for that designated use.

8 Q. And the two boxes underneath that which
9 have Cause ID Description, if you know, what is that?
10 What do those boxes mean?

11 A. Those would be the specific pollutants
12 that could cause impairment.

13 Q. And now looking at 827, Document Number
14 827, which is at the top of the next page?

15 A. Yes.

16 Q. It also says Source ID and Description on
17 this page. Do you know if this is a continuation?

18 A. Of the key, yes.

19 Q. And, Ms. Melgin, now we will juggle. Now
20 let's look at 828, okay, and in conjunction with 826
21 and 827, keeping those two out, keeping that key,
22 that appendix out. Looking under the Designated
23 Uses/Containment column, could you please read the
24 first entry into the record?

1 A. It says F582.

2 Q. And now looking back at the legend and
3 the key, what does that tell you about what F582
4 means?

5 A. That right now Lake Centralia is fully
6 attaining its aquatic life use.

7 Q. And now let's look at the next entry,
8 F583. Looking at the legend, what is that? What
9 does the legend say about that?

10 A. That means that this has not been
11 assessed for fish consumption which would normally be
12 mercury or TP contaminants. They have not assessed
13 for that.

14 Q. So it doesn't mean it doesn't meet it or
15 doesn't meet it; it just hasn't been checked for
16 that?

17 A. Right.

18 Q. Let's look at the next entry, N584. What
19 does that mean according to the legend?

20 A. That means water supply, and N means it
21 is non-supporting its water supply, public and food
22 processing water supply use.

23 Q. So it means it has been -- if I am
24 understanding, it has been tested and it does not

1 meet the use description of public and food
2 processing water supply?

3 A. Right.

4 JUDGE MORAN: Well, would you define, please,
5 what public and food processing water supply means?

6 THE WITNESS: Well, it means that the
7 water -- like you talk about Lake Centralia being at
8 one time a secondary water supply and now it is a
9 tertiary water supply for Centralia, that they would
10 have to treat that water. It is not meeting its use
11 as a public water supply.

12 JUDGE MORAN: There is no food processing
13 going on, is there?

14 THE WITNESS: No, that's just Illinois just
15 lumps -- they have general categories and that's just
16 the way that they use their designated use. They
17 throw water supply and food processing together.

18 JUDGE MORAN: So this is a tertiary or third
19 level water supply, right? There are others?

20 THE WITNESS: Right.

21 JUDGE MORAN: There is a primary and
22 secondary and then finally you get to this as a water
23 supply for drinking purposes?

24 THE WITNESS: Right. The way I understand it

1 now is they completed a pipeline from Lake Carlyle to
2 Centralia. So this is a back-up water supply.

3 JUDGE MORAN: Do you know during the course
4 of the year how much is used, if at all?

5 THE WITNESS: No, I don't.

6 JUDGE MORAN: Go head.

7 BY MS. PELLEGRIN:

8 Q. And now looking at the next entry, I
9 believe we were at X585. What is that according to
10 the code?

11 A. That is primary contact and I will lump
12 that in with the next one, X586, which is secondary
13 contact. That hasn't been assessed and that usually
14 is with regard to pathogens. So you wouldn't want to
15 have contact with waters that have a high pathogen
16 concentration.

17 JUDGE MORAN: But they don't know.

18 THE WITNESS: They don't know. They haven't
19 assessed.

20 BY MS. PELLEGRIN:

21 Q. And then the final entry, N590, what does
22 that refer to?

23 A. That would be aesthetic quality.

24 JUDGE MORAN: Didn't you skip indigenous

1 aquatic life?

2 THE WITNESS: That isn't listed.

3 JUDGE MORAN: Oh, I see. But it is on the
4 use description, but it is not in the code?

5 THE WITNESS: Right, right. They don't have
6 to use all of them. Some states kind of lump, put
7 all their uses in so they don't miss one. Some
8 states use some and not the others.

9 JUDGE MORAN: So if it is not listed that
10 means what? It wasn't assessed either?

11 THE WITNESS: Or they didn't consider that
12 there is indigenous aquatic life in Lake Centralia.

13 JUDGE MORAN: Okay. Now go back to aesthetic
14 quality. What was your answer about that?

15 THE WITNESS: It is not assessed or, sorry,
16 it is not supporting for aesthetic quality, and that
17 would mean like algae blooms, that it would be the
18 odor and the aesthetic quality. That's usually what
19 you mean by excessive algae blooms in the aesthetic
20 quality of a lake, is usually what the state
21 considers.

22 JUDGE MORAN: And what's the situation?

23 THE WITNESS: It is not attaining that. It
24 is not aesthetic according to the state of Illinois.

1 JUDGE MORAN: But this lake is used, though;
2 didn't you say it is used for boating and so forth?

3 THE WITNESS: Yes.

4 JUDGE MORAN: Power boats?

5 THE WITNESS: Yes, power boats.

6 JUDGE MORAN: Swimming, fishing?

7 THE WITNESS: That's what they say.

8 JUDGE MORAN: Okay.

9 BY MS. PELLEGRIN:

10 Q. And let's look at the next column,
11 Causes. The first entry, Ms. Melgin, 273, what does
12 that mean according to this legend?

13 A. It means manganese.

14 Q. And do you have any understanding of how
15 or why -- well, first of all, what does Causes mean?

16 JUDGE MORAN: What does what?

17 Q. The Causes, the column that says Causes,
18 what does that mean in relation to --

19 A. It is the pollutants. It is what's
20 causing the impairment.

21 Q. And do you have an understanding of how
22 or why manganese would cause a problem there?

23 A. Well, you know, let me check something
24 for us. Yeah, manganese naturally occurs in the

1 soil. I think it is applied during the fertilizer
2 and it is transported to the lake through sediment
3 loads from water sheds inputting into Lake Centralia.
4 So that's how manganese gets in the lake.

5 When it becomes a problem, there is a
6 water quality violation. Illinois has an actual
7 numerical water quality standard for manganese.
8 Illinois doesn't like to do TMDLs; they don't have
9 numeric standards for it. So the only reason they
10 are doing probably a manganese TMDL here is because
11 they have a numerical standard and it is exceeding in
12 Lake Centralia.

13 And the only time it exceeds is when you
14 have an oxygen problem in the lake and manganese
15 transforms into some form that is then suspended and
16 it becomes part of the water quality and results in a
17 water quality violation. So it really caused by an
18 oxygen problem.

19 JUDGE MORAN: Let me just, before you
20 continue on with this whole code here, are you
21 challenging what the report says about the status of
22 Lake Centralia?

23 MR. SMALL: No, we are not.

24 JUDGE MORAN: Why are you going -- this

1 exhibit is admitted. They say Lake Centralia is as
2 reflected in this report.

3 MR. SMALL: Yes.

4 JUDGE MORAN: Why are you going into all
5 this?

6 MS. PELLEGRIN: We can fast forward to
7 phosphorous as a cause and under the Causes column
8 you will find phosphate, crops, farming, agriculture.

9 JUDGE MORAN: Okay.

10 BY MS. PELLEGRIN:

11 Q. Let's take the next entry, 403, Ms.
12 Melgin.

13 A. Okay.

14 Q. What is the -- under Causes, what is the
15 legend for 403 again?

16 A. Total suspended solids.

17 Q. And I think you talked about that before,
18 but what does that mean?

19 A. That means it is impaired for total
20 suspended solids, according to the state.

21 Q. Was sediment included in that?

22 A. The suspended portion.

23 Q. I am sorry?

24 A. Just the suspended portion.

1 Q. The suspended portion of sediment. You
2 mean when sediment gets suspended, part of the total
3 suspended solid?

4 A. Yes, turbidity.

5 Q. Now turning under Causes, 462, what is
6 indicated in the legend with 462?

7 A. Total phosphorous.

8 Q. And we talked about that before.

9 JUDGE MORAN: Well, let's not talk about it
10 again, especially since they are not challenge it. I
11 don't understand this all of this, Ms. Pellegrin.
12 They are not even challenging this. They are saying
13 this report is accurate.

14 Is that right, Mr. Small?

15 MR. SMALL: That is correct.

16 JUDGE MORAN: So this just seems to me to be
17 larding up the record with something that isn't even
18 an issue. What I want to hear is this witness's
19 opinion about how much, if anything, got from Martin
20 Branch south of the activity of the alleged activity
21 of the Hesper brothers. I don't get it. When they
22 are not challenging the status of Lake Centralia, to
23 go through all of this tedious information which is
24 not being challenged.

1 And as you said just a second ago, you
2 already asked about this and what total suspended
3 solids mean. And how many times have we had
4 witnesses tell us that.

5 MS. PELLEGRIN: I will fast forward a little
6 bit, Your Honor, and we will just do one more with
7 this argument.

8 Q. Looking under Sources, Ms. Melgin, do you
9 see under sources for Centralia 144?

10 A. Yes.

11 Q. First of all, can you tell us what that
12 column Sources means?

13 A. That's their determination of where the
14 pollutants are coming from.

15 Q. And looking at the legend, what does 144
16 mean?

17 A. Crop production, crop land or joined
18 land.

19 Q. Okay. Ms. Melgin, you can move on from
20 this document.

21 JUDGE MORAN: Well, because you didn't offer
22 a reason why it is necessary to belabor it,
23 Ms. Pellegrin, other than the fact that the
24 Respondents don't have an issue with it and that is

1 Branch.

2 THE WITNESS: No.

3 JUDGE MORAN: No, okay. Go ahead,
4 Ms. Pellegrin.

5 BY MS. PELLEGRIN:

6 Q. Ms. Melgin, I am going to follow up on
7 some of Judge Moran's questions. Why -- first of
8 all, does EPA in wetland cases to your knowledge --
9 why didn't EPA sample the water in this case, if you
10 know?

11 A. Well, for one thing, it's kind of
12 resource and cost prohibitive. One sample wouldn't
13 tell me anything. It is like how long, how many
14 samples would I need to take to show a trend. Over
15 what time period would we need to take samples. If I
16 was out there at the wrong time, I might not find
17 anything. Or if I am out there a different time, it
18 might show that it way exceeded, and that would be --
19 it is hard to find the average year.

20 I can't send my staff, as a manager, have
21 each of these permit applications and enforcement
22 cases be research projects. We don't have -- I don't
23 think the taxpayers would want us to spend the amount
24 of time necessary and the amount over several years

1 or something showing trends in sampling. What we are
2 trying to do is, based on our experience and
3 observation, is determine what's out there at the
4 time we are there. We can't take samples.

5 Q. Okay. Ms. Melgin, let me ask you, in
6 this case, and we saw the video which was
7 post-alleged violation yesterday, and in this case do
8 you know if anyone, either from U.S. EPA or from the
9 Army Corps of Engineers, was anywhere near or out at
10 the site of the alleged violation or downstream of
11 the alleged violation, as the violation was taking
12 place?

13 A. Not that I am aware of.

14 Q. And, if you know, how might that impact
15 whether or not you would be interested in sampling
16 the water downstream of the alleged violation site if
17 we didn't find out about it until much later?

18 A. Right, the violation is over with. I
19 didn't see any erosion control other than some straw
20 put on the ground during that video. So I would
21 assume there was some sediment moving into the
22 channel at the time of construction. Well, we know
23 there was. There was 1800 feet of stream filled in.
24 So there was quite a bit of sediment.

1 MR. SMALL: I am going to move to strike that
2 because that is carrying on and there was again no
3 basis for that.

4 JUDGE MORAN: I am going to allow that. But
5 you indicated that one reason is because you said,
6 your words, were just that the violation was over; is
7 that right?

8 THE WITNESS: Yeah, that's the point she was
9 making.

10 BY MS. PELLEGRIN:

11 Q. Ms. Melgin, let's talk a little bit more
12 about those drainage channels that we talked about on
13 Exhibit D1 and 2. Now, if I understand your
14 testimony, you weren't present while it was raining
15 so you didn't see any water rushing from those flow
16 areas into Martin Branch. Can you tell me anything,
17 if you know, about the topography of that specific
18 area at the site of the alleged violation as it
19 relates to Martin Branch and if you did see any
20 evidence of runoff in that area?

21 A. That's what drainage features are created
22 for, is to get the water off the field.

23 Q. And, Ms. Melgin, did you observe any
24 evidence that water had come off of the field which

1 is the site of the alleged violation into Martin
2 Branch?

3 A. Yes.

4 Q. And can you describe to me what you saw
5 that would have indicated evidence that water and
6 whatever it was carrying would come off of the site
7 of the alleged violations into Martin Branch at the
8 location?

9 A. The drainage features discharged right
10 into the channel.

11 Q. And did you see any evidence on -- any
12 evidence on the bank of the channel, any kind of
13 indication, that water had carved its way into the
14 channels from that site?

15 A. Right, and we also saw parts of, you
16 know, we saw pieces of straw and other agricultural
17 material in the channel as we moved our way
18 downstream. So you can tell that things are coming
19 off the field in general and moving into Martin
20 Branch.

21 Q. Field in general. But I am asking
22 specifically about those two drainage features. Did
23 you see any evidence on the channel itself? In other
24 words, let me just ask, did you see where those

1 channels united with Martin Branch?

2 A. Right, that's why I said they discharged
3 directly into the channel.

4 Q. And did you see any evidence of -- can
5 you explain to me, if you didn't see any water, how
6 do you know that that went into that channel?

7 A. Because there was a channel formed and
8 piped right into Martin Branch. So these drainage
9 features, that's what it does. If they were just
10 drainage features and they didn't go anywhere, you
11 know, the water would pond. They have to discharge
12 that water into another conveyance system. In this
13 case it was Martin Branch.

14 Q. And let me have you turn to Complainant's
15 Exhibit 46 through 48.

16 A. Okay.

17 JUDGE MORAN: Complainant's Exhibits 46?

18 MS. PELLEGRIN: 46.

19 JUDGE MORAN: Through 48?

20 MS. PELLEGRIN: Through 48.

21 (Whereupon Complainant's
22 Exhibits 46, 47 and 48 were
23 presented for purposes of
24 identification as of this date.)

1

2

BY MS. PELLEGRIN:

3

Q. Okay. And, Ms. Melgin, do you recognize
36 through 48? Have you seen this before?

5

A. Yes.

6

Q. And looking at -- well, first, let's look
at 48 because that's where the pictures are
described. And please read the picture number 7
through 6-1 as described. Would you please read that
into the record, that line?

10

11

A. Where are you at now?

12

Q. I am on Complainant's Exhibit 48.

13

A. Bates number?

14

Q. Bates number 1388, and looking at the
description of photo number 7361.

15

16

A. 362?

17

Q. No, 7361.

18

A. Oh, okay. I see what you are saying,
okay, sorry.

19

20

Q. The description, not the photo itself.

21

A. Yes.

22

Q. And can you please read the description
into the record for 7361?

23

24

A. "This picture was taken looking west

1 along the east-west run of Martin Branch."

2 Q. And do you have an understanding that
3 when we are talking about the L, the east-west run is
4 the east-west lateral bottom part of that L?

5 A. Right.

6 Q. And now let's look at this refers to
7 picture 7361. Looking back on Complainant's Exhibit
8 47, looking at photo 7361, which you have just read
9 into the record as looking at the east-west leg of
10 that L -- and first may I ask, were you present
11 during the testimony of Mr. Daniel Hesel when he
12 described these photos?

13 A. Yes.

14 Q. And were you present when he described
15 the water in the channel in addition to the water in
16 the field?

17 A. Yes.

18 Q. Ms. Melgin, looking at Exhibit D and
19 where Channel 1 and Channel 2 is located in Exhibit
20 D, can you relate that at all to photo number 7361?

21 A. Yes, I think it is in the same proximity
22 as the water standing in the field area.

23 Q. Okay. And, Ms. Melgin, looking at these
24 photos as a whole, Exhibits 46 through 48, what, if

1 anything, does this tell you about water in this area
2 as it relates to Channel 1 and Channel 2 in Martin
3 Branch in this case?

4 A. Well, that the Martin Branch overtops
5 even the artificial channel here, flows out in the
6 field, and there has to be a way to convey that water
7 off the field.

8 Q. And in your opinion in viewing the site
9 of the alleged violations, viewing the channels cut
10 in the site that you testified about previously, and
11 viewing these photos which show water flowing, in
12 your expert opinion what's the probability of the
13 water getting from that field, running off into
14 Martin Branch in your professional opinion?

15 A. Well, the over bank flow is every 1.5
16 years. That means you have close to ordinary high
17 water levels every 1.5 years. So anything over that,
18 over a certain amount of time you get over bank flow.
19 And I don't remember compactly what Mr. Manoyan's
20 testimony was, but I think the amount of flow that
21 comes through the channel is pretty significant at
22 times. It has a tendency to flood. That's why there
23 was a flood plain there.

24 Q. And Mr. Manoyan testified, I believe,

1 that the frequency of -- at least the same frequency
2 of the event depicted in these photos as he got the
3 information from wunderground.com for Salem,
4 Illinois, was .96 and he described that the frequency
5 of that into the calculation for us and he described
6 that as occurring, in his estimation, 52 times in the
7 last five years. In terms of the --

8 MR. SMALL: Is that a question?

9 JUDGE MORAN: I don't know. I haven't heard
10 one yet.

11 Q. It is going there. Looking at the flow
12 and the frequency of the flow that Mr. Manoyan talked
13 about, looking at these photos, keeping in mind the
14 drainage features, in your opinion what is the impact
15 of the site of the alleged violations, the filling in
16 of the wetlands and the filling in and channelizing
17 of Martin Branch, what is the effect on downstream
18 waters?

19 A. It increases --

20 MR. SMALL: Objection, foundation. I don't
21 think there has been anything shown at any point in
22 time in these nine days.

23 JUDGE MORAN: And again I hope that you will
24 spend a lot of time on cross examination because

1 that's the vehicle that you will have to use to
2 expose that, Mr. Small.

3 MR. SMALL: Okay.

4 BY MS. PELLEGRIN:

5 Q. You may answer the question, Ms. Melgin.

6 A. Increase the flooding downstream.

7 Q. I am sorry, can you repeat that?

8 A. Yeah, it would increase the flooding
9 potential downstream.

10 Q. And what impact, if any, would it have
11 on -- let's see, I think we have talked about
12 physical, chemical. What about biological? What, if
13 any, impact would increased flooding downstream have
14 from a biological standpoint?

15 A. Well, it would increase the sediment and
16 erosion potential downstream. It could silt in
17 habitat. It could scour out portions, ruin instream
18 channel habitat, cause trees to fall in, that type of
19 thing. It could, you know, once -- and you have the
20 impacts potentially in Lake Centralia.

21 Q. And, Ms. Melgin, in your opinion does the
22 impact you have just described, does that continue
23 still today as we sit here?

24 A. Yes.

1 there is algae growth on Lake Centralia.

2 Q. And as a hydrologist are you familiar
3 with the term "limnology"?

4 A. Yes.

5 JUDGE MORAN: I didn't get the term. What is
6 it?

7 MS. PELLEGRIN: Limnology.

8 JUDGE MORAN: Would you spell that?

9 MS. PELLEGRIN: L-I-M-N-O-L-O-G-Y.

10 JUDGE MORAN: Is that the correct spelling?

11 THE WITNESS: Yes.

12 MS. PELLEGRIN: I was an English major.
13 That's what I am good at.

14 Q. And what does that term mean to you, Ms.
15 Melgin?

16 A. It is the study of lakes.

17 Q. And, Ms. Melgin, what, if anything, do
18 you know about the limnology, any limnology features,
19 of Lake Centralia?

20 A. Well, I had a conversation with a staff
21 person in the Marion field office of the Illinois
22 Environmental Protection Agency, and we talked about
23 their sampling schedule for Lake Centralia, and he
24 talked about the various limnologic aspects of Lake

1 Centralia.

2 Q. And what did he say -- well, first of
3 all, Your Honor, I would like to go off the record to
4 put up a document to look at, an exhibit.

5 JUDGE MORAN: Okay. We can go off the
6 record.

7 (Whereupon there was then had an
8 off-the-record discussion.)

