Park Avenue Inn, Chippewa Falls, Wisconsin.

The continued deposition of Dan Carthel

Appearing for Sawyer County: Joseph P. Wright, Stafford Rosenbaum, LLP.

Appearing for the Plaintiff: Lauren L. Azar, Michael, Best & Friedrich

Appearing for the Witness: James Kirschnik

ALSO PRESENT: James Hausman

July 6, 2004

MS. AZAR: Just do a statement that the witness -- this is a continuing deposition. He continues to be under oath; and you understand that, Mr. Carthel. I'm going to pronounce it right today.

THE WITNESS: You did good.

BY MS. AZAR:

Q. First of all, can I see that, Jim? We were just handed the corrections from the deposition, the errata sheet; and you didn't have any corrections. Correct?

A. No.

Q. Is there any clarifications that you want to make? Did you have a chance to read the deposition transcript?

A. Yes.

Q. Any clarifications you wanted to make?

A. Well, I would like to clarify the questions about, towards the end when I was getting really, really tired, about slope and

taking out this debris dam and stuff. I guess -- I just want to make it clear that I understand that in gradually varied flow that when you increase the discharge, you're going to increase the slope; and, if you increase the friction, you're going to increase the slope; and, if you increase the area, you'll decrease the slope. So that that would be my clarification, there.

Q. And, besides that, any other clarifications?

A. Ahm, no, none that I can think of at this time. I guess I could -- ah -- no, I'm -- I'm good.

Q. So you're comfortable with your testimony?

A. Sure.

Q. During the last deposition on Exhibits 1 and 3, you made markings and I failed to ask you to initial those markings and I'm going to ask you to do that right now with this blue pen.

A. Okay.

Q. On Exhibit 3, I believe that's your mark if you recall that; if not, I can show you where in the deposition transcript.

A. Pink dot being the culverts on the -- the culvert, on McClain Road, leading to the diversion structure.

Q. If you could just put your initials beside there.

A. Okay. Done.

Q. Any other markings there on Exhibit 3?

A. I don't think so. Well --

MR. KIRSCHNIK: That you --

THE WITNESS: Looks like this channel. The diversion channel downstream of the culvert through McClain Road is marked, highlighted. I don't know that I marked it. But that's -- that's what it is, I believe, there. So --.

BY MS. AZAR:

Q. Just go ahead and initial that, if you're comfortable with that.

A. Okay.

Q. Let's turn to Exhibit No. 1.

A. Okay.

Q. If you could do the same thing, look at your markings that you made during your last deposition and initial those as well.

A. Okay. Well, we've got a red line, which is the approximate dredged channel downstream of the Little Round Lake Dam. I'll initial that. And then there's a blue line, which is a continuation downstream of the North Channel, which is a -- which is a marshy channel. It's a channel that is bounded by reeds and such and it leads to Osprey Lake. I'll initial that. And then there's a -- what we call the Southern Channel just highlighted in yellow which leads from Osprey Lake to the CTH NN culverts.

Q. Thank you.

A. Hm-hm.

Q. You had made other markings on some documents you had highlighted things, but I don't think it's critical that you initial those, so I just wanted to make sure that you initialed

the maps.

The instructions that I gave during the last deposition are still standing. Do you recall those, as far as if you don't understand a question, stop me and ask me to clarify it?

A. Okay.

Q. And don't guess when answering unless I ask you to guess and ensure all answers are verbal so that the court reporter can hear them.

A. Okay.

Q. And let's try not to speak over each other. We both had challenges with that the last time. Wasn't today bad, but --

A. Yeah, we did good.

Q. Also, at the last deposition, you hadn't yet been retained as an expert for Sawyer County but were in a dialogue with regards to that. Have you now been retained as an expert for Sawyer County?

A. No, I haven't.

Q. Have you talked with them about this?

A. No, I haven't.

Q. Have you talked with Rob Montgomery?

A. No, I haven't.

Q. Have you talked with anybody from Rob Montgomery's firm?

A. Are you talking about since the last time we met?

Q. Period.

A. Oh, yes, I've talked to Rob Montgomery, yes.

Q. In relation to this case?

A. Yes.

Q. What were your discussions about?

A. About modeling the -- modeling 100-year flood elevation, we talked about that a little bit. And --

Q. And, when you said you discussed the modeling the 100-year flood elevation, were you discussing with him how you were conducting that modeling?

A. That's right.

Q. Did he give you any suggestions on how to do it?

A. Well, yeah, he suggested using the unsteady flow in the HEC-RAS model.

Q. And did you do that?

A. Not yet; I'm going to.

Q. What else did you discuss with Rob Montgomery?

A. Hm, I think we talked somewhat about the different datums there -- that exist and --

Q. Anything else?

A. I can't -- I can't recall anything else really.

Q. Did you speak with anybody else from Rob's firm?

A. He had -- I don't remember his name. But it was one of his employees or associates.

Q. Was with him?

A. Yeah.

Q. What documents did you review in preparation for today?

A. None.

Q. And did you talk to anybody after your last deposition with regards to your deposition?

A. Well, I was out doing some field work with Heather Harrington last week so I spoke with her.

Q. About the deposition?

A. Well, in -- in general terms. Yeah.

Q. What were you discussing?

A. Oh, about how -- it wasn't a very pleasant experience, a long day and I didn't feel well, and -- I get extremely exhausted.

Q. Did you talk to her about any of the questions that were asked?

A. Hm, no, not particularly, because, you know, because I knew you'd ask me this, so -- no. I -- tried not to, no.

Q. Did you talk with anybody else about the deposition?

A. Hm, no.

Q. And are you being paid by anybody to attend this deposition?

A. No. Other than the witness fee.

Q. That whopping --

A. $16.

Q. I'd like to go back to what you started off with in this deposition, and we're going to pull out the colored markers right away. You clarified a point that you made at the very end of your last deposition, and we were talking about the drop in

elevation between Osprey Lake and County Highway NN?

A. Hm-hm .

Q. And we were talking about how the elevations would be affected when a beaver dam was there versus when a beaver dam was not there. Do you recall that?

A. Yes.

Q. And what I'd like you to do right now because I think one of the ways in which I think we can talk about this perhaps more easily is to draw three different points on this blank sheet of paper that I'm about to give you. The first point would be Osprey Lake, the termination point would be County Highway NN and the intermediary point would be where the beaver dam may or may not be. Would you draw that on that sheet for me? That way we'll be able to discuss it.

MR. WRIGHT: In what form? Do you mean points?

MS. AZAR: Three points with a line.

THE WITNESS: And what would that line -- what do they represent?

BY MS. AZAR:

Q. What I want to do is I want to just be able to understand your answer. So I'm going to walk you through this if I can so.

A. Yeah, okay.

Q. The first point, the starting point would be Osprey Lake. You can draw it anyway you want. Okay. The ending point is going to be County Highway NN.

A. Do you want me to draw a profile? Is that what you're after

here?

Q. Well, let me tell you how -- where I'm going to go with this; and you can decide how to draw it. Okay?

A. Yes.

Q. We're going to have points A, B and C: A being the starting point, C being the termination point and B being the place where there may or may not be a beaver dam. And we want to talk about the drop in the elevation between A and C when there is a beaver dam at B and when there's not a beaver dam at B.

A. Okay.

Q. Okay?

A. Well --

Q. And, if you want a new sheet, I have plenty.

A. Well, this is -- this is not to scale. Now, of course -- this picture changes with -- with flows.

Q. And, if you could mark A, B and C on that, A being Osprey Lake or you can just put Osprey Lake if you'd like. And the culverts at NN. And the location -- approximate location of where the beaver dam may or may not be.

A. It's still there. I was just there last week.

Q. Great. Okay. So the questions that we were getting to at the very end of your last deposition is the drop in elevation between Osprey Lake and NN and whether or not the amount of that drop diminishes or increases when there's a debris dam there, all else being equal.

MR. KIRSCHNIK: The amount of the drop?

MS. AZAR: Correct.

MR. WRIGHT: I'm sorry. Which drop are you referring to?

MS. AZAR: The drop in elevation between Osprey Lake and NN.

MR. WRIGHT: Thank you.

THE WITNESS: What is the question?

BY MS. AZAR:

Q. Periodically, the drop in elevation between Osprey Lake and NN has been measured. Correct?

A. Right. Hm-hm.

Q. And that drop fluctuates over time; correct?

A. Yes.

Q. I'm trying to understand how a debris dam could affect that drop in elevation.

A. Between Osprey Lake and CTH NN?

Q. Correct.

A. Okay.

Q. So, all else being equal, tell me how the drop in elevation from Osprey Lake and NN will be affected by a debris dam.

MR. WRIGHT: Object to the form and foundation for the question. Go ahead and answer.

MR. KIRSCHNIK: You can answer.

THE WITNESS: Yeah. Ahm -- I'd like to draw another picture, if I could.

BY MS. AZAR:

Q. Would you like another piece of paper or --

A. Yeah, sure. Well, the debris dam creates what's called a M-1 back water curve and so I think, depending on the flow or the discharge, the magnitude of that discharge, it would -- it would be possible that the debris dam could -- could create -- could control the elevation of Osprey Lake. The M-1 curve is -- it's horizontal at the -- at the debris dam and then it becomes tangent with the normal slope or the normal depth line of the channel, upstream of the debris dam. The channel upstream of the debris dam may be of such width and such size that it is just -- it's at the same pond elevation as Osprey Lake. What else can I --

Q. So I'd like to read back -- have the question read back.

(The pending question was read.)

THE WITNESS: How the lake elevation -- No, how the drop -- was it the drop in elevation?

MS. AZAR: The drop in elevation.

THE WITNESS: The drop in elevation. Well, the elevation at the upstream end of the culverts should not be affected because that's determined by what's happening downstream of the culverts, so the headwater of the culverts has nothing to do with the debris dam. What the debris dam may affect is the elevation upstream on Osprey Lake. So the debris dam would affect the drop by increasing the elevation of Osprey Lake.

Q. So, if the elevation of Osprey Lake is increased, while the

elevation at NN remains the same --

A. Right.

Q. -- the drop increases?

A. Right.

Q. So the answer to that question that she just read back is the drop would increase if a debris dam is there and all he also is -- let me strike that.

The drop in elevation between Osprey Lake and the culverts in NN will increase with a debris -- debris dam, all else being equal; correct?

MR. WRIGHT: Object to the form and foundation. Go ahead and answer.

MS. AZAR: Go ahead and answer.

THE WITNESS: Could you ask me again, please?

MS. AZAR: Could you read that back?

(The pending question was read.)

THE WITNESS: If there was enough discharge, that may not be the case; then the debris dam -- the debris dam became submerged; it would just act as a sill and the culverts at CTH NN would be submerged in the debris dam. I mean if the flow is large enough for that to occur.

BY MS. AZAR:

Q. So, if the debris dam is not topped -- I'm sorry; if it does not -- if it's not submerged?

A. Submerged. Significantly submerged, right.

Q. Then the answer to the question is what?

MR. WRIGHT: Same objections.

THE WITNESS: Maybe. It also depends on the -- the characteristics of the upstream channel, upstream of the debris dam.

BY MS. AZAR:

Q. What characteristics?

A. Well, if it was -- if that channel was choked down enough, then that -- the M-1 curve would become tangent with the normal depth line of that channel prior to going upstream to the -- to the elevation of Osprey Lake. That doesn't make -- sorry. That's not very clear. Now, the -- the back water curve created by the debris dam could become tangent with the normal depth curve of the channel between Osprey Lake and the debris dam prior to the -- the pool elevation.

Q. Have you done cross sections in that area?

A. That is going to -- that is in process, in the area between the debris dam and Osprey Lake. I met with Heather last week, and she's taking care of that.

Q. So you currently don't have enough information then about the cross sections to answer the question? Yes or no?

A. Yes.

Q. The first drawing you did would you mark as No. 1 and the second drawing would you mark as No. 2 and could we have those marked as exhibits. The same exhibit is just fine. So just put

a No. 1 here and a No. 2 there and if you could initial that, both of them. Why don't you put a date on it as well?

THE WITNESS: What is it?

MR. KIRSCHNIK: 6th.

MS. AZAR: Darn good question.

THE WITNESS: I would just like to say these are cartoons.

MS. AZAR: Yes, one exhibit is just fine.

THE WITNESS: Could I get copies of those cartoons?

MS. AZAR: Yeah, they're going to be sent to your counsel so.

THE WITNESS: Okay.

MS. AZAR: All right. I'd now like to turn --

THE WITNESS: Excuse me. Are all the exhibits going to be sent my counsel?

MS. AZAR: Yes, he already should have copies of --

MS. AZAR: You didn't?

MR. KIRSCHNIK: I didn't get any.

MS. AZAR: Oh, that's right. Because you didn't request a transcript. Can we deal with that afterwards?

MR. KIRSCHNIK: Sure.

MS. AZAR: We'll make sure that you get documents..

BY MS. AZAR:

Q. I'd like to turn to Exhibit No. 1, which you indicated is a map that was prepared at your direction?

A. Hm-hm.

Q. And the debris dam is marked on this map, the original map

itself; and I want to confirm that, which de -- strike that. I want to confirm which debris dam you believe is the controlling structure on Osprey Creek. What I'd ask you to do is take this red marker. Why don't you circle what you believe is the controlling structure on Osprey Creek?

A. Well, the whole channel is -- is control -- there's two -- well, actually, three areas that were identified as where drops were occurring, the most downstream one being the -- you know, the largest in size and what the -- with the largest drop in it is the one I called it beaver, slash, debris dam. That one, yeah, it may or may not submerge the other beaver dam that's further upstream. Then there's -- well, and then in-between there is the bulrushes which creates a significant resistance to flow. So I guess I would have to say, at this time, the whole channel is a control for Osprey Lake.

Q. You indicated in the past that you were able to walk on the debris dam?

A. Hm-hm.

Q. Is that correct?

A. Yeah.

Q. And that was --

MR. WRIGHT: Object to the form of the question. Could you specify which one you're talking about now? You just mentioned two different ones.

MS. AZAR: Just so you know, there's a debris dam and we're

always talking about the same thing when we talk about a debris dam. It's marked on the map as a debris dam. There's bulrushes and there is a beaver dam; correct?

THE WITNESS: I believe it's beaver dam, yeah.

BY MS. AZAR:

Q. Why don't you mark this as a beaver dam so that we understand?

A. Have you got a pen?

Q. Which is -- here you go.

A. Well, it says beaver dam right on the picture. Beaver dam and Osprey Lake outlet.

Q. Why don't you just write in right there beaver dam in quotations and I initial that? And then on the next one would you please mark bulrushes in, quotation marks, and then initial that?

A. Hm-hm.

Q. And, just to be clear, why don't you put quotation marks around debris dam down below and initial that?

Q. So --

A. Beaver, slash, debris dam.

Q. I think it actually would be helpful if we continue to refer to this third one as just debris dam rather than the beaver slash debris dam like we did in the last deposition; do you understand that?

