

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
OFFICE OF ADMINISTRATIVE LAW JUDGES

IN THE MATTER OF: )  
) No.: CWA-07-2018-0095  
C&S ENTERPRISE, LLC. )  
)

Courtroom 145  
U.S. District Courthouse  
123 East Walnut Street.  
Des Moines, Iowa 50309  
Tuesday,  
October 2, 2018

The parties met, pursuant to the notice, at  
9:00 a.m.

BEFORE: HONORABLE SUSAN L. BIRO  
Administrative Law Judge

APPEARANCES:  
For the Agency:  
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EXHIBITS

AGENCY'S EXHIBITS:	IDENTIFIED	RECEIVED
AX-1-30A	221	221
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PROCEEDINGS

(9:00 a.m.)

1 JUDGE BIRO: Good morning, ladies and  
2 gentlemen. I'm Susan Biro. I'm the Chief  
3 Administrative Law Judge of the Environmental  
4 Protection Agency. I've been assigned to this case  
5 for the purposes of hearing and we're going to proceed  
6 today. This is my staff attorney with me, Matt  
7 Barnwell.  
8 Counsel for the Complainant, can you please  
9 identify yourself for the record?  
10 MR. MUEHLBERGER: Yes, Your Honor, my name  
11 is Chris Muehlberger with the Environmental Protection  
12 Agency.  
13 MR. BIERI: Good morning, Judge, Britt  
14 Bieri.  
15 JUDGE BIRO: Good morning. And counsel for  
16 the Respondent.  
17 MR. McAFEE: Good morning, Judge. I'm Eldon  
18 McAfee, counsel for the Respondent, and this is my  
19 client, Scott Morrow, on behalf of C&S Enterprises.  
20 JUDGE BIRO: Good morning.  
21 MR. MORROW: Good morning.  
22 JUDGE BIRO: I understand that you have  
23 stipulated to the admission of the exhibits.  
24  
25

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1 Complainant's Exhibits 1 through 32, is that correct?

2 MR. McAFEE: This is correct, Your Honor.

3 JUDGE BIRO: Okay. Thank you. And there

4 have been certain stipulations about the

5 qualifications and the expertise of certain expert

6 witnesses. Maybe we can get to that as we go on in the

7 proceedings.

8 We follow general federal trial practice in

9 these cases, but we're bound by the consolidated rules

10 of practice, which are much more liberal on the issue

11 of evidence. Because something is admitted to the

12 record does not mean that it will be given great

13 weight. The amount of weight will depend on what else

14 comes into the record. We are very accommodating on

15 time, so if anybody need to take a break for any

16 reason, at any time - you know, you want some water,

17 you don't feel well, you need to eat something; we can

18 accommodate all of those things. We have the chance

19 to stay in this courtroom only until 5:00 p.m. So, we

20 try to make the most of our time. There, apparently,

21 is no cafeteria in this building, so we'll have to

22 take at least an hour for lunch to allow everybody to

23 go out, and we can try to fit that into whatever time

24 it works out.

25 I've reviewed every single document that

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1 you've submitted in this case. I've personally read

2 everything that you have submitted, so I'm fairly

3 familiar with this case. So, you don't need to

4 necessarily give extended opening arguments, but I'll

5 give you the opportunity to make an opening statement,

6 if you would like. If the Complainant wants to go

7 first?

8 MR. MUEHLBERGER: Thank you, Your Honor.

9 JUDGE BIRO: Oh, I understand you wanted to

10 invoke the witness rule in this case. Do you want to

11 excuse your witnesses --the witnesses-- all the

12 witnesses before you make your opening statement?

13 MR. MUEHLBERGER: That's completely up to

14 you, Your Honor. I'm fine with the witness listening

15 to the opening statement, but if you prefer they be

16 sequestered, I'm fine with that as well.

17 JUDGE BIRO: Whatever you would like to do.

18 MR. McAFEE: I believe we only have one

19 witness here, is that correct, Chris?

20 MR. MUEHLBERGER: We have one witness and

21 then Dr. Garcia will be here through the entire

22 hearing.

23 MR. McFEE: She's a representative for the

24 agency, right?

25 MR. MUEHLBERGER: Yes, she represents the

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1 Agency.

2 MR. McFEE: Sorry, to talk over you. Pardon

3 me. I have no objection to Mr. Schafer being here

4 during opening. Thank you, Your Honor.

5 JUDGE BIRO: Okay, please proceed.

6 MR. MUEHLBERGER: Okay. May it please the

7 Court, once again, my name is Chris Muehlberger and I

8 represent the Environmental Protection Agency. This

9 is my co-counsel, Britt Bieri. Dr. Delia Garcia will

10 be also representing the Agency; she is the compliance

11 officer assigned to the case. And this is our

12 paralegal, Sarah Moreno.

13 Your Honor, this is a pretty simple story.

14 It begins with a simple question; does the water body

15 that you are looking at here on the screen deserve

16 legal protection? Central to this case is one issue;

17 whether or not this water body is jurisdictional under

18 the Clean Water Act?

19 Let me set the stage here. What you're

20 looking at is a stretch of stream in Deep River, Iowa,

21 that begins at the top of Respondent's property -

22 right here; and stretches for about 1,800 feet until

23 it discharges into Deep Creek - right down here.

24 Prior to 2015, this is what this tributary looked

25 like. But, in numerous written admissions, Respondent

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1 has admitted that in the summer of 2015, he diverted

2 the flow of this tributary underground through

3 drainage tiles into Deep Creek and then filled in the

4 channel. And he also admits that he did all of this

5 work without obtaining a Clean Water Act permit.

6 Allow me to show you what this looks like. Here is a

7 photo of the same stretch, just a few months after

8 Respondent filled it in in July. This is from

9 September 2015, and, by the way, both of these

10 exhibits are from Agency Exhibit 10.

11 Throughout the written evidence, Respondent

12 has alternately referred to that tributary as a gully,

13 or an upland gully, or a grassed waterway or a

14 drainageway. But, Your Honor, EPA will demonstrate in

15 the next few days that this water body easily meets

16 the criteria laid out under the Clean Water Act and

17 subsequent case law, making it a water of the United

18 States. It had a defined channel. It had flow in it

19 through much of the year. And it connected to a

20 perennial tributary, that Deep Creek, that I have

21 already pointed out.

22 Further, EPA will demonstrate that, for

23 decades and despite attempts to fill in and manipulate

24 the channel, this channel continues to re-establish

25 itself and afforge a path to Deep Creek.

1 Finally, EPA will also demonstrate that the  
 2 vegetation that was cleared by Respondent in July of  
 3 2015 contained about an acre of wetlands,  
 4 jurisdictional wetlands under the Clean Water Act. I  
 5 know you are familiar with the Rapanos v. the United  
 6 States Supreme Court case but, as a review, there are  
 7 two tests under Rapanos that the Government must  
 8 establish creating a water of the United States. The  
 9 first is Justice Scalia's Test, which requires, and I  
 10 quote here: "A relatively permanent standing or  
 11 continuously flowing body of water, forming geographic  
 12 features that is described, in ordinary parlance, as a  
 13 stream." Justice Kennedy's test requires that the  
 14 tributary have a physical, biological or chemical  
 15 connection to inhabitable water.

16 Your Honor, in the next few days we will  
 17 easily establish that the water body meets either test  
 18 and, at the end of this hearing, we will respectfully  
 19 request that the Court find for Complainant and award  
 20 whatever remedies are appropriate. Thank you.

21 JUDGE BIRO: Thank you, Mr. Muehlberger.  
 22 Mr. McAfee, would you like to make your opening  
 23 statement now or at the beginning of your case?

24 MR. McAFEE: I think I will make a short one  
 25 now, Your Honor. Thank you.

1 JUDGE BIRO: Okay, please proceed.

2 MR. McAFEE: Your Honor, as you indicated,  
 3 and we appreciate, you've been through the record and  
 4 we're going have at least a several day trial here,  
 5 presenting evidence so I'll try not to be - I guess  
 6 redundant is not the right word, because we haven't  
 7 been through it yet, but--

8 This may not be an opening statement that  
 9 will win any rewards, but I will tell you, as we all  
 10 know in this room, if it were a clear-cut case of  
 11 either a water of the U.S. or not a water of the U.S.  
 12 we wouldn't be here. We are somewhere in the middle  
 13 here and we'll be the first to admit, there are  
 14 factors that indicate this channel or upland gully,  
 15 ditch, whatever this is, there are some factors to  
 16 indicate it is a water of the U.S., but we believe  
 17 there are just as many factors that destroy the  
 18 connectivity or the connection part of it. And  
 19 that's, if anything, and Your Honor, you know what to  
 20 focus on and what not to focus on, but I believe, as  
 21 we hear testimony, I'm going to have to remind myself,  
 22 when any witnesses referring to, you know, factors or  
 23 indicators of being a water of the U.S., where are  
 24 they referring to on this channel, gully, whatever it  
 25 is, stream? I'm sure, as the Government is alleging

1 it is, where are we talking about because connectivity  
 2 in my understanding of Rapanos is a very important  
 3 factor.

4 Beyond that, one of the -- you're going to  
 5 hear testimony about a hog building and, in fact, I  
 6 believe on both exhibits there was not an actual hog  
 7 building in the aerial, but someone had superimposed a  
 8 confinement building there. This case, I don't  
 9 believe, is about hog buildings, per se, but one of -  
 10 a lot of the testimony you'll hear a fair amount of it  
 11 will be about: Did Mr. Morrow make changes because of  
 12 this hog building being there? What does the hog  
 13 building have to do with manure being applied? I  
 14 think there will be some testimony about that, et  
 15 cetera. And again, I submit to you, this case is not  
 16 about the hog building and Mr. Morrow will testify, in  
 17 detail, about what he believes are some  
 18 misunderstandings in the record about what impact that  
 19 that hog building has had on the activities that he  
 20 performed. And, as Mr. Muehlberger stated, it is  
 21 uncontroverted that Mr. Morrow did perform activities,  
 22 just as Mr. Muehlberger stated, and he did not get a  
 23 permit. That's clear. Our point is, is those  
 24 activities are not a violation of the Clean Water Act  
 25 because that is not--

1 JUDGE BIRO: So, he didn't need a permit,  
 2 right. Got it.

3 MR. McAFEE: -- Right. Thank you.

4 JUDGE BIRO: Okay. I think somebody else  
 5 entered, but if you would like to excuse all the  
 6 witnesses, we can move forward.

7 MR. MUEHLBERGER: Your Honor, the witness  
 8 that is about to testify is in the room, and then our  
 9 other witness will be with us during the pendency of  
 10 the hearing, so there are no other witnesses to clear  
 11 at this point.

12 JUDGE BIRO: Okay.

13 MR. BIERI: Judge, if I could say something?  
 14 I think Carol Morrow was on Respondent's witness list  
 15 and when we got here today, Mr. McAfee said she  
 16 wouldn't be testifying. So, we are happy with her  
 17 staying in the courtroom too.

18 JUDGE BIRO: Okay, welcome Ms. Morrow.

19 MR BIERI: Thanks.

20 JUDGE BIRO: Okay. Would the Agency call  
 21 its first witness?

22 MR. MUEHLBERGER: Yes. The Agency calls  
 23 Marlyn Schafer.

24 JUDGE BIRO: Mr. Jones, could you please  
 25 swear the witness?

1 MR. JONES: Yes, ma'am.  
 2 Whereupon,  
 3 MARLYN SCHAFER  
 4 having been duly sworn, was called as a  
 5 witness and was examined and testified as follows:  
 6 DIRECT EXAMINATION  
 7 BY MR. MUEHLBERGER:  
 8 Q Good morning Mr. Schafer. So, let's start  
 9 out by asking the question, what do you do now?  
 10 A I am retired from federal service now.  
 11 Q Okay. And how long have you been retired?  
 12 A Since 2016.  
 13 Q Okay. And what did you do before you  
 14 retired?  
 15 A Before that, I was with the Corp of  
 16 Engineers, Rock Island District, in the Regulatory  
 17 Branch. I worked as a Regulatory Project Manager.  
 18 Q Okay. And how long did you work for the  
 19 Corp of Engineers?  
 20 A 20 years.  
 21 Q Okay. How about prior to working for the  
 22 Corp?  
 23 A Prior to the Corp, I worked with the USDA  
 24 Natural Resources Conservation Service as a District  
 25 Conservationist in various locations.

1 Q Okay. And how long did you work for the  
 2 USDA?  
 3 A That was about 20 years also.  
 4 Q And so, you said you were a District  
 5 Conservationist with the NRCS. Can you tell us a  
 6 little bit about what that job entails?  
 7 A Well, a District Conservationist, you are  
 8 responsible for the District Program, the Soil  
 9 Conservation Program, usually within one county, maybe  
 10 two counties. And conduct the - these days it's  
 11 related to the USDA Farm Program, where they provide  
 12 assistance to farmers who are in the farm program to  
 13 carry-out soil conservation practices and maybe some  
 14 other natural resources practices, such as wetland  
 15 restorations and so forth.  
 16 Q Okay. And let's talk a little bit about  
 17 that wetland restoration. How did you work with  
 18 property owners with respect to wetlands?  
 19 A If a property owner desired to restore some  
 20 wetlands that are either non-existent now or were  
 21 previously there, but non-existent or are impaired, a  
 22 lot of times there was cost share assistance,  
 23 financial assistance was available to that farmer to  
 24 then restore the wetland by either removal of drainage  
 25 tiles, restoring wetland topography, reseeding wetland

1 vegetation.  
 2 Q So, how did you determine whether or not  
 3 there was a wetland on a property owner's property?  
 4 A Well, to determine if there was a wetland  
 5 present, the -- at least with the NRCS, there was a  
 6 procedure there that came into effect back in 1985,  
 7 under the Food Security Act, where we would do a  
 8 delineation of the wetland. The wetland is -- would  
 9 -- to meet the requirements as a wetland, we would  
 10 have to have hydrophytic vegetation, which is wetland  
 11 vegetation; hydro soil, soil that supports wet  
 12 conditions; and then soil saturation or surface  
 13 ponding.  
 14 Q So, you mentioned the Food Security Act.  
 15 So, when you were making these wetland determinations,  
 16 it was for the purposes of the Food Security Act, is  
 17 that correct?  
 18 A Yes, it was.  
 19 Q So, let's talk a little bit more about your  
 20 role with the Corp of Engineers. You had mentioned  
 21 that you were Regulatory Project Manager. Can you  
 22 describe what a Regulatory Project Manager does?  
 23 A Regulatory Project Manager, we would process  
 24 permit applications that we received from -- could be  
 25 from farm property owners, home property owners,

1 businesses, corporations. It could also be city,  
 2 county, state Government. Anyone who is proposing to  
 3 perform some type of work and may even include a  
 4 wetland restoration, if they are going to perform the  
 5 work within a jurisdictional water of the U.S.  
 6 Q Okay. And was this also for purposes of the  
 7 Food Security Act?  
 8 A No, this was just for purposes of the Clean  
 9 Water Act.  
 10 Q Okay.  
 11 A As far as what the Corp did.  
 12 Q Okay. So, you said you needed to help the  
 13 property owner determine whether or not that it was a  
 14 water of the United States. Can you describe a little  
 15 bit what you mean by that?  
 16 A If we receive an application or we may even  
 17 receive an informal contact, such as by phone or  
 18 e-mail, from a perspective applicant, saying that they  
 19 are proposing to perform work in an area that may  
 20 include jurisdictional water, such as a stream or  
 21 wetland --  
 22 And so, we would then, first make that  
 23 determination whether there is -- a preliminary  
 24 determination if there is a potential water of the  
 25 U.S. there. We would first look at - in the office

1 look at various resource maps, soil maps, topographic,  
2 fish water service, National Wetland Inventory map.  
3 We would make a preliminary determination in the  
4 office and, if it appears that this is a  
5 jurisdictional water, then we would advise the -- if  
6 we had not already received an application, we would  
7 advise the prospective applicant to file an  
8 application so that we could process it.

9 We would then, in some cases, it may be  
10 necessary to make a site visit to actually perform a  
11 field procedure to determine if that stream or the  
12 wetland is jurisdictional.

13 Q Let's talk a little bit about determining  
14 jurisdiction for streams and wetlands. What kind of  
15 qualities are you looking for in a stream when you are  
16 determining whether or not it's jurisdictional?

17 A Well, we need to -- we're looking at the  
18 stream -- first of all, if it is a perennial stream,  
19 then it is typically going to be jurisdictional  
20 because it is going to have all year-round substantial  
21 flow. We move up further into the watershed and into  
22 the smaller streams, which may be intermittent flowing  
23 streams, streams that would just flow seasonally.  
24 Well, they have to demonstrate that there is an  
25 ordinary high-water mark in the channel. It has to be

1 a defined channel, show an ordinary high-water mark,  
2 which is generally a break in the vegetation on the  
3 bank, where, below the break in vegetation is where  
4 the flow stream occurs and -- most of the time and  
5 where there will be little or no vegetation. There  
6 will be some sorting -- the silts, the sands, gravel  
7 will sort, may deposit in places where there is low  
8 velocity flow and that --

9 So, we have long duration flows, it may,  
10 after a period of time, the flow may diminish. If  
11 there is no rainfall event to replenish the flow,  
12 then the flow may diminish and even come to a point  
13 where there is little or no flow, but there may still  
14 be some riverpools or depressions where there are  
15 pools or that the streambed would stay saturated for a  
16 long period of time during the season. So, that's the  
17 intermittent flowing streams, is where -- what we  
18 would be looking for. Those and perennial streams,  
19 it's less questionable there.

20 Q Okay. So, throughout the evidence, the  
21 terms "intermittent stream" and "ephemeral streams"  
22 are described. You've just described what an  
23 intermittent stream is; can you talk a little bit  
24 about an ephemeral stream?

25 A Ephemeral streams are going to be smaller

1 streams that have smaller drainage area on them.  
2 Further up in the watershed, they may have a little  
3 steeper topography. And ephemeral streams, if the  
4 project is going to be within an area that appears to  
5 be an ephemeral stream, then that becomes a borderline  
6 case, where we almost always need to make a field site  
7 visit to take a look at that channel and determine if  
8 it has the -- meets those characteristics as a  
9 jurisdictional stream.

10 Q So -- A In those cases

11 Q Sorry.

12 A -- where we have to define where the break  
13 is between jurisdictional stream and upland  
14 drainageway. And so, the entire length of the project  
15 site could still be an ephemeral stream that meets the  
16 requirements as a jurisdictional water, or it may be  
17 that we will just determine it to be upland  
18 drainageway, where it is not a jurisdictional water  
19 and the project can proceed. There's other cases  
20 where there may be a break, where a portion of it is  
21 jurisdictional; the other portion is not.

22 Q So, let's talk about wetlands a little bit.  
23 What kind of qualities are you looking for in a  
24 wetland to make a determination that it is or isn't  
25 jurisdictional?

1 A Well, that has to meet three basic criteria.  
2 It has to be, again, similar to the NRCS'  
3 requirements, hydrophytic vegetation, wetland  
4 vegetation and it has to be -- there's a hydric soil  
5 so that it supports wetland conditions or wet  
6 conditions and saturation to the surface, maybe  
7 ponding.

8 Q So

9 A The saturation, again, is not required that  
10 -- the saturation to the surface or, at least within  
11 the top 12 inches of the soil, may not be present  
12 year-round, but it is present for long periods of  
13 time.

14 Q How does your analysis of a wetland with the  
15 Corp of Engineers compare to your analysis under NRCS?

16 A The procedures and the criteria are very  
17 similar, with some differences. As far as with the  
18 Corps' procedure is that the Corp follows the wetland  
19 delineation procedures that were developed by the Corp  
20 of Engineers and other agencies such as USEPA. And  
21 where the NRCS follows procedures that are outlined  
22 under the Food Security Act Manual. There are some --  
23 in many cases, the NRCS is more involved with  
24 agricultural land, that is already agricultural land,  
25 and so they will follow a procedure of reviewing at

1 least five years of aerial photography from years  
 2 where there was no rainfall. And if the view of those  
 3 photos look for characteristics -- wetland  
 4 characteristics, because a lot of -- in many cases,  
 5 where the NRCS is working it is already agricultural  
 6 land; it is being cropped most years, if not all the  
 7 years. And so, looking in the field, well, I can go  
 8 to the field and do a verification to look at the soil  
 9 indicators and the hydrology, but as far as  
 10 vegetations, may not be present. So, that's where the  
 11 NRCS uses this procedure of looking at the five years  
 12 of aerial photography and, if there is three years  
 13 that show wet conditions, then it is a potential  
 14 wetland. And, in that case, they will then go to the  
 15 field and do the field verification. So, which is a  
 16 procedure that, and if the Corp was involved with  
 17 anything in that case, we would then just consult with  
 18 the NRCS.

19 Q So, does the Corp of Engineers ever rely on  
 20 wetland information provided by NRCS?

21 A Yes, they do. Whenever there is  
 22 agricultural projects and it does involve agricultural  
 23 land, where there is potentially jurisdictional  
 24 wetland, then we will consult with the NRCS.

25 Q So, I think I heard you say that, when you

1 are determining jurisdiction over streams and  
 2 wetlands, that you have reviewed topographic maps and  
 3 aerial imagery. Are there any other things that you  
 4 look at to determine whether or not a water body is  
 5 jurisdictional?

6 A We look at the U.S. Fish and Wildlife  
 7 Service National Wetland Inventory, and that's a very  
 8 good resource, as far as showing where there are  
 9 potential wetlands. And so, aerial photography, soil  
 10 maps -- the NRCS soil maps, we'll look at the soil  
 11 mapping. The soils are all classified, whether they  
 12 are hydric soils or not. They are classified by the  
 13 NRCS, so if the project site includes hydric soils,  
 14 then that is an indicator to us that there is  
 15 potential there for wetland to exist and it also gives  
 16 -- supports when we are making a determination on a  
 17 stream. If that is a hydric soil in there, then it's  
 18 an indicator that there is very likely to be longer  
 19 periods of flow and soil saturation of the streambed.

20 Q So, in your time at the Corp of Engineers,  
 21 how many separate 404 cases would you say that you  
 22 worked on?

23 A Oh, I would say, on average, I would do 100,  
 24 150 a year.

25 Q And how many -- let's say -- how many aerial

1 images do you think that you've reviewed over your  
 2 time at the Corp in reviewing jurisdiction?

3 A Oh, many, many. Yes.

4 Q Okay. So, what happens if somebody does  
 5 work in a tributary or a wetland that is determined to  
 6 be jurisdictional and they don't get a permit? What  
 7 happens then?

8 A We are notified -- we may be notified by an  
 9 adjacent property owner and there are cases where we  
 10 are notified by the NRCS. We have an understanding  
 11 with the NRCS. They know that, if someone does work in  
 12 a stream or potential jurisdictional wetland, then  
 13 they will notify us. And - or it may even be when we  
 14 are out in the field; we may observe some activity  
 15 going on that -- where we have no record of a permit.  
 16 So, any of those cases, we will then first conduct --  
 17 perform a preliminary determination in the office  
 18 whether this is potentially a jurisdictional water  
 19 that we need to investigate it further. If it is,  
 20 then we get whatever information we can about the  
 21 activity, who the property owner is, who is doing the  
 22 work, contact that property owner and then go on from  
 23 there as far as with the investigation, and again to,  
 24 first determine if it is a jurisdictional water and  
 25 then, if it is, then -- we then advise that property

1 owner that they have violated the Clean Water Act and  
 2 that we need to go through a procedure for remedial  
 3 action or whatever the case may be.

4 Q Okay. I'd like to show the witness Agency  
 5 Exhibit 5, Page 2. If we can zoom out a little bit.  
 6 Mr. Schafer are you able to read that?

7 A Yes.

8 Q Okay, great. So, can you -- once you are  
 9 ready, can you describe this document please?

10 A This is an e-mail that was from Mr. Lance  
 11 Schaefer to Katherine Timmerman, who was a District  
 12 Conservationist with the NRCS in Isle County. And  
 13 that's regarding the C&S Enterprises, as he titled it:  
 14 the Morrow hog site. And he had attached information  
 15 and photos -- camera photos and aerial photos, I  
 16 believe, of the activity that had occurred on the C&S  
 17 Enterprises Property regarding the clearing of trees  
 18 and filling of the channel. And just have to see here  
 19 --

20 Q Take your time.

21 A -- yeah, then there is some information here  
 22 regarding MCM, LLC with the proposed building of a hog  
 23 confinement building.

24 Q Do you know Katherine Timmerman?

25 A Yes, I do. I've worked with her on a number

1 of projects and cases.

2 Q And, to your knowledge, would she be

3 qualified to make wetland determinations or other

4 determinations necessary for the NRCS?

5 A Well, most District Conservationists, I'm

6 sure she is qualified to make a wetland determination.

7 Now the NRCS, I know, over the years that their

8 procedures have changed. I believe their more current

9 procedure is to have a designated team of qualified

10 persons that would actually go out to the site and

11 make a wetland determination.

12 Q Okay. And do you know who Lance Schaefer

13 is?

14 A Well, Mr. Lance Schaefer is, I understood he

15 is a nearby property owner, who observed the work that

16 was occurring and decided to look into it further.

17 Q Okay. I would like to show the witness

18 Agency Exhibit 5, Page 1. I'll give you a minute to

19 look this over and when you're ready, Mr. Schafer,

20 could you please describe this document?

21 A Okay. Well, this is that first e-mail --

22 the first -- from Mr. Lance Schaefer; that was the

23 first of a series of e-mails that had occurred between

24 Lance, Mr. Schaefer and myself and with Katherine

25 Timmerman. And so, this -- this particular sheet now,

1 shows e-mail -- well, an e-mail response from me to

2 Mr. Lance Schaefer and I had inquired to get some more

3 information. Where he had named Mr. Scott Morrow of

4 C&S Enterprises, but that the Manure Management Plan

5 shows MCM Pork, LLC and so, contact person, Brian

6 Ritland. And I was trying to determine who I needed

7 to contact regarding the clearing -- the filling of

8 that stream channel.

9 Q To your knowledge, what is the relationship

10 between C&S Enterprise and MCM Pork?

11 A Well, as I understand from -- as I

12 understand from the e-mails, that C&S Enterprises owns

13 the farm property and had performed the clearing and

14 the filling of the channel; and that MCM Pork LLC, it

15 was proposed that they would be constructing the

16 building and operating the confinement system. The

17 property would either be released or sold by C&S

18 Enterprises to MCM Pork LLC. That is my

19 understanding.

20 Q Okay. For the record, could you read the

21 sentence that begins with "The tributary you have

22 circled"?

23 A "The tributary you have circled on the area

24 is a jurisdictional stream, so I need to verify if

25 they have done any work in that tributary, which would

1 require a Corp permit."

2 Q So, at this point, what made you decide that

3 this was a jurisdictional stream?

4 A Well, when I was first contacted by Mr.

5 Lance Schaefer and then received his e-mail with the

6 locations and the photography, then -- I then went

7 through the procedure of viewing the aerial

8 photography, various resource maps, the aerial

9 photography, the soil map, topographic map, wetland

10 inventory. I would have looked at those resources to

11 initially verify whether there is a potential

12 jurisdictional water involved with this work. And

13 which it did appear to be.

14 Q Okay. I'd like to show the witness, Agency

15 Exhibit 5, Page 3.

16 Okay, we'll give you a minute to review

17 this.

18 A Okay. E-mail from Mr. Lance Schaefer, where

19 he advised me that I should contact landowner C&S

20 Enterprises.

21 Q Okay.

22 A Carol and Scott Morrow of Deep River.

23 Q Okay. I'd like to show the witness Agency

24 Exhibit 5, Page 6. This is an attachment from the

25 e-mail that was sent by Mr. Lance Schaefer.

1 A Okay. Well, this is a camera photo which

2 appears to have been taken from or near the road at

3 the north end of the property. It is looking

4 downstream, to the south to where the trees are, is

5 Deep Creek. And where we have the concentrated flow

6 of water, that is where the stream, where this

7 particular stream channel existed prior to the trees

8 being removed and the channel being filled in. It is

9 a concentrated flow of water; it is still following a

10 meandering pattern in there, so it was either that the

11 channel had not been entirely filled in or some of the

12 field material had eroded out and it was again

13 following some of the original channel.

14 Q I'd like to show the witness Agency Exhibit,

15 (sic) Page 9. Which is also a photograph which was an

16 attachment to the e-mail by Mr. Lance Schaefer. And,

17 when you are ready, Mr. Marlyn Schafer, could you

18 please describe what you are looking at in this photo?

19 A This photo was taken on the neighboring

20 property, on the north end; it was north of the C&S

21 Enterprise property, upstream end of the stream

22 channel that was altered on the C&S Enterprise

23 property. This -- on this property the channel

24 remains undisturbed, so we have a wooded cover and a

25 divine channel, a substantial streamflow, and you can

1 see down into that stream channel, where there is  
2 gravel and there's all the vegetation along that  
3 stream channel that would appear to be wetland  
4 vegetation.

5 Q Okay, and based on your analysis of the  
6 photo, what -- how would you describe as what's  
7 happened on the C&S Enterprise property?

8 A Well, once we get to the property line and  
9 then we go onto the C&S Enterprise property, the  
10 stream channel -- well, the woodland -- it would  
11 appear that the -- what existed on C&S Enterprise  
12 property was very similar to what is existing on this  
13 particular property. And so, that wooded cover was  
14 cleared and then the stream channel was filled.

15 Q Okay. I'd like to show the witness Agency  
16 Exhibit 5, Page 10. Once again, another photograph  
17 attached to the Lance Schaefer e-mail. Could you  
18 please describe this image?

19 A This is on the C&S Enterprise property,  
20 where you can still see some of the remaining remains  
21 of the trees that had been removed and the entire  
22 channel here had not yet been filled in. So, this is  
23 the channel that -- in a rough condition, after the  
24 tree removal and where some earth-work had occurred.

25 Q Thank you. One more photo from this

1 exhibit, Agency Exhibit 5, Page 11.

2 A This is another photo showing the work that  
3 had occurred on C&S Enterprise, on the left side.  
4 That would appear to be some tile that had not -  
5 possibly had not yet been installed or I can't recall  
6 whether it had been completely installed at that time  
7 or not but that would appear to be some tile conduit  
8 that is laying on the surface on the left side. Here  
9 again though, the channel -- you can see where the  
10 channel was and where it had been cleared.

11 Q And can you please explain for the record,  
12 what is a tile?

13 A A tile -- all tiles are typically going to  
14 be clay or concrete, but for a long time now,  
15 agriculture drainage tiles have been manufactured as  
16 corrugated plastic tile - PVC material. And it's  
17 installed in the wet areas, three to five feet deep  
18 and, to help it drain out -- there is maybe wet  
19 farmland or wet waterway. And it will then -- the  
20 tile is perforated so it can take out the excess  
21 moisture from the soil and then the - it flows -- the  
22 water that flows through the tile down to an outlet,  
23 such as, in this case, it will flow to Deep Creek.

24 Q Thank you. I'd like to show the witness  
25 Agency Exhibit 9, Page 1. Are you able to read this

1 okay, Mr. Schafer?

2 A Yes.

3 Q Okay. So, after you've had a chance to  
4 review it, can you please describe what this document  
5 is?

6 A Well, it is a telephone conversation record  
7 dated - well, this year was -- July 20, 7 through 29,  
8 because I made the phone call -- the phone calls on  
9 the 29th. But then I was -- prior to that, then,  
10 dated July 28th here, I performed in-office review of  
11 the channel and then documented some of the  
12 information that I had found: Drainage area - 100  
13 acres. All right. At that time, it said that there  
14 was no NWI National Wetland Inventory Designation.  
15 But later on, it did. There was an updated National  
16 Wetland Inventory Map that does show National Wetland  
17 Inventory Designation.

18 Q And what's the date on your conversation  
19 record here?

20 A Let's see, well, let's see -- it was July  
21 28th when I conducted my preliminary review and then  
22 27th -- 28th. And then I had contacted Mr. Morrow,  
23 that was the 29th. I contacted Mr. Morrow to advise  
24 him of the inquiry about the clearing and the filling  
25 of the channel and documented that Scott had explained

1 that C&S Enterprises sold the area of the old  
2 farmstead to MCM LLC to build and operate a hog  
3 confinement unit. And documented that wash tiles had  
4 been installed and the channel had been filled. And  
5 because this was within the limits set by the Iowa  
6 Department of Natural Resources for a distance of a  
7 confinement unit to any channel, I advised Mr. Morrow  
8 that the channel may be jurisdictional stream channel  
9 and would require a Department of the Army permit for  
10 the tiling and the filling of the channel.

11 Q Can you talk a little bit about your  
12 knowledge of these DNR regulations; about the distance  
13 of confinement buildings to streams?

14 A I believe the -- that the -- our primary  
15 Natural Resources' regulations require a minimum  
16 distance. There are two distances: one is 1,000 feet  
17 between the confinement unit and a major water body.  
18 But, in this case here then, that limitation is a  
19 minimum of 500 feet. And so, in this case, Deep Creek  
20 was sufficient distance from the confinement building,  
21 but the intermittent stream was within that 500 foot  
22 limit.

23 Q Okay. And to your recollection then, Mr.  
24 Morrow explained to you that he filled in the channel  
25 because of those setback regulations?

1 A That was my understanding, yes, that he did.  
 2 Q Okay. I'd like to show the exhibit -- or,  
 3 excuse me -- the witness Agency Exhibit Page 9 (sic),  
 4 Page 2.  
 5 A Okay, July 29th, I contacted Ms. Katherine  
 6 Timmerman with the NRCS and to coordinate a review  
 7 with them and to find out what their volume was going  
 8 to be, and then -- she advised me that the NRCS will  
 9 perform wetland determination of the entire reach of  
 10 the channel from Deep Creek to the north end. Then I  
 11 advised her I was going to be meeting with Mr. Morrow  
 12 to determine whether the channel is another  
 13 drainageway, not jurisdictional or an intermittent  
 14 flowing stream channel -- jurisdictional. But that we  
 15 would not complete our jurisdictional determination  
 16 until the NRCS had completed their wetland  
 17 determination.  
 18 Q Okay. Thank you. So, after you talked to  
 19 Mr. Morrow and the NRCS, what did you do next with  
 20 respect to this case?  
 21 A Oh. Then I met with Mr. Morrow on site to  
 22 discuss the Clean Water Act requirements with him, to  
 23 also gain more knowledge about the work that was done  
 24 there and why it was done. And then to, again, since  
 25 the channel had already been cleared and filled, then

1 to find some way of making a determination whether  
 2 this was a jurisdictional water or not, but which -  
 3 fortunately, we still had a stream channel intact on  
 4 the upper property. So, that was what I carried out.  
 5 Q Okay. I'd like to show the witness Agency  
 6 Exhibit 10, Page 21.  
 7 (The document referred to was  
 8 marked for identification as  
 9 Agency Exhibit No. 10.)  
 10 Q Mr. Schafer, this is a photo that was taken,  
 11 an aerial photograph that was taken on September 20th,  
 12 2015. Can you describe timewise the relationship of  
 13 the date of this photo to the time that the channel  
 14 was filled in.  
 15 MR. McAFEE: Excuse me, Your Honor. I'm  
 16 sorry. And I -- sorry, what was the -- I can't read  
 17 the number on that. Is that AX-10?  
 18 MR. MUEHLBERGER: Yeah, it's Agency Exhibit  
 19 10, Page 21.  
 20 MR. McAFEE: I apologize for interrupting.  
 21 MR. MUEHLBERGER: Oh, that's okay. That's  
 22 okay.  
 23 BY MR. MUEHLBERGER:  
 24 A This photo, September of 2015, was taken  
 25 after the work had been performed on the -- the stream

1 channel; where the trees have been cleared and a  
 2 substantial amount of the grading had been completed.  
 3 Q Does this photo accurately reflect the  
 4 conditions of the property when you conducted the site  
 5 visit?  
 6 A See, I conducted the, that was in June, when  
 7 I conducted the site visit. And, yes, I would say  
 8 yes, that it does accurately represent - back in June  
 9 it may still been a little rougher conditions. I'm  
 10 not sure if there was more work that had been  
 11 performed after our site visit or not. But it does  
 12 represent what the condition of the -- that project  
 13 site.  
 14 Q Okay. And I know it's been a while, but, to  
 15 your recollection, can you describe the conditions at  
 16 the site when you conducted your site visit?  
 17 A Most of the -- well, the clearing had been  
 18 done, earth work; there was still some rough areas  
 19 that had not been filled and graded yet. The tile had  
 20 been installed. There were two tile basins that had  
 21 been constructed berms across that water channel with  
 22 tile intakes to capture the surface water and put it  
 23 underground into the subsurface drainage tile, which  
 24 then was taken down to outlet in Deep Creek. At the  
 25 time, it was, again, wet conditions and he had not --

1 the crop was planted but I don't believe any seeding  
 2 had been done as far as grass in that waterway yet, at  
 3 that time.  
 4 Q Okay. I'd like to show the witness Agency  
 5 Exhibit 4, Page 1. Mr. Schafer do you recognize this  
 6 image?  
 7 A Yes, this is one of the camera photos that I  
 8 took on that day I met with Mr. Morrow. It shows tile  
 9 intakes. This would be in one of those basins that I  
 10 previously mentioned where service water would enter  
 11 into the basin and then -- would then flow into those  
 12 intakes into the subsurface drainage tile.  
 13 Q Okay. I'd like to show the witness Agency  
 14 Exhibit 4, Page 2. Whenever you are ready, please  
 15 describe this photo.  
 16 A Okay, well, this would appear that we're  
 17 looking, I believe at the berm. It's a little rough  
 18 as far as well, we've have had some erosion there and  
 19 the vegetation may be covering up some features. But,  
 20 I believe this is one of the basins where we have  
 21 those intakes.  
 22 Q Can you describe the presence of water in  
 23 this photo?  
 24 A Yeah, there is -- yes, there is some flow in  
 25 there at the -- where we have the bare soil. You can

1 see where there's been some minor erosion there and  
2 then sediment deposition around those posts. So, it  
3 has some bare soil areas there, where yes, we've had  
4 some erosion and deposition occurring. And so it's  
5 wet; there is some evidence there of some streamflow  
6 at that time.