9 BY MS. PELLEGRIN:

10 Q. Okay. Ms. Melgin, you were saying
11 something about sampling stations on Lake Centralia?

12 A. Yes, that I had a conversation with a
13 person that actually takes the samples on Lake
14 Centralia.

15 Q. Okay. And that person's name is?

16 A. It is Mike Vundren. I think it is
17 V-U-N-D-R-E-N, of the Marion field office of the
18 Illinois EPA.

19 Q. And were you able to in your conversation
20 with him pinpoint where those sampling stations are
21 on Lake Centralia?

22 A. Yes.

23 Q. And if I asked you to mark them on
24 Exhibit A, could you do that?

1 that IEPA designated these sample stations, ROI-1,
2 ROI-2, ROI-3.

3 Q. And, Ms. Melgin, what, if anything, do
4 you know about any results of either of those
5 sampling stations on Lake Centralia from your
6 conversations with Mike Vundren?

7 A. Well, he told me first that Lake
8 Centralia is included in Illinois' list of core
9 lakes. That means that there is a list of lakes that
10 IEPA has that they sample on a regular basis. They
11 usually try to get there I think every three to five
12 years. A lot of states have sampling programs that
13 are on a five-year rotating cycle, but their list of
14 core lakes they try to get to every three to five
15 years. He said the last time Lake Centralia was
16 sampled might have been 2004. So it is about time to
17 get there again.

18 We talked about the three stations and
19 the data that he has for those stations. The one
20 thing that he mentioned was that station 3, the one
21 closest to the southern end, almost always exceeds
22 standards for phosphorous and TSP, and he says it is
23 because it is the closest to the water shed input.

24 Q. And by water shed input, can you remind

1 us where the -- can you remind us what the largest
2 water shed in Lake Centralia trail is?

3 A. It is Martin Branch.

4 Q. And can you remind us where Martin Branch
5 inputs into Lake Centralia?

6 A. Right there.

7 Q. And can you describe for the record, in
8 terms of sampling locations, what sampling location
9 is that closest to?

10 A. Three, ROI-3.

11 Q. Now, Ms. Melgin, have you had an
12 opportunity to view with an aerial photo what Lake
13 Centralia looks like from the air?

14 A. Yes.

15 Q. And looking at Lake Centralia in an
16 aerial photo, what, if anything, could you observe
17 about the water quality generally of Lake Centralia?

18 A. Well, I first went to Google Earth that
19 anyone can get through the internet and I looked up
20 the general Lake Centralia just to see what I could
21 find. The scale of that and on blowing it up on my
22 computer, I could see a sediment plume coming in this
23 general area from Martin Branch.

24 Now, that photo wasn't a very good

1 quality. It was a composite. So I asked one of our
2 GIS people on my staff to find me a better resolution
3 photo where I could see more clearly the area. She
4 did that and she found a photo from March 16, 2005,
5 that is very good resolution, and it shows a sediment
6 plume in this entire area.

7 Q. And by in this entire area can you just
8 describe what location that you are pointing to on
9 Exhibit A?

10 A. Well, it would be this area here and
11 through -- there is culverts. This is a road going
12 across. I think it is called Levy Road. And you can
13 start to see things moving under the road. But on
14 this photo at this time that the photo was taken, the
15 sediment plume is basically restricted to this bottom
16 area of the lake.

17 Q. Okay. Ms. Melgin, you may be seated.

18 MS. PELLEGRIN: Your Honor, I am going to --
19 I am making an effort not to be duplicative here.
20 And if I may have ten minutes to go over my notes, I
21 believe I can wrap up more quickly if I cut some
22 things out.

23 JUDGE MORAN: I appreciate that. There is no
24 sense in -- I don't know if duplicative is the right

1 word. You are an English major. I think duplicative
2 means something else, but you don't want to be
3 redundant of what is already in the record; is that
4 your point?

5 MS. PELLEGRIN: Right, I don't want to
6 duplicate Ms. Melgin's descriptions of photos that
7 Mr. Greg Carlson has already described.

8 JUDGE MORAN: That's fine. So we are off the
9 record while you take a chance to figure that out?

10 MS. PELLEGRIN: Yes, Your Honor, I would like
11 ten minutes.

12 (Whereupon the hearing was in a
13 short recess.)

14 JUDGE MORAN: We will go on the record.

15 BY MS. PELLEGRIN:

16 Q. Okay. Ms. Melgin, I asked you a number
17 of questions about biological, chemical, etc. And
18 let me just ask you, in your expert opinion as a
19 hydrologist is the site of the alleged violation
20 hydrologically connected to Lake Centralia?

21 A. Yes. We have seen water flowing from the
22 very top of the water shed through the site, walked
23 most of the channel, observed flow, saw it flowing
24 into Lake Centralia. We have seen photos of floods,

1 and flooding means the movement of water, lots of
2 water, going through downstream. That's what
3 flooding is; it is a lot of water. We have seen
4 evidence of that in the channel. We have seen debris
5 racks. We have seen woody debris. We have seen
6 sediment deposits. I have seen that. I have seen
7 fish. So, yes, the water shed site was
8 hydrologically connected to downstream Lake
9 Centralia.

10 MS. PELLEGRIN: And, Your Honor, I would like
11 to set up Exhibit H.

12 JUDGE MORAN: And about how much longer on
13 your direct?

14 MS. PELLEGRIN: Not much longer, Your Honor.
15 (Whereupon Demonstrative Exhibit
16 H was presented for purposes of
17 identification as of this date.)

18 BY MS. PELLEGRIN:

19 Q. Ms. Melgin, looking at Exhibit H which
20 Mr. Carlson has previously described polygons in the
21 gold marker, and I believe he also testified about
22 the tributaries; do you remember that?

23 A. Yes.

24 Q. And can you tell me what, if anything,

1 does this Exhibit H and what's written on here, what,
2 if anything, does that say to you about any
3 hydrological connection from this site to downstream
4 waters?

5 A. Well, the wetlands that were at the site
6 were adjacent to Martin Branch, hydrologically
7 connected through both flooding -- when Martin Branch
8 would flood, it would inundate the wetland area,
9 which is what wetlands are good at doing, is
10 accepting that flowed water and retaining it for a
11 period of time. So they are connected both by
12 surface water.

13 Also connected through the tributaries or
14 drainage areas that are marked on this photo. So you
15 have direct connections through the wetlands of these
16 old channels and other drainages that connected the
17 water from the wetlands directly to Martin Branch.

18 Also connected through ground water, high
19 water table soils, and release of any flood water
20 back into Martin Branch. Physically those wetlands
21 are connected to the channel, or were connected.

22 Q. Okay. And, Ms. Melgin, I believe you
23 testified about non-point source and point source
24 pollutants. Can you tell me, when we are looking at

1 hydrological connections, can pollutants, whether
2 point or non-point pollutants, can they travel
3 hydrologically from this site or any other sites, any
4 similarly situated lands in this area, similarly
5 situated as this site is to Martin Branch, can they
6 travel downstream to Lake Centralia?

7 MR. SMALL: Objection, Your Honor, this is
8 part of my continuing objection about point sources,
9 non-point sources, also piggybacking. There are so
10 many things, I can't even begin. Foundations for
11 that question.

12 JUDGE MORAN: Okay. But I have also -- I
13 understand your concerns. I share several of them.
14 But I have also explained to you, you know, that I
15 believe -- I believe I am correct about this. In
16 fact, I am sure I am correct about this, that the
17 approach is you have to dismantle these opinions
18 through cross examination. She is able to, you know,
19 make that grand conclusion that this question is
20 asked of her. So go ahead and answer the question.

21 THE WITNESS: Can you state the question
22 again, please?

23 MS. PELLEGRIN: Actually, can I please get
24 the court reporter to repeat the question?

1 (Whereupon the requested portion
2 of the record was read back by
3 the Reporter.)

4 THE WITNESS: Q. And, yes, that was the
5 point that I had made before about these streams and
6 water sheds being delivery systems. And the whole
7 point of hydrologic connectivity is the transfer of
8 any medium, nutrient energy mass from the headwaters
9 downstream to receiving waters.

10 BY MS. PELLEGRIN:

11 Q. Ms. Melgin, we have talked a lot about
12 again point source and non-point source pollution and
13 the impacts of this fill on downstream waters. Let
14 me ask you, in your expert opinion what's the sort of
15 practical application here to someone who may be
16 using Lake Centralia, the downstream water from this
17 site?

18 A. Well, when nutrients and sediment are
19 conveyed downstream to Lake Centralia, which they
20 have been, Lake Centralia is impaired. And the only
21 way it could get impaired is from inputs from water
22 sheds and surrounding land.

23 That has an impact on the use of the
24 lake. That is why there are water quality standards.

1 So if I was a guy fishing the lake and the dissolved
2 oxygen level was reduced due to what happens when you
3 get a lot of phosphorous, excessive phosphorous, you
4 get excessive algae blooms. When that algae dies and
5 decomposes, oxygen comes out of the water for that
6 decomposition process. The dissolved oxygen lowers.
7 That would have an effect on aquatic life, including
8 fish.

9 And there are some lakes that don't have
10 -- that have very low dissolved oxygen at some times
11 of the year and they can't sustain fish. This Lake
12 Centralia is able to do that.

13 Another thing would be if it is a
14 swimming destination. Based on the mobile guide,
15 having excessive algae bloom would not be a good
16 thing for people swimming. You don't want to swim in
17 mucky looking water.

18 So it has a real effect, I would think,
19 on the people using the lake and the surrounding
20 communities that are trying to rely on the lake as a
21 tourist destination economically.

22 Q. Ms. Melgin, in your role as a deputy
23 branch chief have you ever had occasion to comment on
24 a wetlands 404 permit?

1 A. Yes, I have.

2 Q. And have you had occasion to comment on a
3 wetlands 404 permit in a water shed where there is an
4 impaired water?

5 A. We do all the time.

6 Q. Okay. And can you tell me on what
7 occasion would you have to comment on such a permit?

8 A. Well, we -- the Army Corps of Engineers,
9 when there is a permit application, there is a public
10 notice. We comment on public notices.

11 And in our branch we have integrated our
12 wetlands and TMDL program in several ways, but one of
13 the ways is this. When a project comes in that is
14 located upstream of an impaired water or on an
15 impaired water, we automatically comment. We think
16 it is so important to not cause or contribute to the
17 further impairment of water sheds because that is a
18 big goal for EPA, is restoring impaired water sheds.
19 That's one of the big measures we have. We think it
20 is so important that 404 projects and 404 projects
21 that are going through the permit process can have an
22 impact still. Any time you fill a wetlands, you are
23 going to have an impact on water quality.

24 So we would comment, regardless if we

1 have any further comments at all on the project.
2 Even if we don't have any specific comments dealing
3 with the project itself, we will send a letter to the
4 Army Corps of Engineers saying this project is
5 located on or upstream of an impaired water. We
6 would like additional mitigation to not only mitigate
7 for the project, but to mitigate for the downstream
8 impairment so it won't cause or contribute to further
9 impairment.

10 Q. And by additional mitigation can you give
11 me an example of that?

12 A. That would be a higher ratio of
13 mitigation. So if they are going to mitigate
14 wetlands 1, 2, you know, one and a half to one, we
15 would say, depending on if it is, you know, what type
16 of wetlands, a forested wetlands, we automatically
17 increase the acreage because those take longer to
18 restore and are more difficult to restore. But we
19 might ask for two to one or sometimes two and half to
20 one depending on the type of situation and the
21 project.

22 JUDGE MORAN: So you are telling me, am I
23 correct, Ms. Melgin, that had the Hesers gone through
24 the permit process, that with mitigation requirements

1 that EPA would send via comment to the Corps of
2 Engineers, that EPA would not have said can't do it,
3 no way, no how; rather, what EPA says is, well, if
4 they are going to do this and a permit is going to be
5 issued, we want X, Y and Z for mitigation to occur?

6 THE WITNESS: No, that's not what I am
7 saying.

8 JUDGE MORAN: So are you saying you would
9 tell the Army Corps of Engineers that in no way shape
10 or form should a permit be permitted -- let's assume
11 that the Hesers went to the Corps of Engineers and
12 said we want to put an L in here. Is it your
13 testimony that EPA would be unalterably opposed to
14 that in any form?

15 THE WITNESS: Right. We would have sent,
16 like I said, a specific comment letter which would
17 have included our objection to any stream
18 modification the way that it was done. Plus telling
19 the Corps that it was on an impaired water. So in
20 this case we would have objected to the permit and at
21 the same time said, hey, and another thing, this on
22 an impaired -- this is upstream of an impaired water
23 body.

24 JUDGE MORAN: So you are saying that the EPA

1 position would be that a farmer such as the Hesers,
2 they could not alter the stream under any
3 circumstances?

4 THE WITNESS: No, of course not. That's not
5 what the permit program is for. But we would have
6 recommended a way that it could have been done or we
7 would have asked for more information or a less
8 environmentally damaging alternative to the project.

9 JUDGE MORAN: And when you say recommended a
10 way that it could have been done, could that have
11 included having the L that's there now?

12 THE WITNESS: I doubt that.

13 JUDGE MORAN: But you don't know?

14 THE WITNESS: Well, I wouldn't have approved
15 that. I would have recommended stream stabilization
16 of a natural channel.

17 JUDGE MORAN: And who has the last word on
18 that, EPA or the Corps of Engineers?

19 THE WITNESS: Well --

20 JUDGE MORAN: You put your input in; what
21 happens on it? Who decides?

22 THE WITNESS: Well, EPA has the final
23 authority. We really want to carry it all the way.
24 But what we do is we comment to the Corps and usually

1 we try to work that out with them, saying we object
2 to this project for these reasons, and we look for a
3 proper design and appropriate mitigation and
4 sometimes that's the end of it. They say, okay, we
5 agree and that's the end. If they don't, we can
6 elevate. We can do a 44Q and then we work it out at
7 a higher level. And the final is the C and those
8 aren't done very often.

9 But we have a pretty good working
10 relationship with most of our Corps district and we
11 actually try to help the applicant. That's what it
12 is for. That's what we are trying -- we have a lot
13 of technical assistance between the EPA and the Corps
14 to design the appropriate projects, and that's what
15 we try to offer people applying for 404 permits.

16 BY MS. PELLEGRIN:

17 Q. And to follow up on that question, Ms.
18 Melgin, can you tell me, if you know, if a permit
19 applicant comes in and says, gee, we have got some
20 problems, we have got this stream running through our
21 site and we have got some flooding occurring and it
22 is getting -- it is interfering with whatever it is
23 interfering with, we would like to do something about
24 that, we don't want it flooding any more on our site,

1 we want to put a backwards shaped L, we want to take
2 the forest cover away, we want to fill in that
3 channel, we want to move the channel all the way over
4 to the side and put a backwards shaped L on a quarter
5 of our property, what's your comment on that
6 situation if the landowner comes in and asks you that
7 question?

8 A. I would say that's not acceptable. For
9 one thing, you are conveying water around your
10 property and increasing the chance for downstream
11 flooding on your neighbor's property. You are taking
12 down forested wetlands and again reducing any flood
13 retention. So it is kind of the opposite. We rarely
14 -- there is -- filling in a stream channel is a
15 significant project and has a lot of water quality
16 impacts. That's why we try to comment. That's why
17 we do comment on those projects and oftentimes object
18 to that type of project and offer solutions and
19 alternatives to those type of projects.

20 Q. Okay. And, Ms. Melgin, what if you are
21 looking at a stream channel that a lot of it is not
22 pristine, there has been some channelization that's
23 occurred in the headwater part of the stream in the
24 past. It is largely an agricultural area. Does that

1 impact what you are going to tell this particular
2 landowner? Hey, these guys did it decades ago; we
3 want to do the same thing. Can we do that?

4 A. Well, that's why these -- when you have
5 an impairment on an already impacted area, the
6 wetlands and water bodies that remain there are so
7 much more important because there is not a whole lot
8 of filtering capacity left in the water shed. A lot
9 of it is gone. So the ones that are left are
10 extremely important to downstream waters and the
11 organisms that live there. There is not a lot left.

12 And when you have -- another reason for
13 the permit program is that you don't get just one
14 project like this, you could get 20 projects like
15 this if there was no permit. If you have 20 projects
16 like this along Martin Branch, there is an obvious
17 impact. That's why there is a permit program, so
18 that type of thing doesn't happen.

19 Q. Ms. Melgin, I just have a few more
20 questions. You talked earlier about --

21 (Pause.)

22 JUDGE MORAN: Go ahead, you said you had a
23 couple more questions, Ms. Pellegrin.

24 Q. I do. Ms. Melgin, we talked earlier

1 about the TMDL program and you looked at the TMDL
2 system for meeting load. I believe you said after
3 the three phases in Illinois there is -- you know,
4 let me ask you, what, if anything, happens after
5 something gets to the final phase of the TMDL?

6 A. Well, I mentioned this yesterday. They
7 submit a final TMDL to us. We generally approve it
8 because we work with the state from the draft stage
9 to the final reports. So there are no surprises at
10 the end. So a lot of times, most, all the time we
11 approve their TMDL unless there is a real problem.
12 But the real work comes after that TMDL. It is when
13 the state puts together their plan to fix the problem
14 that they have identified in the TMDL, and that is
15 called their Implementation Plan.

16 Q. And to your knowledge has there been an
17 Implementation Plan in this particular water shed,
18 the Crooked Creek water shed?

19 A. Not yet because they are only on Stage I
20 of the development?

21 Q. And do you have an understanding then
22 generally about what -- you said fix the problem.
23 How does the Implementation Plan go about fixing a
24 problem? And if I understand you correctly, we

1 talked about this before, point sources are
2 regulated, non-point sources aren't regulated or some
3 in some limited circumstances but generally aren't
4 regulated. So how does that Implementation Plan fix
5 the problem then?

6 A. The Implementation Plan comes up with
7 strategies to implement various control measures. It
8 is not regulated but there is a lot of money that's
9 directed toward these type of situations. So like I
10 talked about over \$200 billion nationwide going to
11 control non-point sources just from EPA.

12 MR. SMALL: Your Honor, I am just going to
13 object as irrelevant.

14 JUDGE MORAN: Yeah, it is sustained. You
15 have gone as far as I am going to let you go on this.

16 MS. PELLEGRIN: Okay. Your Honor, then I
17 would like to make an offer of proof for one final
18 document which is a Macoupin Creek Implementation
19 Plan that I was going to go into with Ms. Melgin.

20 JUDGE MORAN: What exhibit numbers?

21 MS. PELLEGRIN: It is Exhibit Number 38.

22 JUDGE MORAN: Not previously admitted, right?

23 MS. PELLEGRIN: Correct.

24 MR. NORTHRUP: We would not stipulate to it,

1 Your Honor, I believe, just on the grounds of
2 relevancy. It has nothing to do with this site. The
3 Macoupin Creek water shed, I think it is in Illinois
4 somewhere but it is nowhere around our site.

5 JUDGE MORAN: It is nowhere -- it is not in
6 one of the --

7 MR. NORTHRUP: It is hundreds of miles away.

8 JUDGE MORAN: Well, I have to let her do her
9 offer of proof, and then I will hear from you and
10 then I will rule.

11 This is the last question you have;
12 right?

13 MS. PELLEGRIN: Yes, Your Honor, it is.

14 Okay. My offer of proof for the Crooked
15 Creek water shed is that it is a water shed within
16 southern Illinois.

17 JUDGE MORAN: Excuse me, the Crooked Creek?

18 MS. PELLEGRIN: I'm sorry, the Macoupin Creek
19 water shed, which is Exhibit 38, is the Macoupin
20 Creek water shed is what Ms. Melgin just talked about
21 the Implementation Plan, so that after the TMDL
22 Phases I, II and III are done, there is an
23 Implementation Plan put into effect. The Macoupin
24 Creek Implementation Plan in this case is similar.