A. Hm-hm. I do.

Q. Now, let's go back to the question. In the past, you indicated that you were able to walk across the debris dam; correct?

A. Hm-hm.

Q. And I believe that was in October of 2002?

A. Right.

Q. And you indicated that you were just back there recently?

A. Right. I was. Hm-hm.

Q. When was that?

A. Oh, I believe it was Wednesday last week.

Q. And were you still able to walk across the debris dam?

A. Ahm, not across the entire thing.

Q. So has --

A. Not without getting wet feet. Yeah.

Q. Has the character of the debris dam changed between October 2002 and last Wednesday?

A. There's a portion I think that is cleaned out.

MR. WRIGHT: I'm sorry. I couldn't hear you.

THE WITNESS: There's a portion of the channel that -- portion of the of the debris dam that appeared to me to be cleaned out.

MR. WRIGHT: Thank you.

BY MS. AZAR:

Q. So water is running freely through that portion?

A. Fairly freely. There's a big -- there's a big log across that -- floating log across the -- a portion of it. That used to

have -- that used to have a lot of other debris hung up by that log. Ah, but now that's -- that's cleaner, so there's flow under that -- under that log.

Q. And I'd like to go back to the October 2002 trip that you made?

A. Hm-hm.

Q. Was the debris dam -- did it -- strike that. Did the debris dam extend across the entire --

A. From edge of water to edge one of water?

Q. Yeah, channel. I don't know if we want to call it a channel or not.

A. Yeah, from edge of water to edge of water, sure.

Q. It did?

A. Yes. And there's water flowing over the top like in a waterfall fashion.

Q. Would anybody --

A. At -- not a -- not continuously over the top but in different spots it was flowing over.

Q. Were you in a canoe that day?

A. Yes.

Q. Would you be able to canoe over top in the debris dam in 2002?

A. No. No.

Q. You'd be able to, you know, Portage it.

Q. Is water also running under the -- Let's -- I'm sorry. Let

me talk, first of all, about October 2002?

A. Okay.

Q. Was water also running under the debris dam?

A. I would think it was, yeah, you know, because it's not -- it's not a concrete dam. It's porous.

Q. In the trip you made last week, were you also in a canoe?

A. Yes.

Q. Were you able to canoe through it?

A. No, we weren't in a canoe at that location, no. No. We just walked down to it from World's End Road.

Q. I believe that takes care of it. Okay. Have you actually been on Osprey Lake versus on the shores of Osprey Lake, have you?

A. Canoed it?

Q. Hm-hm.

A. Yes.

Q. And when was that?

A. Oh, that -- October 19th, 2002. We put in at the boat landing. World's End Road. And then canoed down to the debris dam.

Q. All right. Would you please describe all of the work that you've conducted for Sawyer County? Just -- in general terms. You don't have to get specific right now?

A. Well, I did some work on the Brune ^ sp Dam -- or, I'm sorry, not the Brune ^ sp Dam, the -- when it was the Lorretta

Dam.

Q. What sort of work?

A. Ah, some repair design. They got an order to lower the lake elevation because of some problems with the dam, with the stoplogs; and then there were some concrete repairs that needed to be made so I put together a set of plans.

Q. When was that?

A. Oh, that was -- hmm -- I'd be guessing. Do you want me to guess?

Q. Let's start with the year.

A. Well, I -- I'm guessing 2001.

Q. Okay. Thank you.

A. Yeah.

Q. What other work have you done for Sawyer County?

A. Well, this particular study, water-level study, this investigation of Osprey Lake.

Q. What else?

A. Ahm, do you want me to -- just work for NWBE who was working for --

Q. I was going to get to that next; but, if you want to add that in?

A. Yeah. Well, then that -- this hundred-year flood elevations are -- the hydrology for Billy Boy Dam which also incorporates this Lake -- these lakes, Little Round, Round and Osprey.

Q. What else?

A. Oh, I designed some temporary stoplogs for NWBE when they were working on the Price Dam, P-r-i-c-e. That's all I can recall.

Q. Do you have a primary contact with the County or do you work with a number of different people there?

A. Well, I guess it's been Dale Olson and Jan Eck.

Q. And has that been true for all of the work we just -- you just enumerated?

A. For the work I did directly for Sawyer County.

Q. And for the work that you did with NWBE, did you have a contact with the County or did you report directly to NWBE?

A. Well, you know, I should say -- I think that the Lorretta Dam project was through NWBE, also; that I was subcontractor. I'm guessing. I can't remember. It could be -- it could have been either way. The same contacts, yeah: Dale Olson and Jan Eck and the water conservation committee.

Q. And the committee itself?

A. Yes.

Q. Are there members of the committee that you had more contact with than others?

A. No, not -- not really, no. Ahm, other than meeting at -- you know, meetings -- at regular Board meetings, ah, I really have no reason to talk to the -- to the -- Board members.

Q. So you haven't had any discussions with any of the land and water conservation committee members outside of committee

meetings?

A. Any discussions?

Q. Any discussions with regards to the work that you were doing for the County.

A. No. Not -- No.

Q. I'd like to turn our attention to the flood-plain study that you're currently working on.

A. Well, the excep -- wait a minute. I want to go back to that.

The exception to that is I did meet with one of the committee members -- maybe Jim can help me out with the name. Lives on Hinton Bay.

MR. HAUSMAN: Hirschfeld.

THE WITNESS: Yeah, Mr. Hirschfeld. He was going to show me some illegal water sources he thought, but I met with him that day and he was going to take me out in his boat, but he thought the water was too choppy to go out so -- and he had some other issues to take care of so --

BY MS. AZAR:

Q. Anybody else on the committee that you've met with --

A. No.

Q. -- or talked to? Okay. Let's turn to the flood-plain study.

A. Okay.

Q. When is the last time that the Round Lake area, so the area

located on this map, has had the hundred-year flood?

A. When is the last time it had a hundred-year flood?

Q. Hm-hm?

A. I don't know.

Q. Was -- has there been a hundred-year flood in the last five years?

A. Hm -- I don't believe so.

Q. Is the hundred-year flood event the same as the hundred-year storm event?

A. No.

Q. Has there been a hundred-year storm event in the last five years?

A. I don't believe so.

Q. And which is used in developing the flood-plain study, the hundred-year flood event or the hundred-year storm event?

A. What is used in developing what?

Q. You're currently conducting a flood-plain analysis; correct?

A. Right.

Q. And does that analyze the hundred-year flood event or this hundred-year storm event?

A. It uses 100-year precipitation depth. And I use the -- data from the Midwest Climate Center for the precipitation depth.

Q. During the last deposition, you indicated that the preliminary flood plain for Round and Little Round Lakes is 1346.13. Correct? I can show you on I believe it is Exhibit 4.

Is that right?

A. Yeah. That was the draft. Yes, a preliminary.

Q. Is that still accurate?

A. There has -- I have done -- I haven't changed this at all yet.

Q. What would 1346.13 be in Round Lake datum?

A. I don't know offhand. I need to look at some other -- I have an equation on one of these exhibits. Maybe.

MS. AZAR: I might be able to help you with that.

THE WITNESS: Yeah, here's one. Okay. Let me use my calculator. 1346.13 minus 1267.75 equals 78.38 local datum.

BY MS. AZAR:

Q. And you're using a conversion of 1267.75 correct?

A. Correct.

Q. Where did you get that number?

A. That was established by David Rider -- Rieder, R-i-e-d-e-r. He was a registered land surveyor hired by Mr. Hausman.

Q. With regards to Exhibit No. 4, you indicated that that has not changed yet. Do you expect Exhibit 4 to change?

A. Yes.

Q. So you're still conducting further analysis?

A. Right.

Q. When do you expect that to be completed?

A. I don't know.

Q. What sort of changes are you making to the model?

A. I'm not making any changes to the model right now.

Q. Are you making any changes to the inputs to the model?

A. Ah, will I be? When I get some -- NWEB is surveying the -- the channels. Ahm, being the marsh channels. That's a big job, so -- they're getting right on it. It's going to take some time.

Q. Can you be more specific as to what they're surveying?

A. Yes. The -- Northern Channel that's marked blue on the Exhibit No. 1.

Q. How many cross sections do you expect them to do?

A. They're going to -- they're going to topal ^ sp it. I told them that I wanted cross sections at every change and width between the bulrushes. I don't know how many. I would expect around a dozen; I don't know.

And then also the yellow Southern Channel, the Southern Channel marked with the yellow highlighter on Exhibit No. 1. They're going to attempt to survey that as well.

Q. And do you know how many cross sections they are going to attempt to do on the Southern Channel or -- also called Osprey Creek?

A. Yeah, again, I'm guessing a dozen more.

Q. So what's been marked as Exhibit 10, is this now a final document or will this also change?

A. That could change.

Q. Did you give a copy of your flood-plain analysis to Rob Montgomery?

A. No.

Q. Did you give it to NWBE?

A. No. Did you give a copy to Matt Dregne, of the -- the la -- the electronic files?

Q. I sent that right up to Nancy Dent. So -- I don't even have a copy.

In the HEC-RAS model that you ran and produced to us, you modeled the debris dam and the Carlson Road dam as a change in ground elevation. Correct?

A. The debris dam and the Carlson Road? I modeled the debris dam as a -- I tried to -- Well, we surveyed the top of it which is a very -- you know, I mean, we had a very irregular surface.

Q. Hm-hm?

A. So we just took random shots across the top of this thing. So now I've got this zigzaggy line and then I build -- I fit that then based on a -- well, I have an existing surveyed cross section and then I have what's called the modeled cross section; and, basically, what I did is I put horizontal lines across it that would represent say a water surface. Okay. And then I summed the horizontal distances or openings in the debris dam at that elevation.

Q. Would it have been --

A. And then --

Q. I'm sorry.

A. I compiled that to -- at various elevations to produce a

modeled cross section.

Q. Would it have been more accurate to model it as an in-line weir box culvert?

A. Box culvert. Well, it's not a very regular weir, so, no, no I don't believe it would be.

Q. Let's go to Carlson Road Dam. Did you model that as a change in ground elevation?

A. I think that I have that in the -- in the HEC-RAS model, but I didn't. I only pulled the data off downstream of the stoplogs and then I input that data into a routine to compute the headwater, separate calculation to determine the headwater upstream of the stoplogs, considering submergence.

Q. Would it have been more accurate to model that as an in-line weir box culvert?

A. It may be appropriate, yes.

Q. What is the typical exit loss from culverts?

MR. WRIGHT: Object to the form and foundation.

THE WITNESS: Are you talking about a co-efficient of exit loss? Coefficient applied to the velocity head?

MS. AZAR: Yes.

ONERIGHT: Same objections.

THE WITNESS: Hm-hm, oh, like --

BY MS. AZAR:

Q. Let me back up.

A. Like a .5 times the velocity head.

Q. You, I believe, used 0.1 at County Highway NN?

A. Okay. I don't recall.

Q. Do you remember why you used 0.1?

A. Actually, 0.5 may be a little high. 0.23. Well, no. 0.5. Yeah. What I was trying to do with that model was to hit some target elevations, so I was running like 20 CFS which was an observed flow and strike to hit some target elevations, and so those files are working files. So -- you know, all is -- I'm trying to do -- I'm playing around with it trying to see what I need to do to try to duplicate observed conditions; and I may have done -- done that just to try to force it to -- to give me some elevations, water surface elevations that I've been trying to target, trying to calibrate the model.

Q. That was going to be my next question.

A. Doesn't mean that I'm -- that that will stay that way.

Q. On Exhibit 3, you indicated that you used MapTech ^ sp to calculate the --

A. Right.

Q. -- the watershed for your flood-plain analysis; correct?

A. Right.

Q. I'd like to point out a few different areas and talk to you about why those areas were excluded from the watershed?

A. Okay.

Q. Okay. And, when I point them out, what I'd like you to do is --

A. This is another item that I discussed with Heather last week, and Heather Harrington of NWBE, she's going to investigate some of the culverts that were brought up at the last -- at our last deposition meeting.

Q. See if anything was missed. But go ahead. This may also help if you could take your blue marker, and I'm going to talk to you about areas of low depression that are currently located outside of the demarcation lines of the watershed. Do you understand that?

A. Yes.

Q. I hope I get these correct. There's currently depression in this area. Would you mark that with the blue marker?

A. Yeah. Mark -- the depression. Okay. This is a pretty thick pen. Have you got something --

MS. AZAR: You can just circle it, if you want. What do you want to -- take your pick.

THE WITNESS: Well, I'm going to obscure the -- the highlighter would be good.

MS. AZAR: There you go.

THE WITNESS: Have you got a blue one?

MS. AZAR: I do. Hold on. There you go.

THE WITNESS: This one's too thick.

MS. AZAR: It's too thick? It's smashed. Green. This one's really tight.

THE WITNESS: Yeah. Okay. All right. Okay. There's a

depression, yes. Hm-hm.

BY MS. AZAR:

Q. And I'd like you to initial that and date it as well.

A. What am I -- It's the 6th.

Q. There's another depression located right in this area; is that correct?

A. Yeah, there's one right here.

Q. Would you mark that and initial and date it?

MR. WRIGHT: Off the record for just a second.

(Discussion off the record.)

THE WITNESS: Do you want all the depressions marked?

MS. AZAR: Well --

MR. KIRSCHNIK: She'll get there.

MS. AZAR: I believe there's one right here as well, isn't there? Or not.

THE WITNESS: Yeah.

MS. AZAR: This is going to take a little while.

(There was a recess.)

BY MS. AZAR:

Q. Mr. Carthel?

A. Yes.

Q. You've now marked a number of areas in green on Exhibit 3. Those areas are areas of depression located just outside the marked watershed area; correct?

A. Correct.

Q. How did you determine that these areas were land locked with no flow to Round Lake?

A. Just based on the -- based on the map.

Q. So you did not calculate the storage of these depressions to determine if they had sufficient storage to hold the regional flood?

A. No, I didn't.

Q. Did you visually check for culverts to determine if any of them flowed into Round lake?

A. No, but that is being done. That's one of the things I asked NWBE to look for.

Q. During the last deposition, we talked about your starting points in your modeling and you indicated that the base flow was 45 CFS. Correct?

A. Hm, let me look at Exhibit 4. I think that may be correct. Yes. I have 45 on Exhibit 4, which is a draft. HEC-1.

Q. Do you expect that to change?

A. I guess I don't expect it to change. Unless -- unless we find some significant -- No, I guess I don't -- I don't expect it to change. Little, if any.

Q. Is the base flow a constant inflow of 45 CFS or does it recede over time?

A. It can recede, yes. I'm not -- hm-hm.

Q. Why can it recede?

A. Well, why can it recede? Well, it -- it represents flow

I -- from -- from previous storm events. It's -- not all of what I've got on here is based. As you recall I added some in for the potential overflow from the Lake Placid diversion. Part of that or most of that I believe is -- is what's considered base flow; but, yeah, ground water becomes saturated. The ground water rises and it -- it drains into the lake and it recedes over time.

