ORIGINAL

ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
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WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS FOR THE CHICAGO AREA WATERWAY SYSTEM AND THE LOWER DES PLAINES RIVER: PROPOSED AMENDMENTS TO 35 Ill. Adm. Code Parts 301, 302, 303 and 304	)	R08-09 (Rulemaking-Water)

REPORT OF PROCEEDINGS held in the above-entitled cause before Hearing Officer Marie Tipsord, called by the Illinois Pollution Control Board, taken before Laura Mukahirn, CSR, a notary public within and for the County of Cook and State of Illinois, at 160 North LaSalle Street, Room N-502, Chicago, Illinois, on the 10th day of November, 2009, commencing at the hour of 9:00 a.m.

A P P E A R A N C E S

MS. MARIE TIPSORD, Hearing Officer
MR. TANNER GIRARD, Chairman
MR. ANAND RAO, Member
MS. ALISA LIU, Member
MS. ANDREA MOORE, Member
DR. SHUNDAR LIN, Member
Appearing on behalf of the Illinois Pollution Control Board

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276
(217)782-5544
BY: MS. DEBORAH WILLIAMS
MS. STEPHANIE DIERS
MR. ROBERT SULSKI
MR. SCOTT TWAIT
MR. HOWARD ESSIG
MR. ROY SMOGOR

FRANZETTI LAW FIRM
10 South LaSalle Street
Suite 3600
Chicago, Illinois 60603
(312)251-5590
BY: MS. SUSAN FRANZETTI
Appearing on behalf of Midwest Generation

HEARING OFFICER TIPSORD: I think we're ready to go on the record. Good morning, everyone. My name is Marie Tipsord, and I've been appointed by the Board to serve as hearing officer in this proceeding entitled Water Quality Standards and Effluent Limitations for the Chicago Area Waterway System and Lower Des Plaines River, Proposed Amendments to 35 Ill. Admin Code 301, 302, 303 and 304. This is Docket No. R 08-9. With me today to my immediate left is acting chairman G. Tanner Girard, presiding board member on this proceeding. Also to his left, far left, is board member Shundar Lin, and board member Andrea Moore will be joining us shortly. To my immediate right is Anand Rao, and to his right Alisa Liu from our technical staff.

This is the 35th day of hearings, and we are continuing today to hear testimony from Midwest Generation's witnesses, and specifically Mr. Greg Seegert. We will continue with IEPA's questions and then move to the Environmental Law and Policy Center.

Anyone may ask a question or ask follow-up question. You need not wait until your turn to ask questions. I do ask that you raise your hands, wait for me to acknowledge you. After I have acknowledged you, please state your name and whom you represent before you begin your questions. Please speak one at a time. If you're speaking over each other, the court reporter will not be able to get your questions on the record. Please note that any questions asked by the board members or staff are intended to help build a complete record for the Board's decision and not to express any preconceived notion or bias. And also this afternoon we'll talk about potential hearing dates in January. Once we have a better idea of how far along we are with Mr. Seegert, we'll have an idea how much time we'll need to finish Midwest Generation. So we'll wait until this afternoon, if that's okay with everyone.

CHAIRMAN GIRARD: Good morning. Let's get to work.

HEARING OFFICER TIPSORD: With that, I

will remind Mr. Seegert he has been sworn in and you're still under oath. And we will begin again with the IEPA. I believe we're at Question 73.

MS. FRANZETTI: If I might interrupt. I'm sorry. Mr. Seegert would like to correct a misstatement he made yesterday with respect to one of his answers, and this has to do with the San Antonio River restoration project.

MR. SEEGERT: Correct. In response to a question from Mr. Ettinger, I referred to a project in Texas which led to a little discussion about is the Colorado River really in Texas. So that got me thinking. I knew it was, but I went back and looked at my maps last night and yes, indeed, the Colorado River is in Texas, but it flows through Austin, not San Antonio. And so the river that I'm referring to was the San Antonio river, and then my recollection of the dollar amount was 240 million. I believe that's what I said. And the actual amount for -- it says eight miles of river south of downtown

San Antonio is $272 million. So I apologize for the error.

MR. ETTINGER: Thank you. Are you aware of the riffle restoration project that is on the Colorado River in Texas?

MR. SEEGERT: No, I'm not.

HEARING OFFICER TIPSORD: Miss Diers?

MS. DIERS: We left off at 73. And I'm going to strike that question and go to 74.

Examination

By Ms. Diers

Q. Explain why the habitat limitations you referred to on Page 12 of your testimony are permanent and irreversible?

A. Well, the limitations that I cite, in particular lack of riffles in fast waters, are a result of the damming of the river, and these limitations are going to continue unless the dams are removed. Siltation is also primarily a result of dams and urbanization, neither of which are reversible. And I would add that there was some discussion yesterday about couldn't you put in a riffle, and I believe my answer was something to the

effect of, well, if we had unlimited amounts of money, perhaps you could do it. But then I got thinking about that and realized that how could you put in a riffle in a system that's established for commercial navigation? There'd be no way to get the barges through it. So, again, you would have to take out commercial navigation in order to have riffles. So you'd have to take out the damns and eliminate navigation in order to put in a riffle assuming a riffle could be put in.

HEARING OFFICER TIPSORD: Mr. Seegert, you talked yesterday about a riffle along the Missouri River north of St. Louis. Is the Missouri River navigable?

MR. SEEGERT: Missouri River is not -- My recollection is no, it's not managed for navigation. They have a series of what the corps calls channel training structures which are wing dams, things that divert flow in the river. But I don't believe that it's managed for commercial navigation. There is pleasure craft. It's deep enough for fishermen and things like that, but I don't believe that it's managed for commercial navigation.

BY MS. DIERS:

Q. Question 75: Why do you conclude the populations of minnows, darters, and suckers in the Upper Dresden Island Pool is not balanced?

A. Well, because there are low numbers of individuals in those species and low variety. So, yes, there are a few darters, but they're few in numbers, and the variety is very low. And then for some of the other groups that are important, minnows and suckers, they -- certain members of those groups are present, but especially amongst the minnows, it's the ones that are highly tolerant. So what you have are the minnows you don't want, but you don't have the minnows that you do want. And so what we have down there are species which are habitat generalists. So within the sucker group we have buffalo and carpsuckers, which are habitat generalists. We don't have the habitat specialist amongst the suckers in any numbers which would be redhorse, hogsucker, some of the other round-bodied suckers. So it's the difference between the representation as we have habitat generalists, but not the habitat specialists that you need to have a balanced community.

Q. How many habitat specialists would be needed then?

A. Well, it's, again, it's not an exact number. The way I look at something like this is if you're calculating an IBI score for a large river, there are certain metrics that species contribute to. So any species that you had is going to contribute to one of the metrics, the number of species. So the more habitat specialists that you have, the potentially higher score you could get for that metric. We talked a little bit yesterday about the metrics on percent round-bodied suckers. So if you either have no round-bodied suckers or you have only a few individuals. Since that metric is based on the percent, it's the number of individuals of those round-bodied suckers that contribute. So you need a lot because you're dealing with a percentage. And then there's some other metrics that, again, factor in. And there are even some species of fish, for example, longear sunfish. It's not an intolerant species, but it's a moderately intolerant species. It's a sunfish that does exist in the system, but in very low numbers and more often than not we don't get. But one of the metrics is number

of sunfish species. So if you consistently had longear sunfish, you would consistently get a higher score because it would be contributing one additional species to that metric. But in this system, we mostly have the really tolerant sunfish. We have green sunfish, we have orange spotted sunfish, we have bluegills, but we're missing the moderately intolerant sunfish species. So it's not an exact number, but if you look at the IBI, there's five or six different metrics where habitat specialists directly contribute to the score. So adding a few habitat specialists could up the score by five to ten IBI points.

Q. And 76, you might have touched on a little bit. Do you make a distinction between the Upper Dresden Island Pool's ability to support habitat specialists and the Upper Dresden Island Pool's ability to support viable populations of habitat specialists?

A. Yes. And make the distinction, again, because we're talking about the difference between an individual here and there versus having what I referred to, I think yesterday, as viable populations. That means the population must have

sufficient numbers to be able to reproduce successfully and sustain itself through all life stages. So it's not enough that it just can show up and stay alive. It has to be able basically to prosper. It has to find a good place where it can eat and grow, and then a place where it can ultimately reproduce, which, in some cases, is the same habitat and in other cases it's different -- It's a different habitat. But all the different -- the habitat needs to be there for all of its different life stages, not just larvae and not just adults, but all the stages in between. And for the habitat specialists, we have very few of them in terms of the number of species. And then we also -- and even the few that we do have are poorly represented, two of these, one of those, that those aren't viable populations.