1 It is not the same water shed because, like I said,
2 the Crooked Creek isn't completed yet. This is an
3 Implementation Plan for a water shed in southern
4 Illinois, not far way from this water shed, where
5 there are similar impairments. There is phosphorous
6 impairment, there is total suspended solid
7 impairments in this water shed. Also, in this
8 particular water shed it is primarily agricultural,
9 this particular land use in this water shed, just as
10 there is in the Crooked Creek water shed which we
11 have talked about. This particular water shed talks
12 about implementation measures, measures to fix the
13 problem of non-point source pollution specifically in
14 Macoupin Creek. Those measures include wetland
15 restoration. Those methods include conservation
16 tillage, some of the things that Mr. Bill Hesel has
17 talked about that he has done on his property, filter
18 strips, quail habitat, contour farming, which Mr.
19 Daniel Hesel talked about on his property. That is
20 relevant in our case to the fact that when this water
21 shed, Crooked Creek, similar impairments, phosphorous
22 and total suspended solids, similar land uses, in
23 this particular water shed you have got an impaired
24 water and in this Implementation Plan of Macoupin

1 Creek talks about how to fix through these measures,
2 including wetland restoration, we have a wetland fill
3 in this case, and that's how it ties to our water
4 shed.

5 JUDGE MORAN: Okay. Now I will hear from the
6 Respondents.

7 MR. NORTHRUP: Okay. It is not relevant.
8 First of all, there is a geographical issue. This is
9 a hundred miles away up north in a different county.
10 Second, this is all about what you do to fix an
11 impaired water. Their complaint, they haven't asked
12 us to do anything to fix the problems of Lake
13 Centralia. We don't know -- so that's the big one.

14 But we don't know anything about Macoupin
15 Creek. Is it like Martin Branch? We just don't know
16 anything about it, so it is just not relevant.

17 JUDGE MORAN: My ruling is that I will not
18 admit this exhibit, Complainant's Exhibit 38. And
19 just so there is no mistake, I am removing it from
20 the record. Actually, it seems to me that I can't
21 imagine this being a basis for error, but I am going
22 to remove it from the record because I am not
23 considering it.

24 And counsel made her offer of proof, so

1 let's move on. Does that conclude your questions?

2 MS. PELLEGRIN: I just have one final
3 question, Your Honor.

4 JUDGE MORAN: Go ahead.

5 BY MS. PELLEGRIN:

6 Q. Ms. Melgin, Mr. Northrup just said that
7 they, and I think he is referring to U.S. EPA or Army
8 Corps of Engineers, "haven't asked us to fix the
9 problem." In terms of wetland restoration, to your
10 knowledge has U.S. EPA asked Respondents to fix the
11 problem of the wetland fill in this case?

12 MR. SMALL: Objection.

13 JUDGE MORAN: What is the base of your
14 objection?

15 MR. SMALL: Your Honor, if she is going
16 through the whole issue, the whole question, of
17 discussions back and forth between counsel, I think
18 that's totally inappropriate. And I think that's
19 where she is heading.

20 MR. NORTHRUP: Well, and I think also I
21 referenced pleadings, the complaint in this case.

22 JUDGE MORAN: I won't allow that question
23 either. So that's sustained.

24

1 BY MS. PELLEGRIN:

2 Q. Ms. Melgin, one more question, to your
3 knowledge has U.S. EPA issued an order to Respondents
4 to restore this area?

5 A. Yes, that's what I understand.

6 MS. PELLEGRIN: No further questions.

7 JUDGE MORAN: And before you begin cross
8 examination, one issue that I do want the parties to
9 brief is something that I addressed at the outset of
10 this hearing many weeks back now, which is I noted
11 that EPA in the complaint, there was not any order.
12 And as I recall, Mr. Martin indicated that that is a
13 possible action that EPA may seek, if I am
14 recollecting this correctly.

15 And so if what I have said is just
16 correct, and I would like the parties to brief the
17 issue about whether through the principle of
18 collateral estoppel or some other legal principle
19 that I am not articulating, you know, whether this
20 closes the book, so to speak, on this issue, that the
21 EPA can not wear down the wherewith all of litigants
22 with its unlimited resources by bringing seriatim
23 actions relating to the same circumstances.

24 Regardless of how this case turns out,

1 then, you know, can they then turn around and say now
2 here is our new action. It relates to seeking an
3 order enforcing restoration now, when that's not part
4 of the original complaint.

5 As I noted at the outset, the complaint
6 seeks only money. And in my experience of these
7 Clean Water Act cases of ten plus years -- that is
8 EPA cases, not exclusively Clean Water Act cases -- I
9 have noted in many of the complaints that, along with
10 the complaint seeking monetary penalties, that the
11 complaint will seek an order as well, and yet that
12 wasn't here.

13 And so I have concerns about it in the
14 sense of fairness and I believe collateral estoppel
15 whether -- you know, the whole principle behind that
16 is that all charges related to a particular event,
17 and not just in EPA but in any type of litigation, if
18 they relate to the same event, they are supposed to
19 be all litigated at once for judicial efficiency,
20 fairness to people charged with -- on the receiving
21 end of a lawsuit, and that's the concept that
22 underlies that as I understand it.

23 Okay. Are you ready to begin your cross
24 examination?

1 (Whereupon the hearing was in a
2 short recess.)

3 JUDGE MORAN: Back on the record. And during
4 an off-the-record discussion two things happened, one
5 is I did hand back EPA Exhibit, what was it, 38.

6 MS. PELLEGRIN: I am sorry, yes, Your Honor,
7 38.

8 JUDGE MORAN: As not acceptable for admission
9 in the record.

10 And the other thing is that, as best as
11 we can prognosticate at this point, this hearing will
12 continue at Monday morning here at 9:30 or at 9:00,
13 9:00 in the morning.

14 Okay. Go ahead, Mr. Small or Mr.
15 Northrup, whoever is going to start this off.

16 MR. SMALL: Thank you, Your Honor.

17 CROSS EXAMINATION

18 BY MR. SMALL:

19 Q. Is it Melgin? Am I pronouncing that
20 correctly?

21 A. Yes, you are.

22 Q. If I ask you any questions that you don't
23 understand, I will try and rephrase them.

24 A. Okay.

1 Q. Or if it is so far out of whack and you
2 need me to start over, I will start over.

3 A. I will let you know.

4 Q. Now, it is my recollection that you
5 testified that you were basically on the Andrew and
6 Bobby Hesper property, and I am going to refer to that
7 as the Hesper L property, on three separate occasions,
8 and I am lumping together March 8 and 9 as one
9 occasion. March 25 of -- all of this in this year?

10 A. Right.

11 Q. And April 29, 2007, also; correct?

12 A. No, I was never on their property.

13 Q. Okay. You were near the site and you
14 viewed the Hesper L on that date?

15 A. I did.

16 Q. So the total extent of your personal
17 knowledge regarding this Hesper L began on March 8,
18 2007; correct?

19 A. No.

20 Q. Now I am talking about your personal
21 observations of the site.

22 A. Then that's true, personal observation.

23 Q. Now, did you authorize the suit, this
24 suit that we are involved with here today?

1 A. No, I did not.

2 Q. Now, when you were on the site on March
3 8, 2007, were there any woods on the Heser L site?

4 A. No, it's gone.

5 Q. And throughout some of your testimony you
6 were talking about varying degrees of acreage but
7 something over five acres to 5.5 acres of being a
8 wooded site; is that correct?

9 A. I don't think I testified to that. There
10 was prior testimony on that.

11 Q. Okay. When you are looking at this site
12 and being disturbed, you consider this site
13 disturbed?

14 A. Yes.

15 Q. And, for instance, I will have you just
16 look at Exhibit H right now. There is a darker area
17 on Exhibit H. Do you see that?

18 A. I am not sure which dark area you are
19 talking about.

20 Q. Do you know where the Heser L is located?

21 A. Yes.

22 Q. Okay. And does that portion that sets
23 within that Heser L, is that shown on Exhibit H?

24 A. The L has been drawn in.

1 Q. Okay. And so that's a yes?

2 A. Yes.

3 Q. And is that at least a portion -- I
4 realize to the right of that L would be land owned by
5 Bill Hesper; is that correct?

6 A. Correct.

7 Q. And likewise to the outside of the
8 boundary lines of the L that would be owned by other
9 parties; correct?

10 A. That is what I understand.

11 Q. And so that dark area would be the area
12 that you considered to be the disturbed site, the
13 area within the L?

14 A. Are you talking about the large dark
15 area, not specific lines, but the shaded area?

16 Q. Correct.

17 A. Right.

18 Q. Shaded area. And is that the approximate
19 5.5 you refer to as being the disturbed site?

20 A. That's what I understand.

21 Q. But you personally didn't see the Hesper
22 logging their site, did you?

23 A. No.

24 Q. And did you hear the testimony of Danny

1 Heser?

2 A. Yes, I did.

3 Q. And did you hear Danny Heser say that
4 Bobby and Andy Heser had purchased the site after the
5 property had been logged?

6 A. I did not hear that. I don't remember
7 Danny Heser saying that.

8 Q. You don't remember that?

9 A. No, I don't.

10 Q. And did you hear the testimony of Bill
11 Heser?

12 A. Yes, I did.

13 Q. And did you hear his testimony that the
14 property which Bobby and Andy Heser had purchased had
15 been logged prior to their purchase?

16 A. I don't remember that.

17 Q. You just don't remember either one of
18 those occasions?

19 A. I may have been out.

20 Q. Okay. Now, if you were aware that the
21 property had been logged by another person prior to
22 Andy Heser and Bobby Heser purchasing that site,
23 would you consider that Bobby and Andy Heser
24 disturbed that site by purchasing land that had been

1 previously logged?

2 A. Well, you could disturb land other than
3 logging.

4 Q. I am asking you, just the mere purchase
5 of the land that had been logged, would you consider
6 them to be violators? And by them I am talking about
7 Bobby and Andy Hesel as being violators because they
8 purchased land that had been logged.

9 A. I don't think I could answer it that way.
10 I can't answer that question.

11 JUDGE MORAN: Well, he has presented you with
12 a hypothetical.

13 THE WITNESS: Well --

14 JUDGE MORAN: And the question -- let me just
15 finish. The question is a simple one. If an
16 individual purchases land that had been previously
17 logged, and that's all that's in the question, would
18 you consider such a person to be, that purchaser, to
19 be a violator?

20 THE WITNESS: Well, no.

21 JUDGE MORAN: Was that your question, Mr.
22 Small?

23 MR. SMALL: Yes, it was. And I wouldn't
24 suspect that she would.

1 Q. But I am just wondering, did you
2 personally ask Bobby or Andy Hesel if they had logged
3 this property in question?

4 A. I did not.

5 Q. Can you list to me all the people that
6 asked Bobby and Andy Hesel from your agency whether
7 or not they had logged this property prior to their
8 purchase?

9 A. I don't have -- excuse me, I don't have
10 knowledge of that.

11 Q. You don't have knowledge?

12 A. No, I don't know who asked them, no.

13 Q. Wouldn't that be something that you would
14 want to know before you began filing a lawsuit?

15 A. I wasn't involved at the very beginning.
16 It may have been asked. I just was not aware of
17 that.

18 Q. Who did start this lawsuit?

19 A. Well, it wasn't me personally.

20 Q. Who within your agency was authorized to
21 draft this complaint against the Hesers?

22 A. Well, Greg Carlson did.

23 Q. And you don't know if Mr. Carlson asked
24 the Respondents whether or not they had logged the

1 property prior to their purchase of it?

2 A. No, I don't.

3 Q. That would be an important factor, would
4 it not?

5 A. To Mr. Carlson but not so much for my
6 personal knowledge.

7 Q. You wouldn't really care whether or not
8 you had it alleged properly or not?

9 A. No. To me, that piece of information is
10 not that important to me.

11 Q. Oh, the fact that somebody had come in
12 and logged 5.5 acres of land and disturbed the land
13 as you just said it was disturbed, that wouldn't mean
14 anything to you, that wouldn't be an important
15 factor?

16 A. Well, there are a lot of different places
17 to log.

18 Q. Would that be an important factor to you?

19 A. Not in my analysis. To Mr. Carlson I am
20 sure it was, but not to my analysis.

21 Q. Would it not be important to you whether
22 or not a site had been disturbed before the
23 Respondents purchased the property?

24 A. That's why we did the aerial photo

1 investigation, to determine previous conditions.

2 Q. So you would rather look at a photo than
3 just ask them?

4 A. From my perspective that's what I did. I
5 looked at photos. I never talked to the Respondents.

6 Q. And you didn't fly those flights for
7 those photos, did you?

8 A. No.

9 Q. And you didn't know that those dates were
10 correct on those photos, did you?

11 A. I am pretty sure we have that figured
12 out.

13 Q. What do you mean figured out? There has
14 been previous testimony that we have got a 1998
15 photograph that says 1998 on it that's a 1993
16 photograph. Did you hear that testimony?

17 A. Yes, I did.

18 Q. And so wouldn't that disturb you a little
19 bit that if you are looking, you are basing your
20 whole opinion upon aerial photographs, that these
21 dates could be wrong?

22 A. Well, I base a lot of different things on
23 aerial photographs and sometimes there is a problem.
24 You figure that out by contacting the people that

1 produce the photo.

2 Q. And sometimes you are right and sometimes
3 you are wrong; correct?

4 A. Most of the time I am right.

5 Q. Okay. Well, when you were out on the
6 site, did you take any tests whatsoever of the
7 upstream portion of Martin's Branch?

8 A. What do you mean by tests?

9 Q. Did you -- well, let's just go through
10 them. Did you get any sediment within -- and when I
11 say upstream branch, I am referring to that portion
12 of Martin's Branch that is upstream from the L, okay.

13 Did you anywhere upstream of the L take
14 any samples of any sediment or soil or debris within
15 Martin's Branch?

16 A. No, I think I already testified that we
17 don't do that very often.

18 Q. You don't do that, okay.

19 JUDGE MORAN: You said very often?

20 THE WITNESS: There are some circumstances
21 that we might take samples, but on most of the time
22 we do not. We just don't have the resources to do
23 that.

24 Q. And did you take any samples of any water

1 in Martin's Branch upstream from the Hesper L?

2 A. No. It wouldn't tell me anything for one
3 time.

4 Q. And did you take any temperatures of the
5 water in Martin's Branch upstream from the Martin L?

6 A. No.

7 Q. And all of this because this costs too
8 much money; right?

9 A. That and it wouldn't tell me much for one
10 sampling point at one period of time.

11 Q. Okay. But if you -- and let's go into
12 the L itself. Did you take any sampling of any
13 sediments in the Martin's Branch L portion?

14 A. No, I did not.

15 Q. Did you take any sampling of any water in
16 the Martin's Branch L?

17 A. No, I did not.

18 Q. Did you take any kind of scientific tests
19 within Martin's Branch L?

20 A. No, I did not.

21 Q. I may have failed to ask this. Upstream
22 did you take any scientific tests of Martin's Branch?

23 A. Nothing other than my observations.

24 Q. And I could go through all this again,

1 but I am going to ask you the same questions for
2 downstream. You took no samplings of any water; is
3 that correct?

4 A. That's correct.

5 Q. Or any soil or sediment or debris?

6 A. That's correct.

7 Q. Or any other sort of samplings, did you?

8 A. I did not.

9 Q. And because this costs the U.S.
10 government money; is that right?

11 A. That's one of the reasons. But a lot of
12 the reason is there is one time when you are out
13 there in a period of time. It will just tell me
14 what's happening at that time. It might take five
15 years to get an average or an idea of the trends.

16 Q. But you didn't have time to come down and
17 look at Martin's Branch til March of 2007; correct?

18 A. Well, I had time. I just wasn't involved
19 in the case at that point.

20 Q. You just weren't that interested in it?

21 A. Well, I have other jobs. I am a manager
22 of 17 people. That's my main job.

23 Q. And, as a matter of fact, you would just
24 as soon have the Respondents spend all their money to

1 go do the testing?

2 MS. PELLEGRIN: Objection, argumentative,
3 Your Honor.

4 JUDGE MORAN: I sustain the objection.

5 BY MR. SMALL:

6 Q. Did you do any testing of -- we have
7 talked about Martin's Branch that flows into Lake
8 Centralia; correct?

9 A. Correct.

10 Q. And have you heard the prior testimony
11 that there are four other tributaries that go into
12 Lake Centralia?

13 A. There are other water sheds in Lake
14 Centralia.

15 Q. Okay. And as well as a substantial
16 number of houses on Lake Centralia; is that correct?

17 A. There are houses on Lake Centralia.

18 Q. Did you do any testing whatsoever of any
19 of those tributaries during any of your visits?

20 A. No.

21 Q. And why not?

22 A. For the same reasons I have already
23 testified to. It wouldn't have told me anything for
24 the one or two times that we were there. And IEPA

1 has data of Lake Centralia, and that's what we used.

2 Q. When you were at Lake Centralia did you
3 see houses located there?

4 A. I did.

5 Q. Did you see any public sewer system
6 around the lake?

7 A. I didn't see it, but the TMDL mentions
8 that there is a sewer system at Lake Centralia.

9 Q. Did you see septic tanks that were
10 discharging into Lake Centralia?

11 A. I usually don't see septic tanks.

12 Q. Did you see the laterals that came from
13 the septic tanks going into Lake Centralia?

14 A. No.

15 Q. And is that because you weren't really
16 looking for them?

17 A. We were just getting an idea of the area.
18 I wasn't looking for septic tanks.

19 Q. Septic tanks could be discharging
20 phosphorous into that lake, could they not?

21 A. They could.

22 Q. If you washed your car or your boat, that
23 would contain phosphorous, would it not?

24 A. Some detergents do. Some say they don't

1 contain phosphorous.

2 Q. And if it then rained, it would flow into
3 Lake Centralia; is that right?

4 A. That's a non-point source of pollution.

5 Q. Now, are you familiar with Bill Hesel's
6 straightened stream project?

7 A. No, I am not.

8 Q. You are not familiar with -- are you
9 familiar with the Bill Hesel land which adjoins the
10 Hesel L?

11 A. Yes.

12 Q. And I thought you had indicated that you
13 had walked up the upstream portion of Martin's
14 Branch?

15 A. I have.

16 Q. And did you stop at the location where
17 Bill Hesel had had a project where dirt was removed
18 and trees were removed from that area?

19 A. Are you talking about his Conservation
20 2000 Program?

21 Q. Okay, we will refer to it as that. I
22 call it the straightened stream area. Do you see any
23 trees in that area?

24 A. No, that's an agricultural field.

1 Q. Do you know if there were any trees there
2 previously?

3 A. I don't know.

4 Q. Is this the sort of riparian corridor
5 that you like to see on the conservation project we
6 just referred to?

7 A. Well, the conservation project isn't a
8 riparian corridor project.

9 Q. Well, you mentioned a riparian corridor,
10 and I think you said you would like to have trees
11 along Martin's Branch, you would like to have them
12 all the way down to Lake Centralia, wouldn't you?

13 A. That would be great.

14 Q. But with this particular project along
15 the Bill Hesper property there aren't any trees along
16 that stream, are there?

17 A. No, the purpose of the project in the
18 Conservation 2000 Program itself is to reduce
19 gullying and rill erosion created by farm land. So I
20 would expect trees not to be an issue here.

21 Q. And so trees would not be an important
22 part of that project then?

23 A. Not this specific project. But other
24 projects they definitely would be.

1 Q. Are you aware that the trees that were
2 moved from that project were pushed into the woods on
3 the Bill Hesper property?

4 A. No, I am not.

5 Q. You walked by and you didn't see them?

6 A. There were a lot of downed trees in the
7 channel and other places for erosion. I wasn't
8 there. I didn't notice where they came from when
9 they were pushed there.

10 JUDGE MORAN: Let me just -- I want to make
11 sure I understand this. There were a lot of downed
12 trees in Bill Hesper's portion of the channel?

13 THE WITNESS: The whole -- the channel from
14 the headwaters all the way down had some woody debris
15 in the channel from big cuts and unstable slopes.

16 JUDGE MORAN: I am asking you about what you
17 just stated. Were you telling me that there were a
18 lot of downed trees in the Bill Hesper portion of the
19 channel?

20 THE WITNESS: Not the Conservation 2000
21 Project. There are no downed trees or anything in
22 that except trash.

23 JUDGE MORAN: Nothing is growing there?

24 THE WITNESS: No.

1 JUDGE MORAN: But in other parts of the
2 channel you saw a lot of downed trees?

3 THE WITNESS: There were downed trees in
4 certain parts of the channel. We have pictures of
5 those and things that I think Greg Carlson had
6 showed.