Q. You just referred to the overflow in the Lake Placid Dam. You assumed that 17 CFS was going to be flowing over the Lake Placid Dam. Correct?

A. I -- I believe that's right.

Q. Is this 17 CFS under normal conditions or in storm conditions?

A. Ahm, that, ah -- that was an assumption based during storm conditions.

Q. And in -- under normal conditions, what would be the flow over the Lake Placid Dam?

A. Oh, I would -- other than some leak -- potential leakage, I understand they put some new stoplogs in there so the leakage should be -- should be close to zero but I would expect it to be nearly zero under normal conditions.

Q. The starting point for your HEC-1 analysis includes 45 CFS for base flow and 28 CFS for outflow of the Carlson Road Dam; correct?

A. 28? Yeah, if -- yeah. Ah, I believe that's correct. No, not that one. Well, if 17 is correct to Lake Placid, then 28

plus 17 is 45, so then right. Outflow -- the assumed outflow must be 28.

Q. And that is your starting assumption for the HEC-1; correct?

A. Right.

Q. What happens to the starting lake level if you assume that the lake inflows and outflows have reached steady state at 45 CFS?

A. What happens to the Round Lake lake levels?

Q. Hm-hm.

A. If it's at steady state, then it would -- it would remain constant.

Q. Right now you're assuming 45 CFS inflow and 25 CFS outflow; correct?

A. Correct. As an initial condition, right.

Q. So the lake level is increasing. Correct?

A. Yes. Pretty small amount, you know. It's not -- it's not a big difference for such a large Lake.

Q. I believe your water-surface elevation was 1345.57 correct?

A. For the starting condition?

Q. Yes.

A. 13 --yeah -- 45.57?

Q. Hm-hm.

A. Yes. That's preliminary again.

Q. For the Round Lake outflows and I'm referring to the HEC-1 model that you did. You had five data points for elevation and

flow.

A. Right.

Q. You only, however, used the two end points in your model. Correct?

A. Okay. Could you be more specific?

Q. Let me see if I can -- I don't know if I have that here. Here's the -- yeah, No. 4. KSP out for a --

MR. WRIGHT: I'm sorry. Which exhibit are you looking at?

MR. KIRSCHNIK: 4.

MS. AZAR: Exhibit 4.

MR. WRIGHT: Thank you.

THE WITNESS: Do you want me to help you?

MS. AZAR: Yeah.

THE WITNESS: Right here. KK OSP -- No, that's Osprey. We're looking at round. We want Round. -- Round dam. Okay.

BY MS. AZAR:

Q. 1, 2, 3, 4, 5, and your two end points are --

A. This is the outflow here.

Q. This is 45.57?

A. Yeah, 28 at 45.57.

Q. So do you recall whether or not you used just two of the data points or whether you used all five data points?

A. Well, there's only two on this draft HEC-1.

Q. Do you recall having five data points to start off with?

A. Oh, I may have.

Q. Why would you have eliminated the three intermediary points?

A. Well, those -- ah, well, that's a -- the -- those would change. Those would change based on what's happening with the HEC-RAS model. That would be the HEC-RAS model between the Little Round Dam and Osprey Lake.

Q. And, when you say those would change, the intermediary data points would change? I'm trying to understand what you mean by those would change.

A. Well, that whole -- the whole rating curve. What we're talking about with these data points is the outflow versus the headwater elevation or the headwater elevation of Little Round Lake.

Q. That usually is a curve, isn't it?

A. Right. In this case, it is a straight line because there are only two points.

Q. And my question has precisely to do with that. Since it's normally a curve, wouldn't you normally like to have more than two data points so that the interpolation would show a curve rather than just a straight line?

A. Again, that -- the shape of that curve's going to depend on what's happening downstream and with the -- with the HEC-RAS model and with what's going on at the -- at the weir.

Now, at a weir, yes, you would get a nice curve -- it -- it tends to start linear and then it becomes more and more curvilinear, but we've got submergence going on there -- of that -- of the

stoplog weirs, so -- I'm not -- you know, I don't recall exactly why there's only the two points but --

Q. Can I infer from your answer that you believe that using only two points did not compromise the accuracy of the results?

A. That's probably -- that's probably the case, yeah.

Q. I'd like to turn to Exhibit No. 10, which is hidden here. Your starting water-surface elevation was 1345.57. We were just discussing that. I believe you indicated that that was obtained from 1969 data; is that correct?

A. I don't recall. I may have said something like after the 1969 dredging operation so that you know we had a --

Q. My question is I'm trying to understand how you came up with 1345.57 as your starting water-surface elevation.

A. Didn't we discuss this -- did we discuss this during the last deposition?

Q. Do you have the deposition transcript there?

A. Yes.

Q. We discussed it I believe on Pages 53, 54 and 55.

A. Okay. Yeah, we talked about that. What I had said was I would normally try to find an elevation that is represent -- that represents the current situation. So post 1969 dredging and -- ah -- you know, and -- and the dam that exists now, et cetera, et cetera. Ahm, and then I'm looking at -- looking at this historical information and then that exhibit that you're looking at now. Is that Exhibit 10?

Q. Yes. So I would -- all right. I'm pointing to Page 4 on Exhibit 10 --

A. Okay.

Q. -- where you've got the 1345.57?

A. Oh, okay.

Q. And the date of the data is June 28th, '02. I notice lots about other historic elevations on this document, namely, Exhibit 10.

A. Hm-hm.

Q. How did you select the data from 6-28-02? Strike that. Why did you select the data from 6-28-02?

A. Ahm -- Well, that -- that particular -- it may coincide closely with -- do you remember, I said I had two four-inch stoplogs in place or eight inches of stoplogs and, if a base flow of 28 CFS --

Q. Outflow.

A. Right.

Q. Yes.

A. So that particular headwater elevation may coincide with the weir flow for that stoplog condition, so -- you know, by the -- by the standard weir equation, you can compute the head over the weirs for 28 CFS; and it may coincide.

Q. With the 1345.57.

A. It may, yes.

Q. So you compared a modeled elevation with the actual

conditions noted on 6-28-02; correct?

A. I don't think I was looking for a particular date. Ahm --

Q. Were there beaver dams in existence on Osprey Creek on 6-28-02?

A. Hm, I -- that I don't know. You know, I can't say for sure. I would assume that there was. I would be guessing to say that there was.

Q. If you found out that there weren't beaver dams on Osprey Creek that were affecting the flow on 6-28-02, would you change your starting water surface elevation?

MR. KIRSCHNIK: Does your beaver dam include the debris dam?

MS. AZAR: Thank you very much. Yes. Any sort of --

MR. KIRSCHNIK: Any?

THE WITNESS: No, I don't believe -- that it -- that it would. Now, I note on this 6-28-02, that NWBE surveyed Little Round at 1345.57 and then they surveyed Osprey Lake at 1345.14, which is by this local datum 77.39 on Osprey. So on that day Osprey Lake was above the ordered maximum for the upstream Round Lake. So -- So Osprey Lake was high -- higher than what even Round Lake should have been.

Q. And what does that tell you?

A. Well, it tells me that -- something's holding -- you know, something's damming the water up on Osprey Lake; and that's -- you know, that's likely that outlet channel.

So whether or not there are beaver dams there, I can't say; I

mean I wasn't there on that particular day; but still Osprey Lake was high so that speaks for itself.

Q. In the disk that you produced, you included some old models in there. And you had starting water surface elevations of 1345.1 and 1345.4?

A. Okay.

Q. As just discussed, the current model uses 1345.57, which is the highest elevation. Why did you increase the water surface elevations in your instrumental modeling?

A. Oh, I did -- really, that's hard to recall. Though -- you know, those were -- this Exhibit 10 was -- I -- I had all the -- had all of those documents separate -- you know, separately; so Exhibit 10 is just a compilation I put together of all of those to help me try to get a more complete picture or, you know, an organized picture of what's going on.

Q. Would you have anything back at your office that would show why the starting elevations changed?

A. No. You know, unless I assumed -- well -- you need to probably look a those and see if the -- if the base flow was smaller. If -- if I was using -- you know, assuming eight inches of stuff, well, I'd just -- and using the smaller base flow, that would explain it.

Q. On the bottom of Page 5, Exhibit 10, there are frequencies of storm events listed at the Chippewa River gage and you used the PEAKFQ?

A. Yes.

Q. Computer program.

A. Yeah, that's a computer program that's -- oh, it's from the USGS. US Geological Service. It's for -- for doing statistical analysis of --

Q. You used that computer program to determine those events, correct?

A. Ah, yes.

Q. Can we get a copy of your analysis using that computer program?

A. Yeah. That was -- that was for another project I did.

Q. I'd love to see it.

A. USP -- I'm just reading from Exhibit 10. USGS computer program PEAKFQ for 76 years of continuous annual peak records from water years 1928 through 2002.

Q. So you can get us that analysis?

A. I have some -- I probably have an output that has a table of recurrence intervals to the Chippewa.

Q. Well --

MR. KIRSCHNIK: What is that exactly that you're asking for?.

BY MS. AZAR:

Q. Will we actually -- I mean do you have the inputs as well?

A. The Chippewa -- there's a gage on the Chippewa River. The USGS maintains a stream gage. It's at the Bishops Bridge on the Chippewa River.

MR. KIRSCHNIK: She's asking you to produce. So do you two know what you're talking about?

THE WITNESS: I think I know what you're talking about.

MS. AZAR: We'll just -- I'll refer to it as the PEAKFQ results.

MR. KIRSCHNIK: Okay.

MS. AZAR: Are we on the same page?

THE WITNESS: Yeah.

MS. AZAR: Great.

BY MS. AZAR:

Q. Turning to the Northern Channel, the Manning's n values that you used there for the bulrushes?

A. Okay. For the HEC-RAS or something or --

Q. I'm turning now to Exhibit No. 1. Again, pointing to the Northern Channel, which is both in red and blue, there's some bulrushes in the Northern Channel?

A. Oh, yah, there is.

Q. And how did you determine which Manning's n values to use for those bulrushes.

THE REPORTER: Can you spell that?

MS. AZAR: Manning's, m-a-n-n-i-n-g, apostrophe s, small n.

THE WITNESS: Well, I was again trying to calibrate the model, I believe, to -- to hit some target water-surface elevations.

MS. AZAR: Okay. So --

THE WITNESS: Some surveyed. Some actual surveyed elevations.

BY MS. AZAR:

Q. You went out at observed --

A. I don't recall what end values I used, but I'm sure that they were quite high.

Q. You think you used two?

A. Yeah. Yeah. Extremely high, which it's basically blocking out -- with an n value that high, it's essentially blocking out flow through those bulrushes and those bulrushes are quite thick, so --

Q. And I want to understand your answer. So you selected to, based on physical observations of the Northern Channel and the flow in that channel. Correct?

A. I did visually observe those bulrushes, yes; but the selection of the n value was based on trying to hit some target. Water-surface elevations, trying to calibrate the model.

Q. Okay.

A. So I just increased the n value until essentially I got up to two, which most likely results in hardly any flow through those bulrushes.

Q. Your analysis assumes that the Lake Placid Dam does not fail. Correct?

A. Correct.

Q. Why did you assume that it did not fail in the regional flood?

A. Well, because there's -- I guess one reason, because there's McClain Road upstream of it, with a small culvert to it. It

results in a small storage capacity for that dam.

So, even if it were to fail, it would be -- it would be insignificant.

Q. You also assumed that the McClain Road culverts would not fail. Correct?

A. Correct.

Q. And why did you assume that?

A. That the road embankment would not fail?

Q. That is correct.

A. Well, I don't believe that I -- I'm required by code to break a road embankment.

Q. If you found out that the culverts under McClain Road were in poor condition, would your assumptions change?

A. Well, I -- they are in poor condition; but whether that would make the embankment fail -- Did we say that the 30-inch culvert, or a 30-inch culvert? So, even if they failed -- whether that was -- that would lead to embankment failure is questionable.

You've got -- another thing is you've got equal head on both sides of that road. Now, there's the possibility that the Lake -- if the Lake Placid Dam failed, then that would lower the tail water on -- on McClain Road so now you'd have a head differential on McClain Road. We are talking about two -- two events that would have to happen, you know, nearly simultaneously.

Q. So if the Lake Placid Dam fails essentially McClain Road becomes a dam, is that --

A. Yes, I guess it would.

Q. With regards to the flood plain study, you indicated that NWBE is going to be going out and doing some additional cross-sections as well as looking at the depression areas that have been marked on Exhibit No. 3?

A. Yeah. They're not looking -- They're looking for culverts.

Q. What else will they be doing?

A. Well, they're going to be looking for the culverts. They're going to be surveying the -- the marsh channels of the Northern and the Southern channels.

Q. Anything else?

A. Not that I -- No. Nothing specific at this -- that I know of at this time. There may be other things that they will do.

Q. Besides those two areas of data selection since the last deposition, have you checked any other data that you will be using in your future flood-plain analysis?

A. We clo -- yes. We did some surveying. Heather Harrington and I did some surveying.

Q. What did you survey?

A. For the Northern Channel. We started on the Northern Channel.

Q. The cross sections?

A. Yes.

Q. So -- Okay.

A. And then NWBE's going to finish it up.

Q. Any other data that you've collected since the last deposition?

A. No.

Q. Have you received -- strike that. Do you know if NWBE has received authorization from the County to conduct this additional work?

A. No.

Q. No, you don't know; or, no, they haven't?

A. No, I don't know.

Q. I'm finished asking questions about the flood-plain analysis. Is there anything you'd like to add to clarify anything you've said?

A. No.

Q. Now I'd like to move on to the water-level study. I point you to Exhibit 23.

Exhibit 23 is the proposal you submitted to Sawyer County for the water-level study on Round Lake; correct?

A. Yes.

Q. I'd like to turn your attention to the attachment which is the fourth page. It's the proposed decision flow chart?

A. Okay.

Q. Did you prepare this document?

A. Yes.

Q. Did anybody assist you in preparing this proposed decision flow chart?

A. No.

Q. Did you follow this flow chart when conducting your study?

A. Hm, no. I think, you know, the first decision is does County desire to lower the lake level to the 1941 ordered level. Yes or no. And -- that -- that decision -- I don't know if that decision was ever made by the County. And, yet -- I have it as the first item or the first decision. So, no, right off the bat, no.

Q. I'd like to point you to the second diamond.

A. Okay.

Q. Is it true that your analysis proceeded with the assumption that the County wanted to lower the lake level to the 1949 orders? Strike that.

In your study, did you initially assume that the County wanted to lower the lake levels to the 1941 ordered level?