Q. So how do you know when you have enough when you're making these evaluations?

A. Well, again, I would use something like IBI, and the IBI as it's used extensively in other states for -- we're talking about boatable, nonwadable rivers. And IBIs have different scores, but a lot of them like I think the current version

that Illinois EPA is operating under the maximum score is six. So based on 60 as a maximum, the typical scores in Ohio for the -- it varies by ecoregion, but to reach attainment, they say you have to be between about 40 and 45. The scores here are half of that. They're basically 20 to 25. And everybody has agreed to that. It's not just our scores, but the scores calculated by MBI. So we're way far apart. We need basically another 20 IBI units. And I looked at how could you gain a certain number of IBI units, in this case, about 20. And say, well, this is what you would have to do. And so when you just do -- when you do certain things like if you had cover, you could gain a couple of IBI points, but you're not going to go up to that 40 or 45. So you have to -- I mean the way I look at it is how could you gain enough species or individuals or certain kinds of species to take it from what it actually is right now, which is 20 to 25, and move it way up here to 40 to 45. And given the habitat limitations, that's not going to happen. The gap is just too big.

And just as I continue, when you asked the question about viable populations, again,

and I was talking about low numbers of individuals, we heard testimony, I believe it was last month from Ms. Barcusen (ph.). Am I pronouncing that correctly?

MS. FRANZETTI: I think that's close.

MR. SEEGERT: And she was talking about a need or what she believed was a need for some inner connection between the tributaries and the main stem of the Des Plaines River. And she cited several examples and saying, well, like in the DuPage River, a -- I think she mentioned a river redhorse was collected. In one other case she might have mentioned black redhorse. But the fact that you get one or two of something, again, it doesn't mean that that's an established population. And I would grant that it's possible that if you find one and then the next year you come back and find five and the next year you come back and find ten, then something is going on. But the kind of examples that she was citing only indicate that if you go out and do a bunch of sampling occasionally, you're going to get a

rare fish, something that basically wandered in from somewhere else that doesn't have the right amount of habitat. It can't sustain itself, and all you're looking at is, the scientific term a lot of people use are waifs, W-A-I-F-S, and these are basically orphan fish. They just wander in from one place to the other, find themselves in a place where they can't sustain themselves and literally die out because they can't reproduce, they can't prosper.

BY MS. DIERS:

Q. I'm going to strike Question 77 and go to 78. Please explain your understanding of how the Agency relied on IBI data generally. And then please explain your understanding of what sources of IBI and QHEI data the Agency relied on. And didn't the Agency rely on -- I'm going to strike as much or more and just ask didn't the Agency rely on QHEI data collected by EA more -- I'm sorry -- hang on. As much or more data collected by EA than IBI referenced on Page 13 in the prefiled testimony?

A. Well, I believe that the Agency used the IBI as primarily a measuring stick to determine

how good the current fish community is and relative to how good it possibly could be. My impression is that they did rely more on the data that was collected by MBI. I went back and looked at the statement of reasons and several other documents, and, frankly, I couldn't really see how the data were used. I just -- I mean because anticipation -- in anticipation of this and similar questions, I tried to follow the logic, how did you get from Point A to Point B; and, frankly, I couldn't follow it. It appeared it had something to do with the recommendation from the Lower Des Plaines UAA. But other than that, it wasn't clear to me how the data were used. I just couldn't figure it out.

Q. Question 79, please provide a reference for your statement on Page 14 that states Illinois EPA's contending that the Upper Dresden Island Pool shares characteristics with Illinois's general use waters that enable it to abstain Clean Water Act aquatic use goals?

A. Currently the only aquatic life use in Illinois that is considered consistent with Clean Water Act goals is the general use. And because it's -- the Agency is proposing that Upper Dresden

Island Pool be upgraded to a classification that attains -- that it believes attains Clean Water Act goals which is what the general use waters in Illinois are believed to be capable of doing, then I would conclude that the Agency must believe that Upper Dresden Island Pool shares many of the same characteristics with other general use waters in the state.

Q. Question 80: You state on Page 14 that general use waters do not have the combination of channelization, impoundment, commercial navigation, irregular flows and significant inputs from urban storm water and wastewater discharges that characterize the Upper Dresden Island Pool. What is the basis for this statement? Would you agree don't general use waters have each of these characteristics that I just mentioned?

A. Well, I don't think that there are any other general use waters in Illinois that have this combination of factors; that there may be other areas that are classified as general use, and perhaps they have impoundments, perhaps they have channelizations, but I don't think they have this combination of factors or factors to this degree; in

other words, the degree of impoundment, the degree of channelization. Even I think in the statement or in your definition for Upper Dresden Pool, you talked about the unique flow situation that exists in the Upper Dresden -- or in the Upper Dresden Pool to support commercial navigation. So by definition unique is unique. So this is the only water body that's got that set of circumstances, but it's this combination of factors that are going to be -- that make this system what it is. Then certainly no other area in Illinois is as urbanized as the Chicago metro area. There are urban centers, but they're not nearly the magnitude of the Chicago area. No other part of the state has a wastewater treatment plant as big as Stickney. We've heard, I believe, testimony to the fact that Stickney is or may still be the largest wastewater treatment plant in the world, not just in Illinois, but in the world. So certainly no other place in Illinois has a treatment plant of that size located on it. So and then on top of the urbanized nature of this area, no other area in the state, to my knowledge, has what I would call the density of barge traffic. It's not just the number of barges moving through

because you have presumably about the same number moving through the Illinois River. But now you've necked this down, and there's almost no room on either side of the barge. I mean the barge goes up and it takes up pretty much all the river channels, so everything is getting all churned up. There is no other water body that's going to be like that in the state. And then another layer of this is the habitat, in this case the lack of good habitat. So it just seems that there's this whole -- it's the combination, it's not just one thing, but it's the combination, and then it's the magnitude of each one of these limitations.

Q. Out of all the waters that we're looking at in this proposal before the Board, would you agree that Dresden Island Pool is the least impacted?

MS. FRANZETTI: Counsel, when you say impacted --

MS. DIERS: Well, all the factors we just talked about.

MS. FRANZETTI: By all these factors that he's just --

MS. DIERS: Yes.

MS. FRANZETTI: Are you going to limit it to the areas he's talked about: South fork, Ship Canal?

MS. DIERS: I'll limit it to him. That's fine.

MR. SEEGERT: Of the areas that I referred to, I would characterize this area as the least poor.

BY MS. DIERS:

Q. Question 81: Are you recommending that Illinois EPA adopt Ohio's use classification system? And I'll just strike the question from there for right now.

A. Okay. Well, I do believe that Illinois needs a multi-tiered system of aquatic life uses. There's a position that I've taken for a number of years. We had a meeting in Springfield four or five years ago, and I commented during the comment period that one of the problems was that the state was moving ahead very nicely on setting up IBIs. But one of the -- but in order to be able to really utilize that data, you needed a multi-tiered system. So I believe they need a multi-tiered system. Whether it -- I think the Ohio system,

which I'm quite familiar with, is a reasonable one, but I'm not prepared to say that's the one you should adopt. I think it's a reasonable one. Conceptually it makes a lot of sense. There may be others that are equally good or even better. But you definitely need a multi-tiered approach, and I also believe that whatever system you adopt, it should be adopted statewide. I don't think that you should deal with water bodies individually. You should come up with a state-wide system which is what Ohio has, and then says okay, where do these water bodies fit within this overall system.

Q. I'm finished with 81. I'll strike 82, strike 83, strike 84.

Eighty-five: You mentioned Mr. Rankin's suggestion that the Upper Dresden Pool as a potential modifying impound use. Did Mr. Rankin make this suggestion based on habitat data alone? I'm sorry. I'm on 85.

MS. FRANZETTI: I'm sorry, Counsel. We're getting there.

MR. SEEGERT: All right.

MS. DIERS: I'm not making it easy.

MR. SEEGERT: Could you repeat that,

please?

BY MS. DIERS:

Q. Yes. I'm on question 85. You mentioned Mr. Rankin's discussions about the Upper Dresden Pool as a potential modified impounded use. Did Mr. Rankin make the suggestion based on habitat data alone?

A. He made his conclusion based on his evaluation of the habitat.

Q. And I'm going to ask the last part of that question. Did Mr. Rankin imply that his conclusion was preliminary given that he did not assess biological data in his study?

A. I believe he did indicate that the biological data needs to be considered; however, in this case there's lots of biological data that's been collected, and it all supports Mr. Rankin's conclusion.