7 BY MR. SMALL:

8 Q. Let's get into that. A little bit closer
9 to the Hesper L there are some woods that are owned by
10 Bill Hesper?

11 A. Correct.

12 Q. And Martin's Branch runs through that?

13 A. Correct.

14 Q. And I believe your exact language was it
15 was a typical stream in an agricultural land, does
16 that sound right?

17 A. Yes.

18 Q. That portion of the stream had been
19 straightened previously; is that correct?

20 A. That's what we were saying, from several
21 decades ago.

22 Q. Do you remember seeing that?

23 A. Yes, I do.

24 Q. Does it look like it had been

1 straightened?

2 A. We saw the dredge spoils that the trees
3 were growing on, but the stream itself was starting
4 to re-meander, like I had said before.

5 Q. Beginning to re-meander; is it mainly
6 straight?

7 A. No, there is quite a bit of little turns
8 in there now. That's what happens.

9 MR. SMALL: Permission to approach the
10 exhibit?

11 JUDGE MORAN: Yes. And let me make sure I
12 understand it. When you are talking about how it is
13 beginning to meander and that's what happens and it
14 was previously straight, you are talking about Bill
15 Heser's property?

16 THE WITNESS: Right, not the CPP project, but
17 downstream of that, the wooded riparian area.

18 JUDGE MORAN: Right. But my point is you are
19 not talking about the Bobby and Andy, the Heser -- we
20 are not talking about the Hesers who are involved in
21 this action; right?

22 THE WITNESS: Right.

23 JUDGE MORAN: Go ahead.

24 BY MR. SMALL:

1 Q. And I am going to point to you on Exhibit
2 H, do you think this is a fair representation that
3 this would be the Hesper L?

4 A. Yes.

5 Q. And would this represent the portion that
6 we were just talking about?

7 A. Yeah, that is an ascending path, but yes.

8 Q. And so you would describe that section as
9 being meandering?

10 A. Well, compared to the straight stretch of
11 the L, it definitely is.

12 Q. So from here to here you think that is
13 more meandering than it is straight?

14 A. Yes, that stream is starting to meander.
15 And it is difficult to tell. I mean, this isn't --
16 you know, this is a drawing. So we walked the entire
17 channel. We walked quite a few events. It
18 definitely was straightened in the path. Like it
19 says, that was the typical agricultural practice.

20 Q. You are not saying that this drawing is
21 inaccurate, are you?

22 A. No, I am saying that it looks different
23 on the ground than it does in a line on the map.

24 Q. Now, Greg Carlson has indicated in his

1 previous testimony that this is not a pristine
2 stream, Martin's Branch?

3 A. Correct.

4 Q. Do you think it is a pristine stream?

5 A. I think I testified that it is very
6 difficult to find a pristine stream in Illinois.

7 Q. The question was do you --

8 A. No. Or, yes, no, I don't consider it a
9 pristine stream.

10 Q. And let's go down to the Hesper L. You
11 described it as grassy with some woody plants, I
12 guess?

13 A. I think I said shrubs.

14 Q. Shrubs. And you indicated it was very
15 flat?

16 A. Yes.

17 Q. Now, would an emerging wetland be
18 something that you would like, that you think is
19 favorable to the environment?

20 A. Yes, but not in a stream channel.

21 Q. Now, you indicated, did you not, that
22 there was an emerging wetland within the L; is that
23 correct?

24 A. I said it is starting to have the

1 properties more of an emerging wetland than it is a
2 stream. There are cattails starting to come up in
3 the bottom.

4 Q. And cattails, as a matter of fact, do
5 absorb pollution; do they not?

6 A. Most vegetation does.

7 Q. The vegetation of the cattails absorbs
8 it; correct?

9 A. Cattails is vegetation.

10 Q. So that's a yes?

11 A. Yes.

12 Q. And would you agree with the
13 representation that, generally speaking, in the Hesper
14 L the water flows slowly?

15 A. During low flow period it flows slowly.

16 Q. And that's why you would have an emerging
17 wetland coming out of that; correct?

18 A. You have water standing there because it
19 is so flat during low flow periods.

20 Q. Now, do you agree with the premise that
21 if a line is lengthened out, that if there is flow in
22 that line, that it will slow down as opposed to a
23 shorter stretch of stream?

24 A. During low flow that's true.

1 Q. Now, you also testify that it was the
2 Hesers' intent to use the Hesper L to get the water
3 the quickest from point A, which would be the
4 upstream portion, to point B, where it exits into
5 Martin's Branch natural stream; is that correct?

6 A. That's usually the point of a linear
7 channel.

8 Q. Well, no, it is not. I am not asking you
9 whether or not that is the point. I am asking you
10 how do you know that, that it was the Hesers'
11 position that they wanted the water to move as
12 quickly as possible from point A to point B? How do
13 you know that?

14 A. From my experience with channels that are
15 created and engineered in this manner in agricultural
16 fields, there is no other purpose for artificial
17 channels than to convey water.

18 Q. But the question is not to convey water;
19 the question is to speed it up. You want it as fast
20 as possible from A to B. That's what you said;
21 correct?

22 A. Because during high flows they would have
23 put in some structures to slow the water down.

24 Q. So then they wouldn't want to be speeding

1 it up, would they?

2 A. Well, you said that's how I knew that,
3 because there aren't any structures in the channel.
4 There is no way to slow water down during high flow.

5 Q. Did you ask either of the Hesers here,
6 Bobby or Andy, if they wanted to get the quickest
7 flow of water from point A to point B through their
8 L?

9 A. No, I didn't.

10 Q. As a matter of fact, if they were
11 constructing that L and that's exactly what they
12 wanted, would they not have put more slope from
13 upstream to downstream?

14 A. They could have.

15 Q. Okay. I would like to talk a little bit
16 about Lake Centralia. You indicated it is in a flood
17 plain area?

18 A. Lake Centralia is in a flood plain area?

19 Q. Yes.

20 A. No, I don't think I said that.

21 Q. Do you remember saying that it has lots
22 of muck?

23 A. That's Martin Branch where it enters Lake
24 Centralia. Martin Branch has a flood plain.

1 Q. Do you remember seeing lots of sediment
2 upstream from the Hesper L?

3 A. There is sediment upstream from the
4 Hesper L.

5 Q. Where did that come from?

6 A. From non-point source pollution from the
7 surrounding agricultural fields.

8 Q. So there is sediment, that's pollution,
9 coming from upstream of the Hesper L into the Hesper L
10 and then downstream; correct?

11 A. That's the hydrologic connection from
12 upstream to downstream through the site.

13 Q. Now, at Lake Centralia you indicated that
14 there was lots of tangled roots; is that correct?

15 A. I don't think I said anything about
16 roots.

17 Q. Sorry to pop around here, but I want to
18 go back to that conservation project again of Bill
19 Hesper's. You indicated that that was approaching the
20 headwaters of Martin's Branch; is that correct?

21 A. Yes.

22 Q. And it was kind of a grassy area? I
23 don't know how else to describe it?

24 A. That's a good way.

1 Q. And that you couldn't see the water
2 because grass was so tall, I guess?

3 A. That's one of the reasons, yes.

4 Q. Did you check for multiple channels up
5 there on Bill Heser's property?

6 A. No.

7 Q. So you don't know if there were multiple
8 channels up there?

9 A. No, water was flowing through the grass
10 area. So by the time it came out of that CPP project
11 it was -- you know, it was re-established in the
12 natural channel.

13 Q. Did you personally perform any biological
14 tests on plants or organisms?

15 A. No.

16 Q. On any of your three occasions?

17 A. No.

18 Q. And that would include upstream from the
19 Hesper L?

20 A. Right. I can predict from hydrological
21 theory what I would expect to find there.

22 Q. And within the Hesper L you did not do any
23 testing there?

24 A. No.

1 Q. Nor any testing downstream from the Hesper
2 L; correct?

3 A. Right, other than what we observed, the
4 organisms that we observed.

5 Q. Did you perform any biological tests on
6 plants or organisms in Lake Centralia?

7 A. No, other than speak to fishermen.

8 Q. And did you hear the previous testimony
9 of Mr. Carlson regarding migration of animals?

10 A. Yes, I did.

11 Q. Do you think Bill Hesper's conservation
12 project where the trees are removed causes a problem
13 with the migration of animals?

14 A. I think part of that habitat was
15 specifically for quail which is why some of those --
16 the grass was planted there. So, but, you know, any
17 time that you don't have trees, it could cause a
18 problem for a specific species. Some species use low
19 grass. Some species use trees and riparian
20 corridors. Usually the more cover you have, the
21 better that is.

22 Q. And, as a matter of fact, animals will
23 move at night whether or not they have trees or not;
24 correct?

1 A. Some do.

2 Q. And that's probably why when you drive
3 along you see all these dead animals on the road;
4 right?

5 A. And the corridor was interrupted.

6 Q. Because they don't have any trees there.
7 But they are still moving around, aren't they?

8 A. That's because the road intersected their
9 habitat corridor. That's why they have wildlife road
10 crossings in some places.

11 Q. Now, do you recall looking at the
12 videotape?

13 A. Yes, I do.

14 Q. And you remember looking at the Hesper L?

15 A. Yes.

16 Q. And it was dry in that L; was it not?

17 A. Yeah, except for that one spot.

18 Q. One remnant pool, we will call it, on the
19 north end of the L. Did it appear that -- how deep
20 did that channel appear to you?

21 A. A couple feet, maybe. It is hard to tell
22 from the video.

23 Q. Oh, that's right, you didn't see it. You
24 are just looking at a videotape; correct?

1 A. That and some other photos. But that's
2 definitely -- if we would have had access to the
3 property, it would have made it a little bit easier
4 for me.

5 Q. Now, you saw riprap down at the Old Salem
6 Road crossing?

7 A. Yes.

8 Q. Riprap is used to, what, slow the water
9 down?

10 A. Well, riprap has several -- it can be
11 used as an energy dissipator which can be used to
12 slow water down if you put it in the path of water.
13 But most of the time riprap at road crossings is used
14 to stabilize the banks.

15 Q. Riprap can slow water down; is that
16 correct?

17 A. If water flows around the riprap. I
18 mean, I am used to riprap slowing down like you have
19 a culvert discharging and you have riprap at the
20 bottom so that when the water flows over the culvert,
21 it doesn't scour. The riprap sort of dissipates the
22 energy and then releases it. Most road crossings and
23 I have seen a lot of road crossings that use it for
24 stabilization.

1 Q. If you know, was there any permit that
2 was requested for putting this riprap in by the state
3 or township commissioner at the Old Salem Road
4 crossing?

5 A. I don't know. If that would have been
6 done, a nationwide permit by the Corps of Engineers
7 would have been issued.

8 Q. Excuse me.

9 A. Oh, sorry.

10 Q. Now, I think your testimony was also that
11 there was some scouring of the banks north of the
12 Heser L?

13 A. Yes.

14 Q. And that is caused by erosion?

15 A. Yes.

16 Q. Of water coming down?

17 A. Yes.

18 Q. And that would be part of the siltage or
19 sediment that might ultimately end up in Lake
20 Centralia?

21 A. Water carries sediment, yes.

22 Q. And that was coming from the natural
23 section of Martin's Branch north of the Heser L;
24 correct?

1 A. Flow comes from the water shed, in the
2 upper parts of the water shed, and moves its way
3 down.

4 Q. And that's in a meandering stream, as you
5 called it. You just called it -- you said that
6 wasn't straight. That was meandering?

7 A. Yep, erosion happens in a meandering --

8 Q. That's still eroded?

9 A. That's what streams do. They carry water
10 and they deposit and they erode.

11 Q. Now, I believe you indicated that one of
12 the sources of pollution or impairment of Lake
13 Centralia is phosphorous?

14 A. That's correct.

15 Q. As a matter of fact, phosphorous can be
16 transported by air, can it not?

17 A. It can be.

18 Q. As well as water?

19 A. Precipitation. Okay, I see what you are
20 saying.

21 Q. And you are familiar with the Lake
22 Centralia water shed where we have got all these
23 different tributaries, five different tributaries,
24 coming into the lake?

1 A. Yep.

2 Q. Are there any farm operations along any
3 of those other tributaries?

4 A. Sure, there are.

5 Q. And are there livestock operations there?

6 A. That I am not aware of. I am not aware
7 of that. There may be. I am just not aware of that.

8 Q. You just don't know?

9 A. I don't know.

10 Q. Now, you were talking about two -- and I
11 don't want to misinterpret this -- but two slight
12 channels that were on the Hesper property that you
13 said went into Martin's Branch; is that correct?

14 A. Are you talking about the drainage
15 features that we observed?

16 Q. Yes, drainage features.

17 A. Yes.

18 Q. And I think you indicated that they were
19 no wider than a foot and no deeper than six to eight
20 inches?

21 A. Correct.

22 Q. Now, I am not a farmer. Are you a
23 farmer?

24 A. No, I am not.

1 Q. But to the best of your knowledge is this
2 a common practice that farmers use throughout this
3 whole area?

4 A. It is common in areas that have, you
5 know, wet soils and have to get water off the fields.
6 That's what they are used for.

7 Q. And are you aware that those are
8 constructed so that they are pushed down so that they
9 are hardened so that they don't carry soil away from
10 those areas?

11 A. They are compacted you saying? The
12 drainage features are compacted?

13 Q. Is that correct?

14 A. I don't know. I don't know if they are
15 compacted or not.

16 Q. Do you believe them to be compacted?

17 A. There are features that I wasn't able to
18 go on the property and look at physically and see if
19 the bottom of those drainage features were compacted.
20 But just because they are compacted doesn't mean that
21 they won't scour.

22 Q. Do you think it would be preferable for
23 water just to run off a field naturally and erode
24 soil into Martin's Branch, instead?

1 A. Well, dependent on if it was being
2 directly discharged to Martin Branch or if it was
3 running through a filter strip or other types.
4 That's non-point source pollution running off a field
5 into a water body, which is why you would want these
6 control measures.

7 Q. So water flowing off of a field, wherever
8 it goes, is just its natural condition; correct?

9 A. If water flows on a field, it finds its
10 way out.

11 Q. And so if water is on a field and it
12 drains away, it is just naturally draining whichever
13 way it drains; correct?

14 A. Correct.

15 Q. Bobby and Andy Heser didn't tell you not
16 to come on their property, did they?

17 A. Not me personally.

18 Q. No. Did you ever see Bobby or Andy Heser
19 fill any stream or if you want to call it a stream,
20 Martin's Branch, from the top of the L to the exit of
21 the L?

22 A. No.

23 Q. As a matter of fact, you don't even know
24 if there was a stream there, do you?

1 A. Well, from --

2 Q. Personally.

3 A. Personal knowledge of it in aerial photos
4 and talking with people. I was not on the site
5 before the violation occurred.

6 Q. So the answer is no, you don't know?

7 A. I didn't observe the natural channel
8 before it was gone.

9 Q. So you can't testify as to 1800 feet of
10 Martin's Branch being filled, can you?

11 A. I didn't see it being filled.

12 Q. Or if it was filled, by whom; correct?

13 A. Correct.

14 Q. Likewise, on any of these borings for
15 wetlands that were done by Mr. Lenz, you were here
16 for his testimony, were you not?

17 A. Yes.

18 Q. And Mr. Carlson, you were here for his
19 testimony, also?

20 A. Yes.

21 Q. You didn't do any borings yourself, did
22 you?

23 A. No.

24 Q. Did you check any of their work?

1 A. No.

2 Q. So you are totally relying upon what
3 their work product is?

4 A. That's right.

5 Q. You didn't see any woods being cleared,
6 did you?

7 A. Not personally, no.

8 Q. Now, Lake Centralia, I think you
9 indicated, is impaired by phosphorous and we talked a
10 little bit about that?

11 A. That's one of the pollutants, yes.

12 Q. Manganese; is that correct?

13 A. Yes.

14 Q. And that's naturally occurring, so that
15 could come from anywhere?

16 A. It comes through soil transport.

17 Q. And then total suspended solids; is that
18 correct?

19 A. Yes.

20 Q. And total suspended solids could be
21 leaves that could be from trees that Martin's Branch
22 goes through?

23 A. Well, it is a combination of sediment and
24 leaves and organisms.

1 Q. Right. I am going to just start with
2 leaves, for instance. Leaves come from trees that
3 Martin's Branch flows through; correct?

4 A. Right, that's would be organic matter.

5 Q. And it can be soil or sediment?

6 A. Right.

7 Q. And that's like what we just talked about
8 that was upstream from the Hesper L; there was
9 sediment there?

10 A. All through the channel.

11 Q. All through the channel. And chemicals;
12 right?

13 A. Right.

14 Q. And chemicals come from everywhere?

15 A. Could be, yes.

16 Q. Could be the guy that's driving down
17 Highway 37 and he loses the load or whatever, it goes
18 into the ditch. That could happen. Or somebody
19 cutting the grass along Interstate 37 or the salt
20 truck coming along and dumping salt on the road in
21 the winter, all that ends up in Martin's Branch?

22 A. That's correct.

23 JUDGE MORAN: Okay. Because you were just
24 nodding for awhile there, I want to make sure that

1 you verbalize your responses.

2 Q. Did you see the Hesers filling any part
3 of Martin's Branch during any of your visits?

4 A. No. Like I said, I wasn't there when the
5 violation occurred.

6 Q. I am just asking about your visits, you
7 know, the ones that you were at.

8 A. Okay, I understand.

9 MR. SMALL: Judge, I think I will just do
10 another brief few questions, and then it would be a
11 natural breaking point.

12 JUDGE MORAN: Sure, that's fine.

13 BY MR. SMALL:

14 Q. I am going to refer you to Complainant's
15 Exhibit Number 27.

16 A. Okay, I am there already.

17 Q. And I want you to look at page 458.

18 A. Oh, right there, okay. I am there.

19 JUDGE MORAN: But I am not. Just give me one
20 second. 27, 458?

21 MR. SMALL: Correct.

22 JUDGE MORAN: Let's just wait til -- the EPA
23 counsel, are you there yet?

24 MS. PELLEGRIN: No, I am not there, Your

1 Honor.

2 MR. SMALL: I need to change the map.

3 JUDGE MORAN: Okay. We are all there?

4 MS. PELLEGRIN: Yes.

5 BY MR. SMALL:

6 Q. Now, looking at that picture, is that a
7 picture of Lake Centralia?

8 A. Yes.

9 Q. And, as a matter of fact, is that the
10 area where you said there was some algae in the
11 water?

12 A. That's what the photo shows, yes.

13 Q. Is that what you think it is?

14 A. Algae floating on the surface.

15 Q. And that other plant there in the
16 left-hand side of that photograph, is that reed
17 grass?

18 A. Phragmites.

19 Q. I am not a scientist, so.

20 A. And I am not a botanist. I know it is
21 phragmites, and that's what I am going to say it is.

22 Q. Looking at the middle of that photograph,
23 do you see what appears to be a concrete dam of some
24 sort?

1 A. Sure.

2 Q. Okay. Now, and if you are familiar, is
3 that the dam for Lake Centralia?

4 A. Yes.

5 Q. And for the first time today I heard that
6 the dam is up here; is that correct?

7 A. No, no, that's the monitoring station. I
8 said it is near the spillway. Yeah, the monitoring,
9 that I have the picture from IEPA, the sampling
10 station, is generally in that location?

11 Q. And is this where the damn is located,
12 where that water color changes?

13 A. No.

14 Q. Is this the dam right here?

15 A. Yes.

16 Q. So it is closer to the dam; is that
17 right?

18 A. It would be.

19 Q. Where we have got this algae and --

20 A. Yeah.

21 Q. Because I thought your testimony before
22 that was it was in a different location.

23 A. What was?

24 Q. This algae and the grass.

1 A. I think it was near the spillway. That's
2 where.

3 Q. Well, the spillway would be right here;
4 right?

5 A. Right.

6 Q. So we are talking up here. I just want
7 to clarify it. So this is right?

8 A. I just want to make sure that I
9 understand. That ROI-1 is the location of -- the
10 approximate location of the IEPA sampling point.