7 Q And can you describe, generally, with  
8 respect to the whole property, where are you at this  
9 point, when you took this photograph?

10 A Well, this may be -- there was two little  
11 basins, so if this is one of my first photographs,  
12 this was at the upstream basin.

13 Q Okay. And can you describe this structure  
14 we're looking at in the photograph?

15 A Well, some posts with wire around them. I  
16 believe what he was doing there was to serve as a  
17 trash guard.

18 Q And under what circumstances would he want  
19 to be guarding?

20 A Trash guards. Whenever you have installed  
21 tile intakes, to avoid the tiles from being plugged by  
22 debris, such as, well, residue from the crop or from  
23 other plants, construct a trash guard to stop any of  
24 that organic material from entering the tile and  
25 plugging the tile.

1 Q I see. Did you observe water flowing at  
2 this location?

3 A Yes.

4 Q Okay. I'd like to show the witness Agency  
5 Exhibit 4, Page 5. And can you describe where you  
6 were when you took this photograph?

7 A Okay. It must be -- this is a photo then  
8 going up into the neighboring property where the  
9 channel had not been disturbed and so, here the photo  
10 shows the stream channel. There is some reflection of  
11 the sun here, which kind of masks some of the  
12 features, but we're looking at the streambed. And so,  
13 here we have an indication of ordinary high-water mark  
14 where we have vegetation on the bank, with a  
15 streambed, that has -- with a flow and sediment  
16 sorting in that channel, and then, alongside that  
17 flow, we have other vegetation that would appear to be  
18 vegetation that would grow in wet areas; it could be  
19 like a fringe wetland.

20 Q And again, did you observe water flowing in  
21 the channel when you took this photograph?

22 A Yes, there was water flowing in the channel  
23 at the time.

24 Q Okay. I'd like to show Agency Exhibit 4,  
25 Page 11. How about 5? 6. I'm sorry. Thank you.

1 A Another photo that was taken in the property  
2 upstream, again showing the stream channel, and you  
3 are seeing substantial vegetation on the banks and in  
4 the fringe areas along the streambed. But again, the  
5 streambed is, itself, is quite free of vegetation. If  
6 you look down into the lower left of the photo, you  
7 can see some rippling effect there. There is where --  
8 that is characteristics of the sediment sorting that  
9 will occur in a stream channel, on the streambed. And  
10 how the channel itself will vary in its widths and its  
11 flows. We'll do -- it looks like there may be some -  
12 on the right side of that streambed, in the wider area  
13 appears to be some deposition occurring there. And  
14 so, on the left of that deposition is where we have  
15 the streams -- some streamflow occurring. Now, during  
16 a rainfall event or just immediately after a rainfall  
17 event, there's going to be a deeper flow in here,  
18 which probably covers that entire streambed and maybe  
19 even some of that lower vegetation. But right now,  
20 but what we're looking at now is just is -- flow  
21 that's occurring probably a few days after that  
22 rainfall event.

23 Q Okay. And once again, can you describe for  
24 us, generally, like when we are looking at the entire  
25 C&S property, where are you located at this point?

1 A A short distance into the upstream property  
2 on the north end --

3 Q Okay.

4 A Upstream, immediately upstream of the C&S  
5 Enterprise property where the channel was altered.

6 Q And you said that maybe rain had occurred  
7 maybe a few days prior to this. What does that tell  
8 you?

9 A A day or maybe more.

10 Q Okay, so what does this tell you generally  
11 about the flow conditions in this channel?

12 A It's a good indication that we do have a  
13 jurisdictional stream channel in respect to the  
14 characteristics of a stream, and -- because, after a  
15 rain event we do -- we still have a streamflow  
16 occurring and wet conditions, like that deposition is  
17 still very saturated and so, as far as meeting the  
18 criteria as a stream channel, it does meet that  
19 criteria. And again, there could be --there is some  
20 vegetation in there that is -- definitely is  
21 hydrophytic vegetation. And so, we have some fringe  
22 wetland areas in there, very likely.

23 Q And what does that hydrophytic vegetation  
24 tell you about the area that was cleared and filled in  
25 downstream?

1 A Well, I presume that the area downstream  
2 would have had very similar characteristics since this  
3 is on the upstream end, then as you go downstream then  
4 -- the drainage area becomes larger and so you start  
5 collecting more drainage from that drainage area. And  
6 so, the stream channel on the C&S Enterprises is going  
7 to be -- very likely is going to be -- very similar  
8 and maybe somewhat larger or deeper than what it is  
9 here.

10 Q I'd like to show the witness Agency Exhibit  
11 4, Page 11. When you're ready, Mr. Schafer.

12 A Okay, well here we are seeing a more --  
13 deeper flow, a well-defined channel with a continuous  
14 flow of water occurring at this time and it is  
15 carrying some -- you know, it's -- the flow is a  
16 little cloudy and so, it is carrying some fine  
17 sediments with it. And again, we are seeing that  
18 rippling effect there where you have the sediment  
19 sorting occurring on the streambed and again, the  
20 fringe areas have the hydrophytic vegetation.

21 Q And where was this photo taken?

22 A This would have been also on the upstream  
23 property.

24 Q Thank you. I'd like to show the witness,  
25 Agency Exhibit 4, Page 12. Can you describe the

1 location of this photograph?

2 A I believe we are down on the C&S Enterprise  
3 property, looking back upstream.

4 Q And what -- can you describe the conditions  
5 of the site based on this photograph?

6 A Here we have -- the crop had been planted,  
7 beans. And had crop through the channel area that had  
8 been filled. But we're getting, because of the rain  
9 events, there is erosion occurring, which has drowned  
10 out or taken out some of that crop. So, we are down  
11 in that channel, where we're seeing the flows coming  
12 from upstream.

13 Q How can you tell that the channel was filled  
14 in at this location?

15 A Well, presumably, if we had a channel there  
16 -- well, it was a wooded channel prior to it being  
17 cleared and filled, so, that would -- since he was  
18 able to crop through the area, then it would be  
19 obvious in that he had filled that channel; otherwise,  
20 he wouldn't be able to crop through the area.

21 Q I'd like to show the witness Agency Exhibit  
22 4, Page 13. When you're ready, can you describe the  
23 location of this photo?

24 A We were up at the -- still at the upper end,  
25 because that's where we started our walk down through

1 the site. But here we are -- we're looking south  
2 downstream to Deep Creek, so we are walking through  
3 that area where the channel had been -- where it had  
4 been cleared and filled.

5 Q I'd like to show the witness Agency --

6 A So, you are looking at the resulting  
7 drainageway.

8 Q Oh, sorry. I'm sorry. Could you repeat  
9 that?

10 A We're looking at the resulting drainageway.

11 Q Okay. And can you describe the conditions  
12 of the area where the tributary used to be?

13 A The area was cropped, and it was just very  
14 wet. And there was still, down in the lowest part of  
15 the drainageway, is where there was still some active  
16 streamflow.

17 Q So, the fact that it was very wet, what does  
18 that tell you?

19 A Well, that was -- it's a collection point  
20 for drainage from the drainage area.

21 Q I'd like to show the witness Agency Exhibit  
22 4, Page 14. Can you please describe the location of  
23 this photo?

24 A Okay, we are again, at -- we're at -- one of  
25 the tile intake basins. We have a berm that was

1 constructed there to capture the surface flows so that  
2 it could enter the intakes into the drainage tile.  
3 Now, there are two of these basins, and I'm not sure,  
4 it's maybe the lower one.

5 Q Okay. I'd like to show the witness Agency  
6 Exhibit 4, Page 18. Can you describe the location of  
7 this photo, please?

8 A Oh yeah. This is where we had walked down  
9 that drainageway to Deep Creek. So, now we are  
10 looking into Deep Creek.

11 Q Can you describe the conditions of Deep  
12 Creek?

13 A Well, Deep Creek is a perennial-flowing  
14 stream and a jurisdictional water and, here again, we  
15 see a little debris in the channel and rock  
16 depositions; and other gravel deposition in there.  
17 And so, we have a continuous flow there. There's  
18 still, because of the rain events, there is still  
19 active flow and sediment is suspended in that  
20 streamflow. So, we have a larger stream here,  
21 perennial flow.

22 Q What do you mean by perennial flow?

23 A That would be year-round. This is where we  
24 have a channel that is of sufficient size and has a  
25 sufficient watershed size for it to have a flow

1 year-around. I believe we are at the location where  
2 the intermittent stream had outletted into Deep Creek.

3 Q Okay. That intermittent stream, that would  
4 be the one that was filled in by Mr. Morrow?

5 A The one that was filled in, yes.

6 Q I'd like to show the witness Agency Exhibit  
7 4, Page 20. Can you describe what we are looking at  
8 here?

9 A See, here are two corrugated plastic tile  
10 outlets which are outletting into Deep Creek, which  
11 are coming down from the intermittent stream channel  
12 that was filled.

13 Q Okay. When you observed these drainage  
14 tiles, did you observe water discharging out of these  
15 tiles?

16 A I believe so. It's not visible in this  
17 particular picture, but I do believe there was water  
18 outletting from the tiles at that time.

19 Q Okay. Any other observations about the  
20 conditions of the water below the tile drains that you  
21 observed?

22 A Well, that's where I say that I believe  
23 there was flow coming from the tiles. When you look at  
24 the water in the creek right by the tiles, the water  
25 is more cloudy; there is a plume of sediment that is

1 being stirred up from the streambed, which is probably  
2 a result of water that is flowing out of the tile and  
3 falling onto the streambed, causing that plume  
4 sediment to be -- to rise in that water.

5 Q And what does that plume sediment tell you  
6 about what happened at the site?

7 A Well, it just tells me that we have a flow -  
8 a concentrated flow coming from the tiles.

9 Q So, based on your observations that you made  
10 during the site visit and the analysis of any of the  
11 documents that you looked at prior to conducting your  
12 site visit, what kind of conclusions did you make  
13 about the flow conditions in the tributary prior to it  
14 being filled in?

15 A Well, based on my review of the aerial  
16 photography, the various resource maps, and then  
17 conducting this field site visit, I felt that the site  
18 visit substantiated or supported what I had seen on  
19 the resource maps, that we have a jurisdictional  
20 stream channel. And the aerial photography and again,  
21 the USGS topographic map, the updated National Wetland  
22 Inventory map, all support that there was a defined  
23 channel all the way down to Deep Creek. There was  
24 some of that aerial photography that also showed where  
25 the portion of the intermittent stream channel that

1 flowed through the bottom land of Deep Creek, where it  
2 had a history of having been altered. But yet, it  
3 always returned to a defined channel, and -- which is  
4 the condition that it was in the more recent years.

5 And so, based on what I saw on the upstream property,  
6 the resource maps and my -- again, it was at that  
7 point a preliminary determination that we did have a  
8 jurisdictional stream channel. And -- but yet, we  
9 were going to await the NRCS completing their wetland  
10 determination, so that we could properly coordinate  
11 actions with them and, also, if they determined there  
12 is wetland there or not, supported or not supported,  
13 our determination.

14 Q So, you just said that, throughout your  
15 analysis of the historical imagery, that you had  
16 identified that the tributary kept cutting itself back  
17 into Deep Creek. What does that tell you about the  
18 nature of that tributary?

19 A Seeing the natural nature of the tributary  
20 is to have a defined channel from the upland area down  
21 to Deep Creek. And there have been various stamps  
22 over the years, and I'm talking about -- we're going  
23 back decades, that, the -- at some point, the area was  
24 -- it was a defined channel, wooded, tree-lined and  
25 we're talking about just on that lower portion, down

1 into the bottom, along Deep Creek, having been cleared  
2 and filled and it appeared that it was then shaped  
3 into a grass waterway. But then, immediately after  
4 that, then it started to then erode out and reverted  
5 back to a defined channel. So that, I would say there  
6 is a connectivity -- we have that connectivity because  
7 of a defined channel connecting to Deep Creek.

8 Q So, if somebody converts a portion of a  
9 stream to a grass waterway, how does that affect the  
10 jurisdiction of the upper reaches of that tributary?

11 A As far as whether we are determining -- as  
12 far as determining the jurisdiction of the upstream  
13 portion of a channel that -- if that channel is out  
14 letting into a grass waterway and -- it does occur  
15 periodically, we have those kinds of conditions where  
16 we'll have a stream channel above a grass waterway or  
17 like in this case here, we've got some good-sized  
18 tiles in there that are taking a lot of that flow  
19 underground. So that they could maintain a grass  
20 waterway, like in this case. So it had been -- the  
21 grass waterway, in itself, may -- well, the grass  
22 waterway itself may not be jurisdictional, but it does  
23 not negate the jurisdiction of the upstream portion,  
24 where we do have a stream channel that has -- meets  
25 the criteria.

1 Q And if somebody converts a portion of the  
2 stream, how does that affect the jurisdiction of the  
3 downstream portion of the tributary?

4 A Well a grass waterway itself, if we're  
5 looking -- if the present condition is that it's a  
6 grass waterway again, we may be going back to when was  
7 that grass waterway constructed and what was there  
8 before the grass waterway? It may be that that grass  
9 waterway, that reach, may not be jurisdictional;  
10 however, if we determine that there was a  
11 jurisdictional stream channel there before that grass  
12 waterway was constructed, that -- that, in itself,  
13 again, depending on when it occurred and in what time  
14 period, because the Clean Water Act itself,  
15 jurisdiction -- the definition of jurisdiction has  
16 changed over the years. There may or may not have  
17 been a violation of the Clean Water Act with  
18 construction of that grass waterway. So, if that is  
19 the case, it may still be determined as  
20 jurisdictional.

21 Q In your estimation, if somebody -- if there  
22 was a grass waterway in that portion of the tributary,  
23 would that have been man-made or created by property  
24 owners?

25 A I'm sorry, again?

1 Q Let me rephrase the question. In any of the  
2 historical images that you reviewed, did you see a  
3 defined channel in the area that, at other times, was  
4 a grassed waterway?

5 A Yes.

6 Q Okay. And so, if there were a grassed  
7 waterway, would it be your conclusion that that would  
8 have been man-made?

9 A Yes.

10 Q I'd like to show the witness Agency Exhibit  
11 10, Page 18. This is an aerial image, dated March 20,  
12 2015, and this is Agency Exhibit 10, Page 18. Can you  
13 describe the conditions of the tributary in this  
14 photograph?

15 A Okay. This would have been March of 2015;  
16 this photo would have been taken it appears that there  
17 is the tree-cover had been cut down. We still see a  
18 defined channel, so we've not had -- had little or no  
19 earth work, having occurred at that point. So, we  
20 still have our defined stream channel, which goes from  
21 the lower right BB Avenue, coming from the upstream  
22 property, and then going downstream, going to the  
23 upper left, outletting into Deep Creek. So, there's  
24 definitely a meandering defined channel there that  
25 existed prior to the fill.

1 Q Would you say that that tributary is  
2 connected to Deep Creek?

3 A Yes, there is a defined channel that reaches  
4 to Deep Creek itself, so it's a continuous channel.

5 Q Compared to other aerial images that you've  
6 reviewed, what would you say about the jurisdiction of  
7 this tributary, by looking at this photograph?

8 A By looking at this photograph, it  
9 substantiates and supports that we have a  
10 jurisdictional stream channel that has direct  
11 connectivity -- the intermittent flowing stream  
12 channel has direct connectivity to a perennial flowing  
13 stream, Deep Creek, which then you can take that on  
14 down further in the watershed, which would, then,  
15 eventually have led into a navigable water, which is  
16 what is required to be determined as jurisdictional.

17 Q Would you describe any portion of the  
18 tributary that you are looking at in this photograph  
19 as a grassed waterway?

20 A The lower portion, where we are -- which is  
21 to the upper left -- there appears to be - you can see  
22 where there is - there appears to be a crossing, but  
23 from that area on down to Deep Creek -- there appears  
24 to be -- that is the area that has, over the years,  
25 has been altered, cleared, shaped into a waterway and

1 then reverted back to a defined stream channel. So,  
2 there are remnants as far as -- you can see the  
3 defined channel and then, on each side of it, you see  
4 a strip of vegetation and so, that is where it was, at  
5 one time, shaped as a waterway and then reverted back  
6 to a defined channel.

7 Q Okay. Thank you.

8 A So, there is no -- so, the answer is, at  
9 this time, we would see that as a defined channel, not  
10 a waterway.

11 Q Thank you. I'd like to show the witness  
12 Agency Exhibit 18, Page 1.

13 A Okay, I'd -- this is a letter that I dated  
14 October 7, 2015, sent to Mr. Scott Morrow, C&S  
15 Enterprises. It is a follow up to the meeting that I  
16 had with him on site on July 29, 2015, and, in here, I  
17 just stated the location and the purpose of the  
18 investigation, to determine whether drainageway and  
19 any associated wetland farmland land, which of it,  
20 filled or drained is jurisdictional under the Section  
21 404 of the Clean Water Act."

22 And paragraph -- next paragraph, it  
23 documents that the study of history of aerial  
24 photography was conducted in the office, dating back  
25 to the 1930s and that the drainageway on the slope was

1 wooded and well-defined. That portion of the channel  
 2 has pretty much stayed undisturbed until 2015. And  
 3 then the drainageway over the bottom grass, over the  
 4 bottom -- there appeared to be no well-defined channel  
 5 at one time, it may have been a swale or grass  
 6 waterway. In the 1960s a channel swale was present in  
 7 the bottom land which appears to have been  
 8 mechanically excavated and graded. By the '70s the  
 9 bottom channel had a riparian tree cover. 2000 to  
 10 2010 the riparian wood cover was removed from the  
 11 bottom channel. The channel appeared to have been  
 12 graded as a grass waterway. 2011 the waterway appears  
 13 to have been partially excavated into a drainage  
 14 ditch. I documented that this was not a waste soil in  
 15 the bottom land and -- soil on the slope.

16 And, during the site visit, Mr. Morrow  
 17 explained that he removed the wood cover and closed  
 18 the channel from Deep Creek to the north property  
 19 line. The reason for closing that channel to meet  
 20 State of Iowa requirements for distance between a  
 21 planned swine confinement facility and open water.  
 22 Minimum distance, as I understand, is 500 feet. Tile  
 23 mains were installed, two of three basins, the surface  
 24 intakes were constructed. Intentions are to grade,  
 25 seed and establish grass waterway through this reach.

1 Not completed in the spring due to rain and wet soil  
 2 conditions.

3 I then walked -- because I could no longer  
 4 evaluate the channel reach on the C&S Enterprise farm,  
 5 I walked into the wood channel on the upstream  
 6 neighboring property to give me an idea of what the  
 7 wooded drainageway was like on the slope and hillside  
 8 of the C&S Enterprise farm.

9 Q So, before we move onto the next page. Just  
 10 a couple of questions from this page. You indicate  
 11 that, in 2011, the waterway appears to be partially  
 12 excavated. To your recollection was 2011 the last  
 13 year that you looked at aerial images of this site?

14 A No, there was aerial photography that was  
 15 available, through at least 2014 at that time.

16 Q And in any of the other aerial images that  
 17 you looked at, did you see a defined channel?

18 A That section had eventually reverted back to  
 19 a defined channel. Each year it showed a deeper, more  
 20 -- it was more -- more of a visible channel.

21 Q What kind of conclusions did you make about  
 22 the work that had been done on that lower portion of  
 23 the channel before it reached Deep Creek?

24 A As far as the lower portion, well, since  
 25 that had been - what I was looking at was the work

1 that had occurred in 2015. So, because it had been  
 2 reverting back to a defined channel, then we will  
 3 consider that the filling of that reach would be a  
 4 violation of the Clean Water Act, as well as the  
 5 upstream portion on the slope.

6 Q I'd like to show Agency Exhibit 18, Page 2.  
 7 Can you summarize what you are telling Mr. Morrow in  
 8 the letter here about the work that you are going to  
 9 continue to do?

10 A Okay. The USDA Natural Resources  
 11 Conservation Service has documented that they will be  
 12 completing a wetland determination under the Food  
 13 Security Act, as amended, and determine if a violation  
 14 of the wetland conservation provisions had occurred.  
 15 And the Corps of Engineers in Rock Island district  
 16 will complete a determination for waters that the U.S.  
 17 clean wetlands under Section 404 of the Clean Water  
 18 Act. We will -- so we withheld -- we withheld  
 19 completion of that determination until NRCS could  
 20 complete theirs.

21 Q In the time period that NRCS was making  
 22 their wetland determinations, what did you do?

23 A Well, this was October that I had sent this  
 24 letter, and then it was at the end of December is when  
 25 I had retired. So, then, at that point, since this

1 was still a pending case, it was then transferred to  
 2 another Regulatory Project Manager.

3 MR. MUEHLBERGER: Thank you. No further  
 4 questions.

5 JUDGE BIRO: Mr. Schafer, would you like to  
 6 proceed, or do you want to take a break?

7 MR. SCHAFFER: I just could use some water.

8 JUDGE BIRO: Okay, take some water then.

9 MR. McAFEE: Excuse me, Your Honor. Could  
 10 we take just a brief break for --

11 JUDGE BIRO: Oh, of course, we will take a  
 12 standard recess for five minutes.  
 13 (break)

14 JUDGE BIRO: Mr. McAfee, are you ready to  
 15 conduct your cross-examination?

16 MR. McAFEE: I am, Your Honor. I will do it  
 17 from the podium.

18 JUDGE BIRO: Okay. Please proceed.

19 CROSS EXAMINATION

20 BY MR. McAFEE:

21 Q Good morning, Mr. Schafer.

22 A Good morning.

23 Q I'm Eldon McAfee, and we met prior to  
 24 today's trial beginning, but, as you know, I am  
 25 representing C&S Enterprise. I just have a few

1 questions. And always be careful when an attorney  
2 says he just has a few questions, right?

3 I want to start with -- as I flip through my  
4 notes here -- first of all, and I think the record is  
5 clear, a very preliminary matter: your name is  
6 spelled differently, your last name, then the Mr.  
7 Schaefer who contacted you, right?

8 A Yes, that's right.

9 Q No relation whatsoever?

10 A No relation whatsoever.

11 Q All right. In his, and I'll do my best not  
12 to drop all my papers on the floor here, but I want to  
13 -- I will show you what has been marked as AX-5, or  
14 Agency Exhibit 5. And these are the - I'll put it on  
15 the ELMO here in a second. I believe that's the page  
16 I want. I wanted to ask you about a reference to --  
17 this is Page 1 of 11 here. I'm looking for the  
18 reference to -- excuse me, I need to turn it to Page 2  
19 I believe. And I apologize, I'm not seeing what -  
20 there is a reference -- I'm back on Page 1, there is a  
21 reference here to -- that his photos and what he had  
22 circled. Do you remember that reference?

23 A Yes.

24 Q And do I have the right page up there? If I  
25 don't I'll turn it over, so you can read it. That's

1 Page 1 of AX-5.

2 A Where I had stated to Mr. Schaefer -- Lance  
3 Schaefer that I received the e-mails which included  
4 his camera photos, a manure management plan for MCM  
5 Pork, LLC and an aerial photo.

6 Q Okay, I believe it's in -- I can -- let me  
7 use something besides my finger. It says here, "I  
8 will likely need to make a site visit," correct?

9 A Yes.

10 Q "The tributary you have circled," and -- was  
11 there an attachment to his e-mails where he circled  
12 something? Do you recall?

13 A Okay, well, there would have been an aerial  
14 photo that -- where he had circled that area where the  
15 intermittent stream is. That was where the work  
16 occurred.

17 Q I apologize, I interrupted you.

18 A No. It's okay.

19 Q Please finish, thank you.

20 A I was just saying that, yeah -- there would  
21 have been an aerial photo which he had included as an  
22 attachment, that is what I'm referring to here. The  
23 tributary you have circled on the aerials, well, I  
24 said, the jurisdictional stream, which, at that point,  
25 was a preliminary determination, or course.

1 Q Okay, I guess -- and we've seen quite a few  
2 exhibits this morning. And I'm sure we've seen one  
3 similar to that, but have we seen the attachment that  
4 he circled because --

5 A No, we have not.

6 Q And I understand, we've seen a lot of other  
7 exhibits regarding the area we are referring to. In  
8 general, what he had circled, was it -- did it  
9 coincide with what we have seen in other exhibits  
10 today?

11 A Yes, as far as proper location, that would  
12 have been the purpose of circling the area on an  
13 aerial photo, just to give me a location so I know  
14 that -- what tributary I'm looking at.

15 Q Again, I understand, I was just trying to  
16 make sure I wasn't missing something with what he had  
17 circled, okay?

18 A Mm-hmm.

19 Q My other question on this was -- and I think  
20 you already answered it, my question was regarding  
21 your statement where you say, "The tributary you have  
22 circled on the aerial is a jurisdictional stream."  
23 And I believe you just stated that that was a  
24 preliminary?

25 A Yes, I wanted to make that clear that, when

1 I said "jurisdictional stream" at that point, I was  
2 not implying any final determination at that point.  
3 It was just strictly a preliminary determination based  
4 on looking at the resources in the office.

5 Q Okay. I believe that's all the questions I  
6 have on that exhibit. And let's see, I'm -- I wanted  
7 to ask you now or, I should say, on that page of that  
8 exhibit. I want to ask you now about some of the  
9 photos with this exhibit, AX-5. And I just want to be  
10 clear. I am putting up AX-5, Page 6. Okay. And you  
11 can see that. First of all, these series of photos  
12 with Agency Exhibit 5; you did not take them, correct?

13 A No, this -- I did not take this particular  
14 photo, no.

15 Q These were provided to you by --

16 A These were the ones that were provided as  
17 attachments to e-mails.

18 Q Okay. Do you know the date of any of these  
19 photos that they were taken? I didn't see anything in  
20 the e-mail that gave you that date, but maybe I missed  
21 it.

22 A No. The exact date, no, I'm not sure about  
23 that.

24 Q Okay, do you know if they were taken on the  
25 same date, these series of photos with the e-mail?

1 A No, I couldn't say that for sure either.

2 Q Sure. All right, on this one I have in  
3 front of you, you've testified to this previously, but  
4 I just want to - if I can use my pen - to point to an  
5 area. I think you testified to this being a drainage,  
6 right? The -- what I would call a light-colored area  
7 is run-off, is that right?

8 A Yes, that would be the water run-off that is  
9 coming off of the drainage area.

10 Q Okay.

11 A That's where we have a concentrated flow of  
12 water occurring at the time.

13 Q And does it appear by this photo to stop at  
14 a certain point?

15 A Yes, it does. At least -- as far as the  
16 appearance goes, that you can see where it is down  
17 about midway in that bottom land field where it is  
18 collecting and widening out, so it's kind of pooling a  
19 little bit in there. That would be because of the  
20 fillwork that had occurred down at the bottom.

21 Q Okay. I guess I just want to -- again, I  
22 just want to be clear, that from this photo, it does  
23 not -- it does not go - I want you to testify, not me  
24 -- but it looks like to does not go clear to the --

25 A No, these flows here. As far as the visible

1 Q Okay. Question, and, if I didn't hear your  
2 testimony correctly, I apologize. But I believe you  
3 said that -- at one point you said -- used the month  
4 of June for when -- referring to Agency Exhibit 10,  
5 Page 21. And I believe you were asked if that  
6 represents what the property looked like when you were  
7 there. And I hope I am stating the testimony  
8 correctly and the question. And I believe I heard you  
9 say June, but you were there in July, correct?

10 A Was that July? Okay.

11 Q And I will take responsibility if I  
12 misstated the record. But I just wanted to clarify,  
13 you were there for your site visit, meeting with Mr.  
14 Morrow, July 20 -- well the record has it in your  
15 notes.

16 A Yes, Right. Right. And so, this picture --  
17 this photo would have been taken after that, so  
18 several months after. So, there may have been, again,  
19 there may have been some additional work done during  
20 that period, between the field site visit and the  
21 photo being taken. Otherwise, it was representative  
22 generally of what I had seen.

23 Q Okay. I just wanted to clarify the date.  
24 Thank you. Now I'd like to put up Agency Exhibit 18,  
25 I understand this to be your letter to Mr. Morrow?

1 flows in the photo I think if you really look closely  
2 you can still see where there is still some light  
3 coloring there, where you're still seeing the flow  
4 that is going to the wooded area of Deep Creek. It's  
5 just that we have a particular area right there --  
6 it's just -- where the flow is collecting and pooling  
7 and again, that's because of the topography at the  
8 time after the work had occurred.

9 Q Okay. Thank you. I now want to turn to --  
10 and I will put it up - I have Agency Exhibit 10, that  
11 you have looked at several pages of. I guess Page 21,  
12 I will put up. I think you testified to this exhibit.  
13 Again, it's Agency Exhibit 10, Page 21. Do you  
14 remember looking at that with Mr. Muehlberger?

15 A Yes. Yes.

16 Q First of all, is this an exhibit or there  
17 --this is an aerial, correct?

18 A Yes.

19 Q Is something you prepared? Like there are  
20 -- there's a marking of a confinement building there  
21 and there are several other text boxes. Did you? Is  
22 this yours?

23 A No.

24 Q Do you know who prepared this?

25 A No, I don't.

1 A Yes, it is.

2 Q Okay. In the third paragraph, which you  
3 testified to in response to questions from Mr.  
4 Muehlberger, third paragraph down, it says, "A study  
5 of history and aerial photography was conducted." Can  
6 you tell me a little bit what that study was?

7 A The -- I would have looked at the GIS  
8 Website where there is a history of aerial photography  
9 available that we can look at the aerials from -- back  
10 from the 1930s, going all the way to present day - to  
11 maybe like a year before the present day. As far as  
12 it would be So, like in the 1900s, feels like there  
13 was one photo representing 10 years, and you get into  
14 2000, then we have a photo -- an aerial photo just  
15 about every year. And so, I was looking at the  
16 history of aerial photography as far as what the  
17 condition was of this channel, how -- what its  
18 appearance and characteristics were back in the 1900s  
19 and then following it through -- through 2000 to the  
20 most recent aerial photo. It is also then looked at  
21 the - the NRCS soil map, the USGS topographic map, the  
22 National Wetland Inventory Map from the Fish and  
23 Wildlife Service. Those are the principle resources  
24 that we look at in the office.

25 Q Okay, and that's what you base this

1 paragraph on?  
 2 A Yes.  
 3 Q And is it fair to say that - well, I don't  
 4 know how many of the materials you looked at that will  
 5 be other than the exhibits that have been shown to you  
 6 today - but have some of those photos that you've  
 7 been shown today, would that have be what you would  
 8 have looked at?  
 9 A Yes.  
 10 Q Would there have been others?  
 11 A Yes, there would have been. Yes.  
 12 Q And I believe, if I understand this  
 13 paragraph and your testimony today, you have said that  
 14 there were, at various times, where the channel was  
 15 not present?  
 16 A That's right.  
 17 Q Okay. But -- and I don't want to  
 18 misrepresent your testimony -- I believe, looking at  
 19 the latest, maybe not the latest photo -- but the 2015  
 20 photos, and I'd be glad to put them up there, but you  
 21 had indicated that the channel had reappeared?  
 22 A Yes.  
 23 MR. McAFEE: Okay. And maybe, in fairness,  
 24 I should. Well, I believe that's fine. I have no  
 25 further questions, Your Honor.