Q. Okay. Strike 86, strike 87. Eighty-eight: Where in the CAWS has EA conducted fish surveys since 1980? This is referenced on Page 17 of the testimony. And how many of the 3,159 collections have been in the Lockport Pool and have you collected samples in the CAWS upstream of the

Lockport Pool?

A. Our studies have been in the Lockport, Brandon, and Dresden Pools except for three sampling locations in the south branch of the Chicago River, and those are done near Midwest Generation Fisk station. And in response to your inquiry about how many of the collections were made in Lockport Pool, during the period 1993 through 2005, we made 557 collections in Lockport Pool.

Q. Ninety-four: Page 24 of your prefiled --

MS. FRANZETTI: Ninety-four?

HEARING OFFICER TIPSORD: You're skipping 89 through 93?

MS. DIERS: I'm sorry. Let me hang on a second. I missed a page.

BY MS. DIERS:

Q. I'll go back. Sorry. Question 90: Page 19 of your prefiled testimony you state, the fish communities in the Upper Dresden Pool and in the five mile stretch Dresden Pool downstream of the Kankakee River and downstream of the Dresden Lock and Dam were relatively similar to each other and noticeably better than those upstream at Brandon

Lock and Dam. What conclusions did you draw by these comparisons between the Upper Dresden Island Pool and the general use waters downstream of it?

A. So you skipped 89, correct?

Q. Yes. Sorry.

A. Okay. In response to Question 90, I would say as discussed in the report that's attached to my testimony that EA has concluded that the different thermal standards in the two portions of the Dresden Pool, in other words, the portion upstream of I-55 and the portion downstream of I-55 that sometimes is referred to as the five-mile stretch, that those areas -- that the temperature does not have a significant effect on the fish community, and we all -- but we conclude the fish community in both areas is depressed.

MR. ETTINGER: May I ask you a question here? Has EA ever found a temperature problem anywhere?

MR. SEEGERT: Yes.

MR. ETTINGER: Where?

MR. SEEGERT: There's a situation on the Ohio River where there's a power plant. And I don't understand all the ramifications,

but because of how the permit is written, their temperature limit is based on like BTU loadings. So they don't actually have an instream temperature limit. And so the fish community in the tributary into which they discharge is very warm, and so there is an effect going on. But apparently, and I don't understand all the legal parts of this, but because of how the permit is written, they are in compliance. So even though there appears to be an effect going on -- well, there is an effect in part of the receiving water body, they're not in violation of the permit, and perhaps during the next permit cycle that will get changed. But so that would be one example.

MR. ETTINGER: Do you know what plant that is and where it is?

MR. SEEGERT: That is the Stuart plant, and all I can remember is it's upstream of Cincinnati on the Ohio.

MR. ETTINGER: Thank you.

BY MS. DIERS:

Q. Question 91: Page 19 of your prefiled

testimony you state, results at thermally-influenced sampling stations were comparable to those at other stations. What do you mean by comparable? How did you determine which sampling stations were thermally influenced and can we identify this in your report?

A. I'm not sure this is the exact order you asked the questions, but comparable means similar. It doesn't necessarily mean they're statistically similar, but basically you look at the numbers and they're pretty close. And as far as how do we know whether there was thermal influence, we take temperature measurements as part of our collections to verify what the temperature regime was within the zone that we're sampling. And that was described in the '93/'94 EA reports. And temperature data are included in those reports, and we identify the areas that are most thermally influenced which end up being those -- not surprisingly those locations that are in the actual discharge canal or one of the locations immediately next to it. So basically it's the locations that are closest to the plant that are thermally influenced.

MS. WILLIAMS: Can I just ask a

clarification really quick?

HEARING OFFICER TIPSORD: Keep it limited, Miss Williams.

MS. WILLIAMS: I just want to understand. You said that temperature data are included in those reports.

MS. FRANZETTI: Yes, he did.

MS. WILLIAMS: Where are the sampling points that the temperature data is from?

MR. SEEGERT: What?

MS. FRANZETTI: Counsel, I'm not following your question. Do you understand the question?

MR. SEEGERT: No.

MS. FRANZETTI: Can you try to rephrase?

MS. WILLIAMS: Is temperature data taken only at the I-55 bridge in those reports or is it throughout the sites?

MR. SEEGERT: No. Well, Mr. Vondruska can address that better.

MS. WILLIAMS: Thank you.

MR. VONDRUSKA: In the field for our electro --

HEARING OFFICER TIPSORD: Excuse me. Just for the record, you were sworn in yesterday, and you're still under oath.

MR. VONDRUSKA: Yes. Thank you. When we do conduct our electrofishing, we make real time temperature measurements, dissolved oxygen, specific conductivity, and take disc measurements right prior to when we sample.

MS. WILLIAMS: Thank you.

BY MS. DIERS:

Q. I'm going to go to 93. I think it flows better, and I'll probably jump back to 92. Ninety-three: On Page 21 of your prefiled testimony, you discuss the fish sampling conducted following the Adjusted Standard 96-10 opinion. Would you agree that the fish diversity, and, I guess, the balance of the fish population in the Upper Dresden Island Pool has increased since that time?

A. I would agree that fish abundance has increased slightly, but I would note that that's really the result of just a few species. So it's not like the whole community has increased, but rather a few species. And a number of those that

have increased are some of the highly tolerant. So it's not particularly surprising that they might have increased. But, yes, there has been somewhat of an increase in terms of numerical abundance. The diversity and balance I don't think are really appreciably different than if you do some of the comparisons. You compare, let's say, just kind of a hypothetical, 2000 versus 1994. 2000 might have had a higher IBI score, but another year it might not have been higher. So some of the years there's an improvement, and it almost has to do with your benchmarking it against 1993 which for reasons we don't fully understand seem to have abnormally poor scores. So compared to what we think is probably somewhat of a poor year, abundance is increased, but the diversity and the overall balance are pretty much unchanged.

MR. ETTINGER: I have to interrupt here again. You've been using this term intolerant or tolerant or relatively tolerant. What do you mean by intolerant species?

MR. SEEGERT: I'm using it, and for the most part, using the same species that

Ohio EPA has used. So what you -- and the way that -- there's a couple ways that are established for doing this: One is to -- and also at most state level IBIs, the person developing the IBI wants to look at both ends of the fish community. They want to look at the intolerant end and the tolerant end. So that person sits down and says, okay, I'm in Wyoming, and then they'll gather as much information as they can about fish abundance and distribution in Wyoming. And then they'll use their professional judgment, sometimes it'll be a group of people, and say these will go in this bucket, the tolerant bucket. These go into the intolerant bucket. Now, Ohio, because they have a huge biological database was able to do it differently and actually more rigorously. For the tolerant group, what they said is we've got a bunch of sites that have really low IBI scores, and so we know those are poor sites. What fish can tolerate our poor sites? What do we actually find in our poor sites? I forgot the exact percentiles that

they used on this, but that was the question they were asking, what do we consistently see at the very poor sites. And then they basically did the reverse of this, for what -- at our best site, what are the species of fish that are basically representative of the best sites, fish that are often not found at just fair sites or even good sites, but where you see them is at the best sites. So basically you're saying what are the fish, the intolerant are the ones that are at the best sites, and the tolerants are the ones that are at the poorest sites. And in most cases, as is typically done, you're talking about tolerance not to a whole host of toxicants, but to habitat disturbance, siltation, and sedimentation. And what U.S. EPA, I believe, calls conventional pollutants which are things like dissolved oxygen and ammonia. So it's -- You're not talking about the tolerance, the PCBs, or the ambient, but mostly to habitat disturbance, siltation and sedimentation, and conventional pollutants.

MR. ETTINGER: So are some fish more intolerant to one disturbance than another?

MR. SEEGERT: Definitely so. Something can be -- I mean the question always has to be tolerant or intolerant to what as I put the kind of general context, but there could be something which is very tolerant to sediment, but it's not at all tolerant to dissolved oxygen or -- I'll give you an example. Yellow perch, relatively speaking, is not very temperature tolerant. It's somewhat of a cool water species. But it's very tolerant to low DO conditions. That's why there are a lot of lakes in northern Wisconsin that you have freeze-out lakes where the dissolved oxygen goes almost to zero. And you'll find usually two or three species of fish, and one of those will be yellow perch, because they're very tolerant. This is where the professional judgment of the biologist comes in. So you're saying overall where am I going to place this critter? What bucket do I want to put that species in?

MR. ETTINGER: Where would you put channel catfish?