11 Q. Right. And where Martin's Branch
12 actually comes into it is down here on the other end
13 of the lake?

14 A. That is correct.

15 JUDGE MORAN: So just for the purposes of the
16 record being clear, this dam that you believe is
17 reflected in CX458.

18 THE WITNESS: Right.

19 JUDGE MORAN: That dam is actually on the
20 left most portion, upper left most portion of Lake
21 Centralia in the area that is a lighter blue.

22 THE WITNESS: It is on the western edge of
23 that.

24 JUDGE MORAN: The western edge?

1 THE WITNESS: Uh-huh.

2 JUDGE MORAN: About as far away as you can
3 get, fair to characterize it, from where Martin
4 Branch enters Lake Centralia?

5 A. That's right. That's where it flows back
6 down into Martin Branch and into Crooked Creek.

7 MR. SMALL: This would be a nice stopping
8 point.

9 MR. NORTHRUP: Wait a minute.

10 MR. SMALL: A few more questions.

11 Q. Again referring to page 458, you see the
12 portion that you said was the concrete that appears
13 to be the dam?

14 A. Yes.

15 Q. In the right-hand portion of that from
16 where that concrete goes across there appears to be
17 some kind of structure there. Do you know what that
18 is?

19 A. No.

20 Q. And to the best of your knowledge is this
21 where the primary source of algae and reed grass is
22 located in Lake Centralia?

23 A. Oh, that's not what I understand from
24 IEPA.

1 Q. But from your personal knowledge?

2 A. No, I haven't -- I didn't take this
3 photo.

4 Q. So you don't know anything about this,
5 other than you are looking at a photograph again?

6 A. That's right. I didn't take the photo.

7 MR. SMALL: Thank you. That's all for right
8 now, Your Honor.

9 JUDGE MORAN: Is that true, Mr. Northrup?

10 MR. NORTHRUP: That is true.

11 JUDGE MORAN: All right. It is 12:32 so we
12 will begin at 1:35.

13 (Whereupon the hearing was in
14 recess until 1:35 p.m.)

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1 A. Yes.

2 Q. If you have too much phosphorous, can
3 that have the effect of lowering the amount of oxygen
4 in the water?

5 A. Yes.

6 Q. I want to refer you to page 507 of that
7 exhibit.

8 MS. PELLEGRIN: I am sorry, what page?

9 MR. SMALL: 507.

10 A. Okay.

11 Q. And referring to the very top part of
12 that page, it says Table 5.1. Would you read the
13 caption there?

14 A. Existing DO, which is the amount of
15 oxygen, Data for Crooked Creek Water Shed, Paris
16 Stream Section.

17 Q. And underneath that table isn't it a fact
18 that they list three creeks that have this issue and
19 that being Crooked Creek, Little Crooked Creek and
20 Plum Creek Segment; is that correct?

21 A. That's correct.

22 Q. Do you see Martin's Branch listed there
23 anywhere?

24 A. No.

1 Q. As a matter of fact, you are familiar
2 with this document?

3 A. Yes.

4 Q. Martin's Branch is not listed anywhere in
5 this document, is it?

6 A. Just it is listed as a description of
7 Lake Centralia.

8 Q. But, as a matter of fact, let's go
9 through that a little bit because when I heard you
10 testifying earlier, I am not certain I was clear with
11 what you were saying.

12 Martin's Branch flows into Lake
13 Centralia; is that correct?

14 A. Yes.

15 Q. And then from Lake Centralia, if it
16 overflows the dam, if it overflows the dam, then it
17 goes to Crooked Creek?

18 A. Well, there is a stretch of Martin Branch
19 still below the spillway that flows into Crooked
20 Creek.

21 Q. But it does go to Lake Centralia first
22 and then to Crooked Creek; correct?

23 A. Yes, Martin Branch was impounded. That's
24 how the lake was created.

1 Q. And that was some time ago; that was in
2 the early 1900s, right, when Lake Centralia was
3 formed?

4 A. Yes.

5 Q. 1910 or thereabouts?

6 A. 1910.

7 Q. So over a period of time all kinds of
8 things could have come into Lake Centralia that would
9 reflect what this report has in May of 2006; correct?

10 A. The part of this report that is concerned
11 with Lake Centralia, yes. The water shed inputs to
12 the lake occurred.

13 Q. I would like you now to refer to page 526
14 of that same document.

15 A. Okay.

16 MR. SMALL: Can I go off the record for just
17 a minute?

18 JUDGE MORAN: Yes.

19 (Whereupon there was then had an
20 off-the-record discussion.)

21 JUDGE MORAN: We will go back on the record.

22 BY MR. SMALL:

23 Q. Referring to page 522.

24 A. Okay.

1 Q. There is a segment called 5.3.1.1 and it
2 is labeled Crooked Creek Segments. Do you see that?

3 A. Yes.

4 Q. And would you read the first sentence of
5 that section?

6 A. It says, Municipal and Industrial Point
7 Sources.

8 JUDGE MORAN: I am lost as to, what location
9 are we at?

10 Q. No, 5.3.1.1.

11 A. Oh, I'm sorry, Crooked Creek Segments
12 OJ-07 and OJ-08.

13 JUDGE MORAN: That's why I was confused,
14 because I didn't see that.

15 BY MR. SMALL:

16 Q. Would you please read the first sentence
17 of that section?

18 A. "There are 18 point sources within the
19 sub basins for Crooked Creek Segment OJ-07 and
20 OJ-08." Do you want me to keep reading?

21 Q. Okay. And it goes on to say that this is
22 for impairments of the pH level and the dissolved
23 oxygen; is that right?

24 A. It does for Crooked Creek, not Lake

1 Centralia.

2 Q. Okay, Crooked Creek, that's correct.

3 Now, referring to page 522 and 523, do you see any
4 indications that any of these point sources are on
5 Martin's Branch water shed streams?

6 A. No.

7 Q. I would like you to refer now to Exhibit
8 Number 36.

9 A. Okay.

10 Q. Referring to page 808, could you read me
11 the first line, what this report is?

12 A. The report is the Illinois Integrated
13 Water Quality Report, Section 303(d) List 2006.

14 Q. And what is the date on that report on
15 that front page?

16 A. April 2006.

17 Q. I would like you to refer to page 817 in
18 that document.

19 A. Okay.

20 Q. And about in the middle of that page
21 there are various designations that indicate Crooked
22 Creek. Do you see that?

23 A. Yes.

24 Q. And in the area where it says Causes

1 Addressed, under the Crooked Creek section, do you
2 see the terms "phosphorous," "manganese" and
3 "dissolved oxygen"?

4 A. Yes, among others I see those.

5 Q. Do you see any soil sedimentation listed
6 there?

7 A. Just down at the bottom where it says
8 TSF, total suspended solids, and
9 sedimentation/siltation.

10 Q. And that would be at the city of
11 Nashville; right?

12 A. I am just looking -- you asked to look at
13 Crooked Creek so that's what I am looking at,
14 segments of Crooked Creek.

15 Q. But the section that you have cited, you
16 are talking about the city of Nashville which would
17 be about 50 miles away from the Martin's Branch water
18 shed; correct?

19 A. Right. I guess that's right because this
20 doesn't say Nashville, which I think is the adjacent
21 water shed.

22 JUDGE MORAN: I am sorry?

23 A. Oh, sorry.

24 Q. I would like to refer to page 821. And

1 referring to the second, third and fourth references
2 from the top, do you see what I am talking about?

3 A. Yes, I do.

4 Q. Where it says segment named Centralia?

5 A. Yes.

6 Q. Let's start with the first one. The
7 first impairment on that was what?

8 A. Okay. Impaired designated use are you
9 talking about?

10 Q. Yes, impaired designated use.

11 A. Aesthetic quality.

12 Q. Okay. So it is how it looks or how it
13 smells?

14 A. Correct.

15 Q. And the potential cause is phosphorous,
16 and would you read potential sources for me, why that
17 would be?

18 A. Sure. "Potential sources are onsite
19 treatment systems, septic tanks, septic systems and
20 similar decentralized systems, crop production, crop
21 land or dry land, urban runoff, storm sewers."

22 Q. Okay. Now let's go to the next line.
23 Again that says Centralia?

24 A. Correct.

1 Q. And the impaired designated use is again
2 the aesthetic quality; correct?

3 A. Yes.

4 Q. And in that particular case the
5 impairment is what?

6 A. Total suspended solids.

7 Q. And that also is crop production;
8 correct?

9 A. That's one of the potential sources.

10 Q. Then let's go down to the third one and
11 that again says Centralia?

12 A. Yes.

13 Q. And impaired designated use is the --

14 A. Public water supply.

15 Q. And you have testified already that Lake
16 Centralia, this would be a third source?

17 A. That's what I understand.

18 Q. And you can't testify, you don't know, if
19 they use that source any more?

20 A. I can not.

21 Q. And the cause there is manganese?

22 A. Yes.

23 Q. And the source is unknown; correct?

24 A. Well, according to this, yes.

1 Q. That's what it is listed as?

2 A. Right.

3 Q. And manganese is naturally occurring; is
4 that correct?

5 A. Yes, like a lot of elements.

6 Q. And I believe your prior testimony was
7 that you believe that most of the pollution for Lake
8 Centralia is caused by non-point source pollution;
9 correct?

10 A. Correct.

11 Q. Can you explain to me the difference why
12 one report would indicate that suspended solids were
13 a potential cause and the other report would not?

14 A. Sure, I can.

15 Q. And I don't need a big long explanation
16 of it, but can you tell me why that would be between
17 the two reports?

18 A. This is an Integrated Report listing
19 impairments. The Crooked Creek TMDL Stage I Report,
20 like I said, Illinois has not developed TMDLs for
21 pollutants that do not have numeric standards. TSS
22 does not have a numeric standard. Of those listed,
23 the TMDL is not built at this time.

24 Q. I would like to refer you to Exhibit

1 Number 48, please.

2 A. Okay.

3 Q. I would like you to look at picture
4 number -- excuse me, this is on page 1388.

5 A. Right.

6 Q. I would like you to look at the picture
7 that is labeled 7362, please.

8 A. I see it.

9 Q. And isn't it a fact that that is Bill
10 Heser's filter strip?

11 A. I am not -- it is his land. I am not
12 sure if it is the exact location of the filter strip.
13 I know it is in there somewhere.

14 Q. Does that look like it is a properly
15 functioning filter strip to you?

16 A. To me a properly functioning filter strip
17 means that it slows water and let's the water absorb
18 into the vegetation before it reaches a stream body.

19 Q. In this particular picture there is water
20 all over the place, isn't there?

21 A. Yeah.

22 Q. And it appears to have several different
23 channels?

24 A. Water is on the property. I can't tell

1 how many channels. I can tell that there is water in
2 different places.

3 Q. Can you tell that there is multiple
4 channels there?

5 A. I don't know if those are channels. I
6 think the water is sitting on a field. It is kind of
7 a blurry picture to begin with but, like I said,
8 water goes onto fields and finds its way out. But
9 from this photo, water is not moving on this photo.
10 So it just looks to me like it is there.

11 Q. Did you do any testing while you were at
12 the site on any occasion?

13 A. No.

14 Q. To see if that particular filter strip
15 was functioning properly?

16 A. No, other than information we have
17 received from Burke Davies.

18 Q. And again the reason for that would be
19 cost allocation?

20 A. That's one of them. Others, it doesn't
21 tell us much to be out there one time.

22 Q. And if you would have done it multiple
23 times, would it have not helped you?

24 A. Over a period of several years or at

1 least.

2 Q. And as a matter of fact, EPA was aware of
3 this L project for multiple years; correct?

4 A. Yes.

5 Q. But you just chose not to do that
6 testing?

7 A. That's right.

8 Q. Did you do any testing at Lake Centralia
9 to show that any phosphorous had come from Andy and
10 Bobby Hesper's property, the Hesper L property, did you
11 do any of that testing?

12 A. No.

13 Q. Did you do any testing on the Lake
14 Centralia water to see if any manganese had come from
15 Bobby and Andy Hesper's property?

16 A. No.

17 Q. Had you done any testing whatsoever to
18 find that there was any pollution coming from the
19 Hesper L to Lake Centralia?

20 A. No.

21 Q. To the best of your knowledge were there
22 any tests conducted outside of the bore tests to find
23 whether it was hydric or non-hydric soil? Other than
24 those tests were there any tests performed to show

1 that there was any kind of pollution coming from the
2 Andy and Bobby Hesper property to Lake Centralia?

3 A. I don't understand the question because
4 first you asked me about hydric soil and then you
5 went into the question.

6 JUDGE MORAN: You could just say "I don't
7 understand the question."

8 THE WITNESS: Okay.

9 Q. Excluding the borings for hydric and
10 non-hydric soils.

11 A. Okay, now I understand where you are
12 going.

13 Q. Were there any tests conducted to the
14 best of your knowledge that would indicate any
15 pollution from the Hesper L to Lake Centralia?

16 A. No.

17 MR. SMALL: May I approach?

18 JUDGE MORAN: Certainly.

19 MR. SMALL: I guess go off the record. I
20 need to put up a map.

21 JUDGE MORAN: That's fine. Go off the
22 record.

23 (Whereupon there was then had an
24 off-the-record discussion.)

1 JUDGE MORAN: Back on the record.

2 BY MR. SMALL:

3 Q. Now, will you please refer to an exhibit
4 that was just placed on the easel? It is labeled
5 Exhibit H, and look at it, please.

6 A. Okay.

7 Q. Now, I think there was some testimony
8 that Greg Carlson had drawn some gold in some areas
9 and marked them in gold, gold-colored markers, to
10 indicate certain polygons. Do you remember that
11 testimony?

12 A. I do.

13 Q. Did you do any independent source of --
14 or any independent source or any testing whatsoever
15 relating to these polygons personally?

16 A. No.

17 Q. When you look at Exhibit H and those
18 polygons, you are totally dependent upon Greg
19 Carlson's assertions that these are certain polygons
20 and they ought to be in certain places; is that
21 correct?

22 A. He is an expert in wetland delineations,
23 yes.

24 Q. And you heard the testimony that there

1 were certain polygons that he considered hydric but
2 there was no bore testing done on those sites;
3 correct?

4 A. I heard his testimony, yes.

5 Q. Is that correct? That there were certain
6 polygons that there were no bore testings at all?

7 A. He used aerial photos, yes.

8 Q. Well, let's go back again. I want to
9 make certain we get this right. When you are looking
10 at these polygons, and I am just talking about that,
11 were there certain polygons, to the best of your
12 knowledge, that contained no bore sites done by the
13 EPA, Mr. Carlson and Mr. Lenz?

14 A. If I remember correctly, you are correct.

15 Q. So this would be his interpretation of
16 something; correct?

17 A. Yes.

18 Q. Because he would label them hydric or
19 non-hydric; correct?

20 A. Correct.

21 Q. But you have no independent source of
22 knowing, let's say, in those particular cases where
23 there is no borings whatsoever, as to why he would do
24 that? Independent personal knowledge.

1 A. Other than talking to him directly about
2 the delineation?

3 Q. Yes, other than that, do you have any
4 personal knowledge?

5 A. I did not test out there for hydric
6 soils.

7 Q. So your testimony is totally dependent
8 upon somebody else's work; correct?

9 A. Of course.

10 Q. And you appear on the scene on the Hesper
11 L in March of 2007; correct?

12 A. Correct.

13 Q. And the majority of the probes were taken
14 by Mr. Lenz in the year 2000; correct?

15 A. Correct.

16 Q. So from 2000, the time that Mr. Lenz was
17 there which was early 2000, I think in February, to
18 March of 2007, you had an opportunity, did you not,
19 if you wanted to do some additional testing on these
20 polygons, you could have done so?

21 A. Well, 2000, that's within the TMDL
22 program.

23 Q. Could somebody in your agency have taken
24 some steps?

1 A. I am not aware of the case status at that
2 point.

3 Q. And I think your testimony was, I think
4 that's a 7-7 Rule, you were in San Francisco for
5 seven years and now you are in Chicago for seven.
6 Exactly when did you begin work for EPA?

7 A. For EPA in --

8 Q. In Chicago.

9 A. 2000.

10 Q. But that wasn't your job duty at that
11 time; is that what you are saying?

12 A. I was a hydrologist in the TMDL program.

13 Q. You didn't know anything about this
14 project then?

15 A. I knew nothing about this project then.

16 Q. When was the first time you knew anything
17 about this project?

18 A. When it was brought up to me by Mr.
19 Carlson.

20 Q. And when was that?

21 A. Earlier this year. I don't remember the
22 exact date.

23 Q. Okay. So throughout this whole process
24 Mr. Carlson is kind of running his own show, so to

1 speak, for this case; is that right?

2 A. That's his job.

3 Q. And when he makes some kind of a
4 determination, then does he come to you and say "I
5 need approval to go forward with a certain project"?

6 A. I am not Mr. Carlson's direct supervisor.

7 Q. You did have a period of time from early
8 2007 down to the time of filing suit to do additional
9 work on these polygons; correct?

10 A. If I was asked to. I was never asked to
11 be involved in wetland delineation.

12 Q. But that's your chief area of work;
13 correct?

14 A. I wish that was true. But, no, I am
15 manager of three programs.

16 Q. Other than administrative?

17 A. I do some technical work, but not only
18 for wetlands.

19 MR. SMALL: Now, can I have just a minute,
20 Your Honor?

21 JUDGE MORAN: Sure.

22 (Whereupon there was then had an
23 off-the-record discussion.)

24 JUDGE MORAN: Okay. We will go back on the

1 record.

2 BY MR. SMALL:

3 Q. We were talking about testing and that
4 U.S. EPA had decided not to expend the funds to do
5 this testing, various types of tests that we went
6 through. And I think your quote was one of the
7 reasons why was because the violation was over with;
8 is that correct?

9 A. That's one of the reasons.

10 Q. So that I am clear, if the Hesers
11 believed that they needed a permit to build this L,
12 it was, and I am going to quote you, "so important
13 that you spend time to comment on the project;" is
14 that correct?

15 A. Correct.

16 Q. But it wasn't important enough to go test
17 the stream upstream from the L?

18 A. Well, those are two different magnitudes
19 of effect.

20 Q. I am just asking about importance.

21 A. We did not test.

22 Q. But it is more important to comment
23 negatively that you would not allow an L to be
24 constructed than to test it; is that right?

1 A. If we tested on every permit application
2 that came through, do you know how long it would take
3 someone to get a permit?

4 JUDGE MORAN: You can't answer with a
5 question. You have to try to answer his question.

6 A. Okay, I am sorry. It would take a long
7 time to get a permit if we tested for every permit
8 application that came through.

9 Q. I am not asking about everybody else's
10 permit. I am asking about this permit.

11 A. This also --

12 Q. And I heard you kind of go back and forth
13 a couple of times, but I want to make certain you
14 would have denied that?

15 A. I would have objected to the project as
16 proposed; that is correct?

17 Q. And you would have written a comment
18 letter because that was important to you?

19 A. We write a lot of comment letters.

20 Q. And so that I am clear, your hydrological
21 connection between any alleged wetlands that are out
22 there is simply the fact that Martin's Branch flows
23 through upstream of the L, through the L and down to
24 Lake Centralia; correct?

1 looked at when you performed that study.

2 A. Well, this is a pretty extensive research
3 project, lasting -- I took it over from someone else.
4 So this was a pretty unusual five-year project that
5 was funded by a grant from the forest service. We
6 were looking at the hydrological and chemical
7 pathways of nitrogen as it worked its way through a
8 water shed into surface water.

9 Q. Did you do any field testing?

10 A. Yes.

11 Q. What kind?

12 A. I had a very extensive instrument network
13 for ground water, precipitation, soil moisture,
14 stream flow.

15 Q. Ground water, precipitation, stream flow.

16 A. Flows, snow, rain, soil moisture and
17 chemistry.

18 Q. And how many samples would you take for
19 each of those things?

20 A. Quite a few over a three-year period.

21 Q. Quite a few. You are talking 500?

22 A. I had 60 ground water wells.

23 Q. How big is the Tahoe Basin?

24 A. Oh, boy, I should know that just like

1 that, but its been almost 20 years now. It is 72
2 miles around because I ran a race around it. I know
3 that for sure. I don't know the size of the Tahoe
4 Basin, but actually it is a fairly small water shed
5 for a large lake. There are 64 tributaries entering
6 into Lake Tahoe.