1 JUDGE BIRO: Thank you, Mr. McAfee. Mr.  
 2 Muehlberger, do you have any re-direct?  
 3 REDIRECT EXAMINATION  
 4 BY MR. MUEHLBERGER:  
 5 Q Mr. Schafer, let's take another look at that  
 6 e-mail. Can you, for the record, again say what the  
 7 date is on this e-mail?  
 8 A Okay. The top date is July 20, 2015.  
 9 Q And you stated in the e-mail that the  
 10 tributary you circled on the aerial is a  
 11 jurisdictional stream and you explained to the Court  
 12 that this was a preliminary determination, correct?  
 13 A That's correct.  
 14 Q Did your analysis of any of the topographic  
 15 maps or any other maps that you analyzed subsequent to  
 16 this e-mail, change that preliminary jurisdiction  
 17 determination?  
 18 A It did not change it, no. It just supported  
 19 it.  
 20 Q Did your analysis of any of the historical  
 21 images of the C&S property subsequent to this e-mail  
 22 change your analysis -- your preliminary determination  
 23 that the water was jurisdictional?  
 24 A No. No. It was just that there was on that  
 25 bottom portion of the channel in question that where

1 we've had the history of alterations and we had the  
 2 more recent - not the 2015 filling but there was,  
 3 prior to that, there was a period where the -- the  
 4 channel had been cleared of trees, just the bottom  
 5 portion had been cleared of trees -- and appeared to  
 6 have been graded into a waterway and then, the natural  
 7 occurrence of reverting back to a defined channel had  
 8 occurred. And this here even occurred back in the  
 9 1900s, pretty much the same scenario, where the  
 10 channel had been filled and then reverted back to a  
 11 defined channel.  
 12 Q And  
 13 A So, it did not change my determination any.  
 14 Q Okay. Thank you. And did the site visit  
 15 that you conducted and now we've established in July  
 16 of 2015, did your site visit change the preliminary  
 17 determination that you made that the water was  
 18 jurisdictional?  
 19 A No, it did not change my determination at  
 20 all. It's -- particularly, when I was able to take a  
 21 look at the stream channel on the upstream property,  
 22 so I was able to then view what the stream channel of  
 23 C&S Enterprises property was very likely like. That  
 24 that -- again, it supported that the stream  
 25 characteristics that are required for this to be a

1 jurisdictional stream.  
 2 Q We've already discussed that, based on your  
 3 analysis of aerial imagery, that at certain times, the  
 4 lower portion of the tributary, at times, was  
 5 converted into something else.  
 6 A Right.  
 7 Q Based on your expertise and your analysis,  
 8 how did that little portion get converted?  
 9 A There was trees -- there -- back in the  
 10 1900s it had been -- it appeared to be shaped into a  
 11 waterway, that would had to have been done with  
 12 construction equipment. And then trees had grown  
 13 along that channel -- along that waterway again. And  
 14 so, then when we get into the 2000s, when trees had  
 15 grown pretty much throughout -- they -- trees had  
 16 grown throughout that entire reach on the bottom and,  
 17 connecting up again with the wooded stream on the  
 18 slope. And so, we had a continuous channel there that  
 19 was wood-lined to Deep creek at one point.  
 20 So, then the trees -- then one portion of  
 21 the channel on the bottom had been cleared one year or  
 22 a couple of years where it showed that the trees had  
 23 been cleared. And then another year following after  
 24 that where the rest of the trees had been cleared.  
 25 So, again, removing the trees -- you are going to

1 remove trees by cutting, but then to shape them that  
 2 would require removal of the stumps and then the  
 3 shaping of the earth to form it into a waterway.  
 4 Q In any of the times that you identified that  
 5 the lower portion had been changed to something else,  
 6 could that have been the result of natural processes?  
 7 A As far as being changed, no. No. That  
 8 would absolutely -- would have occurred -- would have  
 9 had to be man-made.  
 10 MR. MUEHLBERGER: No further questions.  
 11 JUDGE BIRO: For the record, let the record  
 12 reflect that the document that the witness is  
 13 referring to is Agency Exhibit 5.  
 14 MR. MUEHLBERGER: Thank you, Your Honor.  
 15 JUDGE BIRO: Is there any recross, Mr.  
 16 McAfee?  
 17 MR. McAFEE: Just, I think Your Honor,  
 18 please maybe just one question  
 19 JUDGE BIRO: Sure.  
 20 MR. McAFEE: Or two.  
 21 RE CROSS EXAMINATION  
 22 BY MR. McAFEE:  
 23 Q Mr. Schafer, I'm putting back up Agency  
 24 Exhibit 18, and I just want to be clear that - and I  
 25 think you just testified to this. In the third

1 paragraph there, you state -- and I'm holding my pen  
 2 up there, can you see? It says, 'In the 1960s a  
 3 channel/swale was present in the bottom land which  
 4 appears to have been mechanically excavated and  
 5 graded.'  
 6 A Yes.  
 7 Q And that was a result of your reviewing the  
 8 historical photos?  
 9 A That's right.  
 10 Q And by -- that would have been done for  
 11 drainage purposes?  
 12 A Yes.  
 13 Q And again, that's in the 1960s, correct?  
 14 A Right.  
 15 Q Okay. I just wanted to confirm. Thank you.  
 16 I have no further questions.  
 17 JUDGE BIRO: Thank you, Mr. Schafer. You  
 18 may step down.  
 19 MR. SCHAFFER: Thank you.  
 20 JUDGE BIRO: Mr. Muehlberger, would you like  
 21 to call your next witness?  
 22 MR. MUEHLBERGER: Yes, Your Honor.  
 23 Complainant would like to call Don Carrington please.  
 24 JUDGE BIRO: Good morning, Mr. Carrington.  
 25 Would you please stand over here and give the Court

1 Reporter an opportunity to swear you in?  
 2 Whereupon,  
 3 DON CARRINGTON  
 4 having been duly sworn, was called as a  
 5 witness and was examined and testified as follows:  
 6 DIRECT EXAMINATION  
 7 BY MR. MUEHLBERGER:  
 8 Q Good morning, Mr. Carrington. Can we start  
 9 by having you describe where you work?  
 10 A I work for the U.S. Department of  
 11 Agriculture, under the Natural Resources Conservation  
 12 Service, better known as NRCS.  
 13 Q And what is your position with the NRCS?  
 14 A I am a Resource Conservationist.  
 15 Q And can you talk a little bit about what the  
 16 NRCS does?  
 17 A NRCS is providing assistance to landowners,  
 18 primarily agricultural landowners and the conservation  
 19 of soil, water, air and plants.  
 20 Q Okay. And can you describe what a Resource  
 21 Conservationist does?  
 22 A A Resource Conservationist may do a variety  
 23 of activities, anything from laying out terraces,  
 24 designing waterways, helping discuss tillage systems  
 25 that conserve soil. We may work with producers that

1 have livestock to implement grazing systems to better  
 2 utilize forages. We may design windbreaks and shelter  
 3 builds for farmsteads. We help with designing and  
 4 implementation of animal waste systems. We do a  
 5 variety of tasks.  
 6 Q What does a resource conservationist do with  
 7 property owners with respect to wetlands on their  
 8 property?  
 9 A Would you speak up and repeat the question  
 10 please?  
 11 Q Certainly. You know what? Maybe it would  
 12 help if I had the microphone. Would you please  
 13 describe what the NRCS or Resource Conservationists  
 14 for the NRCS do with property owners with respect to  
 15 wetlands?  
 16 A We have Resource Conservationists whose task  
 17 is to make determinations whether areas identified by  
 18 a landowner are or are not wetlands for USDA purposes.  
 19 Q And for what reasons does the NRCS make  
 20 wetland determinations for property owners?  
 21 A We make the determination at the request of  
 22 the landowner, so that the landowner has information  
 23 to make a decision of whether or not they want to  
 24 implement a drainage activity. These decisions that  
 25 the landowner makes can have effects on their

1 eligibility for USDA Program benefits.  
2 Q And when you are working with a property  
3 owner, what kind of the qualities are you looking for  
4 to determine whether a wetland exists or does not  
5 exist?

6 A We are looking at the soil. We are looking  
7 at vegetation and we are looking for indicators of  
8 hydrology.

9 Q And yourself, do you -- have you conducted  
10 wetland determinations before.

11 A I have.

12 Q Can you give a rough estimate of about how  
13 many wetland determinations you've made?

14 A I really don't know.

15 Q Okay. How long have you worked for NRCS?

16 A I've worked for NRCS for 31 years.

17 Q And prior to that, where did you work?

18 A I worked for the Production Credit  
19 Association.

20 Q Let's talk about your education. What kind  
21 of a degree did you receive?

22 A I received a degree of General Agriculture  
23 from Miles State University.

24 Q And in your work at NRCS have you received  
25 any kind of specialized training concerning making

1 wetland determinations?

2 A Yes, I have.

3 Q Okay. Can you describe some of that  
4 training?

5 A I've received training regarding the methods  
6 of identification using the Army Corp Reg Four  
7 Guidelines. I received training in how to apply the  
8 State off-site methods. I've received training in the  
9 assignment of wetland labels and exemptions.

10 Q So, you said that NRCS uses the Army Corp of  
11 Engineers Manual to make wetland determinations, is  
12 that correct?

13 A We use their methods, yes.

14 Q Okay. Does that mean that NRCS and the Corp  
15 of Engineers look at the same type of qualities in  
16 determining whether or not a wetland exists?

17 A I guess, I'm going to have to say I don't  
18 know. Again, we are tasked with making wetland  
19 determinations for USDA purposes. And I understand  
20 there may be some differences on what NRCS would call  
21 a wetland and what the Army Corp may call a wetland.

22 Q Okay. So, let me rephrase the question. To  
23 your knowledge, does NRCS staff look for the same  
24 wetland indicators as the Corp would look for,  
25 generally speaking?

1 A Generally speaking, I would say yes, we use  
2 their methods.

3 Q And let's talk a little bit about the C&S  
4 Enterprise case. How did you first learn about this  
5 case or learn about C&S Enterprise?

6 A NRCS had made a wetland determination that  
7 was adverse to C&S Enterprises. C&S Enterprises  
8 requested reconsideration of that adverse decision.  
9 Once that reconsideration of our adverse decision is  
10 requested, that folder of information came to me and I  
11 reviewed the preliminary NRCS decision to see if we'd  
12 followed the correct procedures, that the information  
13 in the folder supported our decision. And then I  
14 drafted a final technical determination for the state  
15 conservationist.

16 Q Have you ever been to the C&S property site?

17 A Yes, I have.

18 Q And can you tell -- why did you visit C&S  
19 Enterprise?

20 A I offered to visit the site with Mr. Morrow  
21 and Mr. McAfee to identify some potential mitigation  
22 sites that could be used to -- how do you say it --  
23 regain eligibility for USDA Program Benefits.

24 Q And can you tell us, roughly, when did you  
25 make that site visit?

1 A I believe it was in January of 2018.

2 Q I'd like to show the witness, Respondent's  
3 Exhibit 4. Could we zoom out just a little bit,  
4 please? That's great. Mr. Carrington, for the record  
5 could you read aloud the name of this form?

6 A This is a 'Farm Service Agencies Abbreviated  
7 156 Farm Record.'

8 Q Who provides this record?

9 A The Farm Service Agency does.

10 Q And for the record, can you read the name of  
11 the owners of the property to which this form refers?

12 A C&S Enterprises, LLC

13 Q And in your experience, what is the purpose  
14 of an abbreviated 156 Farm Record?

15 A It provides information about the farm to  
16 the landowner and/or producer.

17 Q And what type of information is it conveying  
18 to the producer?

19 A If you look at the bottom of the form, it  
20 provides how many base acres of corn and soybeans  
21 there are. It will provide information of whether or  
22 not there are CRP Contract acres on that particular  
23 farm.

24 Q Can you please read for the record what the  
25 form says concerning the wetland status of the

1 property?  
 2 A Tract does not contain a wetland.  
 3 Q Okay. Is this a record that is issued by  
 4 the NRCS?  
 5 A No, it is not.  
 6 Q Is the FSA authorized to make wetland  
 7 determinations for NRCS?  
 8 A No they are not.  
 9 Q For any purposes under the Food Security  
 10 Act?  
 11 A Not under the Food Security Act.  
 12 Q Do the findings on an abbreviated 156 Farm  
 13 Record indicate an NRCS final determination about a  
 14 property's wetland status?  
 15 A It may, and it may not.  
 16 Q Does a record like this indicate NRCS's  
 17 conclusions about a wetland on their property?  
 18 A It may, and it may not. I mean, at times  
 19 they will take the determination that NRCS has  
 20 completed and that may be where they get the  
 21 information that says the tract does not contain a  
 22 wetland. Other times, I'm not sure how that statement  
 23 gets there.  
 24 Q And you said earlier that NRCS made a  
 25 ultimate conclusion about the wetland status on the

1 C&S property. Does this form provide any information  
 2 to make that determination? Did you rely on this form  
 3 to make that determination?  
 4 A We did not rely on this form when we made  
 5 our wetland decision.  
 6 Q Okay. I would like to present the witness  
 7 Agency Exhibit 11, Page 1. Mr. Carrington, I will  
 8 give you a minute to look over this document and then,  
 9 once you've had a chance to review it, can you please  
 10 describe the document for the record?  
 11 A This is an e-mail between the district  
 12 conservationist for NRCS and a Joseph Shoemaker.  
 13 Q And can you summarize the content of the  
 14 e-mail?  
 15 A The content of the e-mail is that we've  
 16 informed Mr. Shoemaker that Mr. Morrow had asked us to  
 17 share out final wetland determination with Mr.  
 18 Shoemaker.  
 19 Q And do you know K. Timmerman?  
 20 A I do.  
 21 Q And, to your knowledge, is Ms. Timmerman  
 22 qualified to make such wetland determinations?  
 23 A I do not know if she is qualified or not.  
 24 Q Okay. So, why would Ms. Timmerman say that  
 25 the owner asked to have this information shared?

1 A Because of current legislation, we are not  
 2 free to share any document that contains personal  
 3 identification with other agencies, other than USDA  
 4 agencies.  
 5 Q And so, what does this document indicate to  
 6 you as far as C&S Enterprise's position on this  
 7 information?  
 8 A The position I would get is that they had  
 9 requested that we release the information -- the  
 10 wetland determination information.  
 11 Q I would like to show the witness Agency  
 12 Exhibit 11, Page 6. When you are ready, Mr.  
 13 Carrington, can you describe this document please?  
 14 A This is a form that the Natural Resources  
 15 Conservation Service uses to issue highly erodible and  
 16 wetland determinations.  
 17 Q So, this is the type of document where the  
 18 NRCS will communicate with a property owner whether or  
 19 not there are wetlands on the property. Is that  
 20 correct?  
 21 A This along with a map, that would be  
 22 correct.  
 23 Q And can you please tell us the date of this  
 24 document?  
 25 A The date at the bottom with the signature is

1 March 11, 2016.  
 2 Q And according to the document, who is  
 3 recipient of this form?  
 4 A C&S Enterprises, LLC  
 5 Q And can you say who completed this form?  
 6 A Billy Reiter-Marolf.  
 7 Q Do you know Mr. Reiter-Marolf?  
 8 A I know the name, I don't know that I've met  
 9 the individual.  
 10 Q To your knowledge does Mr. Reiter-Marolf  
 11 make wetland determinations?  
 12 A He did at the time that this was completed.  
 13 Q And can you just generally summarize the  
 14 conclusions of this form?  
 15 A If you look under Section Two of "Wetlands,"  
 16 it says that there are 'hydric soils on the farm' and  
 17 then it identifies the fields that are not wetland.  
 18 You can look at 7, 18, 75, 79 and it gives acres and  
 19 the date that the decision was made and the date it  
 20 was certified. It also lists that, in Field 79, there  
 21 is a farm wetland of 9/10ths of an acre. And field  
 22 what's identified as 100, we identified a converted  
 23 wetland, determined that it was converted in 2014, and  
 24 it's 1.3 acres in size. And then in Field 100, there  
 25 is also a wetland of 2/10ths of an acre.

1 Q Okay, so let's talk a little bit about these  
 2 different terms and what they mean. What is a farm  
 3 wetland?  
 4 A A farm wetland is a site that meets wetland  
 5 criteria. It was manipulated in some manner prior to  
 6 1985, and it produced an agricultural commodity at  
 7 least once prior to 1985.  
 8 Q Can you please describe what a converted  
 9 wetland is?  
 10 A A converted wetland is a wetland or some  
 11 wetland type that was manipulated after 1990 and is no  
 12 longer considered to fully meet wetland criteria.  
 13 Q And what about the general wetland category?  
 14 A A wetland means that it meets wetland  
 15 criteria to date, and there may be restrictions on its  
 16 use and/or ability to alter it and remain eligible for  
 17 USDA benefits.  
 18 Q So, you said that a converted wetland is one  
 19 that has been converted after 1990. What is the  
 20 significance of that to NRCS?  
 21 A The significance of that is probably more  
 22 important to the landowner because conversions after  
 23 1990 may result in ineligibility for USDA Program  
 24 benefits.  
 25 Q And then, once that determination has been

1 made, typically, what do NRCS and the producer try to  
 2 achieve after that point?  
 3 A I guess that's up to the producer. I mean,  
 4 we're willing to work with them. There is a  
 5 possibility of restoration; there is a possibility of  
 6 mitigation. Or the producer may choose to remain out  
 7 of the USDA Programs.  
 8 Q Okay, I'd like to show the witness Agency  
 9 Exhibit 11, Page 8. Mr. Carrington, you said earlier  
 10 that along with the highly erodible land and wetland  
 11 conservation determination, that there's generally  
 12 also a map that goes along with it, is that correct?  
 13 A That is correct.  
 14 Q Is this such a map?  
 15 A Yes, it is.  
 16 Q Okay. And, generally speaking, what is this  
 17 map saying?  
 18 A This map helps identify the locations of the  
 19 various types of wetlands.  
 20 Q And can you please tell us the date of this  
 21 map?  
 22 A The map creation date is listed as March 11,  
 23 2016.  
 24 Q And, who completed the map?  
 25 A Billy Reiter-Marolf.

1 Q To your knowledge, and I'm afraid we are  
 2 butchering this guy's name, is Mr. Reiter-Marolf  
 3 qualified to make such wetland determinations?  
 4 A He was at the time this was completed.  
 5 Q Okay. And what area does this map  
 6 represent?  
 7 A It would represent a tract, or a portion of  
 8 the farm owned by C&S Enterprises  
 9 Q Okay.  
 10 A -- or operated by C&S Enterprises.  
 11 Q Are you able to point out Deep Creek on this  
 12 map?  
 13 A Yes, sir.  
 14 Q And could you please do so?  
 15 A This would be Deep Creek here.  
 16 Q And you -- oh, that's right. You can't --  
 17 oh, thank you very much. Can you describe -- can you  
 18 describe, for the record, where on the map you are  
 19 making that mark?  
 20 A It runs kind of in the center of the map,  
 21 from northeast toward the southwest.  
 22 Q And can you also point out for the record  
 23 the tributary that is the subject of this case?  
 24 A It runs from the northwest part of the tract  
 25 down to Deep Creek in a southwest -- southeast

1 direction. Would you like me to draw that on there  
 2 also?  
 3 Q Yes, please.  
 4 A Okay. That would be in this area.  
 5 Q Thank you. So, there's a lot of markings on  
 6 this map, can you tell me generally what do these  
 7 markings refer to?  
 8 A Again, they represent the decisions that  
 9 were made regarding wetlands -- the presence of  
 10 wetlands or the absence of wetlands on this tract.  
 11 Q I know it's kind of difficult to read, but  
 12 can you point out the areas on the map that are  
 13 designated as converted wetlands?  
 14 A Well, that would be the area we have  
 15 identified here.  
 16 Q And could you please describe where here is  
 17 on the map?  
 18 A It begins in the northwest corner of the  
 19 farm and takes a southeast direction to Deep Creek.  
 20 Q And go ahead and please circle that on the  
 21 map. So, based on the location of the areas that you  
 22 designated as converted wetlands, can you describe the  
 23 location of those wetlands in relation to the  
 24 tributary?  
 25 A It would be my understanding that they are

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1 the same location.

2 Q Okay. So, there is no separation between

3 the wetland and the tributary, correct?

4 A To the best of my knowledge, there is not.

5 Q Okay. So, how is it that NRCS -- this

6 wetland determination is different than the

7 determination that we looked at from FSA in 2013?

8 A FSA didn't make a determination -- a wetland

9 determination.

10 Q I'd like to show the witness Agency Exhibit

11 11, Page 11. Oh, yeah.

12 A Thank you.

13 Q After you've had a chance to review this,

14 could you please describe this document?

15 JUDGE BIRO: Can I interrupt a minute? Can

16 we print off a copy of that document that he marked

17 up, or is that not possible?

18 MR. BIERI: Judge, so we were trying to get

19 the IT people to do that. I think they are working on

20 it, but that technology may not be here. Another

21 thing I was thinking if we wanted to, is we could take

22 a photograph of the screen -- if we need him to do it

23 again.

24 JUDGE BIRO: You mean, like on your phone,

25 for example, or through the projector that you have?

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1 How are you going to take that photograph?

2 MR. BIERI: I was just proposing through a

3 phone, but I don't have an understanding --

4 (Asides.)

5 MR. MUEHLBERGER: Your Honor, if you'd like

6 we could have Mr. Carrington mark with a marker on the

7 sheet the locations that he just described -- that's

8 kind of why I had him try to explain specifically

9 where it was on the map, so that, if you referred to

10 it later, you would know. But we are happy to have

11 him mark it on the map, if you'd like.

12 JUDGE BIRO: Well, maybe on break he could

13 recreate it? You can discuss it with Mr. McAfee to

14 see that, in fact, is consistent with what he

15 testified to, and we'll mark it as document --

16 whatever it was, 11A, 11 at 6A.

17 MR. MUEHLBERGER: Sure. We'd be happy to do

18 that; would you like for us to do this now that it's

19 fresh in his mind or want to wait until --

20 JUDGE BIRO: We can do it on break. I don't

21 think he's going to forget.

22 MR. MUEHLBERGER: Okay. Thank you.

23 BY MR. MUEHLBERGER:

24 Q So, going back to this document here, Mr.

25 Carrington, when you're ready could you describe this

Page 87

1 document please?

2 A It is a letter to C&S Enterprises, LLC

3 Q And it's titled here, NRCS Final Technical

4 Determination Appeal. Can you please explain what

5 that is?

6 A Once the agency has made a decision

7 regarding the wetland in dispute, the appellate, Mr.

8 Morrow or C&S Enterprises LLC has the option of

9 appealing the agency's decision to the Farm Services

10 Agency County Committee.

11 Q And, I'm not sure if I asked you this or

12 not, can you please tell us the date of this document?

13 A It is June 14th, 2016.

14 Q I would like to show the witness Agency

15 Exhibit 11, Page 12. Mr. Carrington, the signature on

16 this letter is from Jennifer Ness. Are you familiar

17 with Ms. Ness?

18 A I have met Ms. Ness.

19 Q And can you describe briefly the conclusions

20 that are made in this document?

21 A The conclusion would be -- is that the Farm

22 Service Agency County Committee has supported the

23 Natural Resources Conservation Services wetland

24 decision regarding this piece of property.

25 Q And, for the record, can you read the

Page 88

1 sentence on Exhibit 11, Page 12, that begins with 'The

2 COC also noted?' I can zoom in if that would help.

3 A That may be helpful, please. Oh, it's up in

4 the first paragraph. So, 'The COC also noted that no

5 wetland termination request was ever filed with NRCS

6 for the area labeled CW.'

7 Q And what does that mean to you?

8 A It would indicate that the landowner and/or

9 operator had not requested a wetland determination

10 prior to conducting the activities that converted the

11 wetland.

12 Q For the record, can you read the sentence in

13 bold on Page 12 that starts, "The Iowa County

14 Committee determined"?

15 A "The Iowa County Committee determined that

16 no new evidence was supplied that had not previously

17 been considered by NRCS; therefore, the COC determined

18 there was no merit to the appeal and they do not

19 support a recommendation for a review by the NRCS

20 State Conservationist."

21 Q Mr. Carrington, to your knowledge, was the

22 determination of wetlands and converted wetlands on

23 the C&S property done within specifications required

24 by NRCS?

25 A Could you restate the question, please? I'm

1 not sure what you're asking me.

2 Q Sure. So, the documents that we just showed

3 you showed that the NRCS made conclusions about

4 converted wetlands on C&S property, is that correct?

5 A That is correct.

6 Q And, to your knowledge, did the people that

7 made these determinations, did they do so within the

8 specifications required by NRCS to make such

9 determinations?

10 A To the best of my knowledge, they followed

11 our procedures correctly.

12 Q And to your knowledge, does the NRCS

13 determination of 1.3 acres of converted wetlands on

14 the C&S property still stand today?

15 A We still have a converted wetland

16 determination that is standing. The exact amount of

17 acres I'm not sure of.

18 Q Okay. Finally, I'd like to show the witness

19 Respondent's Prehearing Exchange, Page 1. Actually,

20 I'd like to show him the second page, please, of the

21 Respondent's Prehearing Exchange. One of the

22 witnesses -- so, that's a really good question.

23 MR. MUEHLBERGER: Your Honor, may I ask

24 opposing counsel a quick question?

25 JUDGE BIRO: Sure. Of course. Mr.

1 Carrington, there's some water, if you like, next to

2 you.

3 MR CARRINGTON: Oh, I'm fine. Thank you.

4 BY MR. MUEHLBERGER:

5 Q So, Mr. Carrington, this is a document that

6 was turned over by the Respondent that listed the

7 witnesses that they planned to call at the hearing.

8 It lists as Number Four, a Ms. Regina Leer. It says

9 that she is a retired employee of the Natural

10 Resources Conservation Service. Mr. Carrington, are

11 you familiar with Ms. Leer?

12 A I am not.

13 Q Do you have any idea what Ms. Leer did with

14 NRCS?

15 A The information that I was able to gather is

16 that she is a Federal Soil Conservation Service

17 Technician.

18 Q Do Soil Conservation Technicians typically

19 make wetland determinations?

20 A Technicians do not typically make wetland

21 determinations.

22 Q Okay. Thank you.

23 MR. MUEHLBERGER: No further questions.

24 //

25 CROSS EXAMINATION

1 BY MR. McAFEE:

2 Q Good morning, Mr. Carrington.

3 A Good morning.

4 Q I just, again, a few quick questions. I

5 believe this is -- to your knowledge, does the NRCS

6 make any type of determinations regarding what is a

7 water of the US?

8 A At times, we do our best to make a

9 determination on what is a waters of the U.S., because

10 we do not have jurisdiction over a waters of the U.S.

11 Q Does any such determination - throwing too

12 many n's there -- was any such determination made in

13 this case regarding a water of the US that you are

14 aware of by NRCS?

15 A To the best of my knowledge, there was not.

16 Q Also, you have testified several times that

17 a Mr. Billy Reiter, and as Mr. Muehlberger states we

18 are probably butchering his name, but Marolf, Billy

19 Reiter-Marolf -- you've said several times, pardon me

20 -- that, at the time he was qualified. Is that what

21 you said?

22 A That is correct.

23 Q Is he no longer qualified?

24 A He's no longer in that position.

25 Q Do you know why or anything relevant to this

1 case?

2 A No, I do not.

3 Q I just found that the way that you phrased

4 that "at the time, he was qualified." I wanted to

5 make sure I understood. Do you have any knowledge

6 that he has been disqualified from making

7 determinations?

8 A I have no knowledge that he has been

9 disqualified. It would be my understanding he has

10 either taken another position within the agency or he

11 has left the agency.

12 Q Okay, that's fine. Thank you.

13 MR. McAFEE: No further questions.

14 MR. MUEHLBERGER: Your Honor, Complainant

15 does not have any further questions.

16 JUDGE BIRO: Can I just ask a few questions

17 Mr. Carrington? You talked a little bit about the

18 benefits that somebody could lose by converting

19 wetlands. What are those benefits?

20 MR. CARRINGTON: USDA Benefits include such

21 things as crop insurance premium subsidy, there is

22 disaster payments, the ability to sign up for programs

23 such as CRP, the Conservation Reserve Program, the

24 Conservation Stewardship Program, the Environmental

25 Quality Program. So, those are all USDA Benefits.

1 JUDGE BIRO: Okay. And they are benefits  
2 that would be available normally to crop farmers?

3 MR. CARRINGTON: That would be correct.

4 JUDGE BIRO: Okay. And are they considered  
5 valuable benefits to most crop farmers?

6 MR. CARRINGTON: Well, especially in these  
7 times, the Crop Insurance Premium Subsidy is a very  
8 valuable benefit.

9 JUDGE BIRO: And you indicated that, besides  
10 losing it, you could potentially get your eligibility  
11 for those benefits back through restoration or  
12 mitigation? Can you tell me what those two terms  
13 mean?

14 MR. CARRINGTON: Restoration is simply  
15 putting the converted wetland back to a wetland  
16 condition like it was before the conversion activity.  
17 It may mean removing fill material. It may mean  
18 removing drain tile, such things as that. Mitigation  
19 is simply you have a wetland in one location, you  
20 replace it with a wetland you create in another  
21 location, so that you have a spot that is the same  
22 acres and it has the same, what we call functions and  
23 values as the wetland that was converted. So, we have  
24 no net loss of wetland, acres or functions.

25 JUDGE BIRO: So, are wetlands essentially

1 can farm on it and I'll give other -- set aside other  
2 areas to be wetlands, would that be acceptable to the  
3 NRCS?

4 MR. CARRINGTON: We would need to work with  
5 that producer or that person and make sure that the  
6 site that they want to create a wetland on is  
7 suitable, that it has the right soils, that it may  
8 receive water, that it would look and function like  
9 the wetland they are wanting to convert. So, it's  
10 possible, but they would need our approval and we  
11 would need to investigate to make sure that we get a  
12 similar type of wetland or quality of wetland.

13 JUDGE BIRO: I read somewhere in the  
14 documents that some of the neighboring farms to the  
15 Morrows had been allowed to tile their land and  
16 convert them into wetlands. Is that your  
17 understanding?

18 MR. CARRINGTON: I have no understanding or  
19 knowledge of that.

20 JUDGE BIRO: Okay. So, would that suggest  
21 that they possibly, too, could have done that if that  
22 was the case?

23 MR. CARRINGTON: There's always the  
24 possibility of mitigating for a converted wetland.  
25 Some places it's more difficult than others, but it's

1 fungible, you could swap one for another?

2 MR. CARRINGTON: Yes.

3 JUDGE BIRO: Why does the NRCS allow you to  
4 swap? I mean, what's the -- what's the -- is that to  
5 allow, for example, someone to farm land which they  
6 wish to farm and then to somehow -- to create the  
7 ability to farm on certain land they wish to farm and  
8 then set aside other that -- it's just not for  
9 farming?

10 MR. CARRINGTON: It's not that NRCS allows  
11 it, it's allowed by statute. So, basically, the laws  
12 that we operate under allow for such swapping, for  
13 lack of a better term.

14 JUDGE BIRO: So, is there any intent to  
15 discourage people from converting wetlands or just to  
16 convert it? Just to make sure that they have set  
17 aside other wetlands before they do?

18 MR. CARRINGTON: So, the loss of eligibility  
19 for USDA Program benefits is a discouragement for just  
20 converting wetlands. And the swapping of wetlands is  
21 just a way to -- how do you say it? Maybe make your  
22 farm more farmable and still remain eligible for those  
23 benefits that you would like to receive.

24 JUDGE BIRO: So, if you were to come in for  
25 example and say, I'd like to tile my wetlands, so I

1 always a possibility. Or let's put it this way, for  
2 USDA purposes.

3 JUDGE BIRO: Okay, for USDA purposes, you  
4 indicated they are trying to discourage the conversion  
5 of wetlands, is that correct?

6 MR. CARRINGTON: That is correct.

7 JUDGE BIRO: And why?

8 MR. CARRINGTON: Wetlands have value for  
9 improving water quality, wildlife and their other  
10 functions.

11 JUDGE BIRO: Does it help the farmers in any  
12 way?

13 MR. CARRINGTON: Well, if we all enjoy  
14 wildlife or good water quality, it benefits everyone.

15 JUDGE BIRO: Okay. When the Farm Services  
16 Administration made their determination that there is  
17 no wetlands on the property, do you know who made that  
18 determination?

19 MR. CARRINGTON: Which person?

20 JUDGE BIRO: Yes.

21 MR. CARRINGTON: I do not.

22 JUDGE BIRO: Do you know what office within  
23 the Farm Services Administration would have made that  
24 determination?

25 MR. CARRINGTON: Normally, those labels are

1 put on the form at the local level.  
 2 JUDGE BIRO: And do you know what they would  
 3 have looked at, the universe of materials they would  
 4 have looked at to make that determination?  
 5 MR. CARRINGTON: I do not.  
 6 JUDGE BIRO: Do you know if they conveyed  
 7 that determination to the owners of the property,  
 8 specifically, we've made this determination and sent  
 9 them a letter or notification?  
 10 MR. CARRINGTON: I do not.  
 11 JUDGE BIRO: Okay. The document that showed  
 12 that the Farm Service Administration made that  
 13 determination or at least reflected such a finding,  
 14 was that provided to the Morrows?  
 15 MR. CARRINGTON: I do not know.  
 16 JUDGE BIRO: Is that something that farmers  
 17 could rely on when they come into you, for example,  
 18 and they say, "I'm going to tile, and I believe there  
 19 is no wetlands?"  
 20 MR. CARRINGTON: We strongly discourage them  
 21 from relying on that type of information because it's  
 22 not always 100 percent accurate. In order to be --  
 23 how do you say it? For lack of a better term, in  
 24 order to take the monkey off of their back for their  
 25 responsibility of converting a wetland and put it on

1 the agency, they need to have a determination from  
 2 NRCS.  
 3 JUDGE BIRO: How do they know that, that  
 4 they can't rely on the Farm Service Administration  
 5 form which tells them that it's not a wetland?  
 6 MR. CARRINGTON: NRCS has tried to  
 7 communicate that as we work with producers, to the  
 8 best of our ability.  
 9 JUDGE BIRO: Do you know whether NRCS  
 10 conveyed that information, specifically, to the  
 11 Morrows?  
 12 MR. CARRINGTON: I do not know.  
 13 JUDGE BIRO: All right. Thank you very  
 14 much. Did my questions raise any questions for you  
 15 counsel?  
 16 MR. MUEHLBERGER: Yes, Your Honor, I just  
 17 have a couple of questions; I'll be brief.  
 18 JUDGE BIRO: Please proceed.  
 19 REDIRECT EXAMINATION  
 20 BY MR. MUEHLBERGER:  
 21 Q Mr. Carrington, you stated that when a  
 22 determination about converted wetlands are made, that  
 23 a producer has the option to either mitigate or  
 24 restore wetlands, is that correct?  
 25 A That is correct.

1 Q And, to your knowledge, and to this date,  
 2 has C&S Enterprise ever mitigated or restored the  
 3 converted wetlands?  
 4 A To the best of my knowledge, they have done  
 5 neither.  
 6 Q Okay. And does NRCS make any determination  
 7 about the jurisdiction of streams, for purposes of the  
 8 Food Security Act?  
 9 A For the purposes of the Food Security Act, a  
 10 stream would not come under the jurisdiction of NRCS.  
 11 Q Okay. And does the NRCS make determinations  
 12 about streams for the Clean Water Act?  
 13 A Would you rephrase your question please? I'm  
 14 not sure what you're asking.  
 15 Q Does the NRCS get involved with the  
 16 jurisdiction of streams, for purposes of the Clean  
 17 Water Act?  
 18 A NRCS does not make wetland determinations  
 19 for the Clean Water Act.  
 20 Q And, as far as streams are concerned --  
 21 A So, to the best of my knowledge, we do not  
 22 make determinations for streams.  
 23 Q Thank you.  
 24 JUDGE BIRO: Thank you, counsel. Mr.  
 25 McAfee?

1 MR. McAFEE: No further questions, Your  
 2 Honor.  
 3 JUDGE BIRO: Thank you. Thank you, Mr.  
 4 Carrington, you may step down.  
 5 It's 11:46, gentlemen. Would you like to  
 6 proceed, or would you like to break for lunch?  
 7 MR. MUEHLBERGER: Your Honor, we anticipate  
 8 our next witness will be here at about 1:00, so, if  
 9 it's okay to break for lunch, this would be a good  
 10 time.  
 11 JUDGE BIRO: Okay, why don't we stand in  
 12 recess until 1:00? Thank you.  
 13 (Whereupon, at 11:46 a.m., a recess was  
 14 taken for lunch, to reconvene at 1:00 p.m., later the  
 15 same day.)  
 16 //  
 17 //  
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 24 //

1 AFTERNOON SESSION  
 2 (1:00 p.m.)  
 3 JUDGE BIRO: Mr. Jones, would you like to go  
 4 back on the record. Are you ready?  
 5 MR. JONES: Yes, ma'am.  
 6 JUDGE BIRO: Thank you. Okay, Mr.  
 7 Muehlberger, would you call your next witness?  
 8 MR. MUEHLBERGER: Yes, Your Honor. Before  
 9 we do that, Complainant would like to enter into  
 10 evidence the marked-up exhibit that we discussed  
 11 before.  
 12 JUDGE BIRO: Okay, and what did we mark that  
 13 as?  
 14 MR. MUEHLBERGER: We consulted with opposing  
 15 counsel about this and we agreed to the markings on  
 16 the document and would like to enter it as Agency  
 17 Exhibit 11-8A.  
 18 JUDGE BIRO: 11, Page 8A. Okay. And you're  
 19 in agreement with that, Mr. McAfee?  
 20 MR. McAFEE: I'm sorry, your Honor?  
 21 JUDGE BIRO: Are you in agreement with that?  
 22 MR. McAFEE: Yes, I am. Thank you.  
 23 JUDGE BIRO: Okay, so we are admitting to  
 24 the record Agency Exhibit 11, Page 8A.  
 25 MR. MUEHLBERGER: That's right.

1 (The document referred to was  
 2 marked for identification as  
 3 Agency's Exhibit No. 11, Page  
 4 8A and was received in  
 5 evidence.)  
 6 MR. MUEHLBERGER: That's right. Your Honor,  
 7 Complainant would like to call Bert Noll as a witness.  
 8 JUDGE BIRO: Mr. Noll? Oh, is he out of the  
 9 room? Thank you for accommodating that record  
 10 request. I just wanted to make sure that whoever  
 11 looks at this record after me has seen everything that  
 12 I've seen.  
 13 MR. MUEHLBERGER: And, your Honor, just for  
 14 clarification then, as we move forward, how would you  
 15 like to handle it if we have a witness that would like  
 16 to mark on another document?  
 17 JUDGE BIRO: Maybe we could simultaneously  
 18 have them mark on a piece of paper as well?  
 19 MR. MUEHLBERGER: Okay.  
 20 JUDGE BIRO: And then, you could show it to  
 21 Mr. McAfee and if everybody's in agreement, we'll just  
 22 mark it as another exhibit.  
 23 MR. MUEHLBERGER: Okay. Thanks.  
 24 JUDGE BIRO: Unless you get the technology  
 25 working to print off a copy.