MR. SEEGERT: Channel catfish tend to be in the -- near the tolerant end. So if you think of a continuum from intolerant to tolerant, I would not call them highly tolerant. I would call them moderately tolerant.

MR. ETTINGER: Thank you.

CHAIRMAN GIRARD: Could I ask a follow-up on that, Mr. Seegert. You gave us the general characteristics you look for to identify a poor site. What are the characteristics you would use to identify the best sites?

MR. SEEGERT: Well, okay. Do you mean in terms of habitat or the fish community?

CHAIRMAN GIRARD: Well, give me both.

MR. SEEGERT: Okay. Well, in terms of habitat, we've heard testimony from several people talking about the 60 cut-off on the QHEI. That means it's good. It doesn't mean it's excellent. So I believe Ohio uses either 70 or 75 as a cut-off. So if you're

looking for the -- not sites that just might attain, but almost -- you definitely would know habitat is in a limitation. So if you said any site that's above 70, you can say habitat is not going to be a limiting factor. Then what Ohio EPA has done is based on looking at all of their sites for what their highest use is exceptional warm water. So not just warm water, exceptional warm water. And that they do state wide at an IBI of 50. They've looked at percentiles of how all their IBI sites, how all their sites score statewide for the IBI. And they're looking at the tail of the curve at the high end and they've decided that 50 is that cut-off. So if I wanted to know where the tolerant fishes might be found, I'd go to sites that have IBIs of 50 or more and see what species were there and then see -- yeah, I'm sorry, for the intolerant. And saw what intolerant species were consistently found at these sites where the IBI exceeded 50 or more. So you'd look for sites where QHEIs were probably above 70 or 75 and where the IBI

scores exceeded 50.

CHAIRMAN GIRARD: Thank you.

BY MS. DIERS:

Q. Mr. Seegert, you mentioned IBI in answering some of these questions. Were the IBI scores included in your report summarized in Attachment 1?

HEARING OFFICER TIPSORD: Attachment 1 to his testimony?

MS. DIERS: Yes.

HEARING OFFICER TIPSORD: Which is Exhibit 366.

MS. FRANZETTI: Counsel, I'm sorry. Is this one of your prefiled questions or --

MS. DIERS: It's not.

MS. FRANZETTI: What's the question again? What are we --

MS. DIERS: He's been talking about IBI. And I wanted to know were IBI scores included in his report summarized in Attachment 1?

MR. SEEGERT: No.

MS. DIERS: Is that something that could be provided to us?

MS. FRANZETTI: Can you give me just a second? Because I'm not sure which IBI scores we're talking about.

MS. DIERS: Sure.

MS. FRANZETTI: Counsel, why don't I let Mr. Vondruska explain what the IBI issue is in the absence of scoring on IBI. I think that's what you're asking for, but if not, then you can follow up.

MR. VONDRUSKA: As part of the long-term monitoring the EA has conducted for Midwest Generation, we have not calculated IBI scores because there's not an appropriate IBI for that system.

MS. FRANZETTI: Explain that further what you mean by there isn't an appropriate IBI for that system. The IBI system that exists is for what type of waters?

MR. VONDRUSKA: For wadable streams.

MS. FRANZETTI: And this is not, is not a wadable stream?

MR. VONDRUSKA: That is correct.

MR. ETTINGER: Maybe I missed something. I felt we were talking earlier

about IBI scores of 20 and 40. Was that --

MR. SEEGERT: Right. Let me --

MR. ETTINGER: We have two different concepts playing out here, or what --

MR. SEEGERT: Historically EA did not calculate IBI scores for this system because there wasn't an off-the-shelf version of the IBI available that was specific to this system. You would like to have an IBI for either the ecoregion or the state that you're dealing with. Illinois has IBI, but as Mr. Vondruska just mentioned, the IBI that the State uses is restricted to smaller streams, primarily wadable streams. So we couldn't just plug that IBI in. And when we had the work group that was part of the lower UAA, the biological advisory group, we talked about this issue and we agreed that one of the things we could use was the -- another measure, the index of wellbeing or IWB. And that was probably -- that doesn't depend on all the calibrations that go into the IBI. So we could use that. Then as things eventually evolved in the hearings, then MBI

decided that they would apply their Ohio version, their boatable IBI to this area. And I say that's an acceptable thing to do. It's not as on target as you would like an IBI to -- you'd like to have an IBI that someone like Mr. Smogor would have developed using an Illinois specific data set. But that doesn't exist. So MBI said, hey, we'll use a surrogate, we'll use our Ohio version for this system. And when they used -- when they did that, they got scores mainly in the 20s.

MS. FRANZETTI: And it's those scores that you were referring to in your testimony in the report?

MR. SEEGERT: Yes.

CHAIRMAN GIRARD: Can I ask a question? How long did it take Ohio to develop their IBI for larger streams?

MR. SEEGERT: I can't give you an exact number of years, but it was on the order of ten years. They're collecting data, they started in the early '80s, because I was still in -- I was working in Ohio at that

time. I worked in Ohio from 1979 to when I joined EA in early 1982. And they were in their data collection phase at that point in time. And then it wasn't until sometime in the mid to late '80s that they came out with their first iterations of their IBI and then they refined the various ones since. But they had about a ten-year period of data collection before they were able to assimilate all that data and develop IBIs not just for boat sites, but also for wadable sites.

HEARING OFFICER TIPSORD: And, just for the record, MBI is the name of the consulting firm that --

MR. SEEGERT: Midwest Biological Institute.

HEARING OFFICER TIPSORD: Right.

MS. WILLIAMS: Finish your question for the record. Because I think that there may be --

HEARING OFFICER TIPSORD: It's not for the record. It's just a statement that they were the consultants who worked on --

MS. WILLIAMS: No. That's what -- they were --

HEARING OFFICER TIPSORD: Okay.

MS. WILLIAMS: I don't understand. Well, let's ask our next follow-up and it may --

BY MS. DIERS:

Q. Did the Lower Des Plaines biological subcommittee decide to use the Ohio EPA's boatable method? This is just a follow-up to what we've been talking about. So was it the subcommittee that decided to use the Ohio EPA's boatable method?

A. No.

Q. And you're saying MBI decided, just to be clear?

A. Yes.

HEARING OFFICER TIPSORD: We're still not -- you need to relay back, for the record, because we are 35 days into hearings and it's been a long time since we've talked about MBI. What is MBI's relation and why is it important that they used -- relationship to this rulemaking, and why did they -- why is it important -- Why did you use their IBI

scores?

MR. SEEGERT: MBI was a consultant who I believe was hired by Illinois EPA -- no. Were they hired by U.S. EPA?

AUDIENCE MEMBER: U.S. EPA.

MS. FRANZETTI: Someone hired them.

MR. SEEGERT: I thought in the statement of reasons it said our consultant. Am I misremembering?

MS. WILLIAMS: I'll clarify for the record, MBI, that organization, was hired by the Illinois EPA to testify on the temperature report that Mr. Yoder provided. That was their role in this proceeding.

HEARING OFFICER TIPSORD: And MBI did a lot of -- we have their IBI scores in the record.

MS. WILLIAMS: They were out there collecting data just like everyone else has been out there collecting data, and their data has been used. I believe U.S. EPA hired them to collect some data and --

HEARING OFFICER TIPSORD: That's fine.

MS. WILLIAMS: We used MBI's data. I

don't understand the significance. I don't want to imply here that somehow they were hired by the Agency for any -- to collect data.

MR. ETTINGER: As you pointed out, it is a big record. Does anybody know where this data is in the record?

HEARING OFFICER TIPSORD: Actually, I was just looking.

MS. FRANZETTI: When you say this data, Albert, MBI --

MR. ETTINGER: The MBI -- we have too many initials.

HEARING OFFICER TIPSORD: All right. Can I -- MBI qualitative habitat evaluation index field sheets are Exhibit 7. MBI fish data sheets are Exhibit 20, and that's just a quick search through. That's why I was trying to get on the record what was the basis for the use of the IBI scores from MBI.

MS. FRANZETTI: There is also -- there's an MBI that what Mr. Seegert has at times referred to as the Rankin report, that is also a part of the record. And --

MR. SEEGERT: He works for MBI.

MS. FRANZETTI: Mr. Rankin worked for MBI. So the references to Mr. Rankin's work with regard to his QHEI scoring of the Upper Dresden Island Pool is also a part of the record, but I don't know that I can spot the exhibit number. It actually may have been attached.

MS. WILLIAMS: It's an attachment.

HEARING OFFICER TIPSORD: I think it's Attachment R.

MS. FRANZETTI: To the statement of reasons.