7 Q. And again here at this site U.S. EPA
8 didn't do any testing?

9 A. No, this is our master's research
10 project.

11 Q. You also talked about how, I believe,
12 riparian corridors or wetlands absorb nutrients?

13 A. Yes.

14 Q. What's the process of how that happens?

15 A. Well, the vegetation and ground cover,
16 when water flows across it will slow down, water will
17 infiltrate and lands will take up the necessary
18 water, along with the nutrients.

19 Q. You testified that Lake Centralia was an
20 impoundment of Martin's Branch?

21 A. Yes.

22 Q. But there are other sources of water that
23 go into Lake Centralia?

24 A. That's right.

1 Q. And we have talked about that at this
2 trial, the various water sheds that go into Lake
3 Centralia?

4 A. Martin Branch is just one water source.

5 Q. And I believe those water sheds are
6 identified on Exhibit A?

7 A. That's true.

8 Q. You had talked about your belief that the
9 Hesers created this L channel to convey water as fast
10 as possible?

11 A. That's what I have done.

12 Q. And Mr. Small asked you some questions
13 about that?

14 A. Yes.

15 Q. Now, if in fact they did want to convey
16 water as fast as possible, one way to do that would
17 be to leave the channel bare; correct?

18 A. Yes.

19 Q. No vegetation?

20 A. Yeah, or -- right.

21 Q. Or they could have filled it with rocks
22 and riprap?

23 A. That's right.

24 Q. Looking at Exhibit H I believe you had

1 testified that before the L was there, the area
2 depicted on Exhibit H was a forested wetland?

3 A. That's what I understand.

4 Q. Now, looking at Exhibit H, however, there
5 are areas that are not wetlands; correct?

6 A. Right.

7 Q. There are lots of upland areas as well?

8 A. 2.1 acres, I think.

9 JUDGE MORAN: What is the 2.1 acres?

10 THE WITNESS: The amount of wetlands that EPA
11 has determined were on the site that were impacted.

12 BY MR. NORTHRUP:

13 Q. I believe your counsel discussed this
14 most recent United States Supreme Court opinion, the
15 Rapanos opinion?

16 A. Yes.

17 Q. Have you read that opinion?

18 A. Yes.

19 Q. Has U.S. EPA issued any guidelines or
20 policy statements on how that opinion is to be
21 applied?

22 A. Not yet.

23 Q. Are they working on that?

24 A. As far as I know.

1 Q. Do you have any involvement in that
2 process?

3 A. No.

4 Q. Is that something that's being done from
5 headquarters?

6 A. Yes.

7 Q. Which would be in Washington, D.C.?

8 A. Yes, other than being on a geographical
9 jurisdictional conference call every now and then.

10 Q. Okay, what is that?

11 A. It is just a call where they talk about
12 different jurisdictional issues. They don't talk
13 about the actual guidelines and things.

14 Q. What types of issues do they talk about?

15 A. All kinds of enforcement or issues that
16 come up in case law.

17 Q. Do they talk about the need for testing
18 and sampling and things like that?

19 A. No.

20 Q. Do those calls -- or does anyone on those
21 calls talk about the importance of having site
22 specific monitoring or scientific data?

23 A. Mostly legal.

24 Q. Have you ever heard the term "water shed

1 assessment"?

2 A. Yes.

3 Q. What is a water shed -- do you know what
4 a water shed assessment is?

5 A. Yes.

6 Q. What is a water shed assessment?

7 A. We are seeing the water services, as you
8 call them, every day. They are basically assessments
9 of the water sheds, depending upon the use you are
10 preparing the water shed for. I used them to prepare
11 for timber harvests. So it would be the background
12 of the water shed and issues that would relate to my
13 specific project.

14 Q. Was that something you did at EPA or in
15 private?

16 A. U.S. Forest Service.

17 Q. Would you go out in the field and collect
18 data?

19 A. I wouldn't collect it. It was just
20 almost 1979. We would collect water samples for
21 specific projects, but oftentimes we relied on data
22 that had already been collected or information we
23 could get off of maps and aerial photography.

24 Q. What types of data would have already

1 been collected that you would have then relied on?

2 A. There were some soil data that had sub
3 courses as well as service. There were different
4 levels of complexity. And a lot of times those are
5 done by correlation by aerial photos and some are
6 done by actually going out into the field. Like I
7 said, it depended on the resource, the project that
8 we were doing the water shed assessment for. I mean,
9 if it was a specific -- a lot of times it would be, I
10 almost want to call it, like when you do your
11 environmental conditions part of a NEPA document, you
12 would just go out and collect all the background
13 information that you had, kind of like the Illinois
14 State Farm Report.

15 Q. Had U.S. EPA performed a water shed
16 assessment on the Martin Branch water shed?

17 A. No.

18 Q. Have you heard the term "water shed
19 assessment plan"?

20 A. I have heard of water shed assessments
21 and I have heard of water shed plans.

22 Q. What's a water shed plan?

23 A. I would consider that the same thing,
24 although sometimes plans would have almost like

1 implementation sections where you would talk about
2 the problem and the plans would include BMPs or other
3 strategies to fix the problem, more like an
4 implementation plan rather than an assessment of the
5 problem.

6 Q. And I know Mr. Small went into a series
7 of questions about what kind of testing you may or
8 may not have done. Did you conduct any insect
9 surveys at the Martin Branch?

10 A. No.

11 Q. Any type of wildlife surveys?

12 A. No, other than just what we saw.

13 Q. So other than what you observed, U.S. EPA
14 conducted no formal scientific surveys or testing?

15 A. That's correct, other than the soil
16 information that Mr. Carlson took.

17 Q. Right, right. Would you agree with me
18 that the Rapanos decision is extremely complex and
19 left many questions, some highly technical in nature,
20 regarding Clean Water Act jurisdiction over
21 headwater, intermittent and femoral streams?

22 A. From a hydrologic perspective, in my
23 opinion --

24 Q. I didn't ask for that. I am just asking

1 if you agree with that statement.

2 A. It has definitely made it complex as to
3 what the legal interpretation is.

4 Q. Okay. So that's a yes?

5 A. Yes.

6 Q. Would you agree that detailed studies of
7 individual water sheds or hydrological and
8 biochemical processes that are measured and observed
9 over space and time provide a scientific basis to
10 understand the dominant factors controlling water
11 quality?

12 A. Yes.

13 MS. PELLEGRIN: I am sorry. I couldn't hear
14 you and I didn't know what you were asking. Could
15 you speak up? I couldn't catch any of that question.

16 MR. NORTHRUP: I will repeat the question.

17 Q. Would you agree that detailed studies of
18 individual water sheds or hydrological and
19 biochemical processes are measured and observed over
20 space and time to provide a scientific basis to
21 understand the dominant factors controlling water
22 quality?

23 A. It certainly helps.

24 Q. So do you agree? Is that a yes or a no?

1 A. I agree, depending on the purpose of what
2 you are studying, so if it is a research project or
3 one day out in the field.

4 Q. Well, why don't you turn to Complainant's
5 Exhibit 30, specifically page 695.

6 A. 695?

7 Q. Correct.

8 A. Okay, I am there.

9 JUDGE MORAN: But I am not.

10 Okay. I am now at EPA Bates 695.

11 Q. Well, let me take you back to page 692.

12 Sorry.

13 A. 692?

14 Q. Yeah. Can you tell me -- or what is
15 this?

16 A. It's a journal article in the "Journal of
17 American Water Resource Association."

18 Q. And what's the title of it?

19 A. It is the "Role of Headwater Streams in
20 Downstream Water Quality."

21 Q. Have you seen this before?

22 A. Yes.

23 Q. In fact, this is one of U.S. EPA's
24 exhibits in this case; correct?

1 A. Correct.

2 Q. Now could you turn to page 695?

3 A. Yes.

4 Q. There are two columns of text; correct?

5 A. Correct.

6 Q. The right-hand side, can you read the
7 first sentence?

8 A. Sure. "Detailed studies of individual
9 water sheds where hydrological and bio-geochemical
10 processes are measured and observed over space and
11 time provide a scientific basis to understand the
12 dominant factors controlling water quality and
13 nitrogen and provide insight into how to quantify
14 such responses at water shed and regional scales with
15 modeling approaches."

16 Q. Thank you. Would you agree that the
17 procedures for establishing federal jurisdiction that
18 have emerged from cases such as Rapanos stress the
19 need for technical and scientific information about
20 whether a significant nexus exists between upland
21 waters and downstream navigable waters and their
22 tributaries?

23 MS. PELLEGRIN: Your Honor, I am going to
24 object. It sounds like he is calling for a legal

1 conclusion.

2 JUDGE MORAN: Overruled.

3 Q. Would you agree that the procedures for
4 establishing federal jurisdiction that have emerged
5 from these cases, the Rapanos case, stress the need
6 for technical and scientific information about
7 whether a "significant nexus" exists between upland
8 waters and downstream navigable waters and their
9 tributaries?

10 A. Well, I am not sure. It depends on what
11 the guideline is going to tell us what we have to do.

12 Q. But you don't have that guidance now?

13 A. No, I do not.

14 Q. So do you agree or disagree with that
15 statement?

16 A. I agree that the more data we have, yeah,
17 the better that will be.

18 Q. So is that a yes or a no?

19 A. Yes.

20 Q. Do you agree that such a connection could
21 be based on evidence that the use, degradation or
22 destruction of non-navigable headwaters demonstrably
23 influences the waters covered by the Clean Water Act?

24 A. Could you say that again?

1 Q. Do you agree that such a connection could
2 be based on evidence that the use, degradation or
3 destruction of non-navigable headwaters demonstrably
4 influences the waters covered by the Clean Water Act?

5 A. If I am paraphrasing correctly, you are
6 asking if I agree that the degradation of headwaters
7 would adversely affect downstream navigable waters.

8 Q. No, that's not what I am asking. I am
9 just asking if you agree with that statement I just
10 read.

11 A. I would have to read it because I can't
12 get it in context with how you are saying that.

13 Q. Why don't you turn to page 707?

14 A. Okay.

15 Q. Are you there?

16 A. Yes.

17 Q. Again two columns of text?

18 A. Correct.

19 Q. You see on the right where it says
20 Conclusions in caps?

21 A. Yes.

22 Q. And if you look at the last sentence in
23 that paragraph?

24 A. "Such a connection"?

1 Q. Yeah. Can you just read that for me,
2 please?

3 A. "Such a connection could be based on
4 evidence that the use, degradation or destruction of
5 non-navigable headwaters demonstrably influences the
6 waters covered by the Clean Water Act."

7 Q. Thank you.

8 JUDGE MORAN: And, again, you are reading
9 from an EPA exhibit; is that right, counsel?

10 MR. NORTHRUP: Yes, I am. I believe it is
11 the same.

12 Q. Have you performed any studies on coarse
13 particulate organic matter that has contributed to
14 the Martin Branch at this site?

15 A. No.

16 Q. Have you performed any studies on the
17 amount, if any, of any terrestrial insects that have
18 contributed to the Martin Branch?

19 A. No.

20 Q. Would you agree that water shed
21 assessments, plans and monitoring data are potential
22 pivotal sources of information for jurisdictional
23 determinations to aid the understanding of the
24 relationship between a particular water body and a

1 downstream navigable water?

2 A. No, I don't.

3 Q. Okay. Can you turn to -- one minute,
4 Your Honor, I am sorry.

5 JUDGE MORAN: Sure, and just go off the
6 record for a second.

7 (Whereupon there was then had an
8 off-the-record discussion.)

9 JUDGE MORAN: We will go back on the record.

10 BY MR. NORTHRUP:

11 Q. Can you turn to page 769?

12 A. Okay.

13 Q. And can you tell me what this is?

14 A. This is another article from the "Journal
15 of American Water Resources Association."

16 Q. And have you reviewed this article?

17 A. Yes.

18 Q. Are you a member by any chance of the
19 American Water Resources Association?

20 A. No.

21 Q. Who is the author?

22 A. Tracie-Lynn Nadeau and Mark Cablerains.

23 Q. Can you read the title of the article for
24 me, please?

1 A. "Hydrological Connectivity Between
2 Headwater Streams and Downstream Waters: How Science
3 Can Inform Policy."

4 Q. Is there a date on this first page?

5 A. February 2007.

6 Q. And that is up in the right-hand corner?

7 A. Yes.

8 Q. Do you know who Tracie-Lynn Nadeau is?

9 A. I know she works for the EPA or used to.

10 I am not sure she still does, but that's what her
11 title is.

12 Q. Have you ever met her?

13 A. I don't think so.

14 Q. Did you see the little number two by her
15 name?

16 A. Yes.

17 Q. Can you look down at the bottom of the
18 page and read that for me?

19 A. It says "Respectively, lead environmental
20 scientist, U.S. Environmental Protection Agency,
21 Office of Wetlands, Oceans and Water Sheds," and then
22 the address.

23 Q. Now, are you in the Office of Wetlands,
24 Oceans and Water Sheds?

1 A. That is a headquarters division.

2 Q. So if in fact Tracie-Lynn Nadeau is still
3 in that position, organizationally is she your boss?

4 A. No.

5 Q. Can you then turn to --

6 JUDGE MORAN: Let me just ask, wouldn't it be
7 true, though, organizationally though, while she is
8 not your boss, they are above you. If you had a
9 chart, wouldn't it necessarily, if you will pardon
10 the expression, flow back to the office in
11 Washington?

12 THE WITNESS: We are in the Water Division of
13 Region 5. And then our programs, some of those would
14 be under the office of --

15 JUDGE MORAN: You are working your way back
16 to the headwaters, if you will.

17 THE WITNESS: Right.

18 JUDGE MORAN: You end up at the Office of
19 Wetlands, Oceans and Water Sheds, wouldn't you? And
20 then, of course, you go even further to the
21 administrator.

22 THE WITNESS: Well, it would be the
23 administrator of water and then the administrator.
24 But she is just a staff scientist in that group

1 somewhere, and that is a large group.

2 JUDGE MORAN: But that office, nevertheless,
3 what I am trying to understand here because I never
4 heard of it til just now, but there is a
5 connectivity, if you will, between your office and
6 that office?

7 THE WITNESS: Oh, yeah, I mean if you work
8 with them, definitely.

9 JUDGE MORAN: Well, you more than work with
10 them. They are above you on the chart; is that
11 right?

12 THE WITNESS: Yeah, just like headquarters
13 would be.

14 BY MR. NORTHRUP:

15 Q. If you know, is her position or generally
16 the position in Washington to make policy provisions?

17 A. There are all different types of
18 positions, and I don't know her personally. So I am
19 not sure.

20 Q. Do you know about her position, whether
21 that is a policy position?

22 A. No, I don't know.

23 Q. Turn to page 781.

24 A. Okay.

1 Q. And again you see two columns of text?

2 A. Yes.

3 Q. On the left-hand side there is a first
4 paragraph. It doesn't start the paragraph, right
5 before Acknowledgments. Do you see that in all caps?

6 A. Yes.

7 Q. If you can go up nine lines and see where
8 that sentence begins "finally"?

9 A. Oh, yeah. Yes, I do.

10 Q. Can you read that sentence?

11 A. Yes. "Finally, given that jurisdictional
12 determinations will be made even while this debate
13 continues and that Justice Kennedy's significant
14 "nexus" test is among the possible bases for
15 jurisdiction, water shed assessments, plans and
16 monitoring data are potentially pivotal sources of
17 information for jurisdictional determinations to aid
18 in the understanding of the relationship between a
19 particular water body and a downstream navigable
20 water."

21 Q. Thank you. What is biomass?

22 A. The amount of material. So biomass is
23 the amount of whatever biological material you are
24 talking about. It could be a biomass of algae, a

1 biomass of vegetation.

2 Q. It is measurable?

3 A. I think they measure it by carbon, but I
4 am not completely sure.

5 Q. You didn't do any measuring of biomass?

6 A. No.

7 Q. Are you familiar with U.S. EPA's standard
8 protocols for quantifying midstream and stream side
9 habitats?

10 A. Not really.

11 Q. Have you ever reviewed them before, ever
12 worked with them?

13 A. Is this the monitoring? What is it --
14 can you say that again?

15 Q. I don't know. I am asking you.

16 A. I am not sure. We have a monitoring
17 program, which is separate from our branch. So they
18 would be the ones looking at that.

19 Q. Do you know if U.S. EPA has any protocols
20 for monitoring or assessing the migration of animals
21 in riparian corridors?

22 A. EPA doesn't. I am sure the Fish and
23 Wildlife Service does. You can rely on them.

24 Q. Are you familiar with the U.S. EPA's

1 Rapid Bio assessment Protocols?

2 A. I have heard of those.

3 Q. Other than that can you tell me what they
4 are?

5 A. They are a method, an assessment. It was
6 Ohio that actually used those Rapid Bio assessment
7 methodologies. But it is a way to assess wetlands
8 using plants. And that's all I know about it.

9 Q. And that was not done in this case?

10 A. No.

11 Q. If we have gone over this before, I
12 apologize. Why didn't EPA perform any of these
13 assessments that I have just talked about or those
14 protocols at this site?

15 A. Because in enforcement cases we perform
16 wetlands delineations after the fact, that the fill
17 was placed and the material was removed. We are out
18 there a couple of times to assess and visually
19 observe, but we don't have the resources or the
20 reason to actually take samples when we are only out
21 there a couple of times, because they will be
22 meaningless to us.

23 Q. If you were to take such samples, what
24 would make them meaningful to you?

1 A. Well, it would be over a period of time.
2 What I if I went out there and I took a sample and it
3 said there was a thousand milligrams of phosphorous
4 in the sample, would that be -- I would say, oh, my
5 god, that is exceeding. If I went back four weeks
6 later or a month later or a year later, it might be
7 only one milligrams per liter. So what I am saying
8 is that when you take chemical and biological data,
9 you have to put it in context over a period of time.

10 Q. So what you are saying is for that data
11 to be valid, you have to take it over a long period
12 of time?

13 A. Other than just a reconnaissance type
14 thing, for your information, I am trying to get an
15 idea. But a lot of times I can do that visually. I
16 know from my background from looking at the channel
17 conditions what I would expect to see there. I can
18 tell by ecological theory what type of insects I
19 would expect to find. So my visual observations to
20 me are -- and from the history of looking at past
21 aerial photography tells me much more about the site.

22 Q. If you could turn to Exhibit 36?

23 A. Okay.

24 Q. And I am going to have you reference page

1 828, actually 826 to 828.

2 A. Okay.

3 Q. These are the same pages that your
4 counsel talked about.

5 A. Right.

6 Q. And we were talking -- she had some
7 questions about sources on page 828.

8 A. Yes.

9 Q. That column. We were looking at the
10 Centralia lines.

11 A. Right.

12 Q. And on the last column, Sources, there
13 are five codes listed. Now, counsel only referenced
14 one of those codes which was 144, I believe?

15 A. Yes.

16 Q. And what is that code? What is that
17 source?

18 A. That's their crop production.

19 Q. And how do you know that?

20 A. From the key that's on Bates number 827.

21 Q. Just to be complete, what is -- for the
22 record what is Code 140?

23 A. Code 140 is Source Unknown. They haven't
24 determined the source yet.

1 Q. And 71?

2 A. 71 would be the near shore area of the
3 lake, sort of the non-riverine areas would be the
4 very near shore area.

5 Q. What does that mean, non-riverine?

6 A. It means that it is not a tributary. It
7 is the actual lake shore you are talking about.

8 Q. And what is the natural?

9 A. That is the near shore area. That's the
10 deep water; the other one is shallow water.

11 Q. What is Code 92?

12 A. 92 is the onsite treatment systems.

13 Q. And then Code 177?

14 A. Urban runoff and storm sewers.

15 Q. And those are all the codes that are
16 listed under sources; correct?

17 A. Correct.

18 MR. NORTHRUP: Your Honor, if I could take
19 just two minutes?

20 JUDGE MORAN: Sure.

21 (Whereupon there was then had
22 off-the-record discussion.)