1 MR. MUEHLBERGER: Yes. We talked to the IT  
 2 folks this morning and they said they're not quite  
 3 there with that technology.  
 4 JUDGE BIRO: Okay. All right. And if, when  
 5 they mark the document with lines, if you could have  
 6 them identify them as Line A or B or C for the record,  
 7 that would be really helpful.  
 8 MR. MUEHLBERGER: That sounds good.  
 9 Whereupon,  
 10 BERT NOLL  
 11 having been duly sworn, was called as a  
 12 witness and was examined and testified as follows:  
 13 DIRECT EXAMINATION  
 14 BY MR. MUEHLBERGER:  
 15 Q Good afternoon, Mr. Noll. Let's start by  
 16 talking a little bit about where you work.  
 17 A I work out of the Environmental Services  
 18 Division and Office in Washington, Office Six for the  
 19 Iowa DNR.  
 20 Q Can you tell us what the Iowa DNR stands  
 21 for?  
 22 A The Iowa Department of Natural Resources.  
 23 Q Can you say what your position is please?  
 24 A I'm an Environmental Specialist.  
 25 Q Okay. And what are your primary

1 responsibilities as an Environmental Specialist?  
 2 A I work in several programs, one of them is  
 3 the Animal Feeding Operations Program. And we deal  
 4 with construction plans, manure management plans for  
 5 animal feeding operations as well as siting those  
 6 operations when we need to.  
 7 Q So, generally speaking, if someone wishes to  
 8 build an animal-feed lot, how do they approach you and  
 9 how does that process work?  
 10 A Well, there's really three levels of  
 11 operations, talking specifically about confinements.  
 12 One of them is what we call "small-animal feeding  
 13 operations," which really don't require much of  
 14 anything from us. The next size is what we call  
 15 "manure-management-plan"-sized operation, which is  
 16 just basically required to submit a manure management  
 17 plan and the Construction Design Statement. And then  
 18 there are large operations, which require construction  
 19 permits through us.  
 20 Q Thanks. And can you talk about Iowa  
 21 regulations concerning required distances between  
 22 confinement feed lots and streams?  
 23 A Currently the required distance is 500 feet.  
 24 Q Okay. And what types of waters are covered  
 25 under these regulations?

1 A Well, its waters of the state is what they  
 2 are defined as, so basically, anything that has a  
 3 defined bed and banks.  
 4 Q Okay. And how does these waters compare to  
 5 waters that are jurisdictional under the Federal Clean  
 6 Water Act?  
 7 A They're one and the same.  
 8 Q Are you familiar with C&S Enterprise, LLC?  
 9 A Yes.  
 10 Q Okay. And how did you become familiar with  
 11 C&S?  
 12 A It's a manure management-plan-sized  
 13 operation or a Construction Design Statement  
 14 Operation, so their plans were submitted to our  
 15 office. I did administrative review on those plans.  
 16 Q Okay. And was the confinement feed lot, as  
 17 far as your understanding, was that to be owned by C&S  
 18 Enterprise?  
 19 A Yes.  
 20 Q Okay. I'm going to show you a document here  
 21 in a little bit, and I'm going to ask that question  
 22 again. When you were assigned to the case, the C&S  
 23 Enterprise case, were you the sole contact from IDNR  
 24 with respect to reviewing the documents and making any  
 25 kind of approvals?

1 A Yes.  
 2 Q Did you, at any point, tell Mr. Scott  
 3 Morrow, the owner of C&S Enterprise, that he should  
 4 fill in the tributary on his property?  
 5 A I don't recall talking to him directly, no.  
 6 Q Okay. I'd like to present the witness with  
 7 Agency Exhibit 14, Page 5.  
 8 (The document referred to was  
 9 marked for identification as  
 10 Agency Exhibit 14.)  
 11 Q Yeah, if you could zoom out just a little,  
 12 please. The document is a little bit hard to make  
 13 out, so I'm going to have you describe this here.  
 14 First of all, do you recognize this document?  
 15 A Yes.  
 16 Q Okay. And who provided this document to you?  
 17 A The C&S Enterprises, the owner of the site.  
 18 Q Okay, if you could look at the -- here we go  
 19 -- bottom of the page there. Who produced this  
 20 document?  
 21 A Looks like Pinnacle, who are a consultant  
 22 for construction design and manure management planning  
 23 for animal-feed operations.  
 24 Q And was this document submitted by Pinnacle  
 25 to you at IDNR?

1 A Yes, on behalf of the owner, yeah.  
 2 Q Okay. And what was the purpose of providing  
 3 this document to you?  
 4 A The Construction Design Plans require that a  
 5 map be submitted detailing that the separation  
 6 distances are being met or are showing what the  
 7 separation distances are.  
 8 Q Okay. And so, when this image was submitted  
 9 to you from Pinnacle, what was this saying to you?  
 10 What was your conclusion about this document?  
 11 A That they're meeting several separation  
 12 distances, a water source as one of them.  
 13 Q Okay. Can you tell us the date of this  
 14 document?  
 15 A June 10th of 2015.  
 16 Q And could you say, again, who this was for?  
 17 A This is for C&S Enterprises.  
 18 Q Okay. I'd like to show the witness Agency  
 19 Exhibit 14, Page 3 -- I'm sorry, 4. Thank you. I'll  
 20 give you a minute to look over this document here and  
 21 when you're ready, could you please describe this  
 22 document?  
 23 A Yeah. This is an e-mail between myself and  
 24 EPA, EPA employee Stephen Pollard, where I had  
 25 provided him with the map that we had just been

1 looking at.  
 2 Q Okay. Okay. And I'd like to show the  
 3 witness Agency Exhibit 14, Page 3. Mr. Noll, do you  
 4 recognize this document?  
 5 A Yes.  
 6 Q Can you please describe this document?  
 7 A This is a map a little bit like the one that  
 8 we just looked at a minute ago, detailing separation  
 9 distances to the nearest water source.  
 10 Q Okay. And what are your conclusions about  
 11 the distance between the confinement barn and the  
 12 water source on the C&S property?  
 13 A On this map, it looks like it's 406, or no,  
 14 I'm sorry, at the closest is 376 feet, which would be  
 15 within the required 500 feet.  
 16 Q How is this image different than the one  
 17 that was submitted to you from Pinnacle, the  
 18 consulting company?  
 19 A Well, the distances are a little bit  
 20 different and it also looks like the building's  
 21 orientation is a little different also.  
 22 Q To your knowledge, does the image you're  
 23 looking at right now accurately reflect the current  
 24 location of the confinement barn on the C&S property?  
 25 A Not according to the original plans.

1 Q Like, is this where the confinement barn was  
 2 actually sited, according to this document?  
 3 A I have not physically been there, I guess.  
 4 So, I can't tell you if that's where it's actually at  
 5 or not.  
 6 Q Okay. Just looking at this document alone  
 7 though, what conclusions can make about the location  
 8 of the barn in relation to the tributary?  
 9 A It's within the required separation  
 10 distance.  
 11 MR. MUEHLBERGER: Okay. No further  
 12 questions.  
 13 JUDGE BIRO: Mr. McAfee, do you have any  
 14 cross?  
 15 MR. McAFEE: Yes, please. Thank you, Your  
 16 Honor.  
 17 CROSS EXAMINATION  
 18 BY MR. McAFEE:  
 19 Q Good afternoon, Mr. Noll.  
 20 A Good afternoon.  
 21 Q My name is Eldon McAfee, I'm representing  
 22 C&S Enterprise here today. Have you and I met before?  
 23 A Not directly, I don't think. But, I've seen  
 24 you before at a meeting or two.  
 25 Q Okay. Have you ever met Mr. Scott Morrow,

1 seated at the table there, when I was seated, next to  
 2 me?  
 3 A No.  
 4 Q And, as I just stated, he is with C&S  
 5 Enterprise. Have you ever talked to him on the phone?  
 6 A I don't recall talking to him on the phone.  
 7 Q You have just stated that C&S Enterprise  
 8 owns the hog building. Is that correct?  
 9 A I guess I know it, without having the plan  
 10 in my hands -- I've just known it as the Morrow 1  
 11 site. As far as owners of these things go, it kind of  
 12 can change from time to time, I suppose.  
 13 Q But you have stated under oath that C&S  
 14 Enterprise owns the site, is that correct?  
 15 A Yes.  
 16 Q Would it surprise you to know they do not  
 17 own the site?  
 18 A No.  
 19 Q Would it surprise you that they have never  
 20 owned that site?  
 21 A Yes.  
 22 Q Should you have checked your records before  
 23 you made a statement under oath that they owned that  
 24 site? Did you do that?  
 25 A I did, but I guess I was assuming the folks

1 from EPA here were truthful with me on who owned the  
 2 site and who didn't.  
 3 Q Okay. I will submit to you and Mr. Morrow  
 4 will testify that C&S does not own the site, has never  
 5 owned the site. And he will testify as to who does  
 6 own it. Would that surprise you, sir?  
 7 A As surprised as I can get over something  
 8 like this, I suppose.  
 9 (Laughter.)  
 10 Q Okay. I just want to be clear on what  
 11 you've testified to, sir. Okay, you've also testified  
 12 today that there is a distance -- is a distance  
 13 required under Iowa law for a confinement building  
 14 such as the one that is depicted in AX-14, which you  
 15 looked at with Mr. Muehlberger and we'll put that back  
 16 up in a minute? But you have testified that there is  
 17 a distance of 500 feet required under Iowa law,  
 18 correct?  
 19 A To a water source, yes.  
 20 Q Now I believe you used the term "waters of  
 21 the state" when you testified with Mr. Muehlberger,  
 22 and I don't mean to be picky here, but is there a  
 23 difference between waters of the state or water  
 24 source?  
 25 A No.

1 Q They are one and the same?  
 2 A Yes.  
 3 Q Okay. You also testified that, to be -- as  
 4 you called it - "a water of the state," it had to have  
 5 a bed and banks, is that correct?  
 6 A Yes.  
 7 Q Is there anything else required in that  
 8 definition to qualify for what has to be 500 feet  
 9 away?  
 10 A From what I can recall from the definition,  
 11 it is a definite bed and banks.  
 12 Q Okay, could the definition also include  
 13 "with waterflow?"  
 14 A I don't believe that it does in the Iowa  
 15 Administrative Code, but I don't have it in front of  
 16 me, again.  
 17 Q Okay, just asking you your knowledge as to  
 18 what you've testified to today.  
 19 A From what I understand, it does not have to  
 20 have water flowing through it.  
 21 Q Okay, does the DNR have any practice - let  
 22 me put it this way, we have the definition in the code  
 23 and in the rules. Does DNR to your knowledge have a  
 24 working definition that they use in the field?  
 25 A No.

1 Q You've never heard of the term, when there  
2 is something that could qualify as a water source,  
3 that it is something that can't be farmed through with  
4 normal farming equipment?

5 A I've heard of that, we've also used  
6 three-dot streams. There could be a couple other  
7 general kind of rules of thumb, but then we've also  
8 kind of found that those don't always apply to every  
9 water of the state.

10 Q Okay. I had a few questions about the --  
11 when the definition requires waterflow, but you've  
12 testified today that it doesn't require waterflow, is  
13 that correct?

14 A Right.

15 Q Do you recall, when -- were you present  
16 earlier this year, I believe it was in February, when  
17 I gave a talk to the Iowa DNR Field Officers about  
18 Animal Feeding Operation Rules?

19 A That's what I was talking about earlier,  
20 where I saw you, yeah.

21 Q Do you remember, in that discussion, this  
22 definition was covered, and do you recall Mr. Ken  
23 Hessinius, one of the field office supervisors from  
24 northwest Iowa, discussing the requirement for the  
25 waterflow and said well, 'If we had to depend on

1 waterflow, even the Skunk River would not a water  
2 source at times?' Do you recall that?

3 A Yeah, I think I remember him saying that.

4 Q Okay. So, you do remember the discussion  
5 about waterflow?

6 A (No audible response.)

7 Q Okay. All right. Now let's take a look at  
8 Agency Exhibit 15.

9 A Can I say something about that real quick,  
10 the waterflow?

11 Q You certainly may, if it helps clarify your  
12 answer.

13 A I just don't, I -- you probably remember  
14 Randy Clark, the attorney for the DNR. That's --I go  
15 off of his advice, I guess. Long ago, he said that  
16 what he had told us, anyways, that there did not  
17 necessarily need to be water flowing.

18 Q That's fine. I'm glad you clarified your  
19 answer. You are certainly entitled to do that. Now,  
20 you've testified, in response to Mr. Muehlberger's  
21 question about Agency Exhibit 15. And let me put up --  
22 I think you'd -- excuse me, Agency Exhibit 14, my  
23 mistake. And, I'm sorry. I may have missed -- left  
24 one of the pages I'm looking for back -- here it is.  
25 Sorry. All right. I'm putting Page 5 of 5 up there.

1 Can you see that?

2 A Yes.

3 Q Is it your testimony that that's what was  
4 submitted by Pinnacle with the Construction Design  
5 Statement and Manure-Management Plan?

6 A Yes.

7 Q Okay. And of course, that location - it  
8 gives the distances there, doesn't it? Could you tell  
9 us what that distance is?

10 A All of them, or?

11 Q I'm sorry. I need to clarify, too. In the  
12 lower right-hand corner, there's a distance to water.

13 A Can you move it up?

14 Q Sure.

15 A That way?

16 Q Sorry. Does that help?

17 A Yes. 566 or 506, one of the two.

18 Q And, I can probably enlarge this, but I'm  
19 not sure I know how. Maybe -- Oh, thank you. I just  
20 want to make sure you can see it.

21 A Sure. 566.404

22 Q Okay, and so -- is it your understanding  
23 that would be where the building is located - there in  
24 the drawing I understand is different than where it  
25 was built - but that shows a distance that would meet

1 the requirements of Iowa law?

2 A Yes.

3 Q Okay. And that's what was submitted to you  
4 is your understanding?

5 A Yes.

6 Q How long ago has it been since you've  
7 reviewed that Construction Design Statement or Manure  
8 Management Plan?

9 A Well, my original was within probably a week  
10 when it was submitted, at which time I would have sent  
11 a construction letter. But then, you know, through  
12 our kind of proceedings for this, I've look at it  
13 twice since then probably.

14 Q Okay. So, would you -- as I understand DNR  
15 rules, on a site of this size there is no permit  
16 required, correct?

17 A That's right.

18 Q And you would review the plans that come in  
19 and then you would issue what's called a construction  
20 approval letter?

21 A Yes.

22 Q Do you -- are you the one that issued that?

23 A Yes.

24 Q And do you remember who that was issued to?

25 A No, not right off hand.

1 Q Then, I think you've testified - I'm now  
2 going to put up Page 3 of Agency Exhibit 14.  
3 (Asides.)  
4 Q Ok. Thank you. And let's see -- maybe I  
5 will turn it side -- it will be easier to read. Right?  
6 A Yup.  
7 Q Okay. Is this document in the DNR files  
8 now?  
9 A No.  
10 Q Did you prepare this document?  
11 A No.  
12 Q When is the first time you saw this  
13 document?  
14 A When I was talking with the attorneys from  
15 EPA.  
16 Q And that would be according to Page 1 of  
17 Agency Exhibit 14 -- and this isn't a trick to see if  
18 you can remember. It was -- I'll move it. Page 1 is  
19 -- December 19th -- is that the day you talked?  
20 A Yes.  
21 Q So, how did this document then -- I'm  
22 switching back to Agency Exhibit 14, Page 3. They  
23 e-mailed this document to you?  
24 A Yes.  
25 Q And so, it was prepared by EPA, to your

1 knowledge?  
2 A I can't really say. I received it from  
3 them, but I don't know who --  
4 Q Okay. That's fair. So, you did not prepare  
5 it?  
6 A No.  
7 Q You did not place those distances in there?  
8 A No, I did not.  
9 Q And you did not put the placement of the  
10 building in there?  
11 A No.  
12 Q Okay. Do you know how it was determined  
13 where that building was placed on this drawing?  
14 A No.  
15 Q Okay. Now, I'd like you to look at this  
16 document again, it shows a distance of less than 500  
17 feet at its closest point to the building, correct?  
18 A Yeah.  
19 Q To the ditch, channel, tributary - whatever  
20 we are calling it. Then, just to the right of that,  
21 it shows a distance of 509 feet, correct?  
22 A Yes.  
23 Q And I know the DNR rules require you to  
24 measure from the closest point of the building. I  
25 understand that, but from the closest point of the

1 building to that part of the main tributary, as we're  
2 calling it, it is more than 500 feet, correct?  
3 A The point on the right, yes.  
4 Q Yes. Okay. And I just want to make sure  
5 I'm clear here. I'm putting back up Page 1 of Agency  
6 Exhibit 14. And in that third paragraph -- well,  
7 first of all, have you seen this memo before today?  
8 A No.  
9 Q So, have you had a chance to read it?  
10 A No.  
11 Q Please take the time to read it, if you  
12 would. Can you see it okay?  
13 A Yeah, yep.  
14 JUDGE BIRO: Mr. McAfee, what's the exhibit  
15 number on this? Mr. McAfee, what's the exhibit number  
16 on this?  
17 MR. McAFEE: I'm sorry. It's AX-14, Page 1.  
18 BY MR. McAFEE:  
19 A Okay.  
20 Q So, Mr. Noll, you've had a chance to read  
21 through this?  
22 A Yes.  
23 Q If you go down to the third paragraph, it  
24 says, "Prior to our conference call, Stephen Pollard  
25 sent Mr. Noll an aerial photograph, which showed the

1 tributary prior to filing." Then it says, 'On that  
2 aerial image, he superimposed the confinement barn.'  
3 When the term 'he' is used -- is it referring -- I  
4 think you've testified to this, but I want to make  
5 sure I'm clear -- is that term 'he' referring to you  
6 or to Mr. Pollard, or do you know?  
7 A Well, I did not superimpose it, so I'm  
8 assuming it's referring to Mr. Pollard. Yeah.  
9 Q Okay. And that's fair, you just know it  
10 wasn't you that superimposed that building.  
11 A Right. Right.  
12 Q It goes on to say, in the fourth paragraph,  
13 talking about the first -- and I need to be clear for  
14 the record, I'm sorry. The map showing the location  
15 that was far enough away -- and I'm shuffling papers  
16 here looking for that page number. It is -- that  
17 location was shown on Page 5 of Exhibit 14. He refers  
18 to -- the writer of this memo says that, "Mr. Noll  
19 sent a map that had been submitted with the original  
20 design statement for the Morrow 1 site." Then it goes  
21 on to say, "The map had the barn location further away  
22 from the tributary." Again, that's the one that you,  
23 to your knowledge have in your DNR files?  
24 A Yes.  
25 Q To this day, that's the only map you have in

1 your files?  
 2 A Yes.  
 3 Q So, at one point it appears the building was  
 4 built -- was moved and built closer, according to what  
 5 information we have in front of us.  
 6 A Right.  
 7 Q But, I think you testified that you've never  
 8 been to the site.  
 9 A Right.  
 10 Q So, you've not checked the actual location  
 11 of the building where it has been built.  
 12 A No.  
 13 Q Okay. When a building is moved after an  
 14 original CDS is submitted, is the owner or someone to  
 15 contact you and say it's been moved?  
 16 A We only require that when it actually  
 17 changes legal description. So, if you would move  
 18 outside of the core-to-core section that he indicated  
 19 on the original design, then you're required to  
 20 complete submittal of new plans.  
 21 Q Okay. So, help me through this. And if --  
 22 I understand if you weren't involved or don't know, I  
 23 understand that. But at some point, the building was  
 24 moved, not the actual physical building moved, but the  
 25 site was changed where it was going to be built. And

1 someone had to determine that was closer than 500 feet  
 2 to this unnamed tributary, and -- but you don't have  
 3 anything in your file showing where they contacted --  
 4 anyone contacted the DNR about doing that?  
 5 A No.  
 6 Q Okay. You don't have anything in your file  
 7 about anyone inquiring with you what needs to be done  
 8 to that unnamed tributary, as we're calling it here,  
 9 to comply with the 500-foot distance?  
 10 A I will admit I am terrible at recordkeeping  
 11 and taking notes, but I don't have anything. I don't  
 12 recall anything, and I don't have anything in the file  
 13 that has any communication to me or our office saying  
 14 that that location or the siting of the building was  
 15 going to be changed from the original plans.  
 16 Q Okay. And I understand that - would the  
 17 same go for anything in your file about anyone  
 18 inquiring about -- if we do move it, we need to do  
 19 something with this unnamed tributary?  
 20 A Right, no -- I don't have anything.  
 21 Q So, if that was done, it was done without  
 22 DNR input, as far as you know?  
 23 A Right. Well, yeah. And without any  
 24 official correspondence or like a letter or anything  
 25 like that.

1 Q In your work for DNR, do you work with  
 2 Pinnacle quite a bit?  
 3 A Yes.  
 4 Q Okay. And do they -- have they ever  
 5 contacted you about changing this location of the  
 6 building and water sources and the 500-foot distance,  
 7 et cetera?  
 8 A Yes.  
 9 Q And, to your knowledge, at least for you,  
 10 that wasn't done here? You have no recollection of  
 11 it.  
 12 A Right, I have none.  
 13 MR. McAFEE: Okay. I just have one thing,  
 14 Your Honor, I need to go back to my notebook.  
 15 JUDGE BIRO: Sure.  
 16 MR. McAFEE: There's one exhibit that you  
 17 haven't testified to, but I want to make sure you  
 18 haven't seen it or had any input into the exhibit.  
 19 Just a minute.  
 20 (Pause.)  
 21 BY MR. McAFEE:  
 22 Q Mr. Noll, I'm going to show you what's been  
 23 marked as -- and I'll show you Page 1 -- what's been  
 24 marked as Agency Exhibit 10. And it consists -- can  
 25 you see that at all?

1 A Yeah. And, yeah.  
 2 Q Okay. And it consists -- if you look at the  
 3 lower righthand page of 22 pages, and you can also see  
 4 that it has a box for what says -- I will submit to  
 5 you that it says, "Confinement Building Footprint."  
 6 Do you see that?  
 7 A Yes.  
 8 Q Have you ever seen this exhibit before?  
 9 A No.  
 10 Q Did you have any involvement in the  
 11 preparation of this exhibit?  
 12 A No.  
 13 Q And I could show you all 22 pages, one at a  
 14 time, but do you feel that's necessary I do that to  
 15 confirm that you've not had any knowledge of this?  
 16 A No.  
 17 MR. McAFEE: I have no further questions,  
 18 Your Honor.  
 19 REDIRECT EXAMINATION  
 20 BY MR. MUEHLBERGER:  
 21 Q Mr. Noll, just a few questions here. I'm  
 22 putting back on the screen, Agency Exhibit 14, Page 5.  
 23 You testified that this was submitted to you by  
 24 Pinnacle on behalf of C&S Enterprises, is that  
 25 correct?

1 A Yes.

2 Q Can you read what it says at the top left -

3 what the text says at the top left of the document.

4 A Morrow 1 site.

5 Q Can you also read at the bottom left, where

6 it says, "Field Name" -- what does it say?

7 A Morrow 1 site.

8 Q Okay. And do you understand that Mr. Morrow

9 owns C&S Enterprises, LLC?

10 A That's what I believe.

11 Q Okay. And when this was submitted to you by

12 Pinnacle, did you have any way of knowing that Mr.

13 Morrow might sell a portion of his property to a

14 different entity?

15 A No.

16 Q So, at the time -- at the time that this was

17 submitted to you by Pinnacle, were you familiar at all

18 with MCM Pork?

19 A No.

20 Q Okay. I'd like to show you Agency Exhibit

21 14, Page 3. Actually, let's try Page 2. Okay. So,

22 I've got an e-mail here. Can you tell me who this

23 e-mail is from?

24 A From Stephen Pollard.

25 Q And to whom is it addressed?

1 A To me.

2 Q Okay. What does the e-mail say?

3 A That he set up a conference line, was going

4 to talk at 3:30 with the number.

5 Q It also says there that he attached an

6 aerial image, so there was an attachment to that

7 e-mail-

8 A Yes.

9 Q -- which I'm going to put up again, as

10 Agency Exhibit 14, Page 3. Was this the image that

11 Mr. Pollard attached to that e-mail?

12 A Yes.

13 Q And then, did you have a subsequent

14 conversation with EPA concerning this image?

15 A Yes.

16 Q And what was EPA's conclusion about the

17 siting of the Morrow 1 site when it was actually

18 constructed?

19 A We just discussed the fact that, from

20 looking at this map, the distance to a water source is

21 not met.

22 Q And so, it is EPA's conclusion that the

23 siting was different than what was originally proposed

24 to you by Pinnacle, is that correct?

25 A Yes.

1 Q Okay. And do you have any reason to

2 disagree with EPA's conclusions about the actual

3 siting of the animal feed lot?

4 A No.

5 MR. MUEHLBERGER: Okay. No further

6 questions.

7 MR. McAFEE: If I may, Your Honor?

8 RECROSS EXAMINATION

9 BY MR. McAFEE: Oh sure, sorry.

10 Q Mr. Noll, I want to put back in front of you

11 Agency Exhibit 14, Page 5 of 5. And can you see on

12 the lower left-hand corner? Do we need to enlarge it?

13 If -- can we enlarge that, please? Thank you. Can

14 you read - can you see that, Mr. Noll?

15 A Yes.

16 Q Can you see, first of all, it gives a date,

17 is that correct?

18 A Yes.

19 Q And what is that date?

20 A June 10th, 2015.

21 Q Okay. Then -- that would coincide with date

22 of the CDS and MMP?

23 A I'm assuming, yes.

24 Q Okay. Do you see where it says, "farm

25 name?"

1 A Yes.

2 Q And what does it say there?

3 A Mike Norman Sites.

4 Q Okay. And do you know who Mike Norman is?

5 A Yes.

6 Q And how do you know who Mike Norman is?

7 A He's a regional farmer near Washington,

8 where my field office is at.

9 Q And does he have hog buildings?

10 A Yes.

11 Q And do you know what company he operates

12 under?

13 A No.

14 Q Okay. Have you reviewed other plans of his

15 or his companies that you remember?

16 A There was one that was either him or Steve

17 Norman, yes.

18 Q Would it surprise you if, in fact, Mike

19 Norman and his company are the owner of this site,

20 based on what it says there?

21 A No.

22 Q Thank you.

23 MR. McAFEE: No further questions.

24 JUDGE BIRO: Mr. Noll, I'd like to ask you

25 just a couple of questions, if I could?

1 MR. NOLL: Sure.

2 JUDGE BIRO: In one of the documents it said

3 that you're in Field Office Six. Is that correct?

4 MR. NOLL: Yes.

5 JUDGE BIRO: Are the field offices divided

6 by geographic location or, I don't know. How are they

7 divided?

8 MR. NOLL: Yeah. There are six, total, in

9 Iowa. And I'm not sure exactly how they split them

10 up, but it's kind of two rows of three across, it's

11 one, two, three, four, five, six. And we have 16

12 counties in our field -- in our region -- in our field

13 office region.

14 JUDGE BIRO: Okay. And in a number of these

15 different documents they seem to identify the property

16 we are talking about as a variety of counties. This

17 document, for example, if you could Ms. Morano,

18 (phonetic) put up AE-14 at 5?

19 MS. MORANO: What? I'm sorry. Say it

20 again?

21 MR. McAFEE: I have it right here, Your

22 Honor.

23 JUDGE BIRO: Okay. That'd be great. This

24 one seems to identify it as being in Keokuk County?

25 MR. NOLL: Keokuk.

1 JUDGE BIRO: Right. And another one had it

2 in, I think, Lincoln County, and there was a third one

3 that had it in -- do you know what county this

4 property is in?

5 MR. NOLL: Not -- for some reason, I was

6 thinking it was in Iowa County.

7 JUDGE BIRO: Iowa County.

8 MR. NOLL: Yeah.

9 JUDGE BIRO: Okay. That may have been the

10 third one I don't remember.

11 MR. NOLL: Mm-hmm.

12 JUDGE BIRO: Is that within your region?

13 MR. NOLL: Yes.

14 JUDGE BIRO: Would anybody file any

15 documents with any other regional offices if they had

16 property in Iowa County or Keokuk or --

17 MR. NOLL: If they were building a

18 confinement site, no. It would be our office.

19 JUDGE BIRO: So, you're the only one?

20 MR. NOLL: Yes.

21 JUDGE BIRO: Okay. There were -- in this

22 document, AE-14 at 5, they have a number of

23 descriptions. It says, 'no well within 101 feet, no

24 public use within 2,501 feet, no designated wetlands

25 within 2,501 feet, no HQ or protected water within

1 1,001 feet.' Where do these numbers come from, do you

2 know?

3 MR. NOLL: Much like the distance we're

4 talking about to a water source, there is a list of

5 other things that they need to meet a - that the State

6 or the Administrative Code has minimum separation

7 distances that they need to meet from the confinement

8 building. And a drinking water well is one of the

9 them, and the rest of the things on that list.

10 JUDGE BIRO: Okay. Public use is public use

11 water?

12 MR. NOLL: No, it's a public use area, which

13 are like, in the definition, they give examples of

14 campgrounds, picnic areas, cemeteries, any place where

15 people will congregate for a period of time.

16 JUDGE BIRO: And no designated wetlands.

17 MR. NOLL: There's a list of designated

18 wetlands that they - that the minimum distance is

19 2,500 feet, so -it's

20 JUDGE BIRO: And who designated those

21 wetlands?

22 MR. NOLL: It was our -- well, the State of

23 Iowa or our department, at one point, had it put into

24 the rule, like which ones are, and which ones aren't,

25 I guess.

1 JUDGE BIRO: All right. For the State of

2 Iowa --

3 MR. NOLL: Yes.

4 JUDGE BIRO: -- was for the designated

5 wetlands they are referring to? And so, they are just

6 referring to wetlands designated by the State of Iowa?

7 MR. NOLL: Right. Yep, and there's a

8 specific list of them.

9 JUDGE BIRO: Okay. And what is -- it says,

10 'No HQ.' What does HQ mean?

11 MR. NOLL: Again, there is a list of 'high

12 quality -- high quality waters. So, some larger

13 creeks and bigger rivers and things like that are --

14 have been designated by the state again, and there is

15 a specific list of them as high quality or protected -

16 minimum distance is 1000 feet.

17 JUDGE BIRO: Okay. You indicated there were

18 three categories of confinement feed lots. What

19 distinguishes them?

20 MR. NOLL: The maximum capacity of animals

21 that they can have in them. Then -- this is for

22 confinement operations specifically, I'm talking

23 about. Open-feed lots, where they're not confined,

24 have a different set of rules. But for these, yeah,

25 it's kind of confusing. It's based on what we call

1 animal units. And there is a conversion factor for  
2 like finishing swine, like in this instance.  
3 So, you would take the number of head that  
4 you would fill this building with, multiply it by .4  
5 and that gives you the animal unit capacity. And so,  
6 anything less than 500, is considered a small animal  
7 -feeding operation; anything from 500 to 999 is a  
8 medium or a Medium or Manure Management Plan sized  
9 facility, which -- which is what this is; and anything  
10 1,000 animals or greater is large and it requires a  
11 permit.

12 JUDGE BIRO: You have to go back for me  
13 because I'm way lost.

14 MR. NOLL: Yeah. Even the people that build  
15 these things are confused but --

16 JUDGE BIRO: What are finishing swine?

17 MR. NOLL: It's nursery -- past nursery  
18 phase, to -- when they go to slaughter. So --

19 JUDGE BIRO: Not piglets, grown pigs.

20 MR. NOLL: No, around 50-60 pounds up to 300  
21 pounds.

22 JUDGE BIRO: Okay. 50, 60-pound hogs to  
23 bigger. Okay. And what was the conversion that you  
24 used?

25 MR. NOLL: It's -- you're multiplying the

1 number that would fill the building by .4. And it's  
2 different, I think it's based off of cattle because,  
3 like a feeder is 1. So, I think then they say the  
4 swine is a little less than half that size so it's .4,  
5 is how I think it was based.

6 JUDGE BIRO: Okay, so it's not really 500  
7 hogs in the building.

8 MR. NOLL: Right. Yeah, it's -- it's more  
9 -- so 500 animal units would be

10 JUDGE BIRO: Like 200?

11 MR. NOLL: like 2,400 - 24 -- 2,500 head.

12 JUDGE BIRO: Oh, okay. 2,400 --  
13 (Simultaneous discussion.)

14 JUDGE BIRO: -- head of hogs. That's hogs,  
15 rights? Each one has one head? Okay, great. So,  
16 because it was this - did you say this middle-sized  
17 confinement lot? You said they had to submit a plan.  
18 And the plan consisted of what, exactly?

19 MR. NOLL: It consists of -- well, I guess  
20 technically, it's called -- we call them Manure  
21 Management Plan sized sites, but technically, their  
22 Construction Design Statement is what they submit.  
23 And so, the Manure Management Plan is part of that,  
24 which just indicates that they are going to have  
25 enough acres and fields to apply the manure that's

1 produced at the site. And then the other half of that  
2 is the construction design specs. So, what they are  
3 going to use for concrete, how thick the walls are  
4 going to be, what the size of rebar and the spacing of  
5 the rebar. It's basically for the -- manure is stored  
6 in a deep concrete pit underneath the building, and so  
7 the design is -- just specifies what they are going to  
8 use in the construction of that pit.

9 JUDGE BIRO: So, on a hog confinement  
10 facilities (sic), the manure from the hogs goes into  
11 an underground concrete storage facility, and then is  
12 applied to the land. And how is it applied to the  
13 land?

14 MR. NOLL: Well it's the kind of the norm  
15 today is to -- they just vacuum, suck it out of the  
16 pit into tanks, and then knife it into the ground.

17 JUDGE BIRO: What does knife mean?

18 MR. NOLL: There's well, so they get either  
19 big tanks or like an umbilical line system is what you  
20 use quite a bit. And so, knifing just means that they  
21 have like a toolbar on the back of a tractor or  
22 something and it just kind of pumps this manure  
23 through these hoses and the knives go into the ground  
24 and it just injects the manure into the ground.

25 JUDGE BIRO: Okay, so the waste from the

1 hogs goes onto the ground, then into the ground, and  
2 comes in contact with groundwater?

3 MR. NOLL: It's not supposed to. There's a  
4 whole 'nother set of separation distances that have to  
5 be met in that process, unless it's directly injected  
6 into the ground, which means injecting it like four  
7 inches or more underneath the surface of the ground.  
8 You can still surface supply it, by just spreading it  
9 onto the ground, but then there's -- it's a little bit  
10 similar to how you build a building where there's  
11 distances you have to meet to certain things. Like you  
12 have to stay so many feet away from a creek if you're  
13 going to surface supply it. And there's a whole  
14 'nother sheet of distances. Distances to drinking  
15 water well, to residences and all those things.