HEARING OFFICER TIPSORD: Yes.

MS. FRANZETTI: That's what I thought. So those are just some of the spots, Mr. Ettinger, that contain MBI data. There may be more.

HEARING OFFICER TIPSORD: Thank you. I think we've established what I needed for the record. Thank you.

BY MS. DIERS:

Q. Mr. Seegert, I had asked you just a few minutes ago about who made the decision to use

the Ohio boatable IBI. You stated MBI. May I approach Mr. Seegert, please?

Mr. Seegert, I'm handing you Attachment A, what's been marked in the record as Lower Des Plaines River Use Attainability Analysis. I'm going to show you Page 6-3 of this report. Starting here could you just read that into the record?

A. Okay. Yes, it says after analysis by the Lower Des Plaines Use Attainability Analysis Biological Subcommittee, it was decided that the Ohio boatable IBI was the most appropriate index for evaluation of the Lower Des Plaines River.

Q. Does that change your answer at all?

A. Yes. We've discussed lots of things. And I also would add that, as you were looking for that, I remembered that the -- I had remembered the genesis of the IBI, but I also remembered that for the CAWS UAA, the IBI was definitely used because that consultant had asked us for some information, but I couldn't remember at that point either how it had all come to pass. I had just remembered that they also used it.

Q. That's fine. It's been years ago.

MS. FRANZETTI: Counsel, I just want to ask a follow-up. Mr. Seegert, are you relying on the fact that there's that sentence you were just asked to read in the UAA report for your testimony that it appears the subcommittee chose to use the IBI boatable index?

MR. SEEGERT: Yes. I'm relying on the accuracy of that statement.

MS. FRANZETTI: Do you have an independent recollection as to what the biological subcommittee decided to use?

MR. SEEGERT: No.

MS. FRANZETTI: And are there minutes of the biological subcommittee meetings that were held back during this stakeholder process?

MR. SEEGERT: My recollection is certainly not on a regular basis meaning I don't -- that's not to say there might have been at one meeting somebody circulated something around that said here is some issues or topics. I don't remember anyone being designated to keep minutes, and minutes

definitely were not circulated on a regular basis.

BY MS. DIERS:

Q. I'm going to go back to 92. Please provide a citation for the following statement: For large rivers like the UIW, Upper Illinois Waterway, any site greater than 3 percent DELT (deformities, erosion, lesions, and tumors) anomalies received the lowest possible IBI metric score. And do you have DELT scores more recent than the 1990s?

A. The DELT criteria comes directly from the Ohio EPA procedures manual where they describe how to score each IBI metric. So it's directly from their criterion or from their procedures manual. And in answer to the question about DELTs, when we had them, we had DELT scores from the '90s to the present.

Q. Question 94: Page 2 of your prefiled testimony you state, and although there has been a modest improvement in the Upper Dresden Pool in terms of fish abundance since 1993, the same ten species continue to dominate the community of the Upper Dresden Pool and the five mile stretch and remain unchanged since before the adjusted standard

went into effect. I'm going to strike A and ask B: Are there any new species that you're seeing in this area?

A. We went and looked at that, and it appears that there are -- 17 species have appeared since 1995. Now, I caveat that by saying we just compared that three-year period, 1993 to 1995. There might -- Some of these fish might have been collected earlier than 1993, but that's not the comparison we were looking at, and it's not the question you had asked. So since 1995, 17 species; however, of those 17 new species, 13 are represented by 10 or fewer individuals . And now we're talking about a nine-year period that would be from 1996 up through 2000 -- I'm sorry -- 1997 through 2005. So if you're talking about a nine-year period and you're talking about 10 or fewer individuals, talking about basically one individual per year. So it's not a lot. And then in some of the years -- and this was for both the five-mile stretch and Upper Dresden Island Pool combined, and some of those 17 were found only in one area, some were found only in another area, and a few were found in both areas.

MS. FRANZETTI: Counsel, one thing that we'd like to add to the record right now, and I'm going to let Mr. Vondruska -- that relates to this a little bit. Joe, would you explain what Table 1 is and what it's meant to be.

MR. VONDRUSKA: In Attachment 1.

MR. SEEGERT: Attachment 1 to my testimony.

HEARING OFFICER TIPSORD: Which is Exhibit 366.

MR. VONDRUSKA: Thank you. On Page 10, first paragraph, end of the first sentence refers to a Table 1. That Table 1 was not included with this, and we have brought copies.

MS. FRANZETTI: So that was an omission on our part. The report refers to a Table 1. Everybody really read it closely, as nobody asked me if it was missing Table 1. But we're going to supply it now, and I think it should probably be marked as an exhibit.

MS. DIERS: You caught us.

HEARING OFFICER TIPSORD: If there's

no objections, we will mark Table 1, Species Composition Number and Relative Abundance of Fish Collected By Electrofishing and Seining from Upper Dresden Pool in the five mile stretch 1993 to 1995 and 1997 to 2005 as Exhibit 367.

Seeing none, it's Exhibit 367. I was going to ask about that.

MS. WILLIAMS: So far we only have two new pieces of paper.

BY MS. DIERS:

Q. I'm done with 94. So I'm going to go on to 95. Would reduction of pollutant loads, reductions in sedimentation, and even moderate enhancement of habitat features result in some recovery of fish assemblage in the Upper Dresden Pool? And I'm just going to stop right there.

A. Well, I think the question is too broad to allow me to answer it definitively. First of all, what pollutant loads and to what extent of pollution reduction are you referring to? And then kind of following up on what extent the sediment reduction are you talking about and where? Where is the sediment going to be reduced from?

Q. I'll move on.

Ninety-six: On Page 22 of your prefiled testimony you state that MBI QHEI's scores did not fall within the acceptable range of difference compared to EA QHEI score. What is considered an acceptable range?

A. Again, there's no official acceptable range. There's nothing in writing anywhere that I've been able to find. However, based on our personal experience and some discussions that our staff had with Mr. Rankin during the training sessions that Ohio EPA run, a certification process that they provide, the answer is generally or trained experience observers, you're going to be within about five points most of the time and certainly within ten points. So five points you wouldn't be too surprised to see that level of difference, but ten points is really not explainable. There shouldn't be that much of a difference.

Q. Ninety-seven: I'm going reword it just a little. On Page 24 of your prefiled testimony, it appears you conclude that the difference in QHEI scores between the summer and

spring seasonal variation would only account for at most three points. Is this for every season, and do you have any data to support this?

MS. FRANZETTI: Counsel, if I can ask you to clarify. When you say is this for every season, that at most as you go from one season of the year to another, the score should not vary by more than three points? Is that the "this" that's in the "this" for every season? Is it every season of the year? And is the question that basically the QHEI scores shouldn't vary by more than about three points based on just seasonal differences?

MS. DIERS: I guess I'm looking at spring/summer, summer/fall, fall/winter. I don't know if that helps clarify it.

MS. FRANZETTI: Okay. All right. So I mean that's -- you're looking for how does the QHEI score change?

MS. DIERS: From season to season.

MS. FRANZETTI: From season to season throughout the four seasons of the year?

MS. DIERS: Yes.

MS. FRANZETTI: Okay. That's fine.

MS. DIERS: Sorry.

MR. SEEGERT: Well, typically the QHEI is done from spring through fall. It's typically not done during the wintertime. Nonetheless, regardless of season, the only QHEI metric that would change appreciably amongst any of the season would be the submetric under cover which deals with macrophyte development. So that would change from season to season, and that's what I was alluding to here in terms of the three point difference. And what I did is I looked at how many points you could get in the cover score that are attributed to macrophyte development. Because when Mr. Yoder -- I'm sorry -- Mr. Rankin was there in the spring, the macrophytes wouldn't have been developed, or at least minimally developed. And so it's true that if you come back several months later, the scores at some of the locations might have improved. So how much could they have improved, I think the maximum maybe is like six points, but that assumes that you

would go from no cover for macrophytes to extensive. That wouldn't happen on average. Generally there'd be some intermediate value. And if you had a site, and we've seen many of those sites, where there's essentially no macrophytes even in the summer, that score wouldn't change at all. So the range of change would be from about zero to six points, but that's why I use the word typically would change by three points or less.

BY MS. DIERS:

Q. Question 98. I'm going to move further down because it has to do with Exhibit 2 which is where we're going next. I'll ask 99 before we move on to Exhibit 2. With respect to the QHEI scores, it seems that you have Des Plaines 283.0LB Under Substrates, Quality, (-2+1)/2=-0.5 and not -1 repeated twice. Therefore, shouldn't the QHEI, shouldn't the QHEI be 50.5 and not 49.5?