A. No.

Q. So, if you didn't follow this proposed decision flow chart, how did you proceed with your --

A. Well, the first step was I canoed the channel downstream of Little Round Lake and Osprey Lake and observed the conditions there to see if there was some significant blockage, and there is. In the marshy channel, there's a choke point and, you know, where some debris gets collected. Heather and I last week

survey -- or canoed that same area and that and -- it's still a choke point there and there's debris in there and some of it looks like, you know, basic sticks and -- some of it is 2-by-4's from the lake -- most likely from the lake that have floated down. You know, things like that.

So they get lodged between a narrow space between the bulrushes and then the more that collects, you know, it just gets -- imagine more and more. The more it collects, the worse it gets. But there wasn't -- you know, there wasn't a significant drop, I don't think, between Little Round and Osprey. But what there was, was -- primarily due to this choke point that is in the marsh area. So that was the first step.

Q. Okay. And I just want to clarify. You were talking about the Northern Channel there?

A. Right. The Northern Channel. Yeah.

Q. And what was your next step?

A. Well, the next step -- the next step was, as I recall, to -- get some elevations on -- all on the same day. So of -- Little Osprey Lake downstream of Little Osprey Lake and I am -- every -- I'm sorry. So sorry. Little Round Lake and then Osprey Lake and then down at the CTH NN culverts.

We got some elevations along the water course.

Q. And in your next step?

A. And, also, the canoe, the reach from Osprey Lake down to CTH NN. Actually, we only canoed until we got to the debris dam;

and, as we canoed up to the debris dam, before we even got to it, I could hear water falling. I could hear falling water. So then we were coming up on a beaver dam and, when we got there -- and, like I say, I don't remember that it's a beaver dam. I guess it's a debris dam. That's what we're going to call it. It's a debris dam.

Q. Did you they were portage your canoe and continue your trip down Osprey Creek and the culverts?

A. No, I don't think so. We just turned around and went back.

Q. All right. What was your next step?

A. Well, researched the records that I've got from the DNR, from to County and also Mr. Hausman, which were -- quite voluminous.

Q. Which DNR office?

A. Spooner.

Q. And where were the documents located in Sawyer County?

A. In the land and water conservation department office files. I believe Jan Eck assisted me.

Q. Were they physically located right near Jan or were they stored someplace?

A. No, they were physically located near Jan.

Q. All right?

A. But she may have -- she may have pulled some from other places; I'm not sure. I'm not sure.

Q. And your next step?

A. Then I believe -- then I think -- I believe I wrote a report, ahm -- as part of -- one of the exhibits.

Q. Did you conduct any modelling? .

A. No. Did collect some survey data, though. There was some -- between the time I issued the report and then -- you know, attending the -- the meetings, the County committee meetings and -- that seems like during that time I had conversations with Jim's previous engineer, Hansen, I think, Engineering out of Springfield; and they were -- they were discussing the CTH NN culverts.

Q. What were they discussing about the CTH NN culverts?

A. Oh, I believe there was some -- they were thinking that there was super critical flow downstream of the CTH NN culverts.

Q. What does that mean, super critical flow?

A. Well, it's fast-shooting water as opposed to a mild -- It's associated with the steep slope.

Q. And what impact would that have on the water levels on Round Lake?

A. Well, it would affect the tail water elevation at the culverts on CTH NN, which would have an effect on the headwater on the culverts at CTH NN. So, anyway, I elected to do some surveying downstream and upstream of the culverts.

Q. As a result of your discussion with Hansen?

A. Right. Just to see what was going on, get a better picture. And that was after -- this is all after the county dug out the

upstream end of those culverts with a backhoe.

Q. When did they do that?

A. I don't recall -- but I never recall seeing those culverts prior to them getting a backhoe, and they ac -- they brought a backhoe out there and cleaned out the upstream end of the culverts and then they ended up getting the backhoe stuck in the water. That was a fiasco.

Q. And was this right around the time you were doing --

A. I never saw.

Q. -- study so in 2002?

A. It was prior to the study, I believe.

Q. But that summer?

A. I think it was. Yeah.

Q. What did you -- Did your surveying of the downstream and upstream areas of the culverts at County Highway NN provide any useful information for your water-level study?

A. Well, I think I determined that it wasn't super critical flow downstream of the culverts. But it's -- it's a very difficult reach to model. Because the water braids through a lot of heavy reeds and bulrushes and such. So it appears to be, you know, fast moving water.

Q. As part of your study, did you determine whether it was probable that the debris removal from Osprey Creek would be effective in controlling the water levels?

A. That would be the southern --

Q. (Indicating.)

A. -- channel? Did I -- yes, that would be a -- yes, I think so, yes.

Q. Did you investigate how debris removal could occur on the Southern Channel?

A. No.

Q. Did you report to the County that debris removal in the Southern Channel would be effective in controlling the lake levels?

A. Hm, can I get a copy of my report?

Q. Yeah, it's in there. Exhibit 24. It's right here.

A. Yeah, I guess I did.

Q. Where are you looking?

A. Page 2, second paragraph.

Q. Page 2, second paragraph of Exhibit 24?

A. Right.

Q. So, in this paragraph, you state, quote: It's my opinion that improvements made to the Little Round Lake Dam, end slash, or the stream between Little Round Lake and Osprey Lake will have little or no effect on the Round Lake high water levels until the naturally-occurring dams between Osprey Lake and County Highway NN are removed, end quote. Correct?

A. Correct.

Q. Assume for a moment that the naturally-occurring dams between Osprey Lake and County Highway NN are removed, would the

County be able to control the high water levels on Round Lake at that point?

A. By just doing that?

Q. Yes. I violated a rule.

A. Hm, no, probably -- probably not. Probably some other improvements would need to be made to the to -- to the -- the dredge channel, the -- and the dam structure as well.

Q. On what do you base that opinion?

A. Well, you know, there's observed water surface elevations on Osprey Lake that are higher than the maximum level on Little Round Lake. So, obviously, you can't -- until you lower Osprey Lake, you -- you could dig a huge channel between Osprey Lake and Little Round Lake, make it a thousand feet wide and a thousand-foot bridge essentially just make it one big lake until you lower Osprey Lake. That -- that's the -- that is the first step is to -- is to lower Osprey Lake. You've got observed water Lake elevations on Osprey Lake that are higher than the maximum allowed on Little Round Lake. I guess that's -- that would be my main point.

Q. From that, you conclude that dredging needs to occur in the Northern Channel?

A. Southern Channel.

Q. In the Southern Channel?

A. Well, dredging. There's some cleanup needs to occur down there.

Q. I'm sorry. I misunderstood you. So, with regards to the lake level on Osprey Lake, again, that could be achieved by removing the naturally-occurring dams between Osprey Lake and County Highway NN?

A. Yes.

Q. Let's assume for a moment that those are removed.

A. Okay.

Q. Okay. Would the County be able to control the high water levels on Round Lake after those naturally-occurring dams between Osprey Lake and County Highway NN were removed?

A. I don't know for sure.

Q. Why did your analysis stop when you found the obstructions on the Southern Channel or Osprey Creek?

A. The -- probably be because the -- the tribal government came out with a resolution saying that they weren't going to allow any disturbances in that Southern Channel.

Q. Does that mean the tribal government does not want debris dams to be removed?

MR. WRIGHT: Object to the form of the question.

THE WITNESS: I -- that's my assumption. I think the wording that they used was they didn't want any disturbance in the outlet stream of Osprey Lake. They wanted to leave it natural or some wording like that.

BY MS. AZAR:

Q. So your final report -- strike that. The conclusions in

your final report which has been marked as Exhibit 24 --

A. Hm-hm.

Q. -- are based on the assumption that the naturally-occurring dams in the Southern Channel cannot be removed legally?

A. Could you repeat that question, please?

MS. AZAR: Could you read it back?

(The pending question was read.)

THE WITNESS: No. My conclusions are not based on the assumption that those debris dams can be removed legally, no.

MR. KIRSCHNIK: Cannot?

THE WITNESS: Cannot. No. The conclusions have nothing to do with whether or not they can legally remove debris from the Southern Channel.

BY MS. AZAR:

Q. Okay. But you just testified a moment ago that you stopped your study after you found the obstructions in the Southern Channel; correct?

A. Well, the conclusions of the report -- or I should say the -- the suggestions at the end give -- gives some alternatives on how to proceed: One being do nothing; two being establish revised lawful levels. Three, improve the Osprey Lake outlet stream. Four, abandon the little Round Lake Dam and the Lake Placid Diversion Dam.

Now, these are -- these were the choices that I saw, that I came to. I think, you know, it certainly left an option to improve

the Osprey Lake outlet stream; and it was -- you know. It's -- of course, the tribe came out and said that they won't allow it; but -- that doesn't mean that the County wouldn't be able to negotiate an agreement with them.

Q. You assumed that the LCO resolution basically prohibited the County from removing the naturally-occurring dams in Osprey Creek, didn't you?

A. Well, they -- well, I'm not sure that I did.

Q. I'd like to turn your attention to your third option on Page 4, improving the Osprey Lake outlet stream.

In this you state: This option would require a permit from the Wisconsin Department of Natural Resources and the prior consent of the Lac Courte Oreilles ^ sp tribal government. How did you arrive at that conclusion?

A. That is my understanding of the process to -- to install a dam or a control structure on -- on any water body, you need a permit from the Department of Natural Resources and you also need permission from the riparian owners. The riparian owners in this case would be the Lac Corte Oreilles^ sp tribal government.

Q. So that phrase then had to do with the installation of a control structure at County Highway NN and had nothing to do with the removal of the naturally-occurring dams between Osprey Lake and County Highway NN?

A. Well, it has to do with establishment of lawful levels for Osprey Lake. So, yeah, if you were -- if they were going to

lower Osprey Lake, they -- it would -- they would also have to maintain that Southern Channel.

Q. What would the County need to do to move the naturally-occurring dams between Osprey Lake and County Highway NN? What legal approvals would they need to get in advance or permissions?

A. To remove debris from the channel? Well, you know, I didn't get a very clear answer on that, when I spoke with the DNR about that. That, in fact, at that time I don't think that they were clear on just what was needed. So I guess I don't know the answer to that.

Q. In relation to your third option there, I want to make sure I understand what you recommended.

A. Okay.

Q. You really only talk about the installation of a control structure at County Highway NN?

A. Hm-hm.

Q. You don't talk about cleaning out the Southern Channel. Correct?

A. Yeah, correct. Ahm, I think, you know, the intent of a control structure, though, would be to control both lakes together because the pro -- my intent there was that -- say, you were to just clean out the Southern Channel, put larger culverts and CTH NN, whatever was required. Now, you have no control over Osprey Lake. You do have control of the Round Lakes because you

have a control structure there, but you don't have control over the Osprey Lake. So to just go in and clean out those channels and install bigger culverts, now, you know you're dropping -- you know, Osprey Lake is uncontrollable.

Q. Okay. I'd like to stop you there and then we can go on with that.

A. Okay.

Q. So now we're talking about cleaning out the Southern Channel and installing different culverts at NN?

A. Yeah, if --

Q. If? This is a hypothetical.

A. Right.

Q. You indicated then that the high water levels on Round Lake could we controlled; correct?

MR. WRIGHT: Object to form of the question.

THE WITNESS: Which may -- possibly, you know. But then you -- that's the first step. You've got to clean out the Southern Channel. Okay. Take care of the -- get Osprey Lake down because Osprey Lake is known to be higher than the maximum level allowed on Little Round Lake and Round Lake so that's the first step. Osprey Lake would have to come -- come down.

BY MS. AZAR:

Q. Okay.

A. Now, it may be that, you know, you also need to improve the Northern Channel and the control structure?

Q. So do you have an opinion with regards to whether or not the Northern Channel has to be if promised or whether or not the Carlson Road Dam needs to be changed in order to control the high water level?

A. I don't know.

Q. Please let me finish. In order to control the high water levels on Round Lake?

A. No. I don't have an opinion.

Q. So I want to make sure I can summarize where you are. No. 1, the naturally-occurring dam structures in the Southern Channel have to be removed and the culverts at NN have to be changed, as step one?

A. Well, not necessarily the culverts. But I would think that a control structure would have to be put in place so that you could control Osprey so that it just wouldn't dry up, okay -- or not dry up but, you know, drop to extreme levels during drought years.

Q. You've provided four options here on Exhibit -- is this 24?

A. Hm-hm.

Q. There are other possible options on how to control the water levels on Round Lake, aren't there?

A. That -- why don't you tell me what they are?

Q. Well, we were --

A. These are the ones I pointed to.

Q. Okay. We were just starting to talk about some other

options. One would be to clean out the Southern Channel; potentially change the culverts at NN; clean out the drainage ditch, potentially, we don't know if that's needed or not; and possibly change the Carlson Road Dam. That may work; correct?

MR. WRIGHT: Objection, form and foundation.

BY MS. AZAR:

Q. That may work to control high water levels on Round Lake; correct?

MR. WRIGHT: Same objection.

THE WITNESS: You included cleaning out the Southern Channel?

MS. AZAR: Yes.

THE WITNESS: Yes. Then, yes.

BY MS. AZAR:

Q. So that would be another option; correct?

A. Yes, but I think that -- that that was implied in No. 3. I think if you go back to Page 3, fourth paragraph, I discuss a little bit more about the Osprey Lake resolution.

Q. And you concluded that there is a designated water level on Osprey Lake?

A. No. No.

Q. Okay. I'm confused then.

A. There is none. That's what would have to be established.

Q. Why would one need to be established?

A. A --

Q. Strike that. So there's no designated lake level -- water

level on Osprey Lake. Correct?

A. Correct. Right.

Q. In Paragraph 4 of page 3 you specify that one would need to be established; correct?

A. Paragraph 4, Page 3. Yes. Yes. This -- Quote, this would involve a determination on lawful levels on Osprey Lake, a permit for a control structure at CTH NN and a maintenance and operations agreement for a CTH NN dam and upstream channel.

Q. And why did you make that conclusion?

A. I think the paragraph before that may be my reasoning which -- which discusses, well, there's a DNR quote there. I think this refers to DNR receiving complaints after the dredging operation.

Q. What water elevation would Osprey Lake have to be at to gain control of the high water levels of Round Lake?

A. Well, Osprey Lake would have to be lower than the maximum level of Little Round Lake.

Q. How much lower?

A. Well, it depends on the channel condition in-between. There's a profile in-between. There's a drop.

Q. So you don't know how much lower it would have to drop in order to have control over the high water levels on Round Lake, do you?

A. No.

Q. So how do you know that the -- strike that.

Since you don't know how far the lake level has to drop, how do you know that the riparians around Osprey Lake would object to the dropping of the water?

MR. KIRSCHNIK: I'm going to object. I think you're reciting facts not in evidence.

MS. AZAR: Actually, right here on Page 4, Paragraph 3 and Paragraph 2, Mr. Carthel just pointes to the fact that he assumed that a lawful lake level would be needed on Osprey Lake because the riparians would complain. So it is a fact in evidence. He's using that as one of his primary assumptions in his report.