23 JUDGE MORAN: We will go back on the record.

24 MR. NORTHRUP: No further questions.

1 because Martin Branch -- I think it would be a second
2 order stream, the whole thing could be considered a
3 headwater stream.

4 Q. My question is could you point to me
5 where Martin Branch begins?

6 A. This is the top of the water shed right
7 here.

8 Q. As an identifiable stream does that map
9 reflect where Martin Branch begins?

10 A. I would say, this is Highway 37. So
11 there are ditches coming along. This is where it
12 starts in ditches. So it starts here, starts here,
13 and then flows in and then forms a natural channel.
14 So at one point before it erodes and everything would
15 extend farther up in a natural channel.

16 Q. But from that point that you just pointed
17 to, and let's see what you call this, that just by
18 happenstance where it says in large red letters
19 Martin Branch Water Shed, you pointed to the letter D
20 and the word "water shed" as being the starting point
21 for Martin Branch?

22 A. Well, the starting point would be all
23 these little swells coming in. That's what's
24 forming. But because of the roads, there is a road

1 here, and all the water is still flowing into the
2 Martin Branch water shed, being conducted here, there
3 is a culvert. It flows under the road, down this and
4 then into, this is Bill Hesper's Conservation 2000
5 project.

6 Q. But so then -- now that I understand this
7 a little bit better, where we pointed to where the
8 swells join and then begins, so actually Martin
9 Branch itself relies on other water upstream that
10 comes to feed it. In other words, it does not begin
11 at the point where the D is, strictly from ground
12 water and rainfall. There is upland that contributes
13 to different degrees, and at some point that meets
14 and there is the official beginning of Martin Branch?

15 A. Well, this is the contributing area for
16 the upstream. So any water that falls on this
17 property could make its way down to Martin Branch.

18 Q. And outside of that red line nothing
19 would go to Martin Branch?

20 A. Exactly. It would go to a different
21 water shed.

22 Q. So from this beginning point of Martin
23 Branch, down -- if you were -- can you express on
24 this map or from other knowledge that you have the

1 number of miles that are involved from this
2 origination point we just spoke of to where it enters
3 into Lake Centralia, which we have already noted is
4 at the bottom-most point of Lake Centralia?

5 A. I think it is a little over two miles.

6 Q. Okay. So I am looking at a distance that
7 covers a total of two miles from the beginning of
8 Martin Branch in effect to where it dumps into Lake
9 Centralia, two miles?

10 A. Yeah, maybe a little over that.

11 Q. And that includes all the meandering and
12 so forth; you are not doing this as a straight line?

13 A. No, I was doing that as a straight line.
14 It meanders. That's why --

15 Q. That would be like a human intestine?

16 A. Right, exactly. That's why they use a
17 string.

18 Q. So it is actually much more than two
19 miles?

20 A. It can be, using the meanders.

21 Q. Well, do you actually know?

22 A. I don't know.

23 Q. It could be as much as 20 miles; right?

24 A. No, I walked it.

1 Q. You walked from the very beginning?

2 A. I walked a lot of it. Like Mr. Carlson
3 had noted on here, we walked the sections that he has
4 got marked.

5 Q. Did you walk all the way to Lake
6 Centralia?

7 A. Except for a couple sections.

8 Q. But I don't know what the size of those
9 sections are or why you avoided them. Did a truck
10 pick you up and take you to another section?

11 A. No, we didn't have access to that
12 property. So we tried to observe it, but we
13 walked --

14 Q. You circumvented it because you didn't
15 have access?

16 A. Right.

17 Q. Did you have a pedometer on you?

18 A. No.

19 Q. So it is quite a bit more than two miles
20 because you were talking about as the crow flies;
21 right?

22 A. Right.

23 Q. Or vectoring, if you would, whatever,
24 straight lines. You were talking that when you say

1 two miles?

2 A. Yes.

3 Q. Do you happen to know -- there is no
4 basis for you to say exactly how many miles it really
5 is?

6 A. Right, I don't know.

7 Q. Okay. And so now when I focus on the
8 area of the alleged violation, this L, I think I know
9 the answer, it would be fair to say that we wouldn't
10 measure that in lines; right?

11 A. Right.

12 Q. We would measure them in terms of yards,
13 the L, both ends of the L, the north, south, east,
14 west?

15 A. I think it was measured in terms of feet,
16 linear feet.

17 Q. And so do you know what the total feet
18 from the northwest and the east-south, what that
19 amounted to?

20 A. I don't remember Mr. Carlson's testimony
21 on the length of the L.

22 Q. So you don't know yourself the total
23 length of the L?

24 A. I thought it was about 875 feet.

1 Q. 875 feet?

2 A. But the total channel fill was 1800 of
3 all the tributaries.

4 Q. And do you know how many gallons of
5 water, if that's a fair way to measure it, are in
6 Lake Centralia?

7 A. No.

8 Q. Do you know if you were to -- if you were
9 to walk along the boundary of Lake Centralia right
10 from the beginning point where Martin Branch enters
11 it and to walk in every sort of meander, it would be
12 many, many miles to go around that whole thing; would
13 it not?

14 A. Yes.

15 Q. Do you have a sense of how many miles it
16 would be?

17 A. I have no idea.

18 Q. Now, in terms of the --

19 MR. SMALL: Your Honor, the witness keeps
20 looking back here like she is being coached.

21 THE WITNESS: I am not looking.

22 MR. SMALL: I don't know if that's the case
23 or not, but I just want to call it --

24 JUDGE MORAN: Yeah, usually I pick up on that

1 but I was looking at my notes. It is very important,
2 and I am not at all -- I have had this happen in
3 other hearings and sometimes it has been by
4 Respondent's counsel, but here is the thing.
5 Sometimes people will involuntarily do things like
6 nod or shake their head because they are so involved.
7 I want to put a harmless connotation on it.

8 What I am saying to you is, without again
9 making any conclusions about it, don't do that. If
10 you happen to be agreeing with what this witness or
11 any witness is saying, keep your head still, okay, so
12 that there isn't any sort of indirect communication
13 or the risk of that.

14 Q. Now, to get back to my questions, when we
15 look at the north-south and east-west portions of the
16 Hesper L, my understanding is that you viewed this
17 from Bill Hesper's property?

18 A. Yes, I did.

19 Q. And my understanding is that you only
20 viewed riprap on the top of the north-south section?

21 A. There were two locations where there was
22 riprap.

23 Q. And was one on the top of the north-south
24 section?

1 A. Yes.

2 Q. And that would be where the property,
3 where the Hesper L starts and where it would abut to
4 the Bill Hesper property?

5 A. It was right at that scour portion where
6 it would -- at the elbow. So the --

7 Q. When I think of the elbow, I am thinking
8 of an L where north-south meets east-west. Is that
9 the elbow you are pointing?

10 A. Yes, that's one of the places where it
11 meets.

12 Q. And the other one was at the top of the
13 north side?

14 A. That was at the bottom. I don't remember
15 seeing one at the top.

16 Q. So where the Hesper L begins, which we
17 would agree is that the north section?

18 A. Uh-huh.

19 Q. There is no riprap there. It is only
20 when you get down to where the top, the north-south
21 section of the L meets the east-west, that's where
22 the first riprap is?

23 A. That's where I saw. It is directed --
24 they put the riprap in to protect further erosion

1 into their field.

2 Q. Right, where the two parts of the L meet?

3 A. Right.

4 Q. So the second part, you saw some other
5 riprap and you saw that on the east-west section?

6 A. Right, at the point where it discharges
7 back to a natural channel.

8 Q. Right. But that riprap, as I understand
9 it, was not -- your understanding is that was not
10 placed by the Hesers; that was part of where the road
11 meets the culvert?

12 A. Oh, no, that was at the Old Salem Road
13 crossing. There was a photo of it in here just where
14 the stream discharges back into the natural channel.
15 There is a piece of concrete right there, if I am in
16 the right location.

17 Q. So just to make sure I understand this,
18 so your understanding is that the Hesel brothers,
19 Andy and Robert, or someone under their direction
20 placed riprap in two locations in the L?

21 A. That's my understanding.

22 Q. Now, you indicated that you saw some or
23 learn of some subchannel or downcutting; is that
24 right?

1 A. Yes.

2 Q. And that was in the area where the
3 alleged violation occurred?

4 A. Yes.

5 Q. And I got the impression that actually
6 that that's a good thing. Is that fair to call it
7 that?

8 A. Not really.

9 Q. No? Okay. It was my understanding that,
10 based on testimony that you gave, you tell me if I am
11 correct or not, relating to the Bill Hesel property,
12 that it migrates, eventually a stream will have its
13 way; is that fair?

14 A. That's true.

15 Q. So would it be fair to state that over
16 time Martin Branch will, albeit within a new channel,
17 it will develop meanders; correct?

18 A. It could.

19 Q. And part of that process begins with the
20 subchanneling or downcutting?

21 A. Well, it depends on -- most of the time
22 if you have an artificial channel, you have very
23 specific side slopes. And that meandering -- it is a
24 very small channel right now in the downcut. And

1 because the channel is artificial, during high flows
2 like you saw in that one picture, when flow comes
3 through, it is really going to flow through there,
4 like it did. So it is going to not allow during high
5 flow the establishment of meanders because there is
6 nothing to slow the water down at high flow.

7 Q. My understanding is that at some point in
8 time the label of a channel, because of the effects
9 of nature, that at some point in time a manmade
10 alteration eventually has more of nature's footprint
11 on it because the stream over time establishes its
12 own course, even though it is a new course, at least
13 initially?

14 A. It could. It could breach their berm.
15 It could do several things, depending on if you have
16 a major flooding event. It could do that. I mean,
17 it could happen.

18 Q. Do you know this individual Tony
19 Antonacci, if I am pronouncing his name correctly?

20 A. I know of him.

21 Q. Never visited with him?

22 A. No.

23 Q. Never talked with him?

24 A. No.

1 Q. Do you hear from others at EPA that he
2 was out at the property related to Bob Hesper?

3 A. I know -- I think he was on Bill Hesper's
4 property with one of Mr. Carlson's site visits.

5 Q. Recently, you mean?

6 A. I think it is --

7 Q. You aren't supposed to be looking at him.

8 A. Oh, I am sorry, I was just looking just
9 to refresh my memory with him. He had been out in
10 the field with Mr. Carlson. I met with Burke Davies
11 out in the field, but Mr. Antonacci was not there.

12 Q. Now, earlier in your testimony you
13 indicated that had the Hesper's come to you and said we
14 want to alter this naturally existing channel, Martin
15 Branch, in the location where it was or alleged to
16 have been where it was, my understanding is that you
17 would have said, no, you can't do that, is that fair?

18 A. I would have said, no, you can't do it in
19 that way.

20 Q. But it is also my understanding that EPA
21 will typically, when people seek a permit, one of the
22 things that they will do is, and if the permit is --
23 if they are going to comment on it, they will say,
24 well, there has to be some mitigation; right?

1 A. Right.

2 Q. But in this instance is it your testimony
3 that no mitigation would have been available? That
4 is, by mitigation are we talking about in some ratio
5 finding other or creating other wetland property to
6 sort of compensate for whatever wetland might be
7 lost?

8 A. It wasn't that mitigation wasn't
9 available. It was that they didn't go through the
10 permit program. They didn't apply for a permit.

11 Q. But is one of the possibilities that, had
12 they done that, that EPA would have considered the
13 creation of other wetland in determining whether to
14 allow the stream alteration as alleged here?

15 A. We would have required mitigation for the
16 impact to the wetlands. We would have definitely
17 objected to the relocation of Martin Branch and the
18 filling of the natural channel.

19 Q. Well, is there any written policy that
20 says where farm land is involved, that EPA -- is
21 there something written where EPA has announced that
22 mitigation, relocation of a stream, is not permitted.

23 A. I didn't say it was not permitted. If it
24 was designed appropriately or there was some least

1 damaging environmental purpose, I mean, to me if you
2 are going to -- if you have a flooding problem, you
3 try the best way to reduce that flooding is to work
4 within the natural channel. That's the best way to
5 do that because you already have a conveyance system.
6 There is no reason to create a separate stream
7 channel unless you want to create a drain and
8 maintain it as such.

9 That is one reason it might not
10 re-establish back to a natural stream, if trees get
11 in there. Because that's what happens. When woody
12 debris comes down, it would flood their field.

13 Q. My question is, is there any policy that
14 says, that you could turn to, that it says right here
15 you can not alter the natural channel and create an L
16 or any other shape?

17 A. No, we are following a 404(b)1 guideline
18 of the least damaging practical alternative.

19 Q. How many years have you been involved --
20 is it all your time in Chicago that you have
21 essentially dealt with these types of issues or only
22 a certain number of years in your seven years in
23 Chicago?

24 A. Seven years in San Francisco and seven

1 years in Chicago.

2 Q. Did you ever have any instances where you
3 dealt with farmers seeking to alter channels?

4 A. I used to do that quite a bit, yes.

5 Q. Did you ever allow them to alter the
6 channel?

7 A. Sure.

8 Q. And including taking out meandering and
9 creating a different shape to a channel?

10 A. The ones that we were involved with, and
11 I have worked with this at the conservation service
12 as well, the NRCS, and this is my experience from the
13 west coast, is that we would allow some modification
14 of the channel, but also it would include a riparian
15 corridor or a filter strip along the channel to
16 promote water quality. But we really try to avoid
17 filling in a natural channel because EPA's goal is
18 restoring impaired water sheds. That's the goal now,
19 that's what we are being called to to measure, that
20 we are improving the condition of water sheds.

21 Q. Now, it is my understanding, and you can
22 tell me if I am correct about this, that you know
23 nothing personally about any agricultural runoff into
24 Martin Branch from the fields of Bill and Andy Hesper

1 prior to the alteration?

2 A. Right, other than the general concept of
3 agricultural runoff and what I observed in the
4 channel.

5 Q. Right. But my question is, so you don't
6 know through any information, aerial photographs or
7 whatever, you don't know how much agricultural runoff
8 occurred in the time period prior to the alleged
9 alteration of the channel?

10 A. No. We could have gone out there today
11 and we would have had a good concept of that while it
12 was raining.

13 Q. We wouldn't have had a concept of it
14 prior to the alteration, would we?

15 A. No. It depends on how much water would
16 be coming off the field and how it is running off the
17 water shed.

18 Q. Right. But I want you to go back and
19 just picture if you can, at least in your mind, the
20 period of time before any alleged alteration occurred
21 here, you have no idea, is it correct, as to what
22 agricultural runoff, if any, would have occurred on
23 that pre-existing field into Martin Branch at that
24 time?

1 JUDGE MORAN: On the record.

2 REDIRECT EXAMINATION

3 BY MS. PELLEGRIN:

4 Q. Ms. Melgin, let me start out with I just
5 put Exhibit H, on the board, Exhibit H. And I
6 believe that the Court asked you a question just now
7 about whether or not you knew how close any
8 agricultural fields were prior to Martin Branch --
9 I'm sorry, how close any agricultural fields were to
10 the original portion of Martin Branch prior to the
11 creation of the L at the site of the alleged
12 violation. And I am not asking you for your personal
13 knowledge, but in your experience in interpreting or
14 in viewing any aerial photography of this site, what,
15 if anything, does Exhibit H tell you about the
16 proximity of any agricultural fields to the original
17 portion of Martin Branch?

18 A. Well, that it flowed through a riparian
19 corridor, that it actually was a little farther away
20 from the ag fields because it was flowing through a
21 forest in that site.

22 Q. And I think I asked you this already but
23 I just want to be really clear. We talked earlier
24 about, and I read in a few pages in the transcript

1 when Mr. Small was cross-examining Bill Hesper
2 regarding the natural channels on Mr. Bill Hesper's
3 site, and how they used to, according to Mr. Bill
4 Hesper, drain into, he said, Andy and Bobby's field.
5 And now those areas drop straight into the L. And I
6 just -- is that correct generally?

7 A. Yes.

8 Q. I just wanted to make that clear. Now, I
9 have a couple of questions about Complainant's
10 Exhibit 28. So if you could turn to that.

11 JUDGE MORAN: So when counsel just asked you
12 if that was correct, you were responding that that
13 was your understanding of Mr. Bill Hesper's testimony?

14 THE WITNESS: Yes, and that's from looking at
15 this map. That's what -- the water would have flowed
16 into the forested wetland.

17 BY MS. PELLEGRIN:

18 Q. Yeah, that's true, too. To make sure we
19 are clear, is that your understanding based on
20 looking at the aerial photos in combination with your
21 understanding of what Mr. Bill Hesper said? Is that
22 your understanding of what happened at that time?

23 A. Yes, it is.

24 Q. Okay. Looking at --

1 MR. SMALL: So, Your Honor, so that I am
2 clear, was the question regarding low flow?

3 JUDGE MORAN: You will have to deal with that
4 on cross. That's not really an appropriate -- I
5 mean, you didn't hear that? The question has been
6 asked and answered, and the objection time is passed.
7 You can deal with it on recross.

8 MR. SMALL: Sure.

9 BY MS. PELLEGRIN:

10 Q. Okay. And I believe there was a couple
11 of different questions asked about whether Martin
12 Branch had been on -- any water in Martin Branch has
13 been assessed or named in a TMDL, and I believe the
14 answer was that, no, the Martin Branch isn't in here
15 in terms of it is not anything related to water
16 quality in this report. Do you know why that it is
17 not in here? Do you have any knowledge of that?

18 A. Well, it is not in here specifically. I
19 guess the water shed would be included as part of the
20 overall part of the TMDL segment, that is Lake
21 Centralia. But when I talked to the Illinois
22 Environmental Protection Agency about Martin Branch
23 they said it is on the list, it is on the Integrated
24 Report; it has not been assessed yet, meaning they

1 haven't -- it is on the list. It will be assessed.
2 The State determines how much information and data
3 they need to develop a TMDL, and they went ahead and
4 are developing this TMDL and this segment with simply
5 the data they have.

6 Q. So to your knowledge is IEPA planning at
7 some point or is there something in the works, I
8 guess, to assess Martin Branch at some point?

9 A. At some point according to Mike Vundren.

10 Q. And I believe there was also a question
11 about the development of a TMDL for total suspended
12 solids. A similar question, do you know, again, if a
13 plan is in the works or do you know -- do you have an
14 understanding of does IEPA have to at some point
15 develop a TMDL for total suspended solids?

16 A. Yes, they do. It is on the list as
17 impaired and if IEPA determines they can do TMDLs
18 with narrative criteria, they will start developing
19 those TMDLs.

20 Q. And then I want to ask you, you were also
21 asked a number of questions about mitigation and your
22 comment on permits. If you know, does EPA have a
23 policy related to avoidance or minimization of
24 wetlands? Do you know anything about that?

1 A. Yes, that's actually the 404(d)1
2 guidelines, and the series of mitigation actually is
3 avoiding the minimizing and then providing
4 compensatory mitigations for those impacts that can
5 be avoided.

6 Q. And so if there was a series of what EPA
7 prefers, can you rank that in order of preference,
8 what EPA has a policy as preferring in regards to
9 wetland permits?

10 A. Well, we like to see avoidance when
11 possible, although we understand that that is not
12 always possible. If it is not a water dependent
13 activity, for example, a lot of times there are
14 upland alternatives, and sometimes we comment on that
15 and they have decided that they have a better piece
16 of property for that project.

17 The second point would be, if they can't
18 avoid wetlands and sometimes you can't, then to
19 minimize the impacts as much as you possibly can.
20 That's what we like to see.

21 Q. And how would those come in order, before
22 or after mitigation?

23 A. Well, mitigation, those are all
24 considered sort of mitigation. The compensatory

1 mitigation is replacing the functions that were lost
2 because the impacts couldn't be avoided. So we would
3 want to see actual mitigation implemented on the
4 ground.