A. You're correct. The QHEI score for this location should be 50.5, not 49.5.

Q. Okay. Strike 100, strike 101 --

HEARING OFFICER TIPSORD: You've

already asked those. So you don't want to strike them. You've already asked them.

MS. DIERS: Whatever works. 102 --

MS. FRANZETTI: Counsel, actually can I interrupt and just ask a follow-up question since we're on QHEI scores. This might be the place to do it.

Mr. Seegert, I think you reviewed Exhibit 37 which was the -- It's a CD titled Yoder CD. Included on that were what Mr. Yoder submitted to the Agency as corrected QHEI scores for UAA segments, correct?

MR. SEEGERT: That's correct.

MS. FRANZETTI: And those were corrections made as a result of issues that were identified with theirs and the QHEI scores done by Mr. Yoder's organization during testimony in this proceeding, correct?

MR. SEEGERT: That's correct.

MS. FRANZETTI: Now, have you reviewed the QHEI -- corrected QHEI scores that were contained on Exhibit 37?

MR. SEEGERT: Yes. I think you mean

the corrected corrected.

MS. FRANZETTI: Why do you say corrected corrected?

MR. SEEGERT: Because we're in our third iteration. The QHEI scores were originally submitted as part of, I believe it was, Attachment S to the statement of reasons. And then when Mr. Yoder testified, he testified to the fact that they had inadvertently forgot to include impoundment. So the scores on Attachment S are wrong, and to correct those scores he provided Exhibit 5 which was a table of QHEI scores for each of the locations they sampled. During the questioning of Mr. Yoder, we brought a number of, I'll call them, mostly math errors to his attention. He acknowledged a number of those and said I'll go back and correct those. And then the result of that was a, I'll call it, an updated version of Exhibit 5, and that's what's on Exhibit 37. I took --

MS. FRANZETTI: What have you found with regard to the corrected corrected QHEI scores scoring sheets that are included in

Exhibit 37?

MR. SEEGERT: The original -- most, but not all, the original errors were corrected. But now they've introduced a whole new series of errors, so now there's even more errors than there were on Exhibit 5.

MS. FRANZETTI: And can you just generally state what the nature is of the new errors that have been introduced in the QHEI scoring sheets that are the version that is contained in Exhibit 37?

MR. SEEGERT: I'll put them in two categories. For the metric, for the pool metric that's one of the QHEI metrics. They apparently rescored that -- well, retabulated their scores from the raw data sheets. And so now most of the values that are in the column for pool score are wrong. So they apparently went back and rechecked, had somebody rescore. And now for that whole column, about half of the numbers are wrong. The other even sort of more curious problem is that they also rescored the metric for the

riparian zone quality. And if you look at the values shown in Exhibit 37, you'll see a number of values of 11. But according to the QHEI procedure, and including the version that MBI is using, it says very clearly the maximum score you can assign to this is 10. But somehow they came up with 11. So every one of those 11 values, and I believe there are five or six of them, they're all wrong. So, in summary, they corrected roughly a dozen errors and introduced roughly 20 new errors.

MS. FRANZETTI: And with respect to the errors, is the end result that some of the scores are off by no more than one or two points; is that correct?

MR. SEEGERT: In most cases, yes. The magnitude of the errors, generally one to two points. To me it goes more to this is now the third try, and it's like three -- three strikes and you're out. So it goes to the whole quality assurance process. You know, errors were pointed out. So, okay, we'll correct those errors. They not only fail to

correct all the errors, but in the process of doing that, introduce even more errors than you started with.

MS. FRANZETTI: That's the end of my questions on the QHEI scores.

THE ARBITRATOR: Let's take a ten-minute break. Do you have something on QHEI?

MR. ETTINGER: I just wanted to finish this -- I can understand why you believe 11 is an error. What is the basis for saying that the other new errors you found are errors as opposed to differences in judgment?

MR. SEEGERT: Because Exhibit 7 are the raw data sheets that they prepared, MBI prepared in the field. And we went back to those same raw data sheets, and it doesn't have anything to do with judgment. It's just what box is checked on these data sheets and adding them up. And when you -- When we add them up, when I added them up independent -- or I added them up, then without telling Mr. Vondruska what I thought the score needed to be, I said is my math correct? He made

the same calculations, came up with the same numbers. So in this case if you add six minus one and one, you get six. They did the same calculation and got five.

MR. ETTINGER: Okay. So it's basically a comparison with their sheets and --

HEARING OFFICER TIPSORD: You need to speak up.

MR. ETTINGER: It's a math problem?

MR. SEEGERT: It's a math problem.

HEARING OFFICER TIPSORD: With that, let's take a ten-minute break.

(Short break taken.)

MS. DIERS: Did we leave off starting with Exhibit 2, right?

HEARING OFFICER TIPSORD: Yes, we did.

MS. DIERS: I've asked 100, 101. I'm going to strike 102, 103, 104, 105, and go to 106, and just ask the last half of that question on Page 4 of Exhibit 2.

MS. FRANZETTI: We are skipping 102 through 105.

MS. DIERS: Going to 106.

MS. FRANZETTI: We're going to come back?

MS. DIERS: No. We're done. I'm not going back.

MS. FRANZETTI: So 106.

BY MS. DIERS:

Q. On Page 4 of Exhibit 2, you state the Upper Dresden Island Pool clearly does not have the extent of good or great habitat that is characteristic of general use waters. Is it your testimony that all general use waters have good or great habitat?

A. Well, for the purposes of my testimony, when I use the phrase general use waters, I'm only including within that classification the types of waters that should be properly classified as general use. I mean -- by this I mean that the habitat should, on average, be good or better. And for general use waters to attain Clean Water Act goals, they're going to need good habitat. We had discussed yesterday the fact that many of the general use waterways in Illinois were given that classification essentially by default. No one went through and decided or looked at the habitat, they

didn't do a use attainability assessment.

Q. I'm going to strike Question 107, 108, 109, 110, and 111. I'm going go to Question 112.

In a water body, if impoundment is the main factor that is preventing aquatic life from reaching a more natural condition, is removing or greatly modifying the impoundment structure the only way that aquatic life can attain a more natural condition?

A. Well, although certain modifications may result in some improvement of conditions for some members of the aquatic community, the aquatic community will not improve appreciably until all the limiting factors that are preventing attainment of aquatic life goals are removed.

Q. I'm going to strike 113, 114. And I'll ask 115. We might have touched on this earlier, so if I did, I apologize for asking it again. But in the context of attainability of clean water contact goals on Page 5 of Exhibit 2, second full paragraph of your prefiled testimony you mentioned the potential for instream habitat improvements that could improve the biological potential of the Upper Dresden Island Pool. You

state that for such improvements to have a measurable effect on fish populations and species they would have to occur on an unprecedented scale. Do you know how much habitat improvement would be necessary to have a measurable effect on fish population and species in the Upper Dresden Island Pool?

A. Well, it's not so much a matter of how much, but rather the kind of improvement. Improvement is not going to be significant without elimination of the dams, because it's the dams that are causing so many of the severe limitations that we see. And then, similarly and simultaneously, I'd also say that removal of most of the contaminated sediment that's in the system would also be necessary.

Q. I'm going to strike 116, 117, 118, 119. I'm going to go to 120. On Page 5 of Exhibit 2, you state that here the main limiting factor in this waterway system is the impoundment. Similarly on Page 10 of Exhibit 2 you state it is the impounding effect caused by these dams that has the greatest effect on the fish community. Please explain what the main limiting factor is in your

view?

A. Well, the main limiting factor, as I've stated several times, is the impoundment and then the attendant effects that they cause. So it's not just one thing that they do, but as I mentioned, there are limiting riffles that cause the water to slow down and cause sediment. So there's a whole series of cascading effects, and they're all associated with impoundment. And I've described that in my testimony and in the attached report.

Q. And 121, do you agree temperature is also a limiting factor?

A. I don't believe it's a limiting factor. I would agree that temperature might affect some fish. For example, there undoubtedly is some avoidance of the water mist areas near the plants for short periods of time, but that would be on a short-term basis, and, in my opinion, would have no long-term effect. It's basically just fish moving from one place to another and then when the temperatures cool down, moving back again. And I guess maybe more to the point is, as stated in my testimony in the associated or the attached document, you could change the temperature. You

could even eliminate the power plants, and there still would not be a fish community that attained Clean Water Act goals. It's not temperature that's limiting the system, it's all the other factors that I've mentioned.