MR. KIRSCHNIK: Okay. I'm not looking at the report. I didn't hear him say that it -- so that was my objection.

THE WITNESS: Well, what I'm saying is, I'm stating a historical record that -- that there were complaints of low water on Osprey Lake by the residents. That's all I'm doing.

BY MS. AZAR:

Q. Correct. And, looking at Paragraph 3, it indicated that the water was below 76.52. Correct?

A. Yes. Yes, the complaints were of low water.

Q. Today you've indicated that you know that the water level on Osprey Lake has to be below 77.00 in order to control the high water on Round Lake. Correct?

A. I believe 77.25 is the maximum level.

Q. So it has to be below that, 77.25?

A. Yes. The --

Q. But you don't know how much lower it has to be; correct?

A. Right.

Q. So, for all you know, the County may be able to control the high water level on Round Lake if the elevation of Osprey Lake is at 76.52; isn't that correct?

A. Yes. That's possible.

Q. Now, let's go back to your option.

A. Okay.

Q. Okay? Going back to Option No. 3 and your assumption that lawful levels for Osprey Lake would have to be established, I want to focus on why you assume that lawful levels would have to be established on Osprey Lake. Could you please explain that to me?

A. Okay. This option would likely involve the establishment of lawful levels for Osprey Lake.

Q. Let me back up for a moment because I think the lawful level question really has to do with whether or not controlled structure is placed at NN; correct?

A. Well, I -- I think, also, it has to do with cleaning out the Southern Channel. If -- you know, historically, after they -- after they dredged it out the first time and then shortly thereafter they started getting complaints of low water. I think that has a lot to do with why I say it would likely involve the establishment of lawful levels. I don't think that the DNR would issue a dredging permit without establishing some lawful levels

for Osprey Lake. I say likely. I don't say absolutely. I just say likely.

Q. I'm looking at all the requirements in Option 3, and you talk about prior consent of the Lac Courte Oreilles ^ sp, you talk about a feasibility study, formal hearing, engineering plans, U.S. Army Corps of Engineers, U.S. Fish and Wildlife, and the Bureau of Indian Affairs. How did you come to the conclusion that you would need approvals from all of those agencies?

MR. WRIGHT: Object to form of the question.

THE WITNESS: Well, because you've got wetlands that are probably going to be affected.

BY MS. AZAR:

Q. And which agencies would be involved in that in reply?

A. U.S. Army Corps of Engineers and possibly the U.S. Fish and Wildlife.

Q. And how would the wetlands be affected?

A. U.S. Fish and Wildlife because it's tribal land.

Q. How would the wetlands be affected?

A. I think that was a comment by Mr. Tirold ^ sp. Or Dan Tyrold ^ sp, who's the -- an engineer with the tribal government.

Q. What was the comment about?

A. Changing water levels and he thought it would have an effect on wetlands.

Q. Then somebody made the next step. Namely, you made the next

step and assumed that some sort of approval would be needed. Why did you assume that?

MR. WRIGHT: Object to form of the question. It says may be required. You're misstating his letter.

THE WITNESS: Yeah. Exactly. It may be required.

BY MS. AZAR:

Q. Let's focus on may be required.

A. Okay.

Q. Let me tell you what I'm trying to get at, Dan.

A. Okay. Yeah, sure.

Q. Number 23 here lists a lot of approvals that may or may not be required?

A. Hm-hm.

Q. If the County -- the Sawyer County land and water conservation committee looked at this and thought: Gee, whillikers, we have to get -- five -- at least five approvals for this project, they might reject No. 3?

A. That wasn't my intent.

Q. Did you tell them and foc -- Did you emphasize the fact that you really didn't know whether or not approvals were needed from these agencies in order to implement No. 3?

A. How do you mean? I don't think I put any special emphasis on it, no. I certainly didn't want to leave it out.

Q. Did you inform the Sawyer County Land and Water Conservation Committee that further investigation would need to be conducted

in order to determine exactly what approvals were necessary to implement Option No. 3?

THE WITNESS: Could you read that back to me, please.

(The pending question was read.)

THE WITNESS: Well, I state in Option No. 3 that it would likely require an engineering feasibility study; and that feasibility study would determine the permit requirements.

MS. AZAR: Could you read the question back again, please?

(The pending question was read.)

MS. AZAR: Can you answer the question, please?

THE WITNESS: I -- I don't know.

MS. AZAR: I'd like to have this marked as the next Exhibit please.

(Document marked for identification as Exhibit No. 27.)

BY MS. AZAR:

Q. Can you please identify what's been marked as Exhibit 27?

A. Looks like a memo dated October 6th, 1961. Subject is Round Lake water levels, Sawyer County, by W.H. Cartwright ^ sp.

Q. And is this the memo -- the same memo that you reference on Page 2 of Exhibit 24?

A. Yeah, it looks like this is the one.

Q. Why did you choose to extensively quote and rely on a document that's over 40 years old in your final report to the County?

A. Well, I wasn't -- I didn't quote just this one. I quoted

some others as well: Gerald Wallin ^ sp in '67 and Dick Knitter ^ sp in '68. So I don't want to say that I didn't really dwell on just this one.

Q. And why did you choose to rely on the document that was over 40 years old in your final report?

A. Well, I thought it was pertinent to the situation.

Q. Had the circumstances not changed over the last 40 years?

A. Hm -- well, it's a similar situation. He said that all of the stoplogs were out of the dam and the water level below the dam was practically at the same level as the water in the lake above.

This points to -- points to the -- that it's been an ongoing problem, the high water, for one. That's nothing new.

Q. Do you know if the DNR or Sawyer County had investigated the cause of the high water on Round Lake since this 1961 memo?

A. Do I know if Sawyer County has investigated?

Q. Or DNR?

A. Or DNR? Since '61, sure. Dick Knitter did. And that's -- April 30th, 1968 on Page 2.

Q. Okay. Anything else?

A. That's what I recall. After -- after '68, ahm -- have you got Exhibit 10 handy?

MS. AZAR: It's right here.

THE WITNESS: Starting to remember these exhibit numbers.

MS. AZAR: That's a little scary.

THE WITNESS: Could we take a break?

(Discussion off the record.)

MS. AZAR: Can you answer the question we just asked, though?

THE WITNESS: Yeah, okay. You know, I don't think anything sub -- I don't think any substantial -- what was your wording investigations -- of high water were done after Knitter, after the dredging it. And that was a little disappointing to me that after they did that dredging project, that they didn't monitor water-surface elevations. Would have been useful to have that information.

BY MS. AZAR:

Q. So is the reason you only cite to a 1961 study and 1968 study is because those are the most current studies that you found?

A. That could be, hm-hm.

Q. And, as a result of the 1968 study, isn't it true that the DNR recommended to Sawyer County that it dredge the Northern Channel and the Southern Channel? Strike that, which I believe they only recommended that they dredge the Southern Channel?

A. Yes. I believe that's right.

Q. And indeed the Sawyer County accepted the DNR's recommendations and they did dredge portions of the Southern Channel; is that correct?

A. I believe that's correct.

Q. And when Mr. Cartwright ^ sp prepared his 1961 memorandum,

that was prior to dredging of the Southern Channel; correct?

A. Yes.

Q. I think this is a good breaking point.

(There was a recess.)

BY MS. AZAR:

Q. Continuing to look at Exhibit 27, which is the 1961 Cartwright ^ sp memo, I draw your attention to the last paragraph on Exhibit 27 where it says with these circumstances and then Mr. Cartwright continues to give some recommendations for future action; is that correct?

A. Yeah.

Q. So Mr. Cartwright's recommendations on Exhibit 27 are based upon the physical circumstances that he witnesses in 1961; isn't that correct?

A. It seems correct.

Q. And isn't it true that the reason that you thought this was an appropriate recommendation to include in your December 4th, 2002 report was because the circumstances in 1961 are essentially similar to today's circumstances?

A. Hm, yes.

Q. Since 1961, do you know what changes have occurred at the culverts of NN?

A. Yeah, there were three culverts of smaller size -- I want to say 24 and 30-inch and then I believe now there's two 48-inch culverts so I know that that change had occurred.

Q. So it's your understanding that in 1961 there were three culverts in existence under --

A. Well, I'm not sure because there was a bridge in there. I'm not sure -- I can't recall in '61 what was in there.

Q. So you don't recall -- you don't know whether the circumstances at County Highway NN in 1961 are the same circumstances at County Highway NN today; correct?

A. Not at this moment, no.

Q. When you included this memorandum as part of your recommendations in your December 4th, 2002 report, had you checked that -- had -- let me clarify that. Had you checked whether or not the conditions at Highway NN in 1961 were the same as the conditions today?

A. Hm, I don't recall. I can't say for sure.

Q. If you found out today that the circumstances at County Highway NN were significantly different than the circumstances today, would you have included this recommendation in your report dated December 4th, 2002?

MR. WRIGHT: Object to form of the question.

THE WITNESS: Would have included what recommendation?.

BY MS. AZAR:

Q. Let me jump, so we understand what we're talking about. I'm looking at Page 4 of your December 4th, 2002 report to the County which has been marked as Exhibit No. 24 and your Option No. 1 specifies: Continue to operate the Little Round Dam as suggested

by WH Cartwright ^ sp in this 1961 memo that's been marked as Exhibit No. 27; correct?

A. Yes.

Q. So you chose to recommend, as one of the options -- strike that.

You provided a recommendation to the County that included following this 1961 memo as one of their options; correct?

A. Yeah, I included a do-nothing option, which is always an option. Do nothing is always an option that has to be considered and Cartwright's ^ sp -- Cartwright's ^ sp memo is -- is in line with a do-nothing recommendation, yes.

Q. So you would have included a do-nothing recommendation independently of this 1961 memo?

A. Yes.

Q. Then let's just focus on do nothing?

A. Okay.

Q. Do you recall the June 28th, 2003 public meeting at the high school in Hayward?

A. Yes.

Q. And do you recall that that was videotaped?

A. Yes.

Q. At that meeting did you indicate that Option 1 really wasn't an option for the County because something had to be done?

A. Hm, I may have. Something had to be done, but what did I say had to be done?

Q. I don't know. What do you think you would have said?

A. Well, probably, that levels would have to get changed. Well, yeah. Establish revised lawful levels. So do nothing is an alternative, but it would be in violation of their order. So I may have -- I may have said that.

Q. So the County is currently in violation of their order?

MR. WRIGHT: Object to the form and foundation.

THE WITNESS: Hm, the water level is above the ordered maximum or has been. At least that's -- that's my understanding.

MS. AZAR: Could you read the question back?

(The pending question was read.)

MR. WRIGHT: Same objection, asked and answered. Go ahead and answer again.

THE WITNESS: My answer was that --

BY MS. AZAR:

Q. You don't have to answer it THE same way. A yes or no would suffice?

A. Yes, I would assume they are.

Q. You indicated I think just a few minutes ago that -- I'm trying to remember your wording, but you indicated that you thought that the County would have to establish the revised lawful levels, that that was -- you know, it's one of the options listed here on Page 4 of Exhibit 24; and I was wondering if you were implying that No. 2 was the best option for the County?

A. No. No. Not implying that. No, I was just saying that the

do-nothing alternative would leave -- would leave them in violation of the order.

Q. Okay. No. 2 -- with No. 2 -- strike that. Currently, Sawyer County does not have control over the water levels -- the high water levels on Round Lake. Correct?

A. That -- that's correct. They really have no way of controlling that.

Q. And Option No. 2 doesn't change that fact, does it?

A. That's right.

Q. So, under Option 2, Sawyer County would still not have the power to control the high water levels on Round Lake; correct?

A. That's right.

Q. With regards to Option No. 3, Option No. 3 does indeed provide the County with the means to control the high water levels on Round Lake. Correct?

A. Hm-hm. Yes.

Q. In Option No. 4, would Option No. 4 give the County the power to control the high water levels on Round Lake?

A. No, because they would abandon the little Round Lake Dam.

Q. So, of the four options that you gave the County, only one of those options gave the County the power to control the high water levels on Round Lake; correct?

A. Right, that's correct.

Q. And that's Option No. 3, improve the Osprey Lake outlet stream; correct?

A. That's correct.

Q. Going to Option No. 4, Option No. 4 not only would it not allow the County to control the high water -- the high water levels on Round Lake, but in situations of a drought it would also prevent them from maintaining a normal elevation or a minimum water elevation; correct?

A. That's correct.

Q. Let's talk about the high water elevations. Let's talk about the high water elevations on Round Lake. What sort of a damage if any is currently occurring on Round Lake?

MR. WRIGHT: Objection.

MS. AZAR: As caused by the high water.

MR. WRIGHT: Objection, foundation.

MS. AZAR: Please answer.

THE WITNESS: I have -- I don't claim to have any expertise in that area. I -- you know. I -- what I know is that, you know, Jim has complained that he has had some damage, and he's talked about shoreline erosion. Mr. Hirschfeld claims that he's had some damage from high water, shoreline erosion. That's -- that's the extent of my knowledge of that topic.

MS. AZAR: Mark this as the next exhibit, please.

(Document marked for identification as Exhibit No. 28.)

BY MS. AZAR:

Q. Mr. Carthel, would you please identify what's been marked as Exhibit 28?

A. It's a fax to Dale Olson, Attention: Jan, Sawyer County, from myself.

Q. And did you send -- personally send this fax to Mr. Olson?

A. Yes.

Q. And does this seem to be an accurate copy of the fax that you sent to Mr. Olson?

A. Yes.

Q. Do you know why -- why did you send this fax to Mr. Olson?

A. Well, because they asked me for it. I think that -- I think that your office wanted a -- wanted it, and I can't remember. There was -- something to do with these legal proceedings that they needed a copy of this and so --

Q. And how did they identify it? I mean what did they ask in, the ^ ck Ken Carlson letter or --

A. Yeah, right. Right.

Q. That's what they said?

A. Right.

Q. I noticed that it was faxed on September 18th, '03, correct?

A. Okay. Yes.

MS. AZAR: Oh, strike that. Next item.

(Document marked for identification as Exhibit No. 29.)

BY MS. AZAR:

Q. Mr. Carthel, would you please identify what's been marked as Exhibit 29?

A. Yeah. This is a historic summary of Round Lake water

levels.

Q. Did you prepare this document?

A. Yes.

Q. When did you prepare this document?

A. Oh -- let's see. It was, ah -- this was prior to that final report for the water-level study.

Q. So prior to December 4th, 2002?

A. Yeah. Is that the date of final report?

Q. Did you create this document in the ordinary course of business?

A. Yes.

Q. And is this an accurate copy of the document you prepared?

A. Well -- it's a pretty thick document to be saying that. Check and see if all the pages are here. I see there's a page missing here.

Q. That's bad.

A. Page 7.

Q. There indeed is. Let me see if I have any more copies of this. Hold on a second. You wouldn't happen to have more copies of it, would you?

A. I might.

(Discussion off the record.)