16 JUDGE BIRO: Okay, so they apply it to the  
17 ground, they knife it in

18 MR. NOLL: Mm-hmm.

19 JUDGE BIRO: and then can it be washed from  
20 the ground into a waterway?

21 MR. NOLL: I think the idea -- I think the  
22 idea -- with injecting it under the surface, like into  
23 the ground, is it won't -- but

24 JUDGE BIRO: But is injection what they were  
25 doing here?

1 MR. NOLL: When I got the design for this  
 2 site, the building hadn't even been built yet, so --  
 3 JUDGE BIRO: So, you don't know how they  
 4 plan --  
 5 MR. NOLL: I don't know how they plan to -  
 6 that's the norm today though, for like large  
 7 industrial sites confinements, is to inject the manure  
 8 into the ground.  
 9 JUDGE BIRO: Okay, and that means laying it  
 10 on the top and knifing it in or --  
 11 MR. NOLL: Well, no, it generally gets  
 12 knifed in at the same time it's spread. Yeah. It's -  
 13 - it's -- that's why the knife basically goes into the  
 14 ground and then puts it and then basically just  
 15 pressurizes it into -- into the -- under the surface  
 16 of the ground.  
 17 JUDGE BIRO: Four inches under the ground.  
 18 MR. NOLL: That's the definition of  
 19 injection in the Administrative Code.  
 20 JUDGE BIRO: Okay. Okay. So, let's say you  
 21 have water running on the ground, won't it take some  
 22 of this manure with it off into -- into the streams  
 23 and the wetlands and --  
 24 MR. NOLL: If it's properly injected, it  
 25 theoretically shouldn't. If it's surfaced supplied,

1 it could, but that's kind of why those separation  
 2 distances are required for surface application. I  
 3 think that's what the idea is. Like you got to stay  
 4 like 200 feet away from a creek in the event that it  
 5 does rain or something. I guess the hope is that,  
 6 that it doesn't -- you know, that there is enough  
 7 distance that it doesn't wash it that far.  
 8 JUDGE BIRO: Is there any kind of barriers  
 9 you are supposed to put up other than distance?  
 10 MR. NOLL: No.  
 11 JUDGE BIRO: It seemed that some of the  
 12 neighbors of Mr. Morrow or whoever owns his property  
 13 were not thrilled with the idea of this hog farm being  
 14 put on the property? Do you know why that would be in  
 15 this particular case? What's around there that would  
 16 have --  
 17 MR. NOLL: In general people just don't like  
 18 the odor. That would be my guess.  
 19 JUDGE BIRO: But there are no residences in  
 20 the area?  
 21 MR. NOLL: There -- there could be. That's  
 22 another -- there's another required minimum separation  
 23 distance, and, as long as the owners of the barn meet  
 24 that, you know --  
 25 JUDGE BIRO: I think on this AE-14 at 5 it,

1 at least in one instance, indicates there is no  
 2 residences. This is all basically --  
 3 MR. NOLL: I can see like a little building  
 4 cluster right here, but I don't know -- most of the  
 5 time that is whoever is taking care of the barn or  
 6 whatever.  
 7 JUDGE BIRO: Right. I think if you see,  
 8 superimposed on there, it says no residences.  
 9 MR. NOLL: Oh, okay, I see it, yeah.  
 10 JUDGE BIRO: So, basically this is all  
 11 commercial farm land in the area to the best of your  
 12 knowledge.  
 13 MR. NOLL: It's -- well, I -- I don't know  
 14 about that, I guess. It's probably individually  
 15 owned, I'm sure - most farmland is.  
 16 JUDGE BIRO: Okay. All right. Did my  
 17 questions raise any questions for you Mr. Muehlberger?  
 18 MR. MUEHLBERGER: Not from Complainant, no.  
 19 JUDGE BIRO: Okay. Mr. McAfee?  
 20 MR. McAFEE: No, Your Honor. Thank you.  
 21 JUDGE BIRO: Thank you Mr. Noll, I really  
 22 appreciate it.  
 23 MR. NOLL: Thank you.  
 24 MR. McAFEE: Oh. Thank you.  
 25 JUDGE BIRO: Mr. Muehlberger, would you like

1 to call your next witness?  
 2 MR. MUEHLBERGER: Your Honor, Complainants  
 3 call Joey Shoemaker. Ms. Morano (phonetic) just went  
 4 to get him. It might be a minute.  
 5 Whereupon,  
 6 JOSEPH SHOEMAKER  
 7 having been duly sworn, was called as a  
 8 witness and was examined and testified as follows:  
 9 DIRECT EXAMINATION  
 10 BY MR. BIERI:  
 11 Q Good afternoon, sir. Did you spell your  
 12 name for the Court Reporter?  
 13 A My name is Joseph Shoemaker, J-O-S-E-P-H  
 14 S-H-O-E-M-A-K-E-R.  
 15 Q And Mr. Shoemaker, who is your employer?  
 16 A The U.S. Army Corp of Engineers.  
 17 Q How long have you worked for the Army Corp?  
 18 A Just over 12 years.  
 19 Q And has your position with the Corp remained  
 20 the same since you started 12 years ago?  
 21 A It has, in different locations, but I've  
 22 been a Project Manager for them.  
 23 Q Okay. Can you generally describe for us  
 24 your duties for us as a Project Manager with the Corp?  
 25 A I review applications for Section 10 of the

1 Rivers and Harbors Act, and Section 4 for the Clean  
2 Water Act.

3 Q Any other job duties that you have?

4 A When I was in Rock Island District I did  
5 review mitigation banking applications as well.

6 Q What is that?

7 A That's where somebody goes through the  
8 permitting process and they're required to mitigate  
9 for lost resources. A mitigation bank is a location  
10 where they can go and purchase a credit of resource  
11 rather than do their own wetland or stream replacement  
12 project.

13 Q Is part of your job with the Corp to do  
14 jurisdictional determinations under 404?

15 A It is, yes.

16 Q Okay. And approximately how many 404  
17 matters have you worked on in your 12-year career with  
18 the Corp?

19 A Thousands.

20 Q I didn't say this, you came from Green Bay,  
21 Wisconsin, to be with us today, is that right?

22 A That's correct, yes.

23 Q Thank you. I meant to thank you for making  
24 the trip. Do you receive any training or take any  
25 training from the Corp related to 404 matters?

1 A We certainly do. We have both training of  
2 regulations, more at the beginning of your career.  
3 And we also have technical training with wetland and  
4 aquatic resource identification.

5 Q And I want to talk a little bit about  
6 streams and what you guys do under 404 related to  
7 streams. First question is, what characteristics does  
8 the Corp look to in determining if a stream or  
9 tributary is jurisdictional?

10 A The physical attributes we look at is: is  
11 there a defined bed and bank, is there an ordinary  
12 high-water mark, is there characteristics of flow?  
13 Those are the main physical attributes we look at.

14 Q And, under the regulations, which agency has  
15 the final say in determining whether a water is  
16 subject to the Clean Water Act or jurisdictional, is  
17 that the Corp or EPA or someone else?

18 A EPA.

19 Q We're here discussing this case involving  
20 C&S Enterprise, LLC. When did you first become aware  
21 of this matter?

22 A It was the fall of 2015. I had received it  
23 after a different Project Manager had retired.

24 Q Okay, and who was that Project Manager?

25 A Marlyn Schafer.

1 Q All right. And the Court and everyone here  
2 is well aware of him, because he was here this  
3 morning. What did you do when you got the file?

4 A I simply just reviewed it to see what work  
5 had already been completed, what kind of documentation  
6 had been done. We were really in a holding pattern at  
7 that point. NRCS was in the process of evaluating the  
8 site for wetlands, and I believe they was (sic) just  
9 initiating an appeal process for that. So, we weren't  
10 taking any action until that NRCS process was  
11 completed.

12 Q Okay. And was it your understanding that  
13 the site or that the tributary at issue had already  
14 been altered before you got the case?

15 A That's correct.

16 Q In your review of Mr. Schafer's file, did  
17 you see anything amiss or awry -- that you saw?

18 A No, I didn't.

19 Q After your review of Mr. Schafer's file,  
20 what did you do next?

21 A I essentially just scheduled a site visit,  
22 so I could just get my bearings about me to see the  
23 things in the file that he referenced so I would have  
24 some type of reference to that. So, I made a site  
25 visit on March 30th, 2016, I believe, 2017, I believe.

1 Q My notes say March 30th, 2017.

2 A Yeah, sorry about that.

3 Q Sure, no problem. How did you go about  
4 scheduling the visit?

5 A Just a direct telephone conversation with  
6 Mr. Morrow.

7 Q And was he fine with you coming out there?

8 A Yep, certainly, he was fine.

9 Q And you ultimately came out there on March  
10 30, 2017. I've got some photographs that I want to  
11 show you, but can you just kind of generally -- before  
12 I show you the photographs, tell us what you did that  
13 day?

14 A Yeah, it was a very quick site visit. I  
15 just, essentially, introduced myself. I went to the  
16 north property edge, just to take some pictures,  
17 essentially where the tributary entered the drain  
18 tiles.

19 Q Okay. And about how long were you there?

20 A I would say, at the most, 30 minutes,  
21 approximately.

22 Q All right. And I think you kind of alluded  
23 to this earlier, but what was the purpose of actually  
24 going out there on the grounds?

25 A Just so I would have personal reference of

1 some of the past photographs and some of the things  
 2 that were referenced in the file.  
 3 Q Okay. I'm going to show you now, if I  
 4 could, what's been marked as Agency Exhibit 2, this is  
 5 Page 1 of 8. Can you see that, first of all?  
 6 A Yes, I can.  
 7 Q All right. Let me zoom in just a hair.  
 8 Apparently, the slowest ever, sorry. Okay. Sorry  
 9 about this. What is this document?  
 10 A That is just a Word document I put together  
 11 to reference my photos and just generalize the  
 12 location and the direction of the photos.  
 13 Q Okay. And the next item I am showing you is  
 14 the next page, AX-2, Page 2 of 8. And, sorry, we're  
 15 going to have someone better at zoom than me.  
 16 (The document referred to was  
 17 marked for identification as  
 18 Agency Exhibit No. 2.)  
 19 A Okay  
 20 Q Thank you. Can you tell us what we're  
 21 looking at here?  
 22 A That's just a reference map I put together  
 23 showing where, generally, I was taking the pictures  
 24 and where I visited the site.  
 25 Q Okay. And did you prepare this map?

1 A I did, yes.  
 2 Q Okay, and it looks like it's from Google  
 3 Earth, is that right?  
 4 A That's correct.  
 5 Q There is a box that says approximate picture  
 6 location with an arrow pointing to a circle, do you  
 7 see that?  
 8 A I do.  
 9 Q Were all the photos that you took on that  
 10 day, taken in that approximate area, that circle?  
 11 A Yeah. Yes.  
 12 Q And is where that circle is, if you drew a  
 13 line east and west through that circle across the  
 14 page, is that approximately the property line?  
 15 A I believe it is, yes.  
 16 Q Okay. And to the north of that circle,  
 17 would be someone else's property other than C&S. Is  
 18 that your understanding?  
 19 A That's my understanding, yes.  
 20 Q And were the photographs you took, were they  
 21 on the C&S property or were they on the neighboring  
 22 property to the north? Or do you know?  
 23 A I believe I was on C&S property. I was  
 24 standing right at the -- where the tributary entered  
 25 the drain tile.

1 Q Okay. All right, I'm going to show you the  
 2 next picture, which is AX-2, Page 3. Can you zoom out  
 3 a little bit? Mr. Shoemaker, what are we looking at  
 4 there?  
 5 A That's just disturbed soil. I believe it's  
 6 facing generally to the south. Looking at what would  
 7 be downstream of the tributary.  
 8 Q Okay. And can you tell us what you observe  
 9 in that photograph?  
 10 A Just disturbed soil. There was no - it was  
 11 leveled off between the two hillsides.  
 12 Q Okay. And if we were to go back to that  
 13 map, we're approximately in that red circle on Page  
 14 Two, looking to the south in this photograph?  
 15 A Yeah, generally to the south.  
 16 Q Okay. All right. I'm going to show you  
 17 what's been marked as AX-2, Page 4 of 8. Can you  
 18 describe for us what we are looking at there?  
 19 A Yeah, that's the tributary to the north of  
 20 the drain tiles. In the bottom right, you can see the  
 21 fencing. I also took a picture, that -- I don't know  
 22 if we'll be looking at it in a second, but that's  
 23 blocking the water or -- that's in front of the drain  
 24 tiles, I would assume to block debris from going into  
 25 the drain tiles from the tributary. It's -- I -- in

1 that photo, you can see the tributary, you can see  
 2 water, you can see what appears to be water flowing  
 3 with rippling, you can see defined channel, a bed and  
 4 bank, terrestrial vegetation has been destroyed in the  
 5 channel, likely due to consistent flow.  
 6 Q And what do you mean by terrestrial  
 7 vegetation?  
 8 A Vegetation growing above the water line.  
 9 Q All right. And describe a little bit more  
 10 what you mean about that vegetation being destroyed.  
 11 A Well, you can't see any rooted vegetation in  
 12 the channel itself.  
 13 Q Okay. And what is that indicative of?  
 14 A Of consistent waterflow.  
 15 Q Okay. And what would you expect to see, in  
 16 your experience, if there wasn't consistent flow in  
 17 this portion of the tributary, at least, with respect  
 18 to that type of vegetation?  
 19 A There may be vegetation at the bottom of  
 20 that channel. It would probably be not as defined of  
 21 a flow path.  
 22 Q Okay. Do you see characteristics that are  
 23 indicative of a jurisdictional water, any other  
 24 characteristics of a jurisdictional water other than  
 25 what you've already talked about in this picture?

1 A Not besides what I already referenced.  
 2 Q Okay. I'm going to hand you what has been  
 3 marked as AX-5, excuse me AX-2, Page 5.  
 4 A That's the same tributary, I believe. I  
 5 just took a couple steps upstream and shot it to the  
 6 north. I would say the same characteristics, maybe  
 7 even more defined here. The channel looks larger.  
 8 Water in the channel is accumulating behind that log  
 9 that's fallen across the channel, but the same  
 10 characteristics as before.  
 11 Q And what do you see with respect to the flow  
 12 of water in that picture?  
 13 A The same. You can see the rippling effect  
 14 of the water. Both above the log and below it. So --  
 15 and when I was there, you could see water flowing  
 16 through those areas.  
 17 Q I now show you what's been marked AX-2, Page  
 18 6 of 8, sir. Can you describe what we are looking at  
 19 in this photo?  
 20 A That was my attempt at a direct overhead  
 21 shot of the bed of the tributary. Just to show that  
 22 sediment is moving through there, not accumulating.  
 23 You can see a ripple in there, it's to my left, left  
 24 side of the photo. And you can see no -- that there's  
 25 no vegetation rooted in the bottom of that channel.

1 Q And what does the sediment movement indicate  
 2 to you?  
 3 A Just flowing water.  
 4 Q Okay. And how about ripples?  
 5 A The same, flowing water.  
 6 Q I'm going to show you the next page in the  
 7 series which is AX-2, Page 7 of 8. What are we  
 8 looking at there?  
 9 A The same channel, I think just a different  
 10 angle than the picture before. You can see the steep  
 11 slope coming off. I believe, generally, the road was  
 12 in that general location, but you can see a defined  
 13 channel here as well, flowing water, bed and bank and  
 14 no vegetation growing in it, similar to the other  
 15 photos.  
 16 Q All right. And this is the kind of  
 17 upper-part of the tributary that wasn't filled in, but  
 18 still on the C&S property, to your understanding?  
 19 A Yes, I believe it was. Yup.  
 20 Q I'll show you AX-2, Page 8. What are we  
 21 looking at there?  
 22 A That was the fencing that I referenced  
 23 earlier. That was placed right as the stream was  
 24 entering those two drainage tiles.  
 25 Q All right. What do you -- have you seen

1 that kind of fencing before?  
 2 A In different variations. It -- I've seen it  
 3 before to essentially block debris from clogging up  
 4 drain tiles like that, similar to those yellow  
 5 structures, those vents above the drain tile.  
 6 Q Okay. Based upon your review of Mr.  
 7 Schafer's file and your site visit in March of 2017,  
 8 did you make any initial determination as to whether  
 9 this tributary was a water of the US?  
 10 A Yeah, we preliminary (sic) believed it was a  
 11 water of the U.S. We didn't do a full analysis, but  
 12 all the site characteristics, the physical  
 13 characteristics indicated it was a water of the U.S.  
 14 Q All right. Did you ultimately convey that  
 15 opinion of yourself and the Corp to Mr. Morrow?  
 16 A I believe we did, in a letter that I wrote  
 17 them on April 6, I believe the date was.  
 18 Q All right. And I just happen to have that  
 19 right here. I'll hand you -- I'll show you, sir,  
 20 what's been marked as AX-17, we are looking at Page 1  
 21 now. This letter speaks for itself and is in the  
 22 record, so I don't want to spend too much time on it.  
 23 But, what was the purpose of -- first of all, did you  
 24 draft this letter?  
 25 A I did.

1 Q And what was the purpose of this letter?  
 2 A Just to notify Mr. Morrow that we were  
 3 coordinating the issue with EPA to determine who would  
 4 take the lead in any enforcement active -- actions  
 5 against the activities.  
 6 Q And the second paragraph begins, "It appears  
 7 the unnamed tributary in question is a water of the  
 8 United States." That's correct? I read that  
 9 correctly?  
 10 A Yes, you did.  
 11 Q And then I think what you were referring to  
 12 is the third paragraph, the last sentence where you  
 13 state that Mr. Morrow will be notified whether the EPA  
 14 or the Corp would be the agency to work with to  
 15 resolve this violation.  
 16 A That's correct.  
 17 Q All right. And did you ultimately refer  
 18 this matter to the EPA for enforcement?  
 19 A We did.  
 20 Q Okay. Do you know whether Mr. Morrow  
 21 received your August (sic) 6, 2017 letter?  
 22 A Yes, I believe he did.  
 23 Q All right. And how do you know that?  
 24 A He followed up several weeks later with a  
 25 response to that.

1 Q Okay. And I'm showing you what's been  
2 marked as AX-8. This is -- what is this document?

3 A Just a response to that April 6 letter that  
4 I wrote.

5 Q This is the response that you were just  
6 talking about.

7 A Yes, that's correct.

8 Q All right. And did you understand this  
9 letter to be a response to your letter from April 6th?

10 A That's what I understood it to be, yeah.

11 Q All right. And did you have any follow up  
12 discussions with Mr. Morrow after you received this  
13 letter?

14 A No, I don't believe so. I recall just  
15 forwarding it to the EPA, because, at that point, I  
16 believe they had already determined that EPA would be  
17 the lead.

18 Q All right. Did you eventually take another  
19 site visit out to the C&S property?

20 A I did.

21 Q All right. Do you remember when that next  
22 site visit was?

23 A May of this year. I don't recall the exact  
24 date.

25 Q I have May 15th, does that sound about

1 right?

2 A Yeah.

3 Q 2018?

4 A Yes.

5 Q All right. And who was on that visit with  
6 you?

7 A Delia -- Ms. Delia Garcia, Trevor Popkin  
8 from the Rock Island District, and also a  
9 representative from Mr. Morrow.

10 Q Okay. And we're going to talk to Dr. Garcia  
11 quite a bit about her observations of the site visit  
12 and I believe she took a lot of photos. Did you take  
13 any photos that day?

14 A I did not that day. No.

15 Q Okay. Can you just kind of briefly describe  
16 what you did on the site visit in May of 2018?

17 A We went to the same -- the same general  
18 location that I took my photos from. Ms. Garcia had  
19 contacted the other landowner, so we had permission to  
20 move more freely upstream. We took pictures there and  
21 some measurements. And then we walked downstream to  
22 the confluence of the next tributary.

23 Q Okay. So, just so I can summarize, you  
24 would have started about where the red circle was on  
25 the map we showed you previously?

1 A Correct.

2 Q And then you walked a little bit north onto  
3 the neighboring property?

4 A That's correct.

5 Q And then you would have followed where the  
6 tributary was and then used to be, all the way down to  
7 Deep Creek?

8 A That's correct, yes.

9 Q All right. And as far as the -- how did the  
10 conditions in the upper part of the tributary near --  
11 I'll show you this map again near -- where the red  
12 circle is? How did the conditions during your May  
13 2018 site visit compare with those of April 2017?

14 A They were -- they were similar.

15 Q Okay. And had you looked at aerial imagery  
16 -- historical aerial imagery of this site in your  
17 review of perhaps Mr. Schafer's portion of the file?

18 A Yeah, both Mr. Schafer's maps that he  
19 produced, as well as just Google Earth images.

20 Q Okay. And this is a pretty obvious  
21 question, but did it appear to you something had been  
22 done to that tributary that changed the conditions of  
23 at least the middle and lower portions of it before  
24 you got there?

25 A Yes.

1 Q And what was that?

2 A Placement of two drain tiles and fill  
3 material placed on top of that.

4 Q We saw the photographs of your site visit in  
5 2017, did you observe -- I think we saw water flowing,  
6 but I want to confirm -- did you see water flowing in  
7 the tributary in 2017?

8 A Yes.

9 Q And how about in 2018?

10 A Yes.

11 Q Did your most recent site visit in May of  
12 2018 change your opinion at all with respect to the  
13 initial determination that you had made on behalf of  
14 the Corp in 2017?

15 A No.

16 Q Has anything that you've reviewed in this  
17 matter, made you change your opinion about the  
18 conclusions that you made in 2017?

19 A No.

20 MR. BIERI: I have nothing further. Thank  
21 you.

22 CROSS EXAMINATION

23 BY MR. McAFEE:

24 Q Thank you, Your Honor. I will proceed with  
25 cross examination. Mr. Shoemaker, I'm Eldon McAfee.

1 I believe we met in May of this year when you were  
2 there.  
3 A We did, yep.  
4 Q I chased you around the whole place, right?  
5 A That's correct.  
6 Q I managed to stay out of your -- Ms.  
7 Garcia's photos though, I think.  
8 A Yeah.  
9 Q Anyway, just a few questions. I want to go  
10 to your Agency Exhibit 2 photos and make sure I  
11 understand where they were taken. I'm going to show  
12 you AX-2, Page 2. Okay. Can you see that okay?  
13 A Yes.  
14 Q And I don't want to repeat your testimony  
15 necessarily, but there is a red circle there. Is that  
16 where you took all of the photos?  
17 A That general location, yeah. I don't have  
18 any exact coordinates of where the photos were taken.  
19 Q I'm sorry.  
20 A I don't have any exact coordinates from  
21 where they were taken.  
22 Q Okay. And I understand that. Would you  
23 have taken any to very far to the south, or which  
24 would be closer to Deep Creek -- excuse me -- from  
25 that location?

1 A I believe the only one I took facing south  
2 was the one of the disturbed soils.  
3 Q Okay. Which would be - I believe this is --  
4 if I can read it -- Page 3 of Agency Exhibit 2. Is  
5 that the one you are referring to?  
6 A Yes.  
7 Q All right. Then let's look at - I guess the  
8 one I was won -- several I was wondering about and  
9 just to make sure, like, Agency Exhibit 2, Page 7.  
10 That's from that general red-circle location?  
11 A It's from that general location. I don't  
12 know exactly.  
13 Q Sure. And I think, when you were there in  
14 May you've testified that, you know, there's a fence  
15 there - I believe there's a fence anyway, there at the  
16 north end C&S property?  
17 A I don't recall.  
18 Q I'm trying to remember myself. But, anyway,  
19 and I'm not trying to ask you if you trespassed on  
20 anybody's property, do you understand the property to  
21 the north - for example, where we went during May of  
22 2018 -- to be a private landowner's property or do you  
23 know?  
24 A I believe it was a private landowner. I  
25 didn't make any contact.

1 Q Okay. I believe Ms. Garcia handled that?  
2 A That's correct.  
3 Q Okay. All right. Oh, I know what I was  
4 going to ask too - what kind of camera did you take  
5 these with? Or -- I don't need to know a detailed  
6 make and model, but --  
7 A Usually we just use our work cell phones to  
8 take photos.  
9 Q Okay. Did you use any zoom in feature on  
10 these or just clicked?  
11 A I might have zoomed in, I don't recall.  
12 Q Okay. I guess, again, my question is if you  
13 were in the same general location, some of these would  
14 have had to be further away, but they appear to be  
15 just as close, so if you didn't move, maybe -- I'm  
16 just asking if you -  
17 A Well, there was some -- I moved in that  
18 general location. I didn't walk considerably  
19 upstream, I just -- to my knowledge I was just at the  
20 -- where the tributary dumped into those drain tiles  
21 and just was snapping a few pictures in that general  
22 location.  
23 Q Okay. I'm showing you page -- Agency  
24 Exhibit 2, Page 5. Make sure of that - yes, Page 5.  
25 Did you measure the width of any of the tributary here

1 - the ending tributary? Did you measure the width at  
2 all?  
3 A Not in my initial site visit.  
4 Q And I think we are going to go through the  
5 May 18th photos, not with you, but with Ms. Garcia,  
6 and I believe there are photos there that -- where you  
7 folks held a ruler down. And I believe that -- well,  
8 we'll get to those. Do you recall? Is the width of  
9 the water here much different than what was measured  
10 when -- in May?  
11 A I don't recall.  
12 Q Do you think it was more, less or just don't  
13 know.  
14 A Did it change from the two site visits?  
15 Q Yeah, that's a good way to say it.  
16 A No, I don't believe it did.  
17 Q Okay. You don't believe it changed from.  
18 You were there first in -- gotta (sic) get the date  
19 - You were here in -- what is this?  
20 A I think March 30th  
21 Q March of '17. Thank you. And then, a year  
22 later and a couple of months, May of '18 you were  
23 there. And do I understand you right? You're saying  
24 those measurements taken in May of '18, you don't  
25 believe it changed -- that was much different than it

1 was when you were there in March of '17?  
2 A Well, there is no way for me to know what  
3 they were in my initial visit, because I didn't  
4 measure; but generally, they looked like they were the  
5 same measurement -- the general size.

6 Q Okay. I understand you didn't measure the  
7 first time, but you were there both times and you've  
8 seen both sets of photos, right?

9 A I haven't seen EPA's second set of photos.

10 Q Okay. All right. Okay. You testified, in  
11 response to Mr. Bieri's questions about looking at  
12 some historical imagery, is that correct?

13 A Yeah.

14 Q That was -- when did you do that?

15 A That would have been fall of '16, beginning  
16 of 2017.

17 Q And so, before you made your March site  
18 visit, correct?

19 A Mm-hmm.

20 Q And before you sent the letter dated, April  
21 6th, correct?

22 A That's correct.

23 Q Okay. I think -- and one of the things you  
24 looked at or -- testified you looked at were Google  
25 Earth images?

1 A That's correct, yeah.

2 Q Do you know if those are in any of our  
3 materials - everything you looked at?

4 A I believe they would be in the record that  
5 we provided EPA.

6 Q Okay. Are there any Google Earth images you  
7 looked at, or any other images, that did not show a  
8 channel on the lower portion of this unnamed tributary  
9 down by Deep Creek?

10 A I don't recall it. I believe, in the lower  
11 end of the tributary, there were some notes in the  
12 file from when Marlyn drew on some aerial phot  
13 --photographs, that referenced there was some  
14 disturbance in that lower end of the tributary.

15 Q Okay. But also, I guess I'm asking you if  
16 you recall some of the images you looked at that just  
17 didn't show - I'm not asking about disturbance - but  
18 didn't show a channel?

19 A I don't recall.

20 Q You also testified that when you were -- in  
21 response to Mr. Bieri's question, about when you were  
22 there in 2018, whether -- I hope I'm repeating the  
23 question correctly, I'm sure it will be pointed out to  
24 me later if I'm not -- but when you were there in 2018  
25 about water flowing, I believe, and you said you did

1 see water flowing, correct?

2 A Yes.

3 Q And I just want to make sure, was it in the  
4 tile line or was it above ground?

5 A Both.

6 Q And tell me -- my fault for asking a general  
7 question, tell me where did you see flowing water  
8 above ground?

9 A Above ground? Just north of where the tiles  
10 started and began.

11 Q Okay. Not on C&S property or? To the  
12 North?

13 A I don't know exactly the location of the  
14 property boundary.

15 Q That's fair. And then where, after the tile  
16 intake that you've testified to, did you see any water  
17 flowing above ground?

18 A Above ground?

19 Q Yes.

20 A After the -- where the tiles started?

21 Q Yes.

22 A Not until it -- it outlet into the lower  
23 tributary.

24 Q Clear down to the - what I'll call - I  
25 believe the name is Deep Creek.

1 A Okay, yep.

2 MR. McAFEE: Okay. No further questions.  
3 Thank you.

4 JUDGE BIRO: Any re-direct, Mr. Bieri?

5 MR. BIERI: Nothing further, Your Honor.

6 Thank you.

7 JUDGE BIRO: Thank you, sir. You may step  
8 down. We sure could. Let's stand to recess for 10  
9 minutes.

10 (Brief recess.)

11 JUDGE BIRO: Mr. Bieri -- he's not here.

12 MR. MUEHLBERGER: Your Honor, I'll be taking  
13 the next witness.

14 JUDGE BIRO: Oh, all right.

15 (Laughter.)

16 JUDGE BIRO: Sorry. I'm confused. It's  
17 fine. Mr. Muehlberger, Muehlberger?

18 MR. MUEHLBERGER: It's Muehlberger

19 JUDGE BIRO: Please proceed.

20 Whereupon,

21 DELIA GARCIA

22 having been duly sworn, was called as a  
23 witness and was examined and testified as follows:

24 //

25 //

1 DIRECT EXAMINATION  
 2 BY MR. MUEHLBERGER:  
 3 Q Good afternoon, Dr. Garcia. For the record,  
 4 could you please state your name and spell it please.  
 5 A Yes. It's Delia Garcia, D-E-L-I-A, Garcia  
 6 G-A-R-C-I-A.  
 7 Q And where are you currently employed?  
 8 A I work for the United States Environmental  
 9 Protection Agency, Region Seven, out of Kansas City.  
 10 Q And what is your position with EPA  
 11 currently?  
 12 A I'm an Environmental Scientist in their  
 13 Water Enforcement Branch.  
 14 Q Okay, so I'd like to step back and talk a  
 15 little bit about your background. Can you talk about  
 16 your undergraduate education?  
 17 A Sure. I received a Bachelor's of Science  
 18 Degree from the University of California, Davis, in  
 19 Fisheries and Wildlife Biology.  
 20 Q Okay. And after you finished your  
 21 bachelor's degree what did you do next?  
 22 A I immediately went to work for the U.S. Fish  
 23 and Wildlife Service, out of -- managing a refuge  
 24 complex out of Southern California. And I was a  
 25 Biological Technician for approximately two years

1 there.  
 2 Q Can you tell me about your duties, in which  
 3 you learned managing the wildlife refuge?  
 4 A Sure. Well I -- technically I wasn't  
 5 managing it, I was a Technician there.  
 6 Q Sorry -- I promoted you.  
 7 A I think I misspoke about that, but my  
 8 primary duties were conducting water, fowl and bird  
 9 surveys. The refuge or the series of refuges that  
 10 were managed were primarily managed for endangered  
 11 species, two birds specifically: the Light-Footed  
 12 Clapper Rail and the Least Tern. And both of those  
 13 species are dependent on both wetlands and uplands for  
 14 their lifecycles.  
 15 Q So, can you talk a little bit about your  
 16 exposure to wetland or stream ecology in that role.  
 17 A Yeah, that's where I initially, you know,  
 18 got exposed to wetlands, in this -- in this location  
 19 and I actually fell in love with the wetlands. And I  
 20 actually wanted to learn more about it, so I decided  
 21 to, you know, quit my job there and apply for graduate  
 22 school.  
 23 Q Okay, let's talk a little bit about that.  
 24 Where did you go to school after your job?  
 25 A I went to go get my Master's of Science at

1 the Ohio State University in Columbus, where I  
 2 specialized in -- my thesis was looking at the  
 3 reproductive success of Common Terns, which is, again,  
 4 another Tern. It's kind of like a small gull, for  
 5 those of you who are not familiar with terns. And  
 6 they also rely on aquatic habitats and uplands for  
 7 nesting, usually in large water bodies.  
 8 Q And so, was there more exposure to wetland  
 9 and stream issues through that education?  
 10 A Yes, there was.  
 11 Q Okay, Okay. And then after you received  
 12 your Masters, what next?  
 13 A I applied for a Doctorate Program at the  
 14 University of Missouri, Columbia, where I got a  
 15 Doctorate in Fisheries and Wildlife Biology.  
 16 Q And do you have any emphasis or specialty in  
 17 that Doctorate Degree?  
 18 A Yeah, the -- my Doctorate was basically  
 19 looking at the nutritional ecology of Canada Geese.  
 20 Q Okay. And once again, any kind of exposure  
 21 to wetland or stream ecology in your studies?  
 22 A Yes, I took classes in wetlands and streams  
 23 and we had Graduate seminars both at Ohio State and at  
 24 the University of California, where, you know, we had  
 25 discussions about various topics, anything ranging

1 from statistical design analysis all the way up to  
 2 stream ecology.  
 3 Q Okay. And then after you completed your  
 4 Doctorate, what next?  
 5 A Well, while I was actually in the process of  
 6 finishing up my dissertation, I actually moved to the  
 7 Kansas City area, where I applied for a job with the -  
 8 the Environmental Protection Agency, and I was hired.  
 9 And I finished my degree while -- was while I had  
 10 started -- at about six months into my job.  
 11 Q So, you've been with the EPA ever since?  
 12 A Yes.  
 13 Q How many years is that?  
 14 A Just over 12 years.  
 15 Q Okay. Can you talk about your job and what  
 16 you do at EPA?  
 17 A Sure. I'm primarily responsible in the  
 18 Water Enforcement Branch. I'm 4 -- I'm the  
 19 404-Enforcement Coordinator. Which basically means  
 20 that I review anything that comes in when, you know,  
 21 we get referrals or complaints that involve violations  
 22 of Section 404. And I also, you know, work on  
 23 stormwater cases under Section 402.  
 24 Q Okay, so let's break that down a little bit.  
 25 You talked about getting referrals there. From whom

1 are you receiving referrals?  
 2 A Well, the Environmental Protection Agency --  
 3 both the Environmental Protection Agency and the Army  
 4 Corp of Engineers have responsibility under the Clean  
 5 Water Act for dealing with violations of Section 404.  
 6 And under the 1989 Memorandum between both of our  
 7 agencies, there are certain, you know, things that are  
 8 spelled out as to who will take lead on -- on  
 9 violations. So, usually the Corp probably, you know,  
 10 resolves 98 percent of violations through, you know,  
 11 voluntary restoration, but they refer about two  
 12 percent of their violations to us.

13 Q Okay. And you also said that your primary  
 14 responsibility is under Section 404. Can you describe  
 15 that part of the statute?

16 A Sure. Section 404 of the Clean Water Act is  
 17 the section that deals with the placement of dredged  
 18 or filled materials into waters of the United States.  
 19 It has specific subsections, I guess, where it, you  
 20 know, spells out that, you know, in order for somebody  
 21 to place dredge or fill material into the water of the  
 22 United States, they must obtain a permit from the Army  
 23 Corp of Engineers.

24 Q And what happens if they do not obtain that  
 25 permit?

1 A Well, then if it's a jurisdictional water of  
 2 the United States, you know, whoever the investigating  
 3 agency is goes and makes a determination to see if  
 4 there has been a violation. And, you know, like I  
 5 said, the majority of the complaints come in through  
 6 the Army Corp of Engineers and The Army Corp of  
 7 Engineers -- they would, most of the time, obtain  
 8 restoration.

9 Q Okay. So, you make determinations both to  
 10 whether or not a violation has occurred and whether or  
 11 not it's a water of the United States, correct?

12 A That's correct.

13 Q And we've talked about this a little bit so  
 14 far, but just briefly; how do you determine whether or  
 15 not a water is a water of the United States?

16 A Well, you know, first of all we've got to  
 17 -- if it's a stream, we look for bed and banks. We  
 18 look for ordinary high-water mark and then we look to  
 19 make sure that the tributary or stream or river in  
 20 question, you know, eventually flows into a  
 21 traditional navigable water. If it's a wetland, we  
 22 follow the procedures under the 1987 Manual, the Army  
 23 Corp Manual, along with whatever supplement applies to  
 24 the case.

25 Q So, when you're looking at making wetland

1 determinations, are you looking at the same kind of  
 2 qualities of a wetland that the Corp of Engineers  
 3 looks at?

4 A Yes, we follow the same regulations, so  
 5 we're looking at whether there is a presence of hydric  
 6 soils, the source of hydrology, and whether there is  
 7 hydrophytic vegetation, which is basically vegetation  
 8 that primarily grows in wetlands.

9 Q Okay. And in your role at EPA, have you  
 10 received any special trainings concerning streams or  
 11 wetlands?

12 A Yes, I have. I've had Wetland Delineation  
 13 Training. I've had Hydric Soils Training. I've had  
 14 Stream Channel -- Natural Stream Channel Design  
 15 Training. I've had Wetland and Stream Restoration  
 16 Training. And I've had -- I am credentialed as an  
 17 inspector under the requirements for the Environmental  
 18 Protection Agency.

19 Q And one thing that I don't think we've  
 20 talked about yet so far, is this term "hydric soils."  
 21 What distinguishes hydric soils from other soils?

22 A Well, that's, you know, like I -- like we  
 23 heard earlier from the previous witnesses, the NRCS  
 24 has a list of soils, that are considered hydric soils  
 25 which basically means that it has characteristics that

1 retain - that there's water that's being retained, as  
 2 opposed to just completely going down into the  
 3 subsurface.

4 Q So, during your time at the EPA, how many  
 5 404 cases would you say you've worked on?

6 A I've never actually counted them. But if I  
 7 had to guess, I would probably say between 40 and 50  
 8 --

9 Q Okay. And --

10 A -- that I've handled myself. Not - you  
 11 know, we have other compliance officers within our  
 12 branch that are assigned cases, but I usually review  
 13 everything that comes in.

14 Q I see. And, in each of those cases, have  
 15 you had to determine whether or not the water in  
 16 question is jurisdictional?

17 A Yes, I always review the cases that come in.

18 Q And so, what kind -- what kinds of things do  
 19 you review in order to make the initial determinations  
 20 that the water is jurisdictional?

21 A Well, I rely a lot on aerial photography.  
 22 We look at -- I look at hydric soil maps, I look at  
 23 TOPO maps, I look at the US Fish and Wildlife National  
 24 Wetland Inventory to give us an idea if there's  
 25 potential wetlands in the area. And recently, I've

1 also been looking at LiDAR, since it's become more and  
2 more available in our region.