Q. Strike 122. 123, on Page 6 of your report, Exhibit 2, you state it was agreed that adverse effect of such extreme variations in water level on habitat, by disrupting fish spawning and feeding, are greater than the potential effects of temperature. And this was at the UAA hearing, January 31, 2008, at Page 227. Please identify where this is found in the transcript page cited. And then do you agree that the statement in your testimony incorrectly characterizes the testimony of Mr. Yoder on Page 227?

A. Well, let me answer the last question first. No, I don't think it incorrectly characterizes his testimony. Mr. Yoder agreed that it could be true that adverse effects of the extreme fluctuations in the Ship Canal in terms of water height varying by four to six feet could basically trump the effects of temperature. So I think that what I said is an accurate characterization. He

agreed that those wide fluctuations could trump temperature.

Q. Did Mr. Yoder also say in that line of questioning when you're talking about in the transcript that the reverse could be true?

A. Yes. He did say that -- the reverse, but it would depend. I know certainly he said both, you know. It could happen in either direction.

Q. Thank you. I'm going to strike 124.

One hundred twenty-five, on Page 8 of Exhibit 2 you state, there are no known plans for reducing sedimentation in either water body, and the contributing sources will continue to add sediment to the waterway. Are you familiar with the tunnel and reserve project?

A. I'm aware of it. Again, I wouldn't use the term familiar, but I'm aware of the project and what its general goals are.

Q. Do you think that the project would result in a significant decrease in sediment loading to the waterway?

A. Well, based on some of the transcripts I've read and some of the testimony that I've heard when I've attended previous hearings, it's my

understanding that when TARP is fully online, it will reduce the number of CSO events. However, that same testimony indicated it's not going to eliminate all of the CSO events. So they're not going to disappear completely. So I think it's unclear how much of a reduction there's going to be in sediment loading. Also, I think it stands to reason that the, we'll call them events, that it's not going to handle or going to be the biggest event. In other words, the bigger the event is, the less able TARP is going to deal with it. And so it's really a volume issue. It's not just a number of CSO events that are reduced, but how much the volume. And I did not hear any testimony, but I certainly would expect that the biggest events are not going to be particularly well-controlled. And then in any case, TARP is designed, as I understand it, to deal with the CSO issue. There's still going to be all the other issues about sediment coming in through the sort of general overland flow from various nonpoint sources from the development we talked about yesterday, and I'm not positive how to correctly characterize whether they're point or not point. But it's not a regulated -- it's not an NPDS

discharge point, and so all of those things are still going to continue. So I think, yes, TARP overall will have -- will result in some reduction in loading, but I don't know what that level of reduction is going to be or whether it's going to be significant enough to reduce sediment to a level where it would no longer be a problem.

MR. ETTINGER: Is it your understanding that construction is nonsubject to NPDS?

HEARING OFFICER TIPSORD: I didn't get all of that.

MR. ETTINGER: I'm sorry. Is it your understanding that urban construction runoff is not subject to NPDS requirements?

MR. SEEGERT: That's my understanding, yes.

MR. ETTINGER: Thank you.

BY MS. DIERS:

Q. I'm going to strike 126, go to 127.

On Page 9 of Exhibit 2, the top of your prefiled testimony, you state that the presence of barges located near the stream bank has adverse effects on fishes. You cite the photographs in

Attachment 2A. How do these photographs indicate the adverse effects of barges on fish?

A. Well, the barges are parked along the shallow edge of the river, and this is generally one of the more product -- or should be one of the more productive parts of the river. And so any time you're going to be moving barges in and out, that's going to constantly disturb and resuspend the sediment. It's going to uproot aquatic vegetation. To the extent that there are aquatic macroinvertebrates there, it's going to either disturb -- either disturb them by stirring them up, or it's going to cause silt to fall on them which is potentially going to bury them, or at least it's certainly not going to be a positive effect. And, remember, this is not just one barge, this is a whole spring of barges. So this is a pretty long section of shore line where this activity is going on, and these barges have to be regularly moved in and out.

Q. And I'm going to strike 128, 129. We covered 130 and 131, so I'll move on; strike 132. I'm going to go to 133. On Page 11 of Exhibit 2 of your prefiled testimony, you state that impoundment

effects in Upper Dresden Island Pool eliminated or greatly reduced large groups or classes of fish including all that are obligate riffle dwellers and other species that spend much of their life in fast water over hard substrates. What obligate riffle dwellers and other species of fish that spend much of their life in fast water over hard substrates were eliminated from part of Des Plaines River that is now Upper Dresden Island Pool by the creation of the Dresden and Brandon locks and dams? And what information do you base your answer on?

A. Well, I think to some extent we've covered this. But as described in my testimony and the attached report, there are groups of fish that depend on these shallow fast water areas, some of which are going to be riffle, some of which are going to be runs. And those would be groups like redhorse, darters, madtons, some other round-bodied suckers, and certain minnows. And I would expect that -- And these have been reduced in abundance or, I guess what I would call, functionally eliminated. It's sort of a follow-up to what I was talking about on the viable population. Yes, you might find a couple of these things here or there, but they don't

really have functioning population. And I base my conclusions on the well over 20-year dataset that EA has collected which shows that the groups that I've referred to are either absent or present only in greatly-reduced abundance. I'm drawing upon that 20-plus year data set for each of my conclusions.

MR. ETTINGER: Excuse me. Do none of these species live in lakes?

MR. SEEGERT: Most of them -- Well, the ones that I was -- if something is an obligate riffle dweller, it does not live in a lake, because obligate means that's where it has to be. There are a few species within this group that can spend mostly their adult life or part of their adult life in a lake-like environment. So if you sample a large impounded river like the Tennessee River or the Mississippi River, you will find redhorse. But in those cases, they're going to find places where they need to -- it's mainly a spawning situation either within that water body itself or in a large tributary. So some of the redhorse can be at part of their life stage in a lake-like

environment, and then there's a couple of darter species that, just for frame of reference, not in Illinois, but in the United States there are roughly 200 species of darters. And they don't all have the same habitat requirements in Illinois. I think we probably have about 20 species of darters. And there's really, out of that roughly 20 species, there's only one that -- I'm sorry -- two that occur in lakes with any regularity. But I'm saying as a group, that group mainly is associated with fast water riffle areas. So there are exceptions, but they're the exceptions to the overall rule.

MR. ETTINGER: Of the species that you just got done naming, which ones can live in lakes?

MR. SEEGERT: Well, of darters that are found in this system which can live in lakes, not necessarily spawn in the lake, but at least live in the lake would be johnny darter and logperch. And then and, again, I'm not sure if we're talking about -- So your question refers to lakes, not

impoundments; is that correct? I don't -- none of the redhorse are in the lakes -- in lakes with any regularity. They are certainly found in impoundments in the northern part of the range more than the southern part of the range. I think the shorthead redhorse occasionally occur in lakes. But, again, they're just there. They can find places to feed, but they would need fast-moving water in order to spawn.

MR. ETTINGER: Just a couple of other fish here, as long as we're dealing with fish in impoundments. Can channel catfish live in lakes?

MR. SEEGERT: Yes, they can.

MR. ETTINGER: How about white sucker?

MR. SEEGERT: Yeah. White sucker live -- again, I want to make the distinction. Yes, they can live. So the analogy would be if I set up an aquarium in my house, could I put a white sucker in there and would it live? The answer is yes. As long as the water quality is sufficient, it will live. Could it live out its whole life

cycle in a lake? The answer to that is no. So, for example, here in Lake Michigan there is a white sucker population. It resides there a good part of the year. But come spring, generally about mid April, they head into the tributaries to Lake Michigan. They go up to the riffles, and that's where they spawn. So if you cut off their access from Lake Michigan to their spawning areas, eventually all those adults would die out. So they can live and feed as adults in the lake, but they need the tributaries to be able to spawn.

MR. ETTINGER: Do some of these spawn in -- white suckers, do they spawn on sholes in lakes?

MR. SEEGERT: I'm not aware of white sucker being a shole spawner, no.

MR. ETTINGER: Okay. Walleye? Do walleye live in lakes?

MR. SEEGERT: Yes, they do. And they can spawn over sholes.

MR. ETTINGER: Thank you.

HEARING OFFICER TIPSORD: Miss Diers?

BY MS. DIERS:

Q. Strike 134, 135, 136, 137 and 138. I'll go to 139.

On Page 16 of Exhibit 2 of your prefiled testimony, you state that fishes identified as simple lithophils by Ohio EPA require cobble/boulder substrates to spawn. Does Ohio EPA's definition of simple lithophil include the requirement of cobble/boulder substrate for spawning?