BY MS. AZAR:

Q. Is this an accurate copy of --

A. Appears to be with Page 7 inserted, yes.

Q. What was the purpose of this document?

A. Ahm, this was a compilation of the files that were researched for the water-level study. I believe it included the DNR files, the County files and the files that Jim Hausman provided.

Q. And did you summarize what you consider all the important documents that Sawyer County should consider when making it's decision about the high water levels on Round Lake?

A. Yeah, it was -- it was to help them to get a -- to get a picture of what all these -- what was contained in all these documents.

Q. And to whom did you give this document?

A. Dale Olson.

Q. Anybody else?

A. Hm, Jan Eck. You know, Dale and Jan, I guess.

Q. Did you give them a draft version of this document?

A. No.

Q. Did you give anybody a draft version of this document?

A. No.

Q. Did anybody assist you with the preparation of this document?

A. No.

Q. Did anybody provide proposed revisions to this document?

A. No.

Q. We can mark this one next.

(Document marked for identification as Exhibit No. 30.)

BY MS. AZAR:

Q. Mr. Carthel, would you please identify the document that's been marked as Exhibit 30?

A. It says it's a letter dated February 23rd, 1949, on the letterhead of Public Service Commission of Wisconsin. It's addressed to Mr. Sherman W. Weiss, W-e-i-s-s.

Q. Would you take a moment to read this letter, please?

A. Okay.

Q. Did you have a chance to read it?

A. Yeah.

Q. I'd like to point you to Page 8 on your Exhibit 29.

A. Okay.

Q. When you summarize this document, in your summary which you indicated earlier was your intent to summarize the important points for the County, you specify that the PSC defers approval of the Little Round outlet structure until investigation can be made and asks the County to advise as to what they can do to temporarily pass flood waters to prevent high water damage; correct?

A. Hm-hm.

Q. In the document that's been marked as Exhibit 30, the County describes the structure that they were proposing for the Carlson Road Dam, correct?

A. Please say that again.

Q. In what's been marked as Exhibit 30 -- I'm sorry. The Public Service Commission is responding to the County's proposed Carlson Road Dam, correct?

A. Yes, it appears so, hm-hm.

Q. And at that time the County was proposing to build an outlet structure of a twin box culvert, each 4-by-6 feet with a bottom elevation of 74.0 feet. Correct?

A. Yes.

Q. Was this the structure that was built?

A. It's not the structure that's there now. There was a dam structure there previous to this structure.

Q. Is the structure that's there now?

A. The 4-by-6?

Q. Hm-hm.

A. No.

Q. How large is it?

A. It has 5-foot wide base, 7-foot high, I believe.

Q. In this document, the Public Service Commission of Wisconsin indicates that the proposed structure would be inadequate to comply with the 1941 Order; isn't that correct?

A. Yes.

Q. I'm curious as to why you didn't note that in your summary document that's been marked as Exhibit No. 29.

A. Why I didn't note that a proposed structure was -- what is the wording he uses here -- inadequate?

No, it's not the structure that's there now. It appears that plans were submitted and found to be inadequate and so -- perhaps they revised the plans. I don't know. I guess I just didn't find that aspect important.

Q. Did you find any revised plans in your review of the historic documents?

A. No.

Q. Did you find any approval of the existing structure?

A. No.

Q. So, as far as you know, Sawyer County does not have a copy of an approval for the Carlson Road Dam. Correct?

A. As far as I know, I don't think they do.

(Document marked for identification as Exhibit No. 31.)

BY MS. AZAR:

Q. Mr. Carthel, would you please identify what's been marked as Exhibit 31?

A. It's a letter from Wisconsin Department of Natural Resources to Shirley Suhsen, S-u-h-s-e-n, Chairman, Sawyer County Land and Conservation Committee -- strike the and.

Q. Had you seen this document before?

A. I don't believe I have.

Q. So when the County was producing documents to you, they didn't give you this letter?

A. No.

Q. I think you may want to take a few minutes to read this

letter.

(There was a recess.)

BY MS. AZAR:

Q. Mr. Carthel, did you have an opportunity to read what's been marked as Exhibit No. 31?

A. Yes, I gave it a once-over reading.

Q. Have you ever seen this document before?

A. No. This is the first time.

Q. So, when Sawyer County was producing the historic documents for your review, they failed to provide you with this document?

A. Right.

Q. If you had received this document before today, would you have included it in your summary of historic documents that have been -- that has been marked as Exhibit 29?

A. Yes.

Q. And Exhibit 31 is a report from Mr. Naas of the Wisconsin Department of Natural Resources, following an investigation if high-water levels on Round Lake; isn't that correct?

MR. WRIGHT: Object to form and foundation.

THE WITNESS: I think it was in response to complaints of low water.

MS. AZAR: Ah, thank you. .

BY MS. AZAR:

Q. Let's just read this so we're clear. He said -- I'm looking at this very first paragraph he says: I was requested by the

Board to investigate the complaints of recent low water on the Tiger Cat Flowage. Then he continues -- I'm sorry -- and prepare a report of my findings for your September 6th meeting. Correct?

A. Correct.

Q. Then he continues to say: Looking now at the last sentence of the second paragraph, the purpose of this report is to address the water-level complaints received this year not only in regards to the Tiger Cat Flowage but also the Round Lakes and to make recommendations for future operation of the associated dams. Correct?

A. Correct.

Q. And, indeed, in this report, he specifies that the lake levels on Little Round and Round Lakes exceeded the authorized maximum levels. Correct?

A. Hm, I think he does, yes. Yes, by like -- it was a -- .06 feet or something. Let me see. Yes. It seems like they were just over the maximum.

Q. So is it fair to say that Mr. Naas was submitting a report based on his investigation of the water levels on the Tiger Cat Flowage and the Round and Little Round Lakes?

A. Yes.

MR. WRIGHT: Objection, foundation.

BY MS. AZAR:

Q. Earlier, we were discussing your December 4th, 2002 report to the County which has been marked as Exhibit 24. And we were

discussing your reliance on a 1961 study, a 1968 study. And you had indicated that neither the DNR or Sawyer County had conducted any study subsequent to 1968. Do you recall that discussion?

A. Yes.

Q. And you stated that the reason that you relied on the 1961 and the 1968 study for your report was because that there weren't any more recent studies. Correct?

A. Right.

Q. Now that you've had an opportunity to review Exhibit 31, do you believe that there was a more recent study of the high-water levels on Round Lake, Little Round Lake and the Tiger Cat Flowage?

A. Well, this is -- certainly, an investigation; but it -- Todd Naas, who is the author here I believe, he's a water management specialist with the DNR; made -- some inquiries of the dam operator and of some local residents. He checked the gage levels at the Tiger Cat and Round Lake Dam.

Q. And so were you --

A. So it's a study, I guess, yes.

Q. Had you had this document, would you have included it in your December 4th, 2002 report which has been marked as Exhibit 24?

A. Yes, I would have included some items from this.

Q. What would you have included?

A. Well, I think this discussion about this -- this wetland

north of the Lake Placid diversion. Ah, I'm looking for that now.

Q. Second full paragraph, Page 2.

A. Thank you.

Q. Anything else you would have included?

A. Well, I don't --

Q. For instance, his recommendation of daily monitoring of levels?

A. Well, the -- that's always a -- that's always a good recommendation.

Q. That's always a good recommendation?

A. That's always a good recommendation to have regular monitoring. Ahm, are you asking me if that would have been one of my recommendations as well?

Q. I'm wondering what you would have gleaned. I'm sorry. I'm wondering what you would have gleaned from this report and made a recommendation. Let me back up and say in the 1961 memo there were some recommendations made on the physical conditions at that time. And that document's over forty years old. This document's only six years old. And one would presume that the physical conditions are -- current physical conditions are more represented by this letter than this, the 1961 memo; correct?

A. Correct.

Q. And so the recommendations in this letter are likely more pertinent to the current situation than the 1961 memo; correct?

MR. WRIGHT: Objection, form and foundation.

THE WITNESS: Perhaps.

BY MS. AZAR:

Q. I point your attention to the sentence that says: The water levels must be maintained within the authorized range required by the water levels issued for both water bodies, Pages 1 and 2?

A. Yeah. That he bolded.

Q. Yes.

A. Water levels must be maintained within the authorized range required by law for level orders issued in both water bodies, yes.

Q. He then proceeds by saying: Exceeding these levels can cause damage to private property and degradation of a the lakes' water quality?

A. Yes, he does, yes.

Q. Would that have been something you have noted in your December 4th, 2002 report, had you had said this letter?

A. I don't think so. I think that the committee was well aware of that. I think Jim -- Jim Hausman had made them all aware of -- of his opinion that there's damage taking because of high water.

Q. Do you think the committee was aware that the water levels must be maintained within the authorized range ^ ck ^ coffer ^ cover. Water?

A. I think they were, yes. I think they understand that that

was the order, sure.

Q. Let's jump back to Exhibit 24, which are your recommendations in our prior discussion, in which you said --

A. What page are we on?

Q. Page 4. In which you said that only Option 3 would allow the County to control the water levels such as -- so that they could maintain the water levels within the authorized risk required by the orders. Correct?

A. Correct.

Q. I guess, Dan, I'm asking why you didn't include that in this report.

A. Include what?

Q. I believe you -- you've acknowledged that there was a 1941 Order and there was a maximum level in there.

A. Yes.

Q. There's only one of these options that can achieve those water levels. Why didn't you say that in your report?

A. Why didn't -- I say that only Option 3 will -- ah, perhaps I -- didn't think it needed to be said. You know. It's an obvious thing.

Q. So, when I talk with the members of the committee later this week and I ask them if it was obvious to them that No. 3 was the only one that would allow them to control the water levels on Round Lake, do you think that they'll agree with that?

A. I hope so.

Q. You know --

A. Obviously, by reading these, you know, do nothing would be outside of the lakes, and I think that's -- that's made clear here. Establish revised lawful levels, revised levels, so, therefore outside of the range.

And then -- and then No. 4 is the abandon alternative and, of course, that provides no control. And I say why.

So you were asking me if I should have said -- had one single statement that said only Option 3 will provide control. Well, I think it's implied in these. So I -- and anyone would carefully read them, they would pick that up.

Q. Did anybody ask you that during the committee meeting?

A. I can't recall.

Q. Do you know when the first water gage was installed on Round Lake?

A. Well, it's probably the Kaiser gage. Can I refer to an exhibit, please?

Q. Absolutely. Do you want 10?

A. Yes, 10.

Q. Fancy that.

A. Well, we thought that the Kaiser gage was referred to in the 1941 Order. So it existed prior to 1941. Or at least during 1941. That's I guess what I know.

Q. Thank you.

A. There's other water-level records, but I've noted that the

origin of records is unknown. So I don't know if that was Kaiser gage or what it was.

Q. Thank you. Okay. I want to jump back now to when you were conducting your Round Lake water-level study.

A. Okay.

(Document marked for identification as Exhibit No. 32.)

BY MS. AZAR:

Q. I've just handed you what's been marked as Exhibit 32. Would you please identify that document?

A. It's a USGS basin map with some elevation notations on the Northern Channel, what we're calling the Northern Channel.

Q. Did you prepare this document?

A. Yes.

Q. And did you prepare it in your ordinary course of business?

A. Yes.

Q. Is this an accurate copy of the document that you prepared?

A. It appears to be.

Q. Next. This is the easy stuff. Have you got the next one?

A. Yes.

Q. It's been marked as Exhibit 33. Would you please identify it?

A. That's this one?

Q. Yes. It's got a 293 at the bottom?

A. Yes.

Q. Yes.

A. Okay. What --

Q. Do we have a mark on that one yet?

(Document marked for identification as Exhibit No. 33.)

By MS. AZAR:

Q. Would you please identify --

A. Yeah, these are some survey notes prepared by myself dated 9-30-02.

Q. And did you prepare that in your ordinary course of business?

A. Yes.

Q. And are these accurate copies of the documents you prepared?

A. Yes, I believe so.

MS. AZAR: That's all of that one. Next.

(Document marked for identification as Exhibit No. 34.)

BY MS. AZAR:

Q. Mr. Carthel, would you please identify what's been marked as Exhibit 34?

A. That is minutes of the Sawyer County Land and Water Conservation Committee, October 4th, 2002.

Q. You attended this meeting. Correct?

A. Ah, it says that I did.

Q. It says in here that you reported on the recommendation of corporate counsel to acquire WDNR water management staff and tribal council responses to possible dredging. Did you do that?

A. Let me read that.

Q. Okay.

A. Okay.

Q. Okay?

A. Is what you're referring is this sentence: Counsel reported on recommendation of corporate counsel to acquire DNR water management staff and tribal council responses to possible dredging?

Q. Correct. Did you follow through and discuss possible dredging with the DNR and the tribal council?

A. Yes, I discussed it with DNR.

Q. Who at DNR?

A. Seems like that was before Kafuro ^ sp came on board so it was someone who was standing in his place in Rhinelander. I don't -- the name's slipping.

Q. Spangberg ^ sp?

A. Pardon me?

Q. Was it Spangburg ^ sp?

A. No, it wasn't Spangberg ^ sp, no.

Q. Dale Lang ^ sp?

A. Lang, Dale Lang ^ sp, yeah. Unfortunately, Dale was not very helpful and -- talked a lot about jurisdiction problems between the tribe and the DNR and he really had no idea how to proceed, and I don't think -- since he was -- well, since he was just filling his shoes temporarily, probably didn't have a lot of interest.

Q. Did you also talk to him about removing the debris dam in the Southern Channel? Or was your discussion limited to dredging?

A. I -- I don't recall if it was.

Q. I note here that I'm looking now at the first sentence. It talks about the anticipated results of dredging in the channel between Little Round and Osprey Lakes and possible changes in the Southern Channel.

You're not proposing that dredging occur in the Southern Channel, are you?

A. Hm, no.

Q. Indeed, everything that we've been discussing in relation to the Southern Channel has to do with the moving the natural-occurring dams in that channel. Correct?

A. There is one location further upstream, the debris dam, the beaver dam and then the bulrushes and the bulrush area. That's a potential dredging site, possibly.

Q. But you don't know for sure whether dredging would be --

A. I don't know for sure. That would have to occur anyway.

Q. So I want to focus on -- maybe you've already answered this. I want to focus on what you were going to be talking to the DNR staff about as well as the tribal council. The tribal council really only has say so -- some type of possible jurisdiction to the Southern Channel. Right?

A. That's my understanding, yes.

Q. And so, if --

A. And, perhaps, some of the Northern Channel; but I'm not -- I'm not certain on that.

Q. And, when you were talking with Dale Lang ^ sp about dredging, I guess I'm -- I'm confused because we're talking about tribal jurisdiction versus state jurisdiction over dredging. But dredging is only going to be occurring in the Northern Channel. So why were you talking to the DNR about tribal jurisdiction of the Northern Channel?