5 Q. Okay. And, Ms. Melgin, I think one of
6 the questions, we had a number of questions on cross
7 examination about sampling, and I think you made a
8 statement that one of the reasons that you didn't
9 see -- that there wasn't any sampling here was
10 because the violation was over with. And I just
11 wanted to clarify for the record your meaning or what
12 you mean by violation. And I just -- I know you are
13 not a lawyer, so I just wanted to get the record
14 clear that you don't mean violation --

15 JUDGE MORAN: No, you are going to testify
16 for her or tell her what she doesn't mean?

17 MS. PELLEGRIN: I am asking her.

18 JUDGE MORAN: No, you are not. You are doing
19 more than that. You were telling her. "You don't
20 mean, do you," and then you were going to fill in the
21 blank. She said twice the violation was over.

22 Now, if you want to ask her what did she
23 mean by that, and I understand why you want to ask
24 her that, but don't put words in her mouth.

1 MS. PELLEGRIN: I will do that, Your Honor.

2 Q. Ms. Melgin, what did you mean by the
3 violation was over when you answered questions
4 regarding sampling in this case?

5 A. I mean from the filling activity was
6 complete.

7 Q. And now, Ms. Melgin, I have also another
8 question about the sampling. Mr. Northrup read a
9 number of different quotes regarding different kinds
10 of sampling from the American Journal of Water
11 Resources article. And I just wanted to get -- in
12 terms of a TMDL and what a TMDL does, what, if any,
13 opinion do you have regarding whether or not that
14 adds some level of sampling to your knowledge of the
15 case?

16 A. Well, the TMDL does provide -- it is more
17 of a water shed assessment type document.

18 MS. PELLEGRIN: I have nothing further, Your
19 Honor.

20 JUDGE MORAN: Okay. Any recross?

21 MR. SMALL: Just briefly, Your Honor.

22 JUDGE MORAN: Sure.

23

24

1 A. The photo showed water on the field, yes.

2 Q. So you are saying a photo shows flows?

3 A. That's the photo you pointed me to.

4 Q. That's the one that you are saying --

5 A. Well, I said the photo showed water on
6 the property.

7 Q. Oh. And so you don't know if it is a
8 flow or not. It could just be sitting there.

9 A. Well, I couldn't tell from the photo.

10 Q. All right. And to the best of your
11 knowledge this complaint has got nothing to do with
12 mitigation or looking at other sites or anything like
13 that, does it?

14 A. I am not aware of that part of the case.

15 Q. You are not aware of it or you just don't
16 know?

17 A. I don't know, I didn't follow him over
18 that part.

19 Q. I would like to have you look at a
20 photograph and see if that helps your recollection.
21 Would you look at Exhibit 8 and I am referring you to
22 Exhibit Number 147. I would like you to look at
23 that.

24 JUDGE MORAN: What is that exhibit, counsel?

1 MR. SMALL: Exhibit 8, page 147.

2 THE WITNESS: Okay.

3 MR. SMALL: And then also I would like you to
4 look at page 149.

5 THE WITNESS: Okay.

6 BY MR. SMALL:

7 Q. Now, have you had a chance to review
8 those two photos?

9 A. Yes.

10 Q. And after looking at that, does that
11 refresh your memory that the riprap was on the
12 northern portion of the L?

13 A. Yes.

14 Q. And, as a matter of fact, there was -- if
15 we said the L had two legs, the north-south and
16 east-west leg, there would be no riprap where those
17 two legs meet?

18 A. No, it is at the northern end; you are
19 correct.

20 MR. SMALL: Thank you.

21 JUDGE MORAN: Let me just think for a moment
22 here, please. You are not done. You might be.

23 (Pause.)

24 Okay. I am not going to ask any other

1 questions. Any other questions on the part of EPA?

2 MS. PELLEGRIN: No, Your Honor.

3 JUDGE MORAN: Ms. Melgin, thank you for your
4 testimony.

5 (Witness excused.)

6 Okay. Ready to begin with your next
7 witness?

8 MS. PELLEGRIN: Yes, Your Honor, I am. I am
9 calling Mr. Mark Ewen to the stand.

10 JUDGE MORAN: Mr. Ewen, come up here, please.

11 (Whereupon the witness was duly
12 sworn by Judge Moran.)

13 I don't know if you watched other
14 witnesses, but just state your name and spell it for
15 us

16 THE WITNESS: My name is Mark Ewen. First
17 name is spelled M-A-R-K, last name is spelled
18 E-W-E-N.

19

20

21

22

23

24

1 MARK EWEN

2 called as a witness on behalf of Complainant, having
3 been first duly sworn, was examined and testified as
4 follows:

5 DIRECT EXAMINATION

6 BY MS. PELLEGRIN:

7 Q. Good afternoon, Mr. Ewen. Could you tell
8 us in which city and state you reside?

9 A. I reside in Arlington, Massachusetts.

10 Q. And do you hold any educational degrees?

11 A. I do. I have a bachelor's degree in
12 economics and political science from the University
13 of North Dakota and a master's in public policy from
14 the University of Michigan at Ann Arbor.

15 JUDGE MORAN: You have to keep up your voice
16 up.

17 Q. Okay, I am sorry. Can you please repeat
18 that?

19 A. Sure, how is that, better?

20 JUDGE MORAN: Much better.

21 A. I have a bachelor's degree in economics
22 and political science from the University of North
23 Dakota and a master's in public policy from the
24 University of Michigan at Ann Arbor.

1 Q. And, Mr. Ewen, are you currently
2 employed?

3 A. I am.

4 Q. Where are you currently employed?

5 A. I am a principal at the firm of
6 Industrial Economics in Cambridge, Massachusetts.

7 Q. How long have you been employed with
8 Industrial Economics?

9 A. Almost 12 years.

10 Q. And do you hold a particular title or
11 position with Industrial Economics?

12 A. I am a principal with the firm. It just
13 means I am one of the ownership partner-owners of the
14 firm.

15 JUDGE MORAN: Would you name some of the
16 other principals? I think I have met them in other
17 hearings. Who are the other principals in the firm?

18 THE WITNESS: Well, the others that have been
19 involved in some of the enforcement work is Joan
20 Meyer, Gail Coad, Chiara Trabucchi.

21 BY MS. PELLEGRIN:

22 Q. And how long have you been a principal at
23 Industrial Economics?

24 A. Since 2000, I guess. This is my seventh

1 year.

2 Q. And are you a member of any professional
3 organizations?

4 A. I am. Probably the most relevant to this
5 kind of a work is I am a member of the Risk
6 Management Association which is the professional
7 association for credit lenders, risk assessment folks
8 who loan money to folks and assess their ability to
9 repay loans and that sort of thing.

10 Q. Have you done any teaching?

11 A. I did back in graduate school. I was a
12 teaching assistant for a master's level, graduate
13 level statistics course. I have done a good bit of
14 training over the years on enforcement matters,
15 ability to pay and economic benefit assessment work
16 for regulators and EPA folks as well.

17 Q. I didn't hear that last sentence you
18 said.

19 A. I have conducted a good bit of training
20 activities on ability to pay and economic benefit
21 matters for EPA folks and state regulators as well
22 over the years.

23 Q. And what type of -- what type of work
24 generally is Industrial Economics engaged in?

1 A. We are an applied finance and economics
2 firm, primarily. We do a good bit of financial and
3 economic analysis in the context of public policy, in
4 the context of private litigation, general
5 environmental public policy analysis and that sort of
6 thing.

7 Q. And what is the nature of your particular
8 part of that practice at Industrial Economics?

9 A. Well, my practice is sort of a mile wide
10 and an inch deep really. I do some enforcement
11 related work, obviously, the ability to pay analysis,
12 general financial analysis in the context of
13 enforcement actions. I do some general litigation
14 work, breach of contract damages assessment, business
15 interruption damages assessment in the context of
16 litigation. I do some energy and regulated utilities
17 work testifying on behalf of various intervenors
18 before regulatory boards on rate designs and cost
19 allocation matters. Then I have a general kind of
20 public policy practice as well, doing regulatory
21 assessment, related public policy, and the analytic
22 support for several different governmental entities.

23 Q. I am going to follow up on a few of those
24 concepts you mentioned. What is applied financial

1 economics?

2 A. Well, I guess I generally characterize it
3 as business analysis, basically understanding
4 business operations, decision making, capital
5 budgeting exercises that businesses go through for
6 the purposes of making investment decisions and that
7 sort of thing.

8 Q. And another follow-up, what is a direct
9 financial analysis?

10 A. I guess I put that a little bit more in
11 the accounting realm. I looking specifically at a
12 business's financing, its profitability, its cash
13 flow, the state of its balance sheet, how it finances
14 its operations, whether through debt or equity,
15 basically understanding how a business operates and
16 the general financial resources available to it.

17 Q. Okay. And included in that, in your work
18 do you analyze ability -- you kind of mentioned this
19 earlier, but do you analyze ability to pay?

20 A. Right. Yep, we have done a good amount
21 of work over the years on ability to pay analysis in
22 the context of enforcement actions, and I have been
23 part of that practice.

24 Q. And have you received any training on the

1 specific subject analyzing ability to pay?

2 A. Well, academically my relevant course
3 work included courses in accounting and finance and
4 economics and the like. And then that's been
5 supplemented by 12 years of on-the-job learning and
6 training while at Industrial Economics.

7 Q. And let me ask you how many --
8 approximately how many times have you conducted some
9 sort of financial analysis while you were working
10 with Industrial Economics?

11 A. Well, general financial analysis is part
12 and parcel of most everything I do. In the context
13 of the enforcement work I probably worked on in
14 excess of 150 cases over the years.

15 Q. And how many times approximately have you
16 analyzed a business's ability to pay?

17 A. The vast majority of the cases have some
18 sort of business enterprise involved with it. On
19 more rare occasions does the violation or the
20 superfund contribution involve strictly an
21 individual. So probably 89 percent involve some sort
22 of for profit business enterprise. The other ten
23 percent or so involve individuals or non-profit
24 entities or some other municipal entity.

1 JUDGE MORAN: Counsel's question was how many
2 times have you analyzed the ability to pay.

3 MS. PELLEGRIN: It was the business entity's
4 ability to pay.

5 JUDGE MORAN: Business entity's ability to
6 pay.

7 THE WITNESS: That would be in excess of 130
8 separate cases.

9 JUDGE MORAN: 130 separate cases where you
10 have analyzed a business entity's ability to pay?

11 THE WITNESS: Yes.

12 BY MS. PELLEGRIN:

13 Q. And, generally, of the cases you have
14 been involved in, businesses you have reviewed for
15 their ability to pay, what kind of business sectors
16 were involved?

17 A. It really has run the gamut. Pretty much
18 any business sector that can find themselves
19 embroiled in environmental issues, I have seen it.
20 So dry cleaners to asbestos removers, the big mining
21 entities to big manufacturing enterprises to a
22 variety of ag related enterprises as well.

23 Q. And have you ever analyzed the ability to
24 pay of an individual?

1 JUDGE MORAN: Of what now?

2 Q. Of an individual?

3 A. I have. I mean, it is tough to strictly
4 separate individuals from business enterprises,
5 because even when it is an individual that's a
6 respondent, there might be a sole proprietorship,
7 some form of business enterprise involved there, like
8 in this case. But I think in my resume' I cite the
9 fact that I have done about 25 or 30 individual
10 ability to pay cases over the years.

11 Q. And just a follow-up, approximately how
12 many times have you analyzed the ability to pay of a
13 sole proprietorship?

14 A. Oh, a good number. I don't know for
15 sure. Usually, most of the individual cases involve
16 some sort of sole proprietorship. So I would roll
17 that up with the number consistent with general
18 number of business enterprises.

19 Q. Okay. Well, let me ask this. Is
20 analyzing the ability to pay of a sole
21 proprietorship, how does that compare with analyzing
22 the ability to pay of an individual?

23 A. They are quite similar. You are looking
24 for a similar set of sources of funds. I think what

1 you have to look out for when you have a sole
2 proprietorship linked with an individual respondent
3 is you really have to understand their personal
4 financial circumstances, their household expenses,
5 personal financial situation, much more thoroughly
6 than you would when you have, for example, a C
7 corporation or an S corporation where you can make
8 some distinction, a greater distinction between the
9 owner and the business enterprise.

10 A sole proprietorship, obviously things
11 are much intertwined. And in fact even the business
12 finances are recorded on the individual's 1040 income
13 tax return. So everything is kind of rolled up in
14 one, even more intimately than you would have with a
15 separate corporate entity.

16 Q. Mr. Ewen, have you ever provided any
17 training or educational presentation on the subject
18 of ability to pay?

19 A. I have a number of times. We have a
20 little training practice that we are trying to really
21 put ourselves out of business, so to speak, help
22 train EPA and state folks on the ability to pay
23 analyses on their own and gain some more experience
24 on their own, so I do that regularly. I do online

1 training and I do that a number of times each year.

2 JUDGE MORAN: You train EPA people, am I
3 right?

4 THE WITNESS: That's right, yeah.

5 BY MS. PELLEGRIN:

6 Q. And, Mr. Ewen, have you -- specifically
7 have you ever analyzed ability to pay where the
8 business entity was a farming operation?

9 A. Well, I don't think I have seen a corn
10 and soybean operation before, but I have definitely
11 done entities involved with agricultural activities,
12 milling and elevator operations, some cattle feed
13 lots and certainly we have done a number of other
14 types of entities that are involved in commodity
15 businesses like mining operations and that sort of
16 thing.

17 Q. And do you personally have any
18 familiarity with farming operations?

19 A. I do a little bit. This one is a little
20 closer to the heart than most. I grew up on a grain
21 and soybean and sugar beet farm outside of Mayville,
22 North Dakota.

23 Q. And do you know anything -- you said in
24 North Dakota?

1 A. North Dakota.

2 Q. And do you know anything about farming
3 operations in the state of Illinois?

4 A. Well, you know, I didn't grow up on a
5 corn farm so I know a little bit less about corn.
6 And the climate is a little bit different here. And
7 I would imagine farming practices are a little bit
8 different, but generally I have some sense for what
9 this operation does, what it looks like, I would say.

10 Q. And have you conducted any research
11 regarding farming operations in the state of
12 Illinois?

13 A. I have, just some general internet
14 research. And in fact some internet research was
15 passed on to me by U.S. EPA Region 5 that I also
16 reviewed. But they just provided general field crop
17 information, farm size information, commodity price
18 information and that sort of thing, just to
19 familiarize myself with kind of production and market
20 characteristics and trends in Illinois for the last
21 few years.

22 Q. Okay. Mr. Ewen, have you ever testified
23 as an expert witness before?

24 A. I have.

1 Q. Approximately how many times?

2 A. I think I have testified in court seven
3 times. Six of those were enforcement actions,
4 environmental enforcement actions.

5 Q. And on what subjects generally have you
6 testified?

7 A. Well, the lone non-environmental
8 enforcement case was an economic damages case, a
9 nuisance case. But the other six enforcement cases
10 were mostly an ability to pay focus. I think one had
11 an economic benefit component to it as well.

12 Q. Okay. And in your six ability to pay
13 testimonies were you qualified as an expert witness
14 by those courts?

15 A. I was.

16 Q. And if you remember, what subject or
17 subjects were you qualified as an expert witness in
18 by the courts?

19 A. By other courts or by -- it was generally
20 as an expert on financial matters in all of those
21 cases, both the federal district court and
22 administrative proceedings.

23 Q. So in those six ability to pay, were some
24 of those administrative and some of those were

1 judicial?

2 A. Yes. Four were administrative and two
3 were in federal district court.

4 Q. Okay. And on those occasions that you
5 testified as an expert witness, did you provide
6 expert opinions as part of your testimony?

7 A. I did.

8 Q. And was your testimony accepted by the
9 court as expert testimony on each of those occasions?

10 A. I believe so, yes.

11 JUDGE MORAN: You had to be qualified as an
12 expert in order for you to testify, didn't you?

13 THE WITNESS: Yes.

14 BY MS. PELLEGRIN:

15 Q. And let me direct your attention,
16 Mr. Ewen, to Complainant's Exhibit Number 35 which
17 should be in one of your binders up there.

18 (Whereupon Complainant's Exhibit
19 35 was presented for purposes of
20 identification as of this date.)

21 A. Okay, I have got it.

22 Q. And turning your attention to
23 Complainant's Exhibit 35, document Bates Number 802
24 to 807, can you flip through that, please?

1 A. Uh-huh.

2 Q. And do you recognize this document?

3 A. I do.

4 Q. And what is this document?

5 A. It is my professional resume'.

6 Q. And is this a true, accurate and complete
7 copy of your professional resume'?

8 A. It is.

9 Q. And does it accurately describe your
10 educational background and work experience?

11 A. It does, yes.

12 MS. PELLEGRIN: I would like to move to admit
13 Mr. Ewen's resume', Complainant's Exhibit 35, into
14 the record.

15 JUDGE MORAN: Yes, that's it. Is there any
16 objection?

17 MR. NORTHRUP: To his --

18 JUDGE MORAN: His resume'.

19 MR. NORTHRUP: No, sorry.

20 JUDGE MORAN: It is admitted. It wasn't
21 previously stipulated?

22 MS. PELLEGRIN: No.

23 JUDGE MORAN: It is admitted, whatever.

24 (Whereupon Complainant's Exhibit

1 regulatory work, includes some work for EPA, but also
2 the Department of Interior, Fish and Wildlife
3 Service, and the National Oceanographic and
4 Atmospheric Administration, and then I think I
5 referred to some of the regulatory work where I was
6 working with various intervenor groups, business
7 advocates and consumer advocates intervening in
8 various regulatory proceedings.

9 MS. PELLEGRIN: Your Honor, at this time I
10 would like to move to admit Mr. Ewen as an expert
11 witness on ability to pay.

12 JUDGE MORAN: Just before I hear from
13 Respondents, on ability to pay matters, have those
14 been exclusively that issue and you testified
15 exclusively then for EPA or have you testified for
16 other agencies on the question of ability to pay?

17 THE WITNESS: Well, I guess on the --

18 JUDGE MORAN: Just focus on ability to pay.

19 THE WITNESS: Right, but I was going to
20 define. In the two nuisance cases most recently
21 where I spent the last couple of days, there is an
22 ability to pay like analysis that you have to
23 consider in considering the burden of mitigating the
24 nuisance or paying damages, the burden that that

1 might engender upon the defendant in the lawsuit. So
2 in that context it is an ability to pay analysis.

3 But in terms -- more generally in terms
4 of cash flow analysis, which is essentially a major
5 part of the ability to pay analysis, that's part and
6 parcel of a lot of the, you know, economic damages
7 and economic finance work that I do across a good bit
8 of my practice.

9 JUDGE MORAN: Okay. But my question is how
10 many times when you have done the ability to pay
11 analysis has it been for EPA.

12 THE WITNESS: Well, in the context of --

13 JUDGE MORAN: Not nuisance things.

14 THE WITNESS: In the context of environmental
15 enforcement actions, all of that work has been for
16 EPA, under a couple of the state cases but for the
17 regulators.

18 JUDGE MORAN: Oh, in every instance it has
19 been for the regulators?

20 THE WITNESS: Yes.

21 JUDGE MORAN: You never appeared on behalf of
22 a Respondent to bring your analysis to bear as to why
23 an individual would not have the ability to pay; is
24 that true?

1 THE WITNESS: I have never worked for a
2 defendant in an environmental enforcement case.

3 MS. PELLEGRIN: I have just one follow-up
4 just on that same line of questioning.

5 Q. Mr. Ewen, have you ever in your work for
6 either EPA or another regulator, have you found as
7 your conclusion that a respondent did not have an
8 ability to pay?

9 A. Many times, yes.

10 JUDGE MORAN: Okay. So now we hear from the
11 Respondent. Is there a challenge to this witness's
12 expertise on the question of ability to pay?

13 MR. SMALL: No objection.

14 JUDGE MORAN: Okay. And I find that, based
15 on the questions asked as well as by his resume',
16 that this witness is qualified to testify on the
17 subject of ability to pay.

18 It is now 3:57 so we will pick up
19 tomorrow morning at 9:00 a.m. and we will go off the
20 record.

21 (Whereupon the hearing in this
22 matter was continued until May
23 4, 2007, at 9:00 a.m. in
24 Carlyle, Illinois.)