3 Q Okay. And we'll talk about LiDAR a little  
4 more extensively later. In your job, approximately  
5 how many aerial photos would you say you've looked at  
6 to determine waters of the United States?

7 A I've looked at thousands.

8 Q Okay. So, when a Corp refers a case to EPA,  
9 have they generally already made a determination about  
10 whether or not a water is jurisdictional?

11 A They will usually just make a preliminary  
12 determination.

13 Q Do you assume that the water is  
14 jurisdictional when you receive that referral from the  
15 Corp?

16 A I assume that they have made a preliminary  
17 determination, that they believe that the water is  
18 jurisdictional, but I conduct my own analysis.

19 Q So, have you ever denied a referral from the  
20 Corp of Engineers because you thought the water was  
21 not jurisdictional?

22 A Yeah, there's been a few referrals that --  
23 where the water was jurisdictional - where the water  
24 was questionable, and it's been a factor in us  
25 declining the lead.

1 Q And have you ever analyzed any of the aerial  
2 photos that you were talking about or any of the other  
3 data about upstream or wetland and determined that  
4 that water body was not jurisdictional?

5 A Yes.

6 Q So, I want to talk to you a little bit about  
7 just some basic science questions. What does the term  
8 "watershed" mean to you?

9 A Well, a watershed - it's dependent on where  
10 you're looking at -- the area you are looking at, for  
11 example, in this case where we are looking at the  
12 under-tributary. And if I wanted to establish what  
13 the watershed for that tributary is where it  
14 discharges into Deep Creek, I would be looking at all  
15 the other streams, whether they be ephemeral or  
16 intermittent - whatever they are, and basically,  
17 looking at the land mass that drains into that area.  
18 So, you can think of it as, you know, a tributary or a  
19 watershed kind of like -- if you can picture a tree  
20 where you have a main trunk, then you have branches  
21 and you have twigs -- that's that would be pretty much  
22 describing a watershed. But, you know with the size  
23 of the watershed -- it depends on the scope of where  
24 you're looking at in terms of drainage.

25 Q So, that tree analogy, in your analogy what

1 would be the trunk of the tree if the tree is a  
2 watershed?

3 A Well, again, it would depend on where you're  
4 ultimately looking at. You know? For example, you  
5 know, you could look at something large, you know, a  
6 Section 10 water, you know, something like the Iowa  
7 River, the Mississippi, the Missouri, but there's also  
8 a lot of other tributaries that are large enough where  
9 we have to determine them to be traditional navigable  
10 waters. So, basically, it would be like a traditional  
11 navigable water.

12 Q Okay. So, in the watershed, what are  
13 generally the role of streams in a watershed?

14 A Well, it's -- you know, there's obviously  
15 the physical connection, where they convey water to  
16 downstream waters. They also provide a habitat for  
17 aquatic-dependent or semi-aquatic dependent species.  
18 And then they also, you know, have a chemical portion,  
19 depending how high up on the watershed you are -- in  
20 terms of what like the processes are and in terms of  
21 breaking down nutrients and sorting sediment and  
22 things like that.

23 Q So, how about those higher order, smaller  
24 streams in a watershed? What kind of roles do those  
25 streams play?

1 A Well, they're actually pretty important, I  
2 would say. The ephemeral intermittent streams  
3 actually make up, at the minimum, 75 percent of all  
4 waters. And they are important because they are the  
5 smaller tributaries, where there is a higher surface  
6 to channel -- or surf -- water comes in contact with  
7 the channels and it's also a slower flow, so that it  
8 has the ability to be, you know, conduct chemical  
9 breakdown of nutrients or pesticides, or whatever. So  
10 there's more surface to water contact; so, they're  
11 actually quite important. They also break down  
12 nutrients to make them available to higher order  
13 organisms, so basically, they are forming the base of  
14 the food chain, if you want to think about it that  
15 way.

16 Q So, you've just used the terms  
17 "intermittent" and "ephemeral streams." So, what is  
18 an intermittent stream to you?

19 A An intermittent stream would be a stream  
20 that derives its water not only from rainfall, but  
21 it's (sic) also has a high-water table where it's also  
22 influenced by groundwater.

23 Q And what kind of characteristics do you look  
24 for in determining that a stream is an intermittent  
25 stream?

1 A Well, you know, basically, you know  
2 basically, you have to look at bed and bank and also,  
3 intermittent stream usually has a meandering channel,  
4 you know, and an ordinary high-water mark is pretty  
5 present. You know, I also review -- obviously, it's  
6 not a -- you know, I review an aerial photograph to  
7 make sure that the geometry of the stream has stayed  
8 consistent through the years.

9 Q Okay. What's the importance of the  
10 consistency of the channel throughout the years?

11 A It just means that there is enough flow in  
12 the stream on a regular basis that it maintains the  
13 shape of it.

14 Q I see. So, then, what is an ephemeral  
15 stream?

16 A An ephemeral stream is primarily a stream  
17 that just flows right after a rainfall event.

18 Q And compared to an intermittent stream, what  
19 kind of characteristics would you see in an ephemeral  
20 stream?

21 A Well, you would still have a bed and bank  
22 and an ordinary high-water mark, but usually, it's a  
23 much straighter geometry. It doesn't have the flow  
24 to, you know, meander the water; it doesn't sort  
25 sediments quite as well as an intermittent stream.

1 Q So, generally, what is the effect on a  
2 watershed if a stream is taken out of the watershed?

3 A Well, basically you would be losing all the  
4 functions that were being provided by that -- by that  
5 stream, whether it's chemical, physical or biological.  
6 You know, basically, you're losing habitat and you're  
7 losing the ability of microorganisms and other, you  
8 know, lower order aquatic organisms to break down  
9 nutrients and make them available.

10 Q So, what would be the effect on a watershed  
11 if you diverted the flow of a stream underground  
12 through drainage tiles?

13 A Basically you're, you know, you're still  
14 having the flow obviously going into the lower --  
15 lower watershed, but you're losing the ability of the  
16 microorganisms to be able to break down nutrients and  
17 make them available to the food web (phonetic).  
18 You're also losing habitat for aquatic species.

19 Q So, let's talk a little bit about wetlands.  
20 What, generally, is a wetland?

21 A Well, a wetland is defined as an area that  
22 has water in it long enough for it to be, you know, to  
23 support hydrophytic vegetation, basically, you know,  
24 and has hydric soils and has a source of hydrology  
25 during at least part of the growing season.

1 Q And what kind of roles do wetlands play in a  
2 watershed?

3 A It depends on the -- the physical location  
4 of the wetland. For the most part, wetlands help to  
5 attenuate flood - floods downstream. They minimize  
6 the impacts of flooding when you have a higher  
7 rainfall event. They're able to -- the hydric soils  
8 are able to absorb that water during high-flow events  
9 and release them when it's -- when the flow is not as  
10 good. So, it kind of helps to sustain the flow to  
11 downstream tributaries. They also act as kidneys or  
12 they have the ability to, you know, break down  
13 nutrients and they provide habitat, depending on the  
14 wetland. They, you know, they can serve as refuge for  
15 smaller fish and other aquatic animals.

16 Q And so, generally speaking, what happens to  
17 a watershed if a wetland is taken out, if it's filled  
18 in?

19 A Well, again, you're losing all those  
20 functions. You know, if it was, you know, if it was  
21 serving as a water retention function, not only do you  
22 increase the likelihood of flooding downstream or in  
23 the event of flooding, you know cause, streams  
24 naturally flood, I mean, that's just a given. But you  
25 know, when you remove a kid -- or, I'm sorry, a

1 kidney, when you remove a wetland, you're taking away  
2 the ability of that wetland to absorb some of that  
3 rainfall. And you're also losing the ability of that  
4 wetland to slowly release that water later on when  
5 it's drier conditions.

6 Q So, what is EPA's position concerning a  
7 stream's jurisdiction, if a portion of that stream is  
8 filled in?

9 A That it would still remain jurisdictional if  
10 it had been a water of the U.S. in the past.

11 Q Okay. Is that true for both the upland, I'm  
12 sorry, upstream and downstream portions of the water?

13 A Yes.

14 Q Okay. So, let's talk specifically about the  
15 C&S Enterprise LLC case. How did you first learn  
16 about this case?

17 A I received a referral from Joey Shoemaker  
18 with the Rock Island Arm -- District of the Army Corp  
19 of Engineers.

20 Q And after you got that referral, what did  
21 you do to analyze the case?

22 A I reviewed the packet of information that he  
23 had sent me. And I also did my own waters of the US  
24 analysis by reviewing, you know, again, aerial  
25 imagery, TOPA maps, NWI, soils.

1 Q Okay. And did you make an initial  
2 determination after reviewing the Corp file?

3 A After reviewing just the file itself, I felt  
4 like, you know, they were correct that this stream and  
5 wetlands were jurisdictional. But after conducting my  
6 own analysis, I concurred -- I completely concurred  
7 with their analysis.

8 Q Did you look to other materials outside the  
9 Corp file to make that determination?

10 A Yes, I utilized Arc GIS probe, Google Earth,  
11 aerial images that we have a contract or -- with  
12 Pictometry where we are able to look basically at  
13 tributaries and just about anything from different  
14 angles. And I also relied on Digital Globe, which is  
15 another private contractor that has a contract with  
16 the Government, where we are able to review more  
17 recent satellite images.

18 Q Okay, so for us non-technical folks, what is  
19 Arc GIS?

20 A Arc GIS is basically a software that allows  
21 you to import aerial images, along with other  
22 information, such as, you know, NWI, polygons that  
23 come in as a layer, and you are able to superimpose.  
24 There's also other layers, you know, there's a whole  
25 wide variety of layers, but, for our purposes we

1 primarily focus on aerial images; You know? NWI,  
2 polygons, we look at hydric soils. So, you are able  
3 to superimpose and turn off and, on these layers, to  
4 better analyze things and you are able to zoom in on  
5 things.

6 Q And you talked about these vendors for the  
7 Government, Pictometry and Digital Globe. What do  
8 they provide you in terms of your analysis?

9 A Well, Pictometry, you know, is able to give  
10 us a much better view, depending on whether images are  
11 available for the area. Where you're able to, you  
12 know, get a much higher resolution photograph than you  
13 are with just aerial images that we source from the  
14 NRCS or somebody like that.

15 The Digital Globe usually has more recent  
16 satellite imagery than what we can normally get  
17 through NRCS.

18 Q In making your determination, did you seek  
19 any outside support with any colleagues at EPA to make  
20 that determination?

21 A I did. I contacted Pete Stokely out of our  
22 EPA Headquarters, to make sure that I was analyzing  
23 these aerial photographs correctly.

24 Q And what kind of role does Mr. Stokely play  
25 for the agency?

1 A Well, he's the 404 Enforcement Coordinator  
2 for the whole agency. And he's also our aerial  
3 imagery expert.

4 Q Would he be considered a national expert in  
5 this area?

6 A Yes, he would.

7 Q Okay, I'd like to show the witness Agency  
8 Exhibit 13. Maybe a little bit. Dr. Garcia, do you  
9 recognize this document?

10 A Yes, I do.

11 Q Okay. And this is an e-mail, right?

12 A Correct. It's Mr. Pete Stokely's response  
13 to my initial e-mail to him asking him to review a  
14 PowerPoint that I had put together with several aerial  
15 images and see if he concurred with my determination  
16 about this being a intermittent or relatively  
17 permanent stream.

18 Q And what was his conclusion?

19 A That his preliminary review of my analysis  
20 supported that it might be a relatively permanent, and  
21 he also recommended that I look at annual and monthly  
22 precipitation to establish what streamflow might be.

23 Q And did you eventually look at that data as  
24 well?

25 A I did.

1 Q Okay. So, I'd like to go through some of  
2 the aerial images that you reviewed. If we could  
3 start with Agency Exhibit 10, Page 2. So, let's talk  
4 a little bit about some of the markings on this, so we  
5 can orient the viewers here.

6 So, what is the name of the site here?

7 A This would be the C&S Enterprise, LLC site.

8 Q And the date of the photograph?

9 A This was sometime in the 1960s.

10 Q And where it says "confinement building  
11 footprint," what does that mean?

12 A That means that we were able to take the  
13 georeference, the location of the way that the  
14 confinement building was put -- where it was built,  
15 the footprint, and place it onto this photograph of  
16 the 1960s.

17 Q Okay. And can you read the text box? It's  
18 in the upper left side?

19 A Sure. It says, "approximate starting point  
20 of impact extreme segment."

21 Q And with respect to the C&S Enterprise  
22 property, where is this on the property?

23 A I believe it to be right at the - at the  
24 property line, but I'm not 100 percent sure on the  
25 boundary.

1 Q Or close to the property line?  
 2 A Right.  
 3 Q And can you read the text box on the bottom,  
 4 right?  
 5 A "Approximate end point of impacted stream  
 6 segment."  
 7 Q And then it says Deep Creek there, so what  
 8 is the relationship between the tributary and Deep  
 9 Creek?  
 10 A The tributary flows into Deep Creek on a  
 11 northeasterly, or sorry, southeasterly direction.  
 12 Q And so, looking at this picture from the  
 13 1960s, what does this tell you about the ending  
 14 tributary?  
 15 A That this was a geographic feature that has  
 16 been around for quite a long time.  
 17 Q And what specific features are you able to  
 18 identify from looking at this?  
 19 A Well, I can see that, you know, that there's  
 20 a stream channel, and that, on the upper part, it's  
 21 got some forested area around it.  
 22 Q I'd like to show Agency Exhibit 10, Page 5  
 23 please. Can you read the date from this image?  
 24 A Sure. It's April 4th, 2009.  
 25 Q Okay. And talk a little bit about what

1 you're seeing in this image.  
 2 A Well, I'm looking at this image, you know,  
 3 the vegeta -- the leaves on the trees weren't quite  
 4 there yet, it was earlier in the spring. So, you can  
 5 actually see the meandering stream -- stream segment  
 6 on the upper part of the tributary. And you can see,  
 7 on the lower part, where it's discharging into Deep  
 8 Creek.  
 9 Q And compare this to the image that you just  
 10 saw that was from the 1960s. Does this look to be -  
 11 can you compare this image with that image?  
 12 A Yeah. I mean, it's pretty similar. It  
 13 appears that the stream has been in the same location  
 14 for quite a while.  
 15 Q Okay. Do you see the presence of water in  
 16 this image?  
 17 A Yes.  
 18 Q And how can you tell that there's water in  
 19 this -- in the tributary?  
 20 A Well, I'm able to look at the -- at the  
 21 stream channel given that it's visible here and I'm  
 22 comparing that to the -- the color within the  
 23 tributary and I'm comparing it to the color of the  
 24 water in Deep Creek and also that one feature on the  
 25 righthand side of the picture.

1 MR. MUEHLBERGER: Okay, Your Honor, I'd like  
 2 to go ahead and have her mark where she's identifying  
 3 water in the picture on the screen there. And we can  
 4 handle this any way you'd like to. Once she's  
 5 finished she can mark it with marker on the image or I  
 6 can have her come down and mark it contemporaneously  
 7 on the ELMO -- however you'd like to handle it.  
 8 JUDGE BIRO: You can do it after, I'm sure  
 9 that'll be fine.  
 10 MR. MUEHLBERGER: Okay.  
 11 BY MR. MUEHLBERGER:  
 12 Q Can you identify on this photo where you're  
 13 seeing the presence of water on the unnamed tributary?  
 14 A Let me figure this out here.  
 15 Q I think you can just go ahead and draw right  
 16 on it with your finger.  
 17 A Well, I would be looking at this segment  
 18 here, where it is clearly visible.  
 19 Q Okay.  
 20 A And you can see it here, and it's quite  
 21 visible here.  
 22 A Okay.  
 23 JUDGE BIRO: Let the record reflect, she's  
 24 drawn three circles.  
 25 //

1 BY MR. MUEHLBERGER:  
 2 Q Okay. And when you say here, here and here,  
 3 can you describe, for the record, where you are  
 4 identifying that on the photo.  
 5 A Yeah, the first circle would be on the upper  
 6 most part of the tributary along on the north end.  
 7 The middle circle -- it's towards the center of the  
 8 photograph and the lower circle is right on the lower,  
 9 south part of the tributary.  
 10 Q Thank you. I'd like to show Agency Exhibit  
 11 10, Page 7. Can you tell us the date on this image  
 12 please?  
 13 A Yes, this would be March 14th, 2010.  
 14 Q Okay. And do you see the same markings on  
 15 here that we've seen in previous photographs?  
 16 A Yes.  
 17 Q And can you describe the conditions of the  
 18 channel that you're observing here?  
 19 A Again, you know, this would have been before  
 20 full leaf out, so the meandering stream on the upper  
 21 part of the tributary is quite visible there. And  
 22 it's -- you can see the physical connection to Deep  
 23 Creek.  
 24 Q Do you see -- do you identify the presence  
 25 of water on this photo?

1 A I do, and again, you know, it's quite  
2 visible up here on the northern part of the tributary.  
3 And, you know, you can kind of make it out here, but  
4 it's not quite as visible -- I mean on the southern  
5 part, but it's not quite as visible as it is on the  
6 northern part.

7 Q And can you talk a little bit about the  
8 connection of the tributary to Deep Creek in this  
9 photo?

10 A You can see that it's flowing right into  
11 Deep Creek - it's physically connected.

12 Q All right. I'd like to show the witness  
13 Agency Exhibit 10, Page 8.

14 MR. McAFEE: Excuse me, Your Honor. Maybe I  
15 wasn't paying close enough attention. When are we  
16 going to mark these exhibits that she just marked on?

17 JUDGE BIRO: I was thinking we would mark  
18 them at the end, but if that doesn't work for you, we  
19 could mark them as we go along. If we're going to do  
20 quite a few of these?

21 MR. McAFEE: That would be my point is that  
22 we might not be able to remember --

23 MR. MUEHLBERGER: That's fine. I don't  
24 anticipate doing it for every photo, but I'm happy to  
25 have her mark these now, if it works?

1 JUDGE BIRO: Do you have an extra copy, or  
2 no?

3 MR. MUEHLBERGER: Dr. Garcia, would you  
4 mind? With your permission, Your Honor, could the  
5 witness come to the ELMO here and make those marks?

6 JUDGE BIRO: Sure.

7 MR. MUEHLBERGER: Thank you.

8 BY MR. MUEHLBERGER:

9 Q So, we are going to go back to Agency  
10 Exhibit 10, Page 5. Let the record show that Dr.  
11 Garcia had already identified where she saw the  
12 presence of water in the images, and she is now with a  
13 marker, marking on Agency Exhibit 10, Page 5 --

14 JUDGE BIRO: Maybe Dr. Garcia could continue  
15 to stand there when she testifies, as you go along.

16 MR. MUEHLBERGER: If you're okay with that,  
17 Your Honor, that would be just fine.

18 MR. McAFEE: That's fine. Thank you.

19 MR. MUEHLBERGER: And I assume we go ahead  
20 and move these into evidence when we are done with all  
21 of this? Thanks.

22 JUDGE BIRO: Sure.

23 MR. MUEHLBERGER: Thanks.

24 JUDGE BIRO: We're going to mark them as  
25 AX-10 at 5A.

1 MR. MUEHLBERGER: Yes. That's what I plan  
2 to do.

3 JUDGE BIRO: Okay.

4 MR. MUEHLBERGER: Or should I go ahead and  
5 move to enter them after every time?

6 JUDGE BIRO: Yeah. We can just move them  
7 now.

8 MR. MUEHLBERGER: Your Honor, Complainant  
9 moves to enter this document as Agency Exhibit 10-5A.

10 JUDGE BIRO: Okay. Is there an objection to  
11 this exhibit?

12 MR. McAFEE: No, Your Honor.

13 JUDGE BIRO: We'll admit it, AX-10 at 5A.

14 (The document referred to was  
15 marked for identification as  
16 Agency's Exhibit No. 10-5A  
17 and was received in  
18 evidence.)

19 MR. MUEHLBERGER: Now, let the record show  
20 that we are showing the image of Agency Exhibit 10,  
21 Page 7 again and Dr. Garcia will mark, with a marker  
22 here, where she is indicating the presence of water.  
23 And Complainant moves to -- and I'm going to go ahead  
24 and mark on this as well. Complainant moves to enter  
25 this into evidence as Agency Exhibit 10-7A.

1 MR. McAFEE: No objection.

2 JUDGE BIRO: Exhibit 10 at 7A is admitted  
3 into the record.

4 (The document referred to was  
5 marked for identification as  
6 Agency's Exhibit No. 10-7A  
7 and was received in  
8 evidence.)

9 BY MR. MUEHLBERGER:

10 Q I'm now showing the witness Agency Exhibit  
11 10, Page 8. Can you describe what we are looking at  
12 in this photo?

13 A Yeah, we are looking at an aerial imagery  
14 that we source from Digital Globe, dated July 3rd,  
15 2010. And again, I can very clearly see the tributary  
16 in this image.

17 Q Can you talk about some of the physical  
18 characteristics about the tributary that you are  
19 identifying?

20 A Yeah, it is pretty clear to see that there  
21 is a bed and bank all -- all the way from the northern  
22 part of the tributary to the connection with the  
23 creek. And there's -- I can clearly see water within  
24 the channel on this image.

25 Q Okay. Okay. And could you please mark with

1 this marker on Agency Exhibit 10, Page 8 where you're  
2 indicating the presence of water?

3 A It's quite visible here and here. It's a  
4 little bit more wooded here, so it's kind of hard to  
5 make it out.

6 Q And again, can you explain how it is that  
7 you are concluding that that is water in the channel?

8 A Again, I'm comparing the color of the water  
9 within the channel to the color of the water within  
10 Deep Creek.

11 Q And, by looking at this, would you expect  
12 that the channel is going to have a bed and bank  
13 throughout this stretch of the tributary?

14 A Yes.

15 Q And how about an ordinary high-water mark?

16 A I would expect that it would, I mean I can't  
17 tell an ordinary high-water mark from these images,  
18 but I would expect that, given the flow  
19 characteristics of this tributary, that it should have  
20 it.

21 MR. MUEHLBERGER: Okay. I'd like to show  
22 the witness Agency Exhibit --

23 FEMALE VOICE: Do you want to mark that one?

24 MR. MUEHLBERGER: No, thank you for pointing  
25 that out. Complainant moves to enter this into

1 evidence as Agency Exhibit 10-8A.

2 MR. McAFEE: No objection.

3 JUDGE BIRO: Okay. Complainant's Exhibit 10  
4 at 8A is admitted.

5 (The document referred to was  
6 marked for identification as  
7 Agency's Exhibit No. 10-8A  
8 and was received in  
9 evidence.)

10 BY MR. MUEHLBERGER:

11 Q And, Dr. Garcia, can you tell us what you're  
12 looking at with this image, which is Agency Exhibit  
13 26, Page 2.

14 A Yeah, this is basically the same image,  
15 dated the same as the previous image that we looked  
16 at. July 3rd, 2010, and basically, we just zoomed in  
17 on the lower half of this tributary to better see the  
18 channel.

19 Q And does the zooming in change your  
20 impressions about the channel's connection to Deep  
21 Creek?

22 A No, it doesn't; it just makes it clearer.

23 Q Does it change your perception about the  
24 geographic feature of the channel?

25 A No, it does not.

1 Q Okay and do you also continue to see the  
2 presence of water in this close up?

3 A Yes.

4 Q I'd like to show Agency Exhibit 10, Page 9  
5 please. Can you tell us the date on this photo?

6 A Yeah, this would be December 18, 2010.

7 Q Okay. And again, could you please describe  
8 what you're looking at here.

9 A Basically, you're looking at the tributary  
10 and the same general location that is has been since  
11 the imagery that I've reviewed, which I went back and  
12 was able to see imagery from the 1930s.

13 Q Okay. And what do you see with respect to  
14 the tributary's connection to Deep Creek.

15 A That there's a physical connection to Deep  
16 Creek.

17 Q Okay. I'd like to go ahead and show you a  
18 close up of that photograph, which is Agency Exhibit  
19 26, Page 3. Can you describe what you're looking at  
20 in this photo?

21 A Yeah, again, it's the same image. We just  
22 zoomed in on the northern portion of the tributary and  
23 actually, you can quite clearly see that there's been  
24 a road crossing that has been built here. And I can  
25 mark it for you, if you'd like.

1 Q Yes, please. Please note that the witness  
2 is marking Agency Exhibit 10, Page -- I'm sorry --  
3 Agency Exhibit 26, Page 3, indicating the presence of  
4 a road crossing on the unnamed tributary. And what  
5 about the presence of water in this picture? Do you  
6 see water here?

7 A It's not quite as clear. this image is a  
8 little darker. So, I wouldn't be able to make that  
9 determination based on this one.

10 MR. MUEHLBERGER: Okay. I'd like to show.  
11 Oh, yeah. Thank you. Your Honor, Complainant moves  
12 to enter this into evidence as Agency Exhibit 26-3A.

13 MR. McAFEE: No objection.

14 JUDGE BIRO: Agency Exhibit 26 at 3A is  
15 admitted into the record.

16 (The document referred to was  
17 marked for identification as  
18 Agency's Exhibit No. 26-3A  
19 and was received in  
20 evidence.)

21 BY MR. MUEHLBERGER:

22 Q I'm now showing the witness Agency Exhibit  
23 10, Page 14. Can you tell us the date on this  
24 photograph?

25 A This would be September 16th, 2014.

1 Q And can you talk to us about what you are  
 2 identifying with the tributary here?  
 3 A Basically again, looking at, you know, the  
 4 approximate same location of the tributary as it has  
 5 been; and I can see the physical connection to Deep  
 6 Creek. And you can also see the road crossing on this  
 7 photograph.  
 8 Q And what about the presence of water in this  
 9 image?  
 10 A This one I would not feel comfortable making  
 11 a determination, given that it's a lot of wooded cover  
 12 here, so I'm not able to see the channel quite as  
 13 clear.  
 14 Q Thanks. I'd like to show the witness Agency  
 15 Exhibit 10, Page 19. Can you tell us what the date is  
 16 on this image?  
 17 A Yes. This would be March 20th, 2015.  
 18 Q And does this image look a little bit  
 19 different than the previous images we've been looking  
 20 at.  
 21 A Yeah, this is one of the images that I  
 22 reviewed that we were able to take from Pictometry.  
 23 So, you're looking at -- at a different angle from  
 24 what we've been looking at and we are also looking at  
 25 -- basically, this is Deep Creek here. And this is

1 the lower portion of the unnamed tributary as it flows  
 2 into Deep Creek.  
 3 Q And when you said "this is Deep Creek here",  
 4 can you describe on the image where you are looking  
 5 at?  
 6 A Yeah, it's toward the top whatcha call it --  
 7 left -- north -- sorry, this, right here. I could  
 8 mark it.  
 9 JUDGE BIRO: Why don't you mark it with an  
 10 'A'.  
 11 MR. MUEHLBERGER: Sure.  
 12 BY MR. MUEHLBERGER:  
 13 Q If you could mark on the exhibit, Deep Creek  
 14 please. If you could also mark the tributary, please.  
 15 Can you tell us what you are identifying, as far as  
 16 the characteristics of the tributary, please?  
 17 A Well, you're basically able to get a pretty  
 18 good view of the bed and banks of the lower half of  
 19 this tributary. And you're able to see that there's a  
 20 road crossing here again, present here. And you can  
 21 see what appears to be water flowing from the  
 22 tributary into Deep Creek.  
 23 Q Thanks.  
 24 MR. MUEHLBERGER: Complaint moves to enter  
 25 this into evidence as Exhibit AX-10-19A.

1 JUDGE BIRO: Dr. Garcia, could you mark the  
 2 road crossing?  
 3 DR. GARCIA: Sure.  
 4 MR. MUEHLBERGER: For the record, Dr. Garcia  
 5 is marking on AX-10-19A proposed into evidence, the  
 6 road crossing.  
 7 JUDGE BIRO: So, this is the same area  
 8 looked at from a different direction, is that  
 9 essentially?  
 10 DR. GARCIA: Yes, right.  
 11 JUDGE BIRO: Okay. And this road crossing  
 12 is the same road crossing that we had seen before,  
 13 DR. GARCIA: Yes, to my knowledge. Yes.  
 14 JUDGE BIRO: Looked at from a different  
 15 direction?  
 16 DR. GARCIA: Right.  
 17 JUDGE BIRO: Okay.  
 18 MR. MUEHLBERGER: I'd like to show the  
 19 witness Agency Exhibit 10, Page 21.  
 20 JUDGE BIRO: Oh, let's admit that exhibit.  
 21 I'm sorry.  
 22 MR. MUEHLBERGER: Oh, I'm sorry. I moved  
 23 but didn't get a response. My apologies. Complainant  
 24 would like to move this into evidence as Agency  
 25 Exhibit 10-19A.

1 MR. McAFEE: No objection, Your Honor.  
 2 JUDGE BIRO: Okay, Agency Exhibit 10-19A is  
 3 admitted into the record.  
 4 (The document referred to was  
 5 marked for identification as  
 6 Agency's Exhibit No. 10-19A  
 7 and was received in  
 8 evidence.)  
 9 BY MR. MUEHLBERGER:  
 10 Q I'm now showing the witness Agency Exhibit  
 11 10, Page 21. Can you tell us the date of this  
 12 photograph?  
 13 A This would be September 20th, 2015.  
 14 Q What are we looking at in this photo?  
 15 A Basically, we're looking at the location  
 16 where the tributary had been. And, you know, this  
 17 image is taken after it had been filled and tiled.  
 18 Q Based on your knowledge of the case, about  
 19 how long was this picture taken after the tributary  
 20 had been filled in?  
 21 A Possibly, maybe three to four months.  
 22 Q Okay. And can you tell us of the conditions  
 23 of the tributary after it's been filled in here?  
 24 A Well, basically, you can no longer see the  
 25 physical connection here, as it had been in the past.

1 But you can kind of see that -- in this image anyways  
2 -- you can kind of see that there is still some  
3 overland flow along this area.

4 Q Okay. If you could please mark on the  
5 exhibit where you're identifying overland flow. And  
6 can you describe what you mean by overland flow?

7 A Basically, it means that there's still, you  
8 know, water that, not -- you know, some of the water  
9 is, you know, obviously going into the tiles intakes  
10 up here, but there's still some water that being  
11 drained from the uplands over here and also some of it  
12 from up here. And so, it's basically flowing on the  
13 surface.

14 Q And what does that tell you about the nature  
15 of this tributary?

16 A That it's got enough flow where the design  
17 capacity of the tiles might not be sufficient to keep  
18 all -- all the flow under -- into the tiles.

19 Q And talk a little bit about the vegetation  
20 in this image, compared to previous images.

21 A Well, you can no longer see any vegetation;  
22 it's been cleared.

23 Q Okay. So what kind of overall, general  
24 conclusions did you make about this tributary by  
25 looking at these historical images?

1 A That it had been a relatively permanent  
2 water tributary, that has been there since at least  
3 the 1930s, which is -- which goes back to the imagery  
4 that I have been able to review prior to the tiling  
5 and filling.

6 Q Okay. And based on your analysis of these  
7 aerial images, what conclusions did you make about the  
8 overall physical characteristics of the tributary?

9 A That it was -- you know, the upper part had  
10 been meandering which would indicate to me that it had  
11 sufficient flow to create that geometry. The lower  
12 part, you know, had been graded over time, had been  
13 what we term channelized, which basically means that  
14 it has been straightened and that it was graded over,  
15 over -- you know, several years, but the -- somehow  
16 the flow of the water was sufficient to be able to cut  
17 the channel again and again.

18 Q Okay. Earlier we had talked about the terms  
19 "intermittent" and "ephemeral" tributaries. What kind  
20 of determinations did you make with respect to these  
21 terms?

22 A That the area or the tributary that was  
23 filled was an intermittent stream.

24 Q How do you know that it was intermittent and  
25 not an ephemeral?

1 A It has a very well-defined bed and bank that  
2 were quite visible from these aerial images that were  
3 taken. You know? I don't know at how many feet it  
4 was taken, but, you know, you can very clearly see it.

5 Q Thank you.

6 MR. MUEHLBERGER: And I'm going to --  
7 Complainant moves to enter this exhibit into evidence  
8 as Agency Exhibit 10-21A.

9 MR. McAFEE: No objection.

10 JUDGE BIRO: There being no objection,  
11 Agency Exhibit 10-21A is admitted into the record.

12 (The document referred to was  
13 marked for identification as  
14 Agency's Exhibit No. 10-21A  
15 and was received in  
16 evidence.)

17 BY MR. MUEHLBERGER:

18 Q I believe Dr. Garcia can return to the stand  
19 at this point. Sara, could I take a look at Agency  
20 Exhibit 11, please? Thank you. I'm now showing the  
21 witness Agency Exhibit 11, Page 6. Do you mind  
22 zooming out just a little bit, please?

23 And earlier, Don Carrington of NRCS  
24 testified about this document. Dr. Garcia, I wanted  
25 to ask you, do you recognize this document?

1 A I do.

2 Q Okay. And how is it that you became aware  
3 of this document?

4 A This was part of the documents that were  
5 sent to us by the Army Corp of Engineers in their  
6 referral to us.

7 Q Okay. And have you seen this kind of  
8 document before?

9 A Yes.

10 Q What is this document?

11 A Basically it's a document that's produced by  
12 the Natural Resources Conservation Service to let  
13 landowners know where, on their property, there might  
14 be wetlands and what type of wetlands and also highly  
15 erodible lands.

16 Q Does the NRCS make determinations about  
17 wetlands for the Clean Water Act?

18 A No, they do under the Food Security Act.

19 Q Okay. Does EPA ever rely on information  
20 provided by NRCS to make their own wetland  
21 determinations?

22 A We do.

23 Q And why -- why does EPA feel comfortable  
24 using NRCS's information?

25 A Because, to my knowledge, they are utilizing

1 -- basically looking at the same things that we are.  
 2 And I know, under the Food Security Act, they don't  
 3 have a specific procedure that's listed so they  
 4 utilize the 87 Manual, the Corp of Engineers '87  
 5 Delineation Manual and whatever supplements --  
 6 regional supplements might apply to the area.  
 7 Q And do you know what kinds of conclusions  
 8 are being made about wetlands on this document?  
 9 A Sure. There's some, you know, areas that  
 10 were labeled as non-wetlands. There was an area that  
 11 was named farm wetland. There was a converted wetland  
 12 and there's a wetland.  
 13 Q And how do these terms -- and I understand  
 14 that these are NRCS terms, but how do these terms help  
 15 EPA be informed about jurisdictional wetlands?  
 16 A Well, they're making the determination that  
 17 there is a wetland or there was a converted wetland.  
 18 And it's something that, you know, we look at and  
 19 review, and again, do our own analysis to see if we  
 20 concur with their determination.  
 21 Q I'm going to show the witness Agency Exhibit  
 22 11, Page 8. Dr. Garcia, do you recognize this image?  
 23 A I do.  
 24 Q Okay. And what is this?  
 25 A This was the -- basically, the aerial

1 imagery where the NRCS marked for the landowner where  
 2 the determinations were, in terms of like - whether,  
 3 you know, something was wetland, non-wetland,  
 4 converted wetland or farm wetland.  
 5 Q And does this image comport with the images  
 6 you've looked at concerning C&S Enterprise? Is this  
 7 the same area?  
 8 A Yes.  
 9 Q Okay. And can you identify, on this map  
 10 here, where they identified converted wetlands?  
 11 A Yeah, the -- basically, it would be the  
 12 unnamed tributary that has been the subject of this --  
 13 proceedings.  
 14 Q And you saw earlier where Mr. Carrington  
 15 marked the document as converted wetlands, correct?  
 16 A Correct.  
 17 Q And so, is EPA's assessment about wetlands  
 18 on the C&S property the same as NRCS's conclusions  
 19 about wetlands?  
 20 A Correct.  
 21 Q Okay. Thank you. I'll hand this back to  
 22 you. Okay, so, Dr. Garcia, after you analyzed all of  
 23 the data, including the aerial images and consulted  
 24 with Mr. Stokely at EPA, what did you do next with  
 25 respect to the C&S case?