A. Well, I don't know if I was talking to him about just tribal jurisdiction. We probably talked about, you know, right -- you know, any riparian permissions that may be required and -- and I think, too, that I was talking to him in general terms about, you know, how to -- the permitting process and how to proceed.

Q. Did you also contact anybody at the La Courte Oreilles ^ sp?

A. No, other than then perhaps talking with Dan Tydol ^ sp.

Q. And did you speak to Dan Tyrole ^ sp about this?

A. Well, yes, I talked to Dan Tyrol ^ sp to -- he always attends the committee meetings.

Q. Yeah.

A. Yes, I've had an opportunity to speak with him.

Q. And what sort of discussions have you had with Mr. Tyrole ^ sp with regard to the high-water levels on Round Lake?

A. I don't think he has an opinion one way or another, other

than the fact that he did deliver the message that the Council didn't want any disturbances at the output of Osprey Lake.

Q. Did you specifically ask Mr. Tyrole ^ sp whether disturbance included removal of the naturally-occurring dams?

A. Well, yes, I think we talked about that. And, yes, I think what he was telling me is that -- you know, any changes in the water level is -- considered -- you know would be a disturbance. He seemed concerned about impacts to wetlands upstream, will -- change in the functional values of the wetlands and that sort of thing.

Q. And was he concerned about wetlands being flooded or wetlands being drained?

A. Being drained, I think. Maybe not being necessarily totally drained but, you know, changed somehow -- changing the functional values I think was his --

(Document marked for identification as Exhibit No. 35.)

BY MS. AZAR:

Q. Mr. Carthel, would you please look at what's been marked as Exhibit 35?

A. Yes.

Q. Can you identify that?

A. This looks like an E-mail from Dale Olson to Frank Dallam and Dan Carthel. It's dated June 13th, 2002.

Q. In this E-mail, Mr. Olson suggests that you and Mr. Dallam and Mr. Olson have a meeting prior to the June 28th, 2002 meeting

that was held in the -- Hayward High School. Correct?

A. Yes.

Q. Did that meeting take place?

A. I don't think so, no. Is this -- June 13th, 2002, was the public information meeting?

Q. No, that's a very good question. 2002 -- Let me backup and I apologize. There was a June 25th, 2002 meeting at the Courthouse. Did you attend that meeting?

A. June 25th, 2002. Was it a public information meeting? Yeah. Yeah, I did, yeah.

Q. You did. Okay.

A. But there was no meeting prior to that.

Q. There was not?

A. No.

Q. Do you recall the June 25th, 2002 meeting?

A. Yes.

Q. Do you recall Mr. Hausman giving a presentation at that meeting?

A. Yes.

Q. Do you recall that he had discussed the damage to his property at that meeting?

A. Oh, I'm sure he did, yes.

Q. Were you at the June 5th, 2002 meeting of the Land and Water Conservation Committee?

A. That was prior to this?

Q. Correct. Three weeks prior to.

A. No, I don't recall if I was or not.

MS. AZAR: Bear with me for a minute. I'm going to pull out some more documents here. Try to limit our -- how much we have to do.

(Documents marked for identification as Exhibit Nos. 36 and 37.)

BY MS. AZAR:

Q. Mr. Carthel, I'd like you to look at what's been marked as Exhibit 36. Could you please identify that document?

A. These are some notes that I made. I think I made these at the meeting at the Courthouse, the public meeting we were just discussing.

Q. That would have been the June 25th, 2002 meeting?

A. Yes, that sounds right. Hm-hm.

Q. Do you recall --

A. And most of these I think were taken -- I was asking Jim questions and so -- until Jim was -- this was prior to my really having any knowledge of what was going on there. So I was just taking -- taking a few notes.

Q. Let's just turn to Exhibit Number 37. Can you identify that document?

A. These are some hydraulic calculations for the Little Round Lake Dam and the CTH NN culverts.

Q. Did you prepare this document?

A. And some survey notes as well. Yes.

Q. Did you prepare this document in the ordinary course of

business?

A. Yes.

Q. And is this an accurate copy of the document that you prepared?

A. The bottom of the second page is chopped off. I can make it out, I think.

Q. Besides that?

A. Yeah.

Q. Everything else looks accurate?

A. Yeah.

(Documents marked for identification as Exhibit Nos. 38 and 39.)

BY MS. AZAR:

Q. Mr. Carthel, would you please identify what's been marked as Exhibit No. 38?

A. Minutes from the Sawyer County Land and Conservation Committee of November 4th, 2002.

Q. And this meeting was held after you had started your Round Lake water study but before you had completed the final report; correct?

A. Yes. I believe that's correct.

Q. Are you looking at what's been marked as Exhibit No. 39?

A. Yes.

Q. At the meeting on November 4th, 2002, you distributed to the Land and Water Conversation Committee photos of the beaver dam and debris and vegetation restricting flow. Is this the packet

of materials -- when I say this, is Exhibit 39 the packet of materials that you distributed to the committee on that date?

A. Well, it could be except I'm not seeing a picture of the beaver, slash, debris dam.

Q. So there could be photos missing?

A. Could be. Yeah.

Q. Nevertheless, were those documents prepared by you, those documents that have been marked as Exhibit 38?

A. Yes.

Q. Were they prepared in the ordinary course of business?

A. Yes.

Q. And besides possibly missing some photos from that packet, are they an accurate representation of documents you prepared?

A. Yes.

Q. At the November 4th meeting, you discussed possible actions to resolve the long-term high-water issue? Do you see that?

A. Discussion regarding the possible actions to resolve the long-term water issue. There was discussions. That's what it says.

Q. Do you recall that discussion?

A. No. Not -- nothing specific.

(Document marked for identification as Exhibit No. 40.)

BY MS. AZAR:

Q. Mr. Carthel, would you please identify what's been marked as Exhibit No. 40?

A. Yeah. It's a phone log that I made -- it's a phone to Dale Lang ^ sp, the DNR, on November 15th, 2002.

Q. And the second page?

A. Ahm, some notes regarding a meeting with Sawyer County corporate counsel T.J. Duffy ^ sp that I prepared.

Q. And did you prepare both of these documents in your ordinary course of business?

A. Yes.

Q. And are they accurate copies of the documents you prepared?

A. Yes.

Q. What did you talk with Sawyer County corporate counsel about?

A. Hm -- well, these items that are listed here.

Q. Why don't we walk through them? Kind of read them off.

A. Do you want me too read them out?

Q. Out loud, please.

A. T.J.'s comments: Does the State have superceding jurisdiction on water within tribal lands?

Q. Now, is that your question or his?

A. No, that's T.J.'s question.

Q. And what prompted that question from him?

A. Oh, well, I imagine discussions about the water levels on Osprey Lake and about, you know, clearing out the channel.

Q. And what was he recommending you do in relation to this question?

A. Well, he -- he was suggesting that the County seek the services of a -- an attorney who specializes in -- in tribal issues.

Q. Do you know if the County did that?

A. I don't know if they did or not.

Q. Do you recall anything else with regards to your discussion about that first item concerning superceding jurisdiction?

A. No.

Q. Let's go to the second item.

A. Discuss above with the WMS. Get specific basis for decision.

Q. What does WMS stand for?

A. Water management specialist.

Q. Did you do that?

A. Yeah, that's -- that's -- well, there was no WMS at that time and so the best I could do is talk do Dale Lang ^ sp; but, like I said before, Dale wasn't a lot of help to me.

Q. And your conversations with Dale Lang ^ sp that is actually captured on the first page of this document?

A. Right. That's correct.

Q. Let's go to third item thereon on the second page there.

A. T.J.'s opinion may be easier to get revised PSC order than to fight the tribe. That was his opinion.

Q. And what did T.J. think the County would have to fight the tribe about?

A. Lowering the water surface.

Q. Anything else you discussed in relation to that item?

A. Ah, I don't know. Perhaps -- you know, well, clearing the channel out, perhaps, and lowering the water surface.

Q. And then the fourth item there?

A. T.J. recommends finding attorney who specializes in federal, slash, state jurisdictions. That's what we had talked about in regards to the first item.

Q. And the fifth item?

A. Consider relationship with tribe versus one party.

Q. What was he talking about there?

A. He was referring to, ah, that the County should consider their relationship that they have with the tribe and -- versus one person, one party.

Q. Who is the one person that he was referring to there?

A. Mr. Hausman.

Q. And did Mr. Duffy believe that the current dispute -- strike that.

Did Mr. Duffy believe, based on your conversation, do you think Mr. -- let me try in English. Based on your conversations with him, did Mr. Duffy believe that the current water problems were only affecting Mr. Hausman?

MR. KIRSCHNIK: Object to form, foundation. Go ahead on that one.

THE WITNESS: I don't know. I don't know what he believed. I'm

sure he realizes that the water affects everybody. But whether or not he believed that that would adversely affect one party, I'm not sure.

BY MS. AZAR:

Q. Earlier, we had discussed your contacts with the County and you said your primary contacts were with Dale Olson and Jan Eck?

A. Yes.

Q. You had also mentioned that besides meeting with Mr. Hirschfeld that you didn't have any other direct contact with Land and Water Conservation Committee members; correct?

A. I believe that's right. Yes.

Q. Did you have any contacts with other County board members in relation to the high water problems on Round Lake?

A. No.

Q. Did you have any contacts or discussions with any other Sawyer County employees regarding the high water problems on round Lake?

A. Hm, perhaps, the zoning administrator. But nothing -- nothing specific about the problems. Just in regards to the studies that were being done.

Q. I'm sorry in regards to studies?

A. Yeah, the hundred-year flood elevations.

Q. You talked to Mr. Christman about that?

A. Yeah, from time-to-time.

Q. When was the last conversation you had?

A. Oh -- I -- I can't recall. Quite a while ago.

Q. Have you ever given Mr. Christman preliminary results of your flood-plain analysis?

A. No. I've given Land and Water -- Mr. Olson.

Q. When did you give Mr. Olson the preliminary results?

A. Oh, I -- I think that's one of the -- one of the documents you have.

Q. Is it one of the documents that's been marked as an exhibit?

A. Yeah, I think so.

Q. When did you give that to him?

A. Oh, no. For Round Lake and Little Round Lake. I haven't. No. I haven't. No.

Q. Have you had any contact with Sawyer County's lawyers for this case? And their names are Matt Dregne, Joe Wright or Angela James?

A. Matt Dregne.

Q. When did you talk with Matt?

A. It was this year.

Q. Was it springtime?

A. Springtime.

Q. Springtime?

A. Yeah.

Q. How long was your meeting?

A. 15 minutes probably.

Q. What did you discuss?

A. Oh, that was -- at the same time I met with Mr. Montgomery.

Q. Hm-hm.

A. Yeah, and I think I said before that what we discussed. We discussed about the modeling, you know. We discussed about the datums, the complications that existed with the datums.

Q. What sorts of questions did he ask you?

MR. KIRSCHNIK: Who he?

MS. AZAR: That Mr. Dregne asked you.

THE WITNESS: I don't think he really asked me any questions. Mr. Montgomery may have. They were going to take a tour and -- and so they -- you know, they were asking me about different features, in the water course and stuff.

BY MS. AZAR:

Q. Speaking of the features in the water course, in your flood-plain analysis, how many outfalls do you have modeled from Round and Little Round Lake?

A. How many outlets?

Q. Hm-hm.

A. Modeled? Just one.

Q. Carlson Road --

A. Yes.

Q. -- Dam?

A. Hm-hm.

Q. Have you done any study of a channel that proceeds due east of Little Round Lake?

A. No. No. I'm not aware of it, I guess -- I'm aware that -- are you talking about right here?

Q. This one.

A. Oh, okay. Now, I --

Q. Let's get a marker and mark it. Just why don't you put a red X where we're discussing the potential out -- second outfall from Little Round Lake?

A. Okay.

Q. And so you have not?

A. No, I haven't surveyed that or anything.

Q. Would you mind initialing that and dating it? So do you know whether or not that currently allows water to drain from Little Round Lake into that area?

A. Into Osprey Lake.

Q. Well, even into the wetland area?

A. I don't know. No.

Q. Are there any other potential outfalls of Round and Little Round Lake that you know of?

A. Hm, no.

Q. Okay. As far as contacts you've had with Wisconsin Department of Natural Resources regarding the high water levels on Round Lake, you've now discussed a meeting or discussion with Dale Lang ^ sp. Have you had any discussions with Frank Dallam with regards to --

A. Oh, I'm sure I have. Yes.

Q. How many?

A. Oh, how many?

Q. Less than five, more than five?

A. Well, you know, I would -- one -- one meeting I would say. We had one meeting -- we had a meeting in regards to my work with the Billy Boy Flowage project.

Q. With the overall flood-plain analysis?

A. With the overall. Yeah. That had nothing specific about Round Lake, other than he wanted me to route through Round Lake. I would have rather not routed through Round Lake.

Q. Why not?

A. Well, it's very complicated. I think the requirement is that you do 14 lakes and there's other lakes that could be done other than -- than these.

Q. Have you had any?

A. But he was insistent that this one be routed. So --

Q. And what does it mean to route a lake?

A. Well, to route it through the structures, through the constrictions, to attenuate the flood flow, to account for storage, yes.

Q. Besides talking with Mr. Dallam about the flood-plain analysis, did you have any other discussions with in Dallam with regard to high-water instructions on Round Lake?

A. Yes. There was a meeting with myself and Frank and Dave Kafuro ^ sp and Dale Olson and Dave Kafura's office in Hayward.

Q. When was that?

A. I think that was prior to the public information meeting.

Q. In 2003?

A. Yeah.

Q. What was discussed?

A. Ah, the high-water levels on Round lake and -- a --

Q. Why did you meet?

A. Dale Olson wanted to get everybody together.

Q. And why don't you just describe how the meeting progressed. How long was the meeting, for instance?

A. It wasn't -- it wasn't that long. Half hour to an hour, perhaps.

Q. Okay.

A. Ahm, I -- I don't think that -- at that meeting, I don't think I had a lot of input at that point.

Q. Okay.

A. It had more to do with the -- the DNR's, Frank and Dave Kufaro ^ sp.

Q. What was the discussion?

A. Oh, I can't -- I can't recall. I'm getting tired again. I can't --

Q. We're getting very close to the end.

A. I hope so. I -- I really I -- I cannot recall.

Q. Let's --

A. But, the -- I think Dale wanted to be -- he just wanted to

touch bases and make sure that, you know, they were doing what they could or -- in terms of -- of handling this.

Q. Was he asking for anything?

A. The high water. I -- I don't recall. I -- I don't recall.

Q. Staying on that June 28th, 2003 meeting, it was -- that was the one that was videotaped, if you recall that?

A. At the high school?

Q. Yes, that was at the high school, right? June 28th, 2003.

MS. AZAR: The high school. The one that was videotaped.

MR. HAUSMAN: Yeah, June 7th, Round Lake. Round Lake Property Owner's Association meeting.

MR. WRIGHT: That was June 5th, I think. Were you at that one as well?