1 A Well, I compiled a summary of all of the  
 2 information that I had reviewed, and I met with our  
 3 lead 404-attorney to discuss and see if he agreed with  
 4 my assessment. And then, I presented the case to our  
 5 404-enforcement team, which basically consists of  
 6 technical 404-compliance officers and attorneys.  
 7 Q And what was the conclusion of the 404-team?  
 8 A They agreed with our assessment that a  
 9 violation of Section 404 of the Clean Water Act had  
 10 taken place and they agreed with us proceeding forward  
 11 and taking the lead in resolving the violation.  
 12 Q Okay. And then I would like to show the  
 13 witness Agency Exhibit 10, Page 21. Okay. So, after  
 14 EPA decided to take the lead on enforcement action,  
 15 what did you do next?  
 16 A I basically, you know, gave it to my  
 17 supervisor for assignment and she ended up assigning  
 18 it to me. So, I, you know, reviewed all the factors  
 19 requested an attorney and, you know, proceeded to try  
 20 to resolve this violation through a settlement with  
 21 Mr. Morrow.  
 22 Q Did you ever conduct a site visit on Mr.  
 23 Morrow's property?  
 24 A I did.  
 25 Q Can you tell us when that took place?

1 A Yeah, it took place on May 15th, 2018.  
 2 Q And I'm showing the witness Agency Exhibit  
 3 10, Page 21, which you already identified was a few  
 4 months after the Respondent filled in the tributary,  
 5 correct?  
 6 A Correct.  
 7 Q And does this photo generally represent the  
 8 conditions at the site when you conducted your site  
 9 visit in 2018?  
 10 A Yes, it was very similar.  
 11 Q Okay. Generally, when -- can you talk about  
 12 the conditions of the site when you went out there.  
 13 A Basically, you know, we walked in the  
 14 general location that Mr. Shoemaker had conduct --  
 15 when he conducted his visit on March 30, 2017. And  
 16 then I had obtained permission from the upstream  
 17 landowner, so that I could go look at the upstream  
 18 portion of the tributary. And we, you know, -- after  
 19 proceeding and looking at the upstream portion of the  
 20 tributary we walked back down south and looked at the  
 21 connection with Deep Creek.  
 22 Q Does the marking on the upper left side of  
 23 the document, talking about the approximate starting  
 24 point of the tributary, does that match pretty closely  
 25 where you started your site visit?

1 A Yes, maybe a little bit south of that.

2 Q Okay. Okay. And you said that you had

3 walked down until it reached Deep Creek. Does the

4 marking at the bottom, talking about the end of the

5 impacted stream, is that generally where you walked

6 down to at the end of your site visit?

7 A Yes.

8 Q Okay. I'd like to show the witness, Agency

9 Exhibit 1, Pages 5 through 8. We'll start with Page

10 5. Dr. Garcia, do you recognize this image?

11 A It is. It's the photo log that I prepared

12 for my report where I, you know, provided a

13 description of the photos that I had taken, the

14 approximate time, file name, date and approximate

15 location of where the photos were taken.

16 Q Okay.

17 MR. MUEHLBERGER: With your permission, Your

18 Honor, may the witness refer to this photo log in her

19 Exhibit Book if she needs to as we go through the

20 photographs?

21 JUDGE BIRO: Sure.

22 MR. MUEHLBERGER: Okay.

23 JUDGE BIRO: Ms. Garcia, if you want to open

24 up --

25 DR GARCIA: What was the -- was it AX-1?

1 MR. MUEHLBERGER: AX-1.

2 BY MR. MUEHLBERGER:

3 Q I'd like to show the witness Agency Exhibit

4 1, Page 9. Dr. Garcia, can you describe this

5 document?

6 A Yeah, that would be a portion of the

7 tributary that we walked on the upstream portion and

8 those numbers there represent the approximate

9 locations of where I marked GPS locations for -- for

10 where I took some photographs.

11 Q Okay. So, the markings on the image

12 correlate with where you took photographs during your

13 site visit, correct?

14 A Correct. With the GPS locations, because I

15 took several photographs and, you know, depending on

16 the location - so, you would have to reference the

17 photo log.

18 Q I'd like to show the witness Agency Exhibit

19 1, Page 13. Dr. Garcia, is this a photograph that you

20 took on your site visit?

21 A It is.

22 Q And can you describe what we are looking at

23 in this photograph?

24 A Sure. We are looking at the tile intakes,

25 where the beginning, basically, of the work where the

1 water was flowing -- the water from the upstream

2 tributary, undisturbed tributary -- was flowing into

3 the tile intakes.

4 Q Was there water flowing at the time of your

5 inspection?

6 A There was.

7 Q Okay. And can you describe this - what

8 we're looking at here -- this structure?

9 A Yeah, it's basically post and some - what I

10 would describe as hog-wire fencing, that are, you

11 know, usually placed there to prevent debris and other

12 trash from flowing into the tributaries and/or into

13 the tiles and clogging up the tiles during higher flow

14 events, when the tributary carries debris -

15 Q Okay --

16 A More debris or larger debris.

17 Q In your experience reviewing 404 cases, have

18 you seen these types of structures before?

19 A I have.

20 Q And what does this indicate to you about the

21 channel itself?

22 A That, during high rainfall events, that, you

23 know, what we looked at when I was there I would

24 describe as baseflow -- but during higher water

25 events, there's a lot more water that flows in the

1 tributary that it's able to carry larger pieces of

2 debris or trash or whatever it may be.

3 Q And so you're saying what you're identifying

4 with the flowing water now, you would - you would

5 characterize as baseflow?

6 A Correct.

7 Q Okay. And can you again describe what that

8 means?

9 A Well, it -- it basically means that it's,

10 you know, that it hadn't rained during the day of my

11 site visit and it was, you know -- there was

12 definitely water flowing in there, but it's not, you

13 know, bank-full.

14 Q I'd like to show the witness Agency Exhibit

15 1, Page 15. Can you describe the approximate location

16 of this photo?

17 A Sorry. Let me refer -- yeah, we were

18 upstream of the disturbance, looking at the unnamed

19 tributary, before it -- it goes into the unnamed

20 tributary at Deep Creek.

21 Q Can you talk about the characteristics of

22 the tributary here?

23 A Sure. This -- this picture, you can clearly

24 see the bed and bank on the tributary. There was

25 water present during our site visit. And you can see

1 that, you know, this tributary has enough flow to the  
2 point where there's no or very little terrestrial  
3 vegetation on the bed of the tributary.

4 Q And one point that I meant to make earlier,  
5 we use the term "tributary" and "stream" a lot  
6 throughout these proceedings. Are the terms  
7 "tributary" and "stream" synonymous?

8 A Very much so, yes.

9 Q Okay. I'm going to get the next one. I'm  
10 showing the witness here, Agency Exhibit 1, Page 16.

11 Can you describe what you are looking at in  
12 this photo?

13 A Yeah, we -- this was an overhead shot  
14 directly looking at the tributary from overhead. And  
15 I believe it was Joey Shoemaker that had brought a  
16 tape measure and we were just doing a -- a measurement  
17 of the stream.

18 Q Okay. Does the width of a stream play a  
19 role in determining whether or not a tributary is  
20 jurisdictional?

21 A No, it does not. But, you know, the  
22 scientists that we are, we just like to get as much  
23 information as we can.

24 Q Okay. Was the tributary roughly the same  
25 width throughout as --

1 A No, it varied. It varied. There were  
2 certain parts where it was wider, certain parts where  
3 it was narrower, so it was very much a varied stream.

4 Q Okay. I'd like to show the witness Agency  
5 Exhibit 1, Page 19. Can you describe the approximate  
6 location of this photograph?

7 A Yeah, this was located on the upstream  
8 property, where -- I was looking downstream at the  
9 waterflow in the tributary.

10 Q And what kind of conditions are you  
11 identifying here?

12 A Well, the purpose for this photograph was to  
13 show that, if you see that limb there and you can see  
14 some of the vegetation that is carried during higher  
15 flow events.

16 Q Okay. And vegetation being carried, what  
17 kind of role does that play in the overall health of  
18 the stream?

19 A Well, I mean, there's microorganisms and  
20 other aquatic fauna in these smaller streams that  
21 would break down vegetation like this to make  
22 nutrients, such as carbon, available to other  
23 organisms that rely on that. So, they break it down.

24 Q What can you tell us about the bed and bank  
25 in this particular stretch of the tributary?

1 A It was quite visible.

2 Q Okay. And let me ask you this. If there  
3 were not bed and bank in this portion of the  
4 tributary, how would that change the way that this  
5 looks?

6 A There would be basically grasses or other  
7 type of vegetation just growing in there. You  
8 wouldn't be able to actually see a well-defined bed in  
9 there.

10 Q Okay. I'd like to show the witness Agency  
11 Exhibit 1, Page 23. Where was this photo taken?

12 A This was located upstream of the impacted  
13 tributary. Again, on the adjacent property.

14 Q And what are we looking at in this  
15 photograph?

16 A I was looking directly, you know, overhead,  
17 looking at -- I was trying to take a picture of the  
18 walnuts that were within the -- that had fallen into  
19 the tributary, basically, just to show the type of  
20 processes that take place in these kinds of  
21 tributaries. Where, you know, these -- these walnuts,  
22 you know, will sometimes take years to decompose, but  
23 there's microorganisms that will, you know, slowly  
24 decompose these type of organic matter and making it  
25 available.

1 Q And what about the organic material, you  
2 know, downstream or going into other tributaries?

3 A Well, you know, there's obviously organic  
4 matter that goes into higher or -- larger tributaries  
5 that falls in, but it's -- it doesn't have as much of  
6 a chance to decompose because of higher flows as it  
7 does on these smaller tributaries, which is what the  
8 importance of these tributaries are.

9 Q I'd like to show the witness Agency Exhibit  
10 1, Page 24. And where was this photograph taken?

11 A This would have been located upstream of the  
12 -- the impacted tributary.

13 Q And what -- describe the characteristics of  
14 the tributary here.

15 A Where -- I took this photo facing toward the  
16 tile inlets and you can see very clearly that there  
17 was bed and bank and that there was water flowing  
18 within the tributary.

19 Q I'd like to show the witness Agency Exhibit  
20 1, Page 27. Yup. And was this picture also taken  
21 upstream of the tributary -- of the impacted  
22 tributary, I should say?

23 A It was.

24 Q And what are you looking at in this  
25 photograph?

1 A It was basically - it's not quite as clear  
 2 to see in this copy - but it was an ephemeral  
 3 tributary that was draining into the unnamed  
 4 tributary.  
 5 Q Okay. And could you just kind of mark, with  
 6 your finger there, where you are identifying the --  
 7 the ephemeral tributary and then, for the record,  
 8 explain where you are marking this in the photograph?  
 9 A Yeah, I'm basically looking at the center  
 10 portion of the photograph -- right in here. But it's  
 11 -- again, it's not quite as clear as it is when you're  
 12 looking at an original picture.  
 13 Q And what does the presence of a ephemeral  
 14 tributary mean to you with respect to the -- to the  
 15 tributary at the heart of the case?  
 16 A It's just another contributor of water  
 17 during rainfall events to -- to the unnamed tributary.  
 18 Q I'd like to show -- actually, let's stick  
 19 with that for a second. So, what does that mean for  
 20 the tributary, itself, that there are additional  
 21 sources of flow into that tributary?  
 22 A Well, that -- that would make this what is  
 23 called a second-order stream. Because -- it means  
 24 that there's other lower-ordered streams contributing  
 25 flow to this tributary.

1 Q I'd like to show the witness Agency Exhibit  
 2 1, Page 28.  
 3 JUDGE BIRO: Do you want to mark for the  
 4 record her markings on the photo?  
 5 MR. MEUHLBERGER: We can if you'd like to,  
 6 Your Honor. I just asked her to describe where it was  
 7 on the photo, so if you were comparing it in the  
 8 transcript, you would know where to look, but I'm  
 9 happy to have it marked if you'd like that.  
 10 JUDGE BIRO: Do you care? No. Okay, let's  
 11 move on.  
 12 BY MR. MUEHLBERGER:  
 13 Q All right, Dr. Garcia, could you describe  
 14 where this photo was taken?  
 15 A Yeah, this was taken just a few feet  
 16 immediately up from the tile intakes. You can kind of  
 17 see the structure in the center of the photograph.  
 18 Q Okay. Maybe we could zoom in a little bit  
 19 here to identify what you're talking about.  
 20 A So, yeah. So, this structure here --  
 21 Q That's good.  
 22 A that we're looking at here is the -- from my  
 23 first photo, where the tile intakes are at, and that's  
 24 the debris guard that was placed in front. And we're  
 25 looking at the tributary, basically following the path

1 right into the tile intakes.  
 2 Q Okay. And I don't think there's any need to  
 3 mark this up, because we've got a lot of images of  
 4 this much closer up coming up here.  
 5 I'd like to show Agency Exhibit 1, Page 29.  
 6 And where was this photograph taken?  
 7 A This was taken upstream of the impacted  
 8 tributary.  
 9 Q Okay. And what was the purpose of this  
 10 photograph?  
 11 A Well, we had identified wetland vegetation  
 12 within this portion of the tributary, so this was -  
 13 this, specifically, is a sedge species, which is one  
 14 of those hydrophytic vegetations that are present  
 15 within wetlands.  
 16 Q And does the presence of wetland plants  
 17 upstream say anything to you about -- about the  
 18 presence of wetlands downstream?  
 19 A Well, given that, you know, by the time, you  
 20 know, NRCS, EPA and the Corp got involved, the  
 21 vegetation on the downstream tributary had been  
 22 cleared, you know, we would expect, given the -- the  
 23 conditions of this tributary, to be very similar to  
 24 the downstream.  
 25 Q I would like to show the witness Agency

1 Exhibit 1, Page 30. Dr. Garcia, where was this  
 2 photograph taken?  
 3 A This is a close-up of one of the tile  
 4 intakes again from Photo 1.  
 5 Q Okay. And tell us about the flow of the  
 6 water when you took this picture.  
 7 A There was water flowing into the tile --  
 8 both tile intakes. The purpose of this photograph,  
 9 even though it's not quite visible in this image, was  
 10 to show that, while we were there we had, I guess  
 11 disturbed a frog that was utilizing the stream and it  
 12 had jumped into the tile and -- I don't know if you  
 13 can see -- make it out, but it's right in the center  
 14 of the tile there.  
 15 Q This might be one that might be worth it to  
 16 have you mark on the document - the document here.  
 17 MR. MUEHLBERGER: Your Honor, may I approach  
 18 the witness with this image?  
 19 JUDGE BIRO: (No audible response.)  
 20 BY MR. MUEHLBERGER:  
 21 Q Could you please circle on the image the  
 22 frog and label that as such, please? Okay, Dr.  
 23 Garcia, what is (sic) the presence of a frog in this  
 24 image indicate to you about the tributary?  
 25 A Well, you know, this -- this frog is a, you

1 know, semi-aquatic species dependent on tributaries  
 2 for part of their lifecycles, specifically  
 3 reproduction. So, you know, to me, it tells me that,  
 4 obviously, this -- prior to the impact of this  
 5 tributary was providing habitat for amphibians.  
 6 MR. MUEHLBERGER: Your Honor, Complainant  
 7 moves to enter this into evidence as Agency Exhibit  
 8 1-30A.  
 9 MR. McAFEE: No objection.  
 10 JUDGE BIRO: No objection. Complainant's  
 11 Exhibit 1-30A is admitted into the record.  
 12 (The document referred to was  
 13 marked for identification as  
 14 Agency's Exhibit No. 1-30A  
 15 and was received in  
 16 evidence.)  
 17 BY MR. MUEHLBERGER:  
 18 Q I'd like to show the witness Agency Exhibit  
 19 1, Page 31. Is this also at the same tile inlet  
 20 location you were just describing?  
 21 A Yes, it is.  
 22 Q Okay. And can you describe what we are  
 23 looking at in this photo?  
 24 A Basically, we are looking at what the term  
 25 is iron deposits going into the - into one of the tile

1 intakes and that, to me, confirms our suspicion that  
 2 this tributary is groundwater influenced. The reason  
 3 that you can see these -- this bright-orange, you  
 4 know, streak, I guess, going into the tributary is  
 5 that, when our - from groundwater is -- there is  
 6 little or very -- no oxygen at all. And when it  
 7 emerges into -- to the surface there's bacteria.  
 8 That's what they do, they oxidize iron, and so that's  
 9 why you get that bright orange. So, to me, this was  
 10 indicative that this tributary is groundwater  
 11 influenced.  
 12 Q I'd like to show the witness Agency Exhibit  
 13 1, Page 32. Can you describe what we are looking at  
 14 in this photo?  
 15 A This is just a zoomed-out view of the  
 16 previous photograph, just giving you a better view of  
 17 the tile inlet and, actually, in this one, you can  
 18 clearly see some of that vegetation that has been  
 19 prevented by that fencing from going into or flowing  
 20 into the tile intakes during higher water events.  
 21 Q Okay. I'd like to show the witness Agency  
 22 Exhibit 1, Page 35. And where was this photograph  
 23 taken?  
 24 A This was taken along the -- the portion of  
 25 where the -- the unnamed tributary had been prior to

1 the filling and tiling. So, we are looking  
 2 downstream.  
 3 Q Sorry. How do you know that that's where  
 4 the tributary was?  
 5 A General location, we -- you can kind of see  
 6 the scars on the land. What we are looking at here is  
 7 a willow species, which again, is one of those species  
 8 of trees that are usually water dependent. So, to me  
 9 it indicates that, you know, there are still hydric  
 10 soils despite the disturbances, there are still some  
 11 hydric soils going on there. There's still enough  
 12 surface and groundwater to be able to sustain this  
 13 kind of vegetation.  
 14 Q Because willows are the type of vegetation  
 15 that grow in wetlands, is that correct?  
 16 A Typically, yes.  
 17 Q Okay. I'd like to show the witness Agency  
 18 Exhibit 1, Page 37. Can you talk a little bit about  
 19 the structures we are looking at here?  
 20 A Yeah, these would be risers that are  
 21 visible. Those orange things where, you know, surface  
 22 water is able to flow into the tile unit.  
 23 Q Let's look at Agency Exhibit 1, Page 38  
 24 please. Can you describe this structure please?  
 25 A Yeah. I'm looking at one of the tile

1 intakes and I believe it was from the same  
 2 photographs. I'm basically looking down through that  
 3 yellow guard, looking directly at the tile below,  
 4 where you could -- I was able to see water flowing  
 5 through the tile.  
 6 MR. MUEHLBERGER: And Your Honor, at this  
 7 time I would like to show the Court a video that we  
 8 submitted into evidence as Agency Exhibit 19.  
 9 BY MR. MEUHLBERGER:  
 10 A You want me to describe the video?  
 11 Q Sure. I was going to let us -- yeah, why  
 12 don't you go ahead and describe what you're looking at  
 13 there.  
 14 A So, I was able to, you know, use the video  
 15 portion of my camera to videotape the water flowing  
 16 through the tile.  
 17 Q Okay. So what does that mean to you as far  
 18 as the water flowing that you identified there?  
 19 A That you know, basically, the water was  
 20 going up from the undisturbed portion of the unnamed  
 21 tributary upstream and flowing into the tile intakes  
 22 and you can see it flowing directly through the tiles.  
 23 Q I'd like to show the witness Agency Exhibit  
 24 1, Page 41. Okay. Thanks. And zoom out just a  
 25 little bit, please. Okay. So, where are we when you

1 took this photograph?

2 A Basically, we're -- I was facing upstream.

3 This is Deep Creek, where the unnamed tributary used

4 to flow into here, before it was tiled.

5 Q Can you talk a little bit about the

6 conditions in Deep Creek?

7 A Yeah, I mean, obviously, you know, this is a

8 much larger stream. You can clearly see bed and bank

9 and water was flowing during our site visit.

10 Q Would you expect that -- what kind of flow

11 conditions would you expect in a stream like Deep

12 Creek?

13 A That it would be a perennial flow, which

14 would mean that it would be flowing year-round.

15 Q Okay. I'd like to show the witness Agency

16 Exhibit 1, Page 48. And what is this photo?

17 A This is basically, looking - I believe I was

18 facing downstream looking at Deep Creek, and you can

19 see a large tree had fallen over and was present

20 there. There was water flowing in there.

21 Q I'd like to show the witness Agency Exhibit

22 1, Page 49. And where are you located when you took

23 this photo?

24 A This would be the location of the tile

25 outlets into Deep Creek.

1 Q Okay. I'd like to show the witness Agency

2 Exhibit 1, Page 53. And how about this photograph?

3 A It would be basically the same location, but

4 I'm looking - you know, it's a side view of the tile

5 outlets and you can see water flowing from the tile

6 outlets directly into Deep Creek.

7 Q Okay. And earlier, when you were talking

8 about one of the satellite images, and where the

9 tributary discharges into Deep Creek, does this match

10 the location that you identified in the aerial images

11 where the water would be discharging from the

12 tributary into Deep Creek?

13 A Yeah, it would be very close.

14 Q Okay. I'd like to show the Court another

15 video from Agency Exhibit 19.

16 (Pause.)

17 Q And what can you tell us about what you

18 identified in that video?

19 A Yeah, this was basically the same location

20 as the photograph we just looked at, it was just

21 again, I, you know, utilized the video feature of my

22 camera to take a video to show the flowing water

23 draining directly into Deep Creek.

24 Q Okay. So earlier on, you talked about how

25 you would expect the presence of wetland species to

1 exist downstream. Can you also talk about the

2 conditions of the tributary above the impacted, would

3 you expect the same types of conditions downstream

4 prior to the Respondent filling in the tributary?

5 A Yes, I would, given the location. And it's

6 on the upper portion; it was wooded and shared about

7 the approximate same slope as the upstream portion of

8 the tributary.

9 Q Okay. Dr. Garcia, what were you overall

10 observations about flowing water in this tributary?

11 A That there was definitely water flowing in

12 the tributary during my site visit, and it was

13 discharging directly into Deep Creek.

14 Q And combine that with your analysis of the

15 aerial historical photographs. What were -- are your

16 conclusions about the presence of the flowing water in

17 that tributary?

18 A That this tributary has all the

19 characteristics of an intermittent tributary that

20 would have relatively permanent flow, where it would

21 flow seasonally -- at least seasonally during the

22 year.

23 Q And combining your analysis of the aerial

24 historical images and your site visit, what were your

25 overall observations about the physical

1 characteristics of the tributary?

2 A That a bed and bank were present, and an

3 ordinary high-water mark were present on the upstream

4 portion. I obviously wasn't able to observe ordinary

5 high-water mark or bed or bank on the tributary that

6 was filled in and tiled.

7 Q Based on your analysis of the aerial images

8 and your site visit, what were your overall

9 observations about the connection of the tributary to

10 Deep Creek?

11 A That, prior to the impact, there was a

12 direct physical connection, and, after the impact, the

13 physical connection still remains, but, in this case,

14 through tiles.

15 Q Okay. Based on your analysis of the aerial

16 images, the information that you obtained from NRCS

17 and your onsite observations, what are your overall

18 conclusions about the presence of wetlands on the

19 property?

20 A That, given the -- you know -- my analysis,

21 and given my review of the NRCS wetland determination,

22 and, you know, looking at aerial images, hydrology and

23 hydric soil maps, that there was definitely wetlands

24 prior to the impact. And these were within stream

25 wetlands.

1 Q Based on your expertise and your experience  
 2 in 404, what impact would the tiling of the tributary  
 3 have on the physical connection to Deep Creek?  
 4 A The physical connection is still present,  
 5 you know, water is still able to flow into the tile  
 6 intakes and connect to Deep Creek; but the velocity of  
 7 the water going into the -- from the tile outlets into  
 8 Deep Creek is at a much faster rate than it would have  
 9 had the channel still been present there.  
 10 Q And what does that mean to the overall  
 11 health of the watershed that the velocity in the water  
 12 is greater?  
 13 A Well, the fact that you have a much higher  
 14 velocity, the channel's not there, so you're not able  
 15 to get some of the water infiltration that you would  
 16 have normally with a bed and banks. And so that,  
 17 whenever you have a much higher rain event, not only,  
 18 you know, what I observed is what I would consider  
 19 baseflow. But when you have much higher water events,  
 20 that velocity is even going to increase. The velocity  
 21 of the water through the tiles was much faster than  
 22 what the velocity was going into the tiles. And so,  
 23 you know, the velocity going into Deep Creek -- it's  
 24 going lead to more erosion downstream.  
 25 Q What impact would the tiling of the

1 tributary have on the biological or physical  
 2 connection of the tributary to Deep Creek?  
 3 A Biologically, the -- you know, basically,  
 4 you are losing all the habitat for the aquatic fauna  
 5 that would have utilized it. You're - so, by losing  
 6 the -- Not only that, but also in terms of chemically,  
 7 you're losing the ability of water to -- or  
 8 microorganisms within the tiles to be able to break or  
 9 -- well, there are no more microorganisms with the  
 10 tile, so you have lost the ability of that portion of  
 11 the unnamed tributary to be able break down nutrients  
 12 and make nutrients available to other fauna.  
 13 Q So, what impacts would removing the grade  
 14 and the slope of the tributary have on the health of  
 15 the watershed?  
 16 A Well, by removing the grade, you're actually  
 17 lowering the water quality to downstream tributaries.  
 18 You are also losing the nutrients that would be made  
 19 available.  
 20 Q Okay. How does -- how does changing the  
 21 grade and slope of a tributary affect the water  
 22 quality?  
 23 A Again, you're increasing the velocity of the  
 24 water that's flowing through the tiles. You know?  
 25 So, you're causing more erosion on the downstream

1 tributaries. You don't -- you don't have the ability  
 2 of the water to -- or to have that slope pace that it  
 3 normally would have in a tributary this size to be  
 4 able to break down chemicals, so you're decreasing  
 5 water quality.  
 6 Q What kind of impacts to aquatic species  
 7 would you say would occur from removing this tributary  
 8 or might occur?  
 9 A Well, you're obviously not providing the  
 10 habitat that would have been available there for  
 11 microorganisms and other fauna that had utilized it.  
 12 So, it's no longer available to them and you're also  
 13 -- you know, even for downstream waters, you are  
 14 losing the ability of the microorganisms that would  
 15 have broken down all these other nutrients that would  
 16 have made them available to other species.  
 17 Q What impact would filling in the wetlands  
 18 along this tributary have on the tributary and the  
 19 overall watershed?  
 20 A Again, given the functions of the tributary  
 21 -- oh, I'm sorry, of the wetland, you would have lost  
 22 the ability for this water to be, you know, stored  
 23 during higher water events and to be slowly released  
 24 to maintain the flow with two downstream tributaries.  
 25 You are also losing the ability of the functions of

1 the wetland in terms of breaking down chemical  
 2 components and, you know, we do an analogy that they  
 3 are kind of the kidneys of the ecosystem. You're kind  
 4 of losing the ability for them to be able to break  
 5 down harmful nutrients.  
 6 Q Okay. I'd like to show the witness Agency  
 7 Exhibit 24.  
 8 MR. MUEHLBERGER: Your Honor, do you mind if  
 9 we take a five-minute break?  
 10 JUDGE BIRO: No, of course not. We'll stand  
 11 in recess for five minutes.  
 12 (Brief recess.)  
 13 JUDGE BIRO: Mr. Jones, are you ok? Oh,  
 14 please be seated. Sorry. You guys are so polite.  
 15 That was a test. I apologize. I sat. Okay. Please  
 16 proceed.  
 17 BY MR. MUEHLBERGER:  
 18 Q And Your Honor, I only have maybe five, ten  
 19 more minutes of questions. We're finishing up here.  
 20 I would like to show the witness Agency Exhibit 28.  
 21 Dr. Garcia, do you recognize this image?  
 22 (The document referred to was  
 23 marked for identification as  
 24 Agency Exhibit No. 28.)  
 25 A I do.

1 Q Okay. And can you describe this image?  
 2 A Sure. This is an image that was included  
 3 with the packet that the Army Corp of Engineers  
 4 referred to us. And what is being depicted here in  
 5 the blue polygon here would be the approximate  
 6 location of the watershed that flows into Deep Creek.  
 7 Q Okay.  
 8 A And this would be approximately 100 acres.  
 9 And this is a TOPO map, basically representing the  
 10 area.  
 11 Q So, the fact that it's 100 acres, what does  
 12 that tell you about the unnamed tributary?  
 13 A Well, it would tell us that it's got enough  
 14 flow coming in from 100 acres that would support  
 15 intermittent, relatively permanent waters.  
 16 MR. MUEHLBERGER: Okay. And Your Honor, may  
 17 I approach the witness to have her mark the exhibit  
 18 where Deep Creek is.  
 19 JUDGE BIRO: Unless you'd like her to come  
 20 stand with you?  
 21 MR. MUEHLBERGER: This is the only image  
 22 that we'll be using for this.  
 23 JUDGE BIRO: Okay.  
 24 BY MR. MUEHLBERGER:  
 25 Q Dr. Garcia, can you identify on the

1 watershed map the location of Deep Creek?  
 2 A Sure.  
 3 Q Can you identify and trace the approximate  
 4 location of the unnamed tributary within the  
 5 watershed? Thank you.  
 6 So, you're just saying that the size of the  
 7 watershed has an impact on what the - on the likely  
 8 type of water that the underlying tributary is?  
 9 A That's correct. It's one of the things that  
 10 we, you know, look at. And, you know, in isolation by  
 11 itself, it's not, you know, what we base our  
 12 determinations on, but it's one of the -- one of the  
 13 -- if you want to call it - one of the resources that  
 14 helps to form our -- analysis of whether this is an --  
 15 or intermittent, ephemeral, perennial tributary.  
 16 Q Okay. Based on your review of this image  
 17 here, what water body does Deep Creek flow into?  
 18 A Deep Creek flows into a river, called the  
 19 North English River.  
 20 Q And, for purposes of jurisdiction, how would  
 21 you characterize the North English River?  
 22 A It's a perennial river, as well.  
 23 Q Can you tell me approximately the distance  
 24 from the unnamed tributary to the North English River?  
 25 A Sure. Well the unnamed tributary flows

1 directly into Deep Creek and from the location where  
 2 it flows into Deep Creek, it's approximately one-third  
 3 of one mile to the North English River.  
 4 Q Okay. So, based on your analysis of the  
 5 aerial images, your analysis of this watershed map,  
 6 the analysis that was provided to you by NRCS, and  
 7 your site visit, what is your determination about the  
 8 jurisdictional status of the unnamed tributary?  
 9 A That both the unnamed tributary and it's  
 10 within stream wetlands are jurisdictional waters of  
 11 the United States.  
 12 MR. MUEHLBERGER: One last document that I'd  
 13 like to show you, Dr. Garcia, is, oh, I'm sorry.  
 14 Complainant moves to enter into evidence Agency  
 15 Exhibit 28- Page 1A.  
 16 MR. McAFEE: No object -- pardon me, no  
 17 objection, Your Honor.  
 18 JUDGE BIRO: Agency Exhibit 28 at 1A is  
 19 admitted into the record.  
 20 MR. MUEHLBERGER: Let's take the whole  
 21 thing. Yeah. Thank you.  
 22 //  
 23 //  
 24 //  
 25 //

1 (The document referred to was  
 2 marked for identification as  
 3 Agency's Exhibit No. 28-1A  
 4 and was received in  
 5 evidence.)  
 6 BY MR. MUEHLBERGER:  
 7 Q I'm now showing the witness Agency Exhibit  
 8 30, Page 1. And would you mind zooming out a little  
 9 bit please, Sara? Dr. Garcia, do you recognize this  
 10 document?  
 11 A I do.  
 12 Q Okay, and what is this document?  
 13 A This is a letter that was sent to C&S  
 14 Enterprise under our Section 308, under the Clean  
 15 Water Act to request information.  
 16 Q Okay. And what type of the information is  
 17 EPA authorized to get under Section 308?  
 18 A We get --  
 19 Q Let me rephrase the question, what was the  
 20 purpose of sending this Clean Water Act 308 request?  
 21 A Well, there were, you know, two purposes.  
 22 We had two questions: we wanted to know what, if any,  
 23 activities have been conducted within the tributary to  
 24 Deep Creek prior to the work that was conducted in  
 25 2015; and we also wanted to get a detailed location of

1 where the tiles were placed within the tributary.  
 2 Q And what was the date of this document, if I  
 3 didn't ask you already?  
 4 A August 15th, 2018.  
 5 Q Why did EPA want to find out if the  
 6 Respondent had done any work in the tributary prior to  
 7 2015?  
 8 A Well, we wanted to know if what we were able  
 9 to observe in aerial images was the same as, you know,  
 10 what -- to see if Mr. Morrow had graded through the  
 11 tributary at any point.  
 12 Q I'm now showing the witness Agency Exhibit  
 13 30, Page 6. Dr. Garcia, do you recognize this  
 14 document?  
 15 A Yes, this would be C&S Enterprise's response  
 16 to our questions.  
 17 Q Okay. And for the record, could you please  
 18 read the paragraph that starts at the beginning,  
 19 'assuming this request is regarding.'  
 20 A Yes. 'Assuming this request is regarding  
 21 activities other than those alleged in Paragraph 15 of  
 22 the Complaint, Respondent's activities within the  
 23 drainageway and Respondent's property prior to July  
 24 2015, were to conduct normal crop farming operations,  
 25 such as tillage, planting and harvesting. In

1 addition, Respondent conducted routine drainage system  
 2 maintenance, which was discussed and done with the  
 3 knowledge of the local NRCS Office.'  
 4 Q So, what did this say to you about  
 5 Respondent's activity within the tributary prior to  
 6 2015?  
 7 A That it confirmed what we had been observing  
 8 in 2015, that he had been grading through the  
 9 tributary on several occasions -- through the lower  
 10 part, I would say. You know, to me, when I look at  
 11 the upper part of the tributary, it looked like it had  
 12 been undisturbed for years.  
 13 Q And does this also confirm what you had  
 14 determined through reviewing historical aerial images?  
 15 A That's correct.  
 16 Q Okay. I'd like to show witness Agency  
 17 Exhibit 30, Page 7. Do you recognize this document?  
 18 A Yes, I do.  
 19 Q Was this part of Respondent's response to  
 20 EPA's 308 request?  
 21 A It was.  
 22 Q Okay. And what was Respondent conveying to  
 23 EPA in this image?  
 24 A Basically showing us the placement of the  
 25 tiles and the tile intakes.