THE WITNESS: Yeah.

BY MS. AZAR:

Q. The Round Lake property owners' meeting. Both of those meetings were videotaped?

A. Yeah.

Q. Do you remember standing in the back of the room and talking with Nancy Dent about your flood-plain analysis?

A. I remember standing in the back of the room when Nancy Dent was up giving her presentation. I don't remember talking to her.

MS. AZAR: I tell you what. Can we take like a five-minute break? I'm going to pull together the last documents and I'm sure we're very close to the end. I just want to make sure we're

not forgetting anything.

(There was a recess.)

(Documents marked for identification as Exhibit Nos. 40 through 42.)

BY MS. AZAR:

Q. Let's go to what's marked as Exhibit 41. Can you identify these documents?

A. Yeah. They're photographs of locations in water course between Little Round Lake and Osprey Lake and CTH NN.

(Documents marked for identification as Exhibits No. 41 through 43.)

BY MS. AZAR:

Q. Were these all taken by you?

A. Yes.

Q. Were they all taken on -- whoops -- strike that. This is going to be hard. I would like to try to identify the dates of these photos. I notice that some have the dates marked on the front and others don't.

A. Okay.

Q. Are you going to be able to determine which --

A. Yeah, I think I might be able to. Right now. I'll get a -- I know how they're grouped, so.

Q. Fantastic. Here's an a red marker. The first one actually is marked 9-30-02?

A. Yeah, 9-30, that's September 30th. Okay.

Q. And that's obviously the culverts at NN. Mark that Page 1. Page 2?

A. September 30th, '02. That's already marked.

Q. Page 3?

A. That's marked.

Q. And it's of Osprey Creek leading to Little Round Lake Dam?

A. Hm-hm.

Q. Page 4, it's also marked Little Round Lake Dam, looking downstream. Page 5. I believe that's marked?

A. Mine's not marked.

Q. Mine isn't either. Do you know what date that was?

A. Ahm, can we just skip that one for right now?

Q. Here. Do you want to flag it?

A. Yeah.

Q. Page 6?

A. That's marked. 9-30-02.

Q. And it's the typical channel of Osprey Creek from about 500 feet downstream?

A. Yes.

Q. Page 7?

A. That's marked to 9-30-02. Typical channel of Osprey Creek from about 300 feet, to 500 feet downstream.

Q. Page 8? It's also marked -- and this is from October 19th, 2002?

A. Right.

Q. Page 9?

A. Yeah, I think that's the same date, October 19th, 2002.

Q. Could you mark the page number on that as well? Actually, I'd like you to go through and mark all the numbers.

A. All right. Let's go through and mark them then. So one.

Q. Page 10 is also marked already?

A. Yup.

Q. Page 11 is also marked?

A. Right.

Q. That's of the debris dam?

A. Right.

Q. Page 12 is marked?

A. Hm-hm.

Q. Page 13?

A. That's also 10-19.

Q. 10-19 of '02. Correct?

A. Right.

Q. And what are we looking at there?

A. Page 13. Ah, well, it's a big -- it's on Osprey Lake. It would be looking downstream. It's kind of the odd -- the beginning of the channel, the South Channel. Probably in this area. Right here, let's say. Guessing.

Q. Let's go to Page 14.

A. This is the same date, 10-19-02.

Q. Can you identify that?

A. That's that beaver dam that I got marked on Exhibit 1.

Q. That's the beaver dam or the debris dam?

A. It's the beaver dam.

Q. It's beaver dam as indicated on Exhibit 1?

A. Hm-hm.

Q. We're up to Page 15.

A. Yah. That's also 10-19-02.

Q. What are we looking at?

A. That's also the beaver dam. That's looking upstream from downstream.

Q. And, again, that's the beaver dam as shown on Exhibit 1?

A. That's right.

Q. Page 16?

A. That's the same photograph.

Q. So same date?

A. Same view.

Q. Same view. It's actually the same photograph just close up?

A. Same photograph as Page 15. Only, yeah, a little different position or angle or -- it's actually pretty close to the other one.

Q. Page 17?

A. Just put the date on 10-19.

Q. Ooh, back up.

MR. WRIGHT: Off the record for a second.

(Discussion off the record.)

THE WITNESS: This one I'm not sure about. I'm pretty sure it's 9-30-02, based on the foliage.

BY MS. AZAR:

Q. If you're not sure, I wouldn't guess. And the rest you identified?

A. Yeah, the ones on the back I'm not sure, either. These are digital. These are taken with film.

Q. Did you take these?

A. Yes, I did.

Q. Did you take them during your Round Lake water study?

A. Hm, may have been just prior to that.

Q. And have you identified those pages? Have you marked the pages?

A. I haven't put page numbers on them. I can do that.

Q. I think we should talk about what they are as well, so -- what page number is that?

A. Six.

Q. And what is that a picture of?

A. This is a picture of 11 -- the -- this is a picture.

Q. The top photo is?

A. The top photo is looking at the benchmark location.

Q. Which benchmark?

A. At Carlson Road, at the Little Round Lake Dam, there's an orange marker in the center of the picture just showing where the benchmark is located.

Q. And the bottom photo?

A. That's close to the benchmark itself.

Q. Okay. The next page?

MR. KIRSCHNIK: Number?

THE WITNESS: 27 -- Page 27 is the -- this is the dredged Channel, the top picture.

BY MS. AZAR:

Q. The top photo is a picture of the dredged channel which is marked in red on Exhibit No. 1; is that correct?

A. That's correct. The bottom photo is looking downstream of the end of the dredged channel indicated on red on Exhibit No. 1. So it's looking towards the blue Northern Channel on Exhibit No. 1.

Q. Wonderful. Next page?

A. The top photo. Let me see. Let me get this page number. Page No. 28. Top photo, I think, is looking from downstream towards the upstream at the Little Round Lake Dam structure. So it's looking at the downstream side of the Little Round Lake Dam.

Q. And the bottom photo?

A. And the bottom photo is about standing at the same location, looking downstream at the dredged channel, which is the red line on Exhibit No. 1.

Q. Yes, sir. Page 29.

A. Page 29. The top photo is looking from the inlet the dredged channel at Little Round Lake, looking downstream towards

the Little Round Lake dam. And the bottom photo is the same. Little different position and angle.

Q. Page 30?

A. That's turned around. Page 30, the top photo is looking upstream from on top of the Little Round Lake dam structure. And the bottom photo is looking downstream from on top of the Little Round Lake Dam structure.

Q. Pages 26 through 30 you indicated you didn't know exactly what date these photos were taken?

A. Right. But I note because I -- because of the -- I'm pretty sure these were film photos. So they were prior to when I got my digital camera. I think -- I see it's spring.

Q. 2002?

A. When did we -- when was that first meeting at the courthouse?

MR. HAUSMAN: In 02 or 03?

MR. WRIGHT: The very first meeting.

THE WITNESS: Very first meeting.

ALSO PRESENT: June 5th. Then there was one at 7 o'clock. That was June 25th of.

MS. AZAR: Of '02.

THE WITNESS: This may have been right about that time. June -- the foliage looks a little -- well, it's out pretty good. Yeah, it could be June of '02.

MR. KIRSCHNIK: That's your best guess.

THE WITNESS: That's a guess, yes, my best guess.

BY MS. AZAR:

Q. There were other photos in the middle that didn't have any markings on them, and I wanted to make sure that we have descriptions of them in the record.

A. Okay.

Q. So can you look through? And I apologize, since we have different pagination.

A. Do you want to get yours organized quickly?

Q. Fabulous. I think 18 is where I stopped.

(Discussion off the record.)

BY MS. AZAR:

Q. No. 5 was one that you were going to go back to?

A. Yeah, and -- on -- on this 9-30-02, that's when I canoed the Northern Channel, so -- my guess would be that this is the Northern Channel, somewhere along the Northern Channel.

Q. But it's a guess?

A. Yes, on 9-30-02 and judging by the foliage I would say it's 9-30-02.

Q. Okay. 6, 7, 8, you had done a description on 14 and 15. Can you -- do you know if you did one on 16?

A. 16 is the same as 15.

Q. I think you did do that one. 17?

A. 17. That's the bulrush blockage in the Southern Channel.

Q. As identified on Exhibit 1. Correct?

A. Right.

Q. No. 18?

A. That's the debris dam.

Q. As identified on Exhibit 1?

A. Hm-hm.

Q. And that photo is taken on the 19th of October, 2002. Correct?

A. Correct.

Q. Next is 19?

A. Yeah, that's looking from the debris dam downstream towards CTH NN.

Q. Okay. And that was also taken on the 19th of October?

A. Right.

Q. Page 20?

A. That's the same.

Q. Page 21?

A. That's looking across the debris dam. You can see a little bit of ponded water on the left. Do we have the same photo?

Q. Yes.

A. Okay. Some ponded water on the left and then you can see a faint channel line going down the center of -- going across the center of the picture.

Q. And so the debris dam would be located at the breaking point from the open water to the channel?

A. Right.

Q. Next. Page 22?

A. Right. This is also looking across the debris channel. It's looking towards World's End Road. The previous picture 21 was also more or less looking towards World's End Road.

Q. Both of those were taken on October --

A. -- 19th, '02.

Q. Next item which is Page 23?

A. I think that is -- oh, I think that's looking upstream from the debris dam. Yes.

Q. Page 24?

A. And that was 10-19-02, also. Page this is looking downstream from the debris dam towards the CTH NN.

Q. Dane on?

A. 10-19-02.

Q. Page that?

A. Please also looking downstream from the debris dam towards CTH NN on 10-19-02.

Q. Thank you. And we do have descriptions of those remaining photos?

A. Hm-hm.

Q. Thank you. Let's move on to what's marked as Exhibit No. 42. Can you identify this document?

A. This is a letter from myself to Mr. Dale Olson, Sawyer County Land and Water Conservation, June 9th, 2003.

Q. This document references a meeting with Mr. Olson and DNR representatives on March 31st, 2003?

A. That's that meeting we were talking about right before the break.

Q. Okay.

A. And that would have been myself, Dale, Dave Kafura ^ sp and Frank Dallam.

Q. Let's move on to what's been marked as Exhibit No. 43? Can you identify this document?

A. This is an e-mail from Dale Olson to quite a few people: Shawn Haseleu, James Weinzierl, Dan Tyrolt, Frank Dallam and myself. It's date June 10th, 2002.

Q. Now, this discusses having a meeting as well, doesn't it?

A. Yes, it does. Special meeting of the Sawyer county land and conservation committee to discuss waters levels on Round Lake.

Q. Now, is this discussing a pre-heard heat. 0r an annual a factual meeting itself?

A. I think it's the actual meeting itself.

Q. And this would have been the meeting that was held on June 25th, 2002 at the Courthouse?

A. At the Courthouse, yeah. I believe it is.

Q. E-mail says in point No. 6 that Dan Carthel and Heather Harrington are running heck on the watershed now and we will have solid numbers fairly soon. Do you see that?

A. Yeah.

Q. The solid numbers didn't come fairly soon, did they?

A. No.

MR. KIRSCHNIK: Well, a matter of degree.

MS. AZAR: And thank you for pointing that out.

BY MS. AZAR:

Q. The solid numbers didn't come for two more years, correct? Again, remind me what the cause of the delay was.

A. Well, other work came up. There was more survey work than what was originally anticipated and, frankly, the time schedule that was originally set up was ridiculously short given the amount of work that has to be done.

Q. And the time schedule that was in set up was actually for a study of all the lakes, wasn't it?

A. Right. That's right.

Q. I notice also in this E-mail that Mr. Olson references one individual from Illinois. Do you see that reference?

A. Yes.

Q. Were -- who were they referring to when they state that?

A. Well, knowing what I know now I know who it is. It would be Jim Hausman, but at the time I got this E-mail I probably wouldn't have known that.

Q. And why do you think it was -- that Mr. Olson references it as one individual from Illinois?

A. I don't know.

Q. Did you ever hear Mr. Olson speak in derogatory terms about

Mr. Hausman?

A. No.

Q. Did you ever hear anybody from Sawyer County speaking in terms that were less than flattering about Mr. Hausman?

A. No.

Q. And you understand, when I say less than flattering, I'm speaking pretty broadly?

A. I understand.

Q. So no one -- would you like him to leave the room? Would that help?

A. Well --

MS. AZAR: Why don't you leave, Jim? I'm serious; he doesn't have to. .

BY MS. AZAR:

Q. I just want the record to reflect that Mr. Hausman left.

A. There's nothing specific that I can -- that I can recall. Certainly, there -- you know they're not happy that he's bringing this suit against them and making everybody's life miserable, but --

Q. And how do they talk about Mr. Hausman generally?

A. Well -- I -- I -- I don't par -- I don't participate in anything like that, so --

Q. And I'm not -- I'm not suggesting that you participated, but you might have heard some things. And you're allowed to swear on the record when --

A. No. I -- you know -- I can't -- I can't recall anything specific, and I guess we're -- we're -- you know, you're talking about Dale, I suppose. Dale Olson or anyone.

Q. I'm talking about anyone from Sawyer County, whether they were elected or not elected?

A. No. No. I think most people try to keep a professional demeanor. Certainly, no one on the committee has ever said anything badly about Jim that I'm aware of.

Q. Any -- any other County officials?

A. No.

MS. AZAR: You can bring Jim back in.

MR. WRIGHT: I'll get the door.

MS. AZAR: All right. We are getting really down here now?

BY MS. AZAR:

Q. Did you investigate the damage at Mr. Hausman's property at any point in time?

A. No.

Q. So not in 2002?

A. Never. Never been on his property?

MR. KIRSCHNIK: Your ears still burning?

BY MS. AZAR:

Q. And have you been totally paid for your services up to date under the NWBE contract?

A. Is it -- No, I haven't billed everything, no.

Q. And I don't remember what that contract -- that contract was

for a limited dollar amount or was that time and materials?

A. No, it was a limited dollar amount; but I can negotiate a higher amount and -- she's got -- it's a complicated situation and I guess I don't want to get into it, yes. I could probably negotiate for more money.

Q. Okay.

A. But -- I haven't decided to do that yet.

Q. Obviously, the study has taken longer than either you or NWBE has anticipated; correct?

A. That's right.

Q. And it's more expensive than you had anticipated?

A. That's correct.

Q. Do you know if NWBE has negotiated further payments from Sawyer County?

A. I don't know.

Q. You don't know. With regards to -- I don't want to say this is the last question, but it might be -- Exhibit No. 24, which is your final report to Sawyer County, did you prepare a draft of that document?

A. No.

Q. Did anybody from Sawyer County provide comments to you on that document?

A. Hm, no.

Q. Did you discuss the results of that report with anybody from Sawyer County prior to releasing it?

A. No. No, I think I brought it for the meeting and that was the first time anybody saw it.

MS. AZAR: That was the last question.

MR. WRIGHT: Just a minute here. I have no questions.

(The deposition concluded at 4:11 P.M.)