1 Q Okay. And it's kind of hard to make out,  
 2 looking at this image here.  
 3 MR. MUEHLBERGER: So, your Honor, may I  
 4 approach the witness and have her mark this document  
 5 as well?  
 6 JUDGE BIRO: Sure.  
 7 BY MR. MUEHLBERGER:  
 8 Q Dr. Garcia, will you identify, on this image  
 9 here, where Respondent is indicating the presence of  
 10 tiles?  
 11 A So, it would be basically this whole line  
 12 here that's encompassed from the upper -- what I  
 13 believe to be the property line all the way to where  
 14 it meets up with Deep Creek.  
 15 Q Okay. And let the record show that she  
 16 marked this exhibit and wrote the word 'tile' and I'll  
 17 share this with the Court. So, since the Court didn't  
 18 get to see what you were just doing, can you repeat  
 19 what you said about what you just marked?  
 20 A Yes, based on Mr. or C&S Enterprise's  
 21 response to our request for information, he indicated  
 22 that the tile line was from the upper portion of what  
 23 I believe to be the property line, all the way to the  
 24 southern portion where it discharges into Deep Creek.  
 25 All that portion of the tributary had been placed into

1 tiles and filled.  
 2 Q Okay. And Does the location of the tiles as  
 3 marked by the Respondent correspond with the locations  
 4 that you identified in your site visit?  
 5 A Yes, I would say it's in the general  
 6 vicinity.  
 7 Q And the approximate discharge point of the  
 8 tiles that's identified by Respondent in this image,  
 9 would that correspond to the approximate discharge  
 10 point you identified in your site visit?  
 11 A Yes.  
 12 Q And the beginning of the tile on this image,  
 13 would that correspond to where you saw the tile inlets  
 14 when you made your site visit?  
 15 A Correct, approximately, yes.  
 16 MR. MUEHLBERGER: Okay. No further  
 17 questions. Oh, I'm sorry. Complainant would like to  
 18 move this into evidence as Agency Exhibit 30, Page 7A.  
 19 MR. McAFEE: No objection.  
 20 JUDGE BIRO: Okay. Agency Exhibit 30 at 7A  
 21 is admitted into the record.  
 22 //  
 23 //  
 24 //  
 25 //

1 (The document referred to was  
 2 marked for identification as  
 3 Agency Exhibit No. 30-7A  
 4 and was received in  
 5 evidence.)  
 6 MR. MEUHLBERGER: Thank you.  
 7 JUDGE BIRO: Mr. McAfee, we have the  
 8 Courtroom for about one-half hour. Would you like to  
 9 begin your cross?  
 10 MR. McAFEE: Yes. And Your Honor, I may be  
 11 able to finish.  
 12 JUDGE BIRO: Okay.  
 13 CROSS EXAMINATION  
 14 BY MR. McAFEE:  
 15 Q Good afternoon, Dr. Garcia.  
 16 A Good afternoon.  
 17 Q Pardon me. I guess I'd like to start with a  
 18 document that you've seen. You've been present during  
 19 testimony today, correct?  
 20 A That's correct.  
 21 Q Okay. I'd like to go to Agency Exhibit 18,  
 22 and, of course, this is a letter to Mr. Morrow from  
 23 Mr. Schafer, but you're familiar with this letter?  
 24 A Yes, I've seen it before.  
 25 Q Sure. And have you reviewed it prior to

1 today?  
 2 A I have, yes.  
 3 Q And there's been much testimony today  
 4 regarding Paragraph Three and his statements in that  
 5 paragraph about the history and what has occurred. If  
 6 you need to read it, I -- but I assume you're familiar  
 7 with it after being here today?  
 8 A Yes.  
 9 Q Okay. Do you agree with his statements in  
 10 that paragraph, based on your historical review?  
 11 A Yes. I'm sorry, may I add that where he  
 12 characterized the area as a swale, that he was basing  
 13 that on aerial imagery which the resolution wasn't  
 14 good enough to be able to completely see the channel  
 15 as it has been in more recent photographs.  
 16 Q Thank you. Okay, now we need to go back to  
 17 the document, if we could. What sentence are you  
 18 referring to?  
 19 A I'm referring to where he talks -- he  
 20 describes the 1960s as being a channel/swale, which  
 21 was present in the bottom line.  
 22 Q And you do or don't agree with that  
 23 statement?  
 24 A I would say that, given the resolution of  
 25 the imagery, it's hard to make a determination as to

1 whether it was a swale or a channel.  
 2 Q Okay. I don't believe he disagreed with it,  
 3 but I just -- that's what your testimony is? Is that  
 4 right?  
 5 A Correct.  
 6 Q Thank you. Well, now you made me think of  
 7 another question. We'll go back to it. Did you  
 8 review the same imagery he did, or do you know?  
 9 A I would say I probably reviewed some of the  
 10 same imagery, definitely, the 1960s and 1970s. And I'm  
 11 not sure exactly what years he reviewed from 2000 and  
 12 2010, but I pretty much reviewed whatever imagery I  
 13 was able to review.  
 14 Q Did you discuss this paragraph with Mr.  
 15 Schafer?  
 16 A I did not.  
 17 Q Thank you. Now I'd like to go to - and I'll  
 18 put it on the screen -- Agency Exhibit 11, Page 8.  
 19 This is the NRCS wetland determination map?  
 20 A Correct.  
 21 Q Can you tell from this map, first of all as  
 22 I understand it, the total area -- and I can put that  
 23 up -- that's on Agency Exhibit, Page 11. Excuse me.  
 24 Agency Exhibit 11, Page 6 -- I believe this shows the  
 25 total wetland area to be 1.3 acres, is that right?

1 A That's correct.  
 2 Q Okay. So in that 1.3 acres, as I understand  
 3 it, and I'll go back to AX 11, Page 8, and you've  
 4 testified the same that that 1.3 acres would stretch  
 5 all the way from Deep Creek up to the northern edge of  
 6 the C&S property, is that right?  
 7 A From my -- from my review of this wetland  
 8 determination, I would say, yes.  
 9 Q Pardon me?  
 10 A From my review of this NRCS wetland  
 11 determination, I would say, yes.  
 12 Q Okay. Now you've also been on the property  
 13 on your -- May 15, 2018.  
 14 A May 15th, 2018.  
 15 Q Did you notice flags when you were there?  
 16 A I did not.  
 17 Q Okay. So, you didn't see any flags marking  
 18 the area of the wetland?  
 19 A I don't recall seeing the flags.  
 20 Q Okay. Do you have any testimony about the  
 21 width of that wetland area, which NRCS has determined  
 22 is all along, what we're calling "the unnamed  
 23 tributary?"  
 24 A I did not have access to that information.  
 25 Q Okay. Okay. That's fair. Thank you.

1 Okay, Dr. Garcia, I'm going to refer to your  
2 testimony on Agency Exhibit 1, which is your trip  
3 report and the photos.

4 A Okay.

5 Q If need be, I'll find the exact page for  
6 you, but I just have a few questions. You testified,  
7 and it was regarding Photos 39 and 43 (sic), which  
8 were down at the creek -- at Deep Creek, and the tile  
9 flow. And why don't -- in fairness to you, why don't  
10 I put those up?

11 A Yes. That would be helpful.

12 Q Okay. This is one of the photos I wanted to  
13 ask you about and then the other one is Page 53. I  
14 think that's right and that's Page 53 of AX-1. I  
15 believe your testimony was that you noted that the  
16 tile - the flow coming out of those tiles.

17 A Correct.

18 Q Is it -- do you know whether the only water  
19 entering those tiles is what would have been, as you  
20 testified, coming from the unnamed tributary or is  
21 there -- are there other tiles lines entering those  
22 tiles?

23 A I wouldn't be able to tell you. That's one  
24 of the reasons why we request -- send the 308 -- so we  
25 can get a better understanding of what fed into this.

1 But there was nothing indicated within the response  
2 that we received from C&S Enterprise that would show  
3 anything coming into the tiles.

4 Q You didn't get a tile map?

5 A Not with anything that indicated that there  
6 was any other tiles, other than the location of the  
7 tile where -- on the main tributary. So, there was  
8 nothing in the map that we received, that we just  
9 reviewed that would indicate that there were other  
10 tiles lines that were feeding into that channel or  
11 into the that --

12 Q Okay. And I may need a minute. In fairness  
13 to you and me both, I may grab that exhibit and see.  
14 I was thinking that Mr. Morrow had provided, in  
15 addition to the map that you looked at with Mr.  
16 Muehlberger, there was also a tile map with it. But,  
17 I'll look at it. Do you recall?

18 A I don't recall. I would have to look at the  
19 exhibit.

20 Q All right. I may need to step back to my  
21 desk and take a look at that. If there are, in fact,  
22 other tile lines entering that tile, would you --  
23 would it be your testimony that would increase the  
24 tile flow more than what was in the previous surface  
25 water?

1 A It would all depend on whether there was  
2 water going into those tiles.

3 Q Okay. All right, thank you. You also  
4 testified, I believe, kind of in conclusion with Mr.  
5 Muehlberger about your site visit and your photos, et  
6 cetera, that, if I understood you right, rainfall  
7 events would increase the tile flow. Is that right?

8 A That it would increase the flow within the  
9 channel that would be going into the tiles.

10 Q Okay. And do you - do you believe - I'm  
11 trying to understand -- do you believe that's a  
12 significant increase or impacts your conclusions? I'm  
13 not -- I just didn't understand your testimony, so if  
14 you did --.

15 A Yeah, my testimony was that during a  
16 seasonal part of the year at least, there is water  
17 that is being -- groundwater that is basically - you  
18 could describe it as spring water that maintains a  
19 baseflow. But then there's rainfall events, and, you  
20 know, it varies. But you know that the flow within the  
21 channel would be higher during rain events. Not only  
22 would you have the baseflow that's, you know,  
23 basically bubbling up, for better terms, coming in  
24 from the groundwater, but then you also have rainfall  
25 that's falling into the tributary, so you would have

1 more flow during rainfall events.

2 Q And are you talking about since the work was  
3 done or before?

4 A Both.

5 Q Both. Okay. Now since the work was done,  
6 did you see any surface water traveling in the area  
7 where the unnamed tributary had been on your visit?

8 A Not during my visit, no, I did not.

9 Q Okay. Have you seen any photos of any  
10 surface waters?

11 A Yes, I have.

12 Q And what -- do you recall which photos those  
13 were?

14 A I don't recall the exact date, but I know  
15 there was one from earlier this year, where you can  
16 very clearly see that there's been a water that's  
17 reforming on top of where the tributary had been.

18 Q And would that water come from surface  
19 run-off from the surrounding ground -- farm ground?

20 A I would expect that some of it would come  
21 from surface run-off, but I would also expect that  
22 there would be water coming in from the upper portion  
23 of the tributary that's not making it into the tile  
24 inlets during higher flow events.

25 Q Okay. All right, thank you. I believe I

1 just need to step back. Pardon me a minute while I  
 2 review my notes but let me take a look at that agency  
 3 exhibit and. Yeah, all right. Thanks.  
 4 Okay. I don't -- I guess the other part of  
 5 what was provided to you through the Section 308  
 6 request is Page 8 of 10. And I don't - I'm sorry. 10  
 7 of 10 is blank. Isn't it? That's okay. It probably  
 8 is blank. Maybe that's the tile map I'm looking for.  
 9 Anyway, Page 8 of 10. Do you see that?  
 10 A I do.  
 11 Q And that is -- what is that?  
 12 A I would say that would be indicative of the  
 13 two larger corrugated tiles that Mr. Morrow placed  
 14 within the tributary, along with two smaller PVC  
 15 tiles, which is what we observed at the outlet.  
 16 Q And you just took my question or answered my  
 17 question before I asked it. This would be what you  
 18 would see down at Deep Creek, right?  
 19 A That's correct.  
 20 Q Okay. And you've already testified to Page  
 21 7 of 10 about - and I'll show that to you since I  
 22 mentioned it. And I don't believe I have any further  
 23 questions on that. And I'll take a look at my notes.  
 24 MR. McAFEE: I don't have any further  
 25 questions. Thank you.

1 DR. GARCIA: You're welcome.  
 2 MR. McAFEE: Let me make sure I give this  
 3 back to you before I walk away with it.  
 4 MR. MUEHLBERGER: Thanks.  
 5 MR. McAFEE: Is that all? I think that's  
 6 all that there -- all right, thank you.  
 7 REDIRECT EXAMINATION  
 8 BY MR. MUEHLBERGER:  
 9 Q Dr. Garcia, let's take another look at  
 10 Agency Exhibit 18, Page One, that you were just  
 11 talking to Mr. McAfee about, which refers to the  
 12 letter sent by Mr. Schafer of the Corp to Mr. Morrow  
 13 in 2015. And so, again, looking at that third  
 14 paragraph, Mr. Schafer talked about various changes to  
 15 the tributary over his review of historical aerial  
 16 images, is that correct?  
 17 A That's correct.  
 18 Q And, in his observations there, he talks  
 19 about there may have been a swale, a grass waterway.  
 20 He says that, "this appears to have been mechanically  
 21 excavated or graded." And he says that "Between 2000  
 22 to 2010 the right perennial cover was removed from the  
 23 bottom of the channel and the channel appeared to be  
 24 graded as a grass waterway again."  
 25 So, in your understanding of what Mr.

1 Schafer is saying here, whenever the channel was --  
 2 became something other than the tributary, such as a  
 3 grassed waterway or a swale -- was that done through  
 4 natural processes?  
 5 A No. That would have been mechanically done  
 6 with heavy equipment.  
 7 Q And what was your analysis of what had been  
 8 done on the C&S property throughout the years with  
 9 respect to that lower portion of the tributary?  
 10 A It appeared to me that, you know, they had  
 11 tried grading it over several years and that the  
 12 tributary kept cutting back into the channel.  
 13 Q And what does that say to you about the  
 14 nature of the tributary, that it kept, as you say,  
 15 'cutting back?'  
 16 A It would indicate to me, you know, that  
 17 there was enough flow in the tributary that it wasn't  
 18 able to sustain a grass waterway. You know, grass  
 19 waterway is usually more efficient when you have an  
 20 ephemeral tributary. But when you have, you know,  
 21 intermittent tributary with higher flows, it's, you  
 22 know, it basically takes out the attempts to grade it  
 23 into a grass waterway.  
 24 Q So, let's say a water body is converted into  
 25 a grass waterway or a swale or however it was

1 described here by Mr. Schafer, what does that do to  
 2 the jurisdiction of the water?  
 3 A Well, you would have to basically review it,  
 4 but, you know, there would still be flow within the  
 5 grass waterway and so the -- it would still remain a  
 6 tributary.  
 7 Q Because there is flow --  
 8 A Because there is flow going from the  
 9 upstream portions of the tributary into the - into the  
 10 other tributary, in this case, Deep Creek.  
 11 Q Okay. In that same paragraph, the last  
 12 sentence says that, 'In 2011 the waterway appears to  
 13 have been partially excavated into a drainage ditch.'  
 14 And then it doesn't appear that Mr. Schafer references  
 15 any other years in this letter, is that correct?  
 16 A That's correct.  
 17 Q And did you look at images -- aerial images  
 18 past 2011 in making your determinations?  
 19 A Yes, I did.  
 20 Q And did you see any images past 2011 that  
 21 indicated a defined channel?  
 22 A Yes, there were plenty of images that I  
 23 reviewed, especially -- specifically from Pictometry  
 24 where you can clearly see the defined channel  
 25 throughout the tributary, both the upstream and the

1 downstream portion.

2 Q And did you see -- in addition to a defined

3 channel, did you see images past 2011 that showed a

4 connection to Deep Creek?

5 A Yes.

6 Q Okay. If somebody manipulates a tributary

7 and makes it into a grass waterway, can that water

8 return to jurisdiction if -- let me ask this in two

9 parts, and you've already answered the first one.

10 Does converting it to a grass waterway take its

11 jurisdiction?

12 A No.

13 Q Can a stream also become jurisdictional in

14 the sense that it has a defined bed and bank and

15 ordinary high-water mark and connection to another

16 tributary, after it's been converted to a grass

17 waterway?

18 A Yes. So, basically, the Army Corp of

19 Engineers determined -- jurisdictional determinations

20 when they do approve jurisdictional determinations,

21 they are only valid for five years, because conditions

22 can change over the site. So, in this case, if you

23 look at the five years prior to the tributary being

24 tiled and drained, you can very much, clearly see a

25 well-defined bed and bank; and so, we would have

1 jurisdiction under the Clean Water Act.

2 Q I'd like to go back to the response that the

3 Respondent provided in response to EPA's 308 request.

4 This is Agency Exhibit 30, Page 6. You had already

5 testified that Respondent had admitted to tillage

6 planting and harvesting over the unnamed tributary, is

7 that correct?

8 A That's correct.

9 Q Is that kind of activity in keeping with

10 what Mr. Schafer was describing in his letter to Mr.

11 Morrow, that at various times, the tributary had been

12 altered or manipulated?

13 A Correct.

14 Q Okay. And so, there's some confusion here

15 about the images that were received from Respondent to

16 EPA. And I just want to go through these pages pretty

17 quickly from the 308 response. This one you've

18 already testified to, this is Agency Exhibit 30, Page

19 7. And does this represent the approximate locations

20 of the tile that was placed by Respondent?

21 A Yes.

22 Q Okay. Agency Exhibit 30, Page 8. This

23 image you just testified to, you assumed that it had

24 referred to the drainage tiles themselves, is that

25 correct?

1 A Correct.

2 Q An image that was sent by Respondent - also,

3 Agency Exhibit 30, Page 9, shows an invoice in

4 relation to the placement of the tiles in the

5 tributary, is that correct?

6 A That's correct.

7 Q Okay. Dr. Garcia, did you receive any other

8 images or documents from the Respondent in response to

9 the 308 request besides these images that I've just

10 shown you?

11 A I did not.

12 MR. MUEHLBERGER: Okay. No further

13 questions.

14 JUDGE BIRO: Re-cross?

15 MR. McAFEE: Yes, please, Your Honor.

16 RE-CROSS EXAMINATION

17 BY MR. McAFEE:

18 Q Dr. Garcia, you've just testified, in

19 response to Mr. Muehlberger's questions, about

20 basically, it was that paragraph in Mr. Schafer's

21 letter, Agency Exhibit 18, I believe -- and

22 conversion, into a grass waterway, I'll add into a

23 drainageway, or whatever's in that paragraph, and you

24 indicated that that does not eliminate jurisdiction if

25 it was a jurisdictional water, is that correct?

1 A That's correct. And that's why, you know,

2 the jurisdiction is evaluated every five years,

3 because conditions change.

4 Q But what if that conversion occurred, which,

5 according to that paragraph much of it did, prior to

6 1985?

7 A I'm sorry, what's your question?

8 Q My question is, what if it was converted

9 into a grass waterway, into a drainageway of some

10 kind, prior to the Clean Water Act going into effect?

11 A Then it would -- you know, you know -- still

12 a tributary. There wouldn't be, for purposes of farm

13 service or the Farm Bill. It wouldn't be a violation

14 of the Farm Bill.

15 Q But for purposes of the Clean Water Act,

16 when did the Clean Water Act go into effect?

17 A I believe it was the 1970s.

18 Q Okay, if the conversion occurred prior to

19 the Clean Water Act, going into effect in the 1970s,

20 would that change your opinion?

21 A If a conversion took place prior to the

22 1970s and you're evaluating it, you know, from the

23 1970s, yes, it would not be considered a water of the

24 U.S., but we evaluate jurisdiction every five years.

25 Q All right. So, again, to make sure I

1 understand. You're saying if, as I believe his letter  
 2 states, he noted, from historical aerial images, that  
 3 some conversion had taken place or work had been done  
 4 prior to - in the 60s, I believe is one sentence,  
 5 correct?  
 6 A I'm sorry, could you repeat that?  
 7 Q I believe he said some of the work had been  
 8 done in the 1960s, is that correct?  
 9 A I believe so.  
 10 Q And that would be pre-Clean Water Act,  
 11 correct?  
 12 A Correct.  
 13 Q And so, If I understand your testimony  
 14 correct, that wouldn't be -- wouldn't have been a  
 15 drainageway prior to the Clean Water Act going into  
 16 effect.  
 17 A It would have been a tributary prior to the  
 18 Clean Water, you know, Act having into effect. It was  
 19 graded over the years into grass waterway and it would  
 20 convert back to a tributary.  
 21 Q Okay, but if it's maintained as a  
 22 drainageway after it was converted, prior to the Clean  
 23 Water Act going into effect, is it still a  
 24 jurisdictional water?  
 25 A It's maintained as a grass waterway, then it

1 probably would not be.  
 2 Q Okay. Thank you.  
 3 JUDGE BIRO: Dr. Garcia, I have a few  
 4 questions that I'd like to ask, just to clear up a few  
 5 things for me.  
 6 DR. GARCIA: Sure.  
 7 JUDGE BIRO: Under the Clean Water Act, I  
 8 understand that minor drainage of certain farmlands,  
 9 to use them for farming, does not come within the  
 10 Clean Water Act?  
 11 DR. GARCIA: Minor drainage, that's correct.  
 12 JUDGE BIRO: Okay. Would tiling of the  
 13 property, in this case, fall within minor drainage?  
 14 DR. GARCIA: No, it would not.  
 15 JUDGE BIRO: Can you explain to me why?  
 16 DR. GARCIA: I believe the 404-exemptions,  
 17 the F-exemptions, I believe, you are referring to --  
 18 JUDGE BIRO: Mm-hmm.  
 19 DR. GARCIA: -- I believe it specifically  
 20 prohibits the placement of tiles within tributaries.  
 21 JUDGE BIRO: I don't think so. The  
 22 definition of minor drainage, "a discharge of dredged  
 23 or fill material incidental to connecting upland  
 24 drainage facilities to waters of the United States,  
 25 adequate to affect the removal of excess soil moisture

1 from upland property."  
 2 DR. GARCIA: Okay. Yeah. So, in this case,  
 3 this wouldn't be upland, it would have been a  
 4 tributary, so that's why. It wouldn't be exempted.  
 5 JUDGE BIRO: It wouldn't have been an  
 6 upland.  
 7 DR. GARCIA: Correct.  
 8 JUDGE BIRO: Okay, because it's not upland;  
 9 it's a tributary, but not upland.  
 10 DR. GARCIA: That's correct.  
 11 JUDGE BIRO: And that's why it wouldn't be  
 12 minor drainage?  
 13 DR. GARCIA: Right.  
 14 JUDGE BIRO: Okay. Can you say that the  
 15 tiling caused actual harm to the environment?  
 16 DR. GARCIA: Well, given my experience and  
 17 knowledge of these types of systems, by taking away  
 18 1,800 feet, I would say there was definitely harm to  
 19 the environment that took place.  
 20 JUDGE BIRO: And that was, I think you said,  
 21 the chemical changes and aquatic changes --  
 22 DR. GARCIA: That's correct. And the  
 23 availability of nutrients to other aquatic fauna,  
 24 which basically formed the basis of the food chain.  
 25 So, it definitely has an impact.

1 JUDGE BIRO: Is there a way to quantify that  
 2 harm?  
 3 DR. GARCIA: No, it would be very difficult.  
 4 I mean you would have to basically develop several PhD  
 5 analyses of every impact to a tributary.  
 6 JUDGE BIRO: Okay.  
 7 DR. GARCIA: And you would to have had to  
 8 had baseline information prior to the work, so it  
 9 would have required a study and doing a water quality  
 10 analysis probably too and comparing it to after.  
 11 JUDGE BIRO: Okay. So, there's no way to  
 12 determine, with specificity, the exact amount of harm.  
 13 DR. GARCIA: That's correct. It's a general  
 14 statement given what we know about these systems.  
 15 JUDGE BIRO: Okay. Is there any harm to the  
 16 regulatory scheme by not getting the permit?  
 17 DR. GARCIA: Yeah, so it puts -- places  
 18 landowners, who go through the Clean Water Act  
 19 permitting process at a disadvantage, because, you  
 20 know, when individuals apply for a Clean Water Act,  
 21 depending on the complexity, they're required to  
 22 sometimes -- if it's a very complex thing they have to  
 23 hire consultants so there's a cost to them. You know,  
 24 the cost of the permit itself is not very expensive,  
 25 if it's a very complex -- in this case it wouldn't

1 have been a very complex application, so I believe the  
2 landowner would have been capable of applying for the  
3 permit. But, when you lose resources, such as streams  
4 and wetlands, if you had applied for a permit and you  
5 had been granted a permit, you would have had to  
6 mitigate for this. So -- and depending on the  
7 mitigation there definitely would have been a cost  
8 associated. So, that's why we take enforcement  
9 actions to make sure there's a level playing field  
10 between landowners and that landowners go through the  
11 correct procedures for applying for a 404 permit, just  
12 make sure that - you know, you won't be able to  
13 completely replace functions from the system, but at  
14 least you try to mitigate for some of it.

15 JUDGE BIRO: So, there would have been a  
16 certain amount of time and effort that would have gone  
17 into the whole permitting process.

18 DR. GARCIA: Correct.

19 JUDGE BIRO: Plus, the cost of the permit,  
20 which is a few hundred dollars?

21 DR. GARCIA: That's correct.

22 JUDGE BIRO: And, in terms of mitigation, is  
23 there any way to quantify the cost of the mitigation?

24 DR. GARCIA: It would be, you know,  
25 dependent on the -- what type of mitigation, what it

1 cost, and if the landowner had area available within  
2 their property, that they might have been able to, you  
3 know, mitigate within the property -- it obviously  
4 would have been a lot cheaper for them. And --but if  
5 they had had to go to like a -- basically a  
6 streambank, I think Joey Schafer or Joey Shoemaker  
7 referred to it before, where you would buy mitigation  
8 credits depending on the impacts to the resources.  
9 There's definitely a cost, but I don't know what the  
10 per acre cost would be for this area, specifically in  
11 Iowa County. But generally, my experience with other,  
12 you know, mitigation banks within our region that we  
13 are responsible for, you know, they can range anywhere  
14 from \$30,000 to \$50,000 per cost per acre of wetland.

15 JUDGE BIRO: \$30,000 to \$50,000 per acre --

16 DR. GARCIA: That's correct.

17 JUDGE BIRO: -- for credit to mitigate.

18 DR. GARCIA: That's correct.

19 JUDGE BIRO: Could Mr. Morrow mitigate at  
20 this time?

21 DR. GARCIA: If he had a location where -  
22 you know, within his property that he would be able to  
23 - assuming that there were hydric conditions. The  
24 hydric soils were there -- if they had been a farm  
25 wetland or something, where he was able to identify

1 and be able to restore. It would be possible for him  
2 to restore there -- I mean it's possible for him to  
3 restore the area that was tiled. And it's certainly  
4 possible for him to purchase mitigation credits from a  
5 bank.

6 JUDGE BIRO: Do you know what the cost of  
7 restoration would be?

8 DR. GARCIA: It's -- no, I wouldn't be able  
9 to pinpoint it, I'm sorry.

10 JUDGE BIRO: Okay. If he had had to come  
11 back into compliance, would it involve restoration,  
12 and would there be any other activity he would have to  
13 take?

14 DR. GARCIA: If he were to come back into  
15 compliance, you know, for the Food Security Act in  
16 terms of the impacts to the wetland, he would have to  
17 identify property that he might be able to restore -  
18 either that or restore the area itself.

19 JUDGE BIRO: So, he would have to take out  
20 the tiles?

21 DR. GARCIA: That's correct, if -- unless he  
22 could provide another area or purchase credits at a  
23 mitigation bank.

24 JUDGE BIRO: And you don't know how much  
25 that would cost.

1 DR. GARCIA: In terms of purchasing credits?

2 JUDGE BIRO: No, removing the tiles.

3 DR. GARCIA: Oh. I don't think removing the  
4 tiles themselves would be much of a cost, if you have  
5 the equipment you'd just be able to pull them out. In  
6 terms of restoring the area grading back - the area  
7 back to what the tributary and planting hydrophytic  
8 vegetation to try to mimic the area -- I don't have an  
9 idea of how much that would cost. It depends on what  
10 the source of the plants would be, whether he was  
11 actually just seeding it with wetland plant mix or if  
12 he was buying individual plants.

13 JUDGE BIRO: Okay. Were you involved in  
14 calculating the penalty in this case?

15 DR. GARCIA: I was.

16 JUDGE BIRO: How did you arrive at the  
17 \$40,500 proposed penalty?

18 DR. GARCIA: Well, the agency has a Clean  
19 Water Act 404 settlement policy and there are several  
20 factors that we take into consideration. You know, we  
21 take into consideration things such as environmental  
22 harm, time, culpability, you know, deterrent value --  
23 so, it was a matter of looking at all those individual  
24 factors and evaluating what, you know -- the way that  
25 we do it is each of those factors can be from zero to

1 20, so we had to, you know, look at each of the --  
2 evaluate the factors and see where they fit in -- and  
3 then we have a penalty panel, that reviews my  
4 calculations and determines whether it's appropriate,  
5 given the case.

6 JUDGE BIRO: And in calculating that  
7 penalty, did you determine the -- a monetary amount  
8 for harm?

9 DR. GARCIA: I did. I wouldn't be able to  
10 recall what that was without looking at my penalty  
11 calculations.

12 JUDGE BIRO: How about in terms of  
13 culpability? How did you evaluate the culpability?

14 DR. GARCIA: In this case, it would have  
15 been, you know, relatively low compared to other  
16 cases. We don't know that the Respondent has any  
17 history of doing this kind of work before, so it would  
18 have been rated pretty low.

19 JUDGE BIRO: Did you take into account any  
20 ability to pay?

21 DR. GARCIA: I did not. There was nothing  
22 from the Respondent that indicated that there wasn't  
23 ability to pay.

24 JUDGE BIRO: Other than the statutory  
25 factors in the Clean Water Act, major circumstances,

1 JUDGE BIRO: So, it went from about 2015  
2 until --

3 DR. GARCIA: -- Approximately 2017 whenever  
4 it was referred to us, because, I mean, the fill  
5 remained in place.

6 JUDGE BIRO: Okay. And that's when you  
7 calculate the penalty?

8 DR. GARCIA: That's correct.

9 JUDGE BIRO: Okay. Is there any particular  
10 toxicity that comes from the specific PVC pipes and  
11 the tiles that are put in?

12 DR. GARCIA: I -- I wouldn't be able to  
13 address that. I'm not -- I don't know.

14 JUDGE BIRO: Okay. Do you know if the  
15 Respondent received any economic benefit as a result  
16 of this tiling activity?

17 DR. GARCIA: Well, the economic benefit, in  
18 this case, would have been the cost savings of not  
19 having applied for a permit and the, at this -- you  
20 know, at this point, not mitigating. Usually, we  
21 take, you know, whether they are going to mitigate or  
22 not, but that wasn't considered in this case. It was  
23 just basically, the cost of not applying for a permit.  
24 And given that it was minor, we didn't include  
25 consulting fees or anything like that.

1 extent, you know, all those factors in the statue  
2 itself, were there any other factors that you took  
3 into account that weren't specified in the Clean Water  
4 Act?

5 DR. GARCIA: No, our penalty policy is  
6 based, basically, on the Clean Water Act.

7 JUDGE BIRO: Okay. How did you determine,  
8 in calculating the penalty, the length of time of the  
9 violation?

10 DR. GARCIA: Well, it would have been from  
11 when the work was done, which was 2015. So, it would  
12 have been a relatively short period by the time it was  
13 referred to us in terms of, you know, it would have  
14 been about two years.

15 JUDGE BIRO: So, you didn't calculate it  
16 from - you calculated from the day he did the tiling  
17 until the day the Complaint was filed?

18 DR. GARCIA: Yeah. Yes.

19 JUDGE BIRO: Did you go on a day-by-day  
20 basis?

21 DR. GARCIA: No, it's just basically, you  
22 make a determination as to how long the fill has been  
23 in place, you know, most cases, we're able to settle a  
24 lot quicker and we're able to get restoration so that  
25 fill gets taken out and the time is shorter.

1 JUDGE BIRO: Okay. Okay. Mr. Muehlberger,  
2 do you have any questions?

3 MR. MUEHLBERGER: Your Honor, I just have  
4 one additional question based on Mr. McAfee's previous  
5 cross-examination, if I could be allowed to ask that  
6 question?

7 JUDGE BIRO: That's kind of out of the scope  
8 of the questions I just asked.

9 MR. MUEHLBERGER: It relates to the  
10 questions you were asking, as far as drainage --  
11 maintenance of the drainageway.

12 JUDGE BIRO: Okay. I'll grant you leeway,  
13 go ahead.

14 MR. MUEHLBERGER: Thank you. Should I go  
15 back to the podium?

16 JUDGE BIRO: Whatever you'd like.

17 MR. MUEHLBERGER: Okay. Thank you.

18 REDIRECT EXAMINATION

19 BY MR. MUEHLBERGER:

20 Q Dr. Garcia, you told Mr. McAfee that, if the  
21 tributary had been maintained as a drainage waterway  
22 from the 1960s on, that it may not have been a  
23 jurisdictional water, is that correct?

24 A That's correct, assuming that the -- it was  
25 just a maintenance of what had been done prior to the

1 1960s.  
 2 Q Based on your review of the historical  
 3 aerial images, was the waterway maintained as a  
 4 drainage waterway consistently since the 1960s?  
 5 A Not from what I was able to tell. I mean,  
 6 you know, it appeared that, you know, there was some  
 7 grading sometimes. But for the most part, it looked  
 8 like a channel to me.  
 9 MR. MUEHLBERGER: That's all I've got.  
 10 JUDGE BIRO: Okay. Mr. McAfee.  
 11 MR. McAFEE: I do have one question based on  
 12 the environmental issue, if you wouldn't mind. I'm  
 13 sorry. And I do need to use this, if I could, Your  
 14 Honor. I apologize.  
 15 RE-CROSS EXAMINATION  
 16 BY MR. McAFEE:  
 17 Q Ms. Garcia, going to AX-1, Page 25 of 54,  
 18 I'm going to turn it here, if I may. And your log  
 19 notes an oily sheen within the water. Do you remember  
 20 that?  
 21 A Yes, I do.  
 22 Q And I'm going to turn it over to Photo 14,  
 23 which is Page 26 of AX-1, and you made the same  
 24 comment there - another view of the oily sheen. What  
 25 -- and this, of course, is up in the area that was not

1 disturbed by Mr. Morrow. What are you referring to  
 2 here?  
 3 A Well, it's kind of hard to tell from the  
 4 photograph, but  
 5 Q Oh, sorry.  
 6 A It would be -- if I could point to it, I  
 7 guess. I'll just point to it. I was referring to  
 8 this general area, where you can see an oily sheen.  
 9 And it's, you know, it was more obvious during my site  
 10 visit.  
 11 Q I guess my question is, are you suggesting  
 12 anything Mr. Morrow has done has caused that?  
 13 A No, actually an oil sheen -- an oily sheen  
 14 within the tributary is, in these kinds of systems  
 15 where's their groundwater - what do you call it --  
 16 groundwater source, it's actually caused by oxidizing  
 17 -- by iron oxidizing bacteria, those are actually  
 18 their cells from decomposed -- when they get  
 19 decomposed basically. So, that's what you're seeing  
 20 there.  
 21 Q Is it an indication of low water flow?  
 22 A No, it's not.  
 23 Q So, high waterflow, you would also see the  
 24 oily sheen?  
 25 A Yes. Potentially, yes. You know, you don't

1 see it all the time, but, you know, in this case, I  
 2 did see it.  
 3 Q Okay. Thank you.  
 4 MR. McAFEE: I don't feel the need to have  
 5 that preserved where she circled that. I think it's  
 6 apparent, from her description on Page 6 of AX-1,  
 7 along with this. So unless someone else sees the need  
 8 for that. Thank you.  
 9 JUDGE BIRO: Okay. Thank you. Thank you,  
 10 Ms. Garcia, you may step down.  
 11 (Witness excused.)  
 12 It's after 5:00. Can we recess for tonight,  
 13 and what time would you be available to begin again  
 14 tomorrow?  
 15 Mr. McAFEE: Pardon me?  
 16 MR. MUEHLBERGER: Can we start at 9:00?  
 17 JUDGE BIRO: Can we start at 9:00 again?  
 18 MR. MUEHLBERGER: Is that okay with you?  
 19 JUDGE BIRO: We can start earlier. The  
 20 courthouse only opens at 8:00, so --  
 21 MR. MUEHLBERGER: And I may be being  
 22 ambitious here, but I'm thinking we could possibly be  
 23 done tomorrow with counsel opposite's efforts to --  
 24 JUDGE BIRO: Do you have any more witnesses  
 25 you intend to call?

1 MR. MUEHLBERGER: We have one more in the  
 2 morning, that I anticipate will take, you know, maybe  
 3 two hours. And then I believe he is going to call his  
 4 client and Mr. Hennessee, Dr. Hennessee, and then  
 5 MR. McAFEE: That's it. Yes.  
 6 MR. MUEHLBERGER: So, we're going to be  
 7 quick without hurrying, but we'll try to get done.  
 8 JUDGE BIRO: Okay, that'd be great. That'd  
 9 be really great. Okay, let's --  
 10 MR. McAFEE: Your Honor, I have a question  
 11 regarding witnesses tomorrow. The Prehearing  
 12 Conference Summary that Mr. Barnwell provided is -- I  
 13 just want to make sure I understand -- it says that,  
 14 regarding sequestering of witnesses, that experts are  
 15 allowed to remain in the courtroom. So, like Mr.  
 16 Hennessee is our expert, could he be here tomorrow  
 17 during Mr. Stokely's --  
 18 JUDGE BIRO: Yes, absolutely.  
 19 MR. McAFEE: Okay, just wanted to clarify  
 20 that, Your Honor. Thank you.  
 21 JUDGE BIRO: I don't know if that would  
 22 affect his testimony in any way, but he can certainly  
 23 come in and listen to it. No problem.  
 24 MR. McAFEE: Thank you.  
 25 JUDGE BIRO: Okay, so we'll stand in recess

1 until 9:00 a.m. tomorrow.  
2 (Whereupon, at 5:10 p.m., the hearing in the  
3 above-entitled matter adjourned, to reconvene at 9:00  
4 a.m. the following day, Wednesday, October 3, 2018.)  
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REPORTER'S CERTIFICATE

DOCKET NO.: CWA-07-2018-0095  
CASE TITLE: C&S Enterprise, LLC  
HEARING DATE: October 2, 2018  
LOCATION: Des Moines, Iowa

I hereby certify that the proceedings and evidence are contained fully and accurately on the tapes and notes reported by me at the hearing in the above case before the United States Environmental Protection Agency, Office of Administrative Law Judges.

Date: October 2, 2018

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