A. I believe it does. Because that's their spawning habitat. I mean that is the definition of what a simple lithophil is.

Q. Strike 140, 141. One hundred forty-two: The fact that the same ten species dominated the area before the current Com Ed/Midwest Gen Adjusted Standard went into effect as have dominated after it went into effect indicates that the slightly higher thermal standards allowed by the adjusted standard did not affect the fish population. What do you mean by slightly higher thermal standards? And do you have any data comparing the ambient temperatures of the Upper Dresden Island Pool, Brandon Pool, or the CAWS

before and after Adjusted Standard 96-10 took effect?

A. With regard to the first question which is what do I mean by slightly higher thermal standards? I mean that the adjusted standard allows the temperature downstream of I-55 to be 91 degrees Farenheit at I-55 rather than the general use standard of 90. And then in your question you use the word ambient temperatures. In this system for all the reasons that have already been described, it's difficult, if not impossible, to determine what constitutes ambient in these waterways.

And then, second, the adjusted standard applies only downstream of I-55, so no changes in temperature would be expected in --

MS. WILLIAMS: Objection. Can we let Mr. Seegert answer the question?

MS. FRANZETTI: Well, Counsel, I mean we want an accurate record. I'm just -- He's misspeaking, reversing things. So I mean I can let him go on, but I think it's better to note to him when he's made a misstatement.

Counsel, I think you need to establish for Mr. Seegert what the area of

the adjusted standard is that you are talking about in your question. Don't put it on him to interpret that, because I will need to jump in and explain it. But it's your question, and if you object to my interceding --

MS. WILLIAMS: It was a quote.

MS. DIERS: I was using his quote, so I was asking about his quote.

MS. FRANZETTI: But now you're going -- No. The second part of your question.

MS. DIERS: You're asking about do I have any of the data on the ambient temperatures? You're going on to the second part? Okay.

MS. FRANZETTI: Yes. I think he's answered the first question. I mean I think actually we can move on, if you agree. I think he has. I mean the first question is what do you mean by slightly higher thermal standards, and I think he's answered that. So the simple solution here may be if you agree to just go on to the next part of the

next part of Question 142.

MS. DIERS: Sure. That's fine.

MS. FRANZETTI: Did you already state it for the record? I'm sorry.

MS. DIERS: We're on the data part, right?

BY MS. DIERS:

Q. Do you have any data comparing ambient temperatures of the Upper Dresden Island Pool, Brandon Pool or the CAWS before and after Adjusted Standard 96-10 took effect?

MR. SEEGERT: Okay. No. We have not compared ambient temperatures in the areas you're talking about before versus after AS 96 took effect.

BY MS. DIERS:

Q. And do you know if Commonwealth Edison had variances from the Pollution Control Board prior to the adjusted -- the Adjusted Standard 96-10?

A. I don't recall.

MR. ETTINGER: What's your understanding of what the adjusted standard did?

MR. SEEGERT: Well, the adjusted

standard gives them an extra one degree. Instead of having to meet 90, they meet 91.

MR. ETTINGER: Okay. That's your understanding.

MEMBER RAO: You think that was the only change in the adjusted standard, or there was some transitional temperature changes also involved?

MS. FRANZETTI: I don't think this witness is the best witness. I mean Ms. Wozniak is the witness that is most familiar with the elements of the adjusted standard. If you wish, we can bring her back up here.

MEMBER RAO: No. It's just that he was describing what slightly higher meant. Was he focussing just on the 90 degrees and 91 degrees?

MR. SEEGERT: Yes.

MEMBER RAO: And not the transitional temperatures?

MR. SEEGERT: That's correct.

MEMBER RAO: Thank you.

MS. WILLIAMS: I think Ms. Wozniak

could help us with a clarification to --

MS. FRANZETTI: I don't think she can help you with the question, because it's what the witness used.

MS. WILLIAMS: The witness is implying that --

MS. FRANZETTI: Give me a second. With respect to what the adjusted standard does, what it contains, quite frankly we can all read the adjusted standard. So, you know, I don't think there's anything to be gained.

HEARING OFFICER TIPSORD: I guess, Miss Williams, I would ask what clarification are you looking for?

MS. WILLIAMS: I think his quote implies that when adjusted standard came into effect, temperatures went up and that we can infer something from what was the case before the adjusted standards to what was the case after in an environment, because legally the temperatures went up. So that, I think, is what this question was trying to get at. And if he doesn't know, then maybe Miss Wozniak

can help explain whether temperatures from either in the waterway or from the effluent actually went up after the relief was granted by the Board. I don't know which witness is better to clarify that point.

MS. FRANZETTI: Well, this witness can't clarify that point, and this is a question for this witness. So I would suggest we move on. He is giving you his answer of what he was referring to by a slightly higher thermal standard. That's all he can do in terms of -- for the purposes of this statement in his report.

MS. WILLIAMS: That's fine.

HEARING OFFICER TIPSORD: Let's move on.

BY MS. DIERS:

Q. Question 143: You state on Page 18 of Exhibit 2, Ohio EPA 1987 plus the 2006 update classifies fish based on their tolerance to environmental perturbations such as decreasing water and habitat quality. How are these classifications related to thermal impacts?

A. We touched on this a little bit

earlier. And, in this case, I don't believe that Ohio EPA specifically used thermal tolerance in developing their tolerance classification. However, several of the species they list as highly tolerant also happened to be thermally tolerant. But they did, so they just happened to be that. But they didn't use thermal tolerance as one of their end-point criteria.

MR. ETTINGER: And isn't shad one of the species they list as tolerant?

MR. SEEGERT: No, it is not.

BY MS. DIERS:

Q. Question 144: On Page 18 of Exhibit 2, you testify regarding the number of tolerant, moderately tolerant, and intolerant fish species found in the Dresden Pool. What source or sources did you look to for classification of these species? And why do you conclude on Page 18 that the preponderance of moderately tolerant and highly tolerant fishes reflect the degraded habitat of Dresden Pool? I'll stop there for now.

A. Okay. We also touched on this, but as indicated on the -- in the report, we used the tolerance classification system developed by Ohio

EPA. We did that because it covers most, if not all, of the fish species that are in the system. So even though it was developed in Ohio, I'd say it has direct applicability here. And then following up in terms of how I reached this conclusion, the species assemblage in Dresdon Pool is more consistent with what you'd expect for a habitat degraded area than an area that is thermally or DO limited. As an example, blunt-nose minnow, according to Mr. Yoder or at least his rankings, is somewhat thermally sensitive, yet it's one of the most common fishes in the area suggesting that the current temperature is not adversely affecting fish populations. So in summary the results we see are consistent with habitat degradation. They're not consistent with a thermal explanation.

Q. I'm going to strike 145, 146, and 147. I'm going to skip 148, I'm going to strike 149, 150, 151, 152, 153. I'm going to strike 154 and 155, strike 156, 157. I'll let you guys catch up.

MS. FRANZETTI: We are there.

BY MS. DIERS:

Q. All right. You state that since EA has used the QHEI to evaluate many streams and

rivers in Illinois, Indiana, Ohio, and elsewhere, including the Lower Des Plaines, have you had any training by Ohio EPA on the methodology?

MS. FRANZETTI: Counsel, he can easily answer all those questions at once. Do you want to just keep going?

MS. DIERS: That's fine.

BY MS. DIERS:

Q. Do you know if Joe Vondruska received training? Which EA staff has been trained to perform QHEI assessments, and which ones have been certified?

A. We've all received training. Before there was a formal certification process, I received on-the-job training from various Ohio EPA staff, including Mr. Rankin, who developed a QHEI when he was with Ohio EPA. And so I have about 20 years of, I guess they call it, hands-on experience using the QHEI. Mr. Vondruska, another of our senior biologists -- well, three others: Ken Cummings, Marty Sneen (ph.), and Mike Kazinski, and have all been -- and myself have all been trained by Ohio EPA, and all of these individuals except for myself have been certified by Ohio EPA.

MS. FRANZETTI: Just to follow up. The individuals who you named: Mr. Vondruska, Mr. Cummings, Sneen, and Kazinski, have they all participated in the QHEI work that's been done that is a part of the data on which, Mr. Seegert, you are relying in your testimony in the attached EA report in Exhibit 366? Mr. Vondruska, if you want to answer that, that's fine.

MR. VONDRUSKA: Mr. Cummings would have participated in scoring the QHEI during maybe portions of the '93 to '95 sampling. I did most --

HEARING OFFICER TIPSORD: Could you speak up, please?

MR. VONDRUSKA: I'm sorry. For the studies conducted in 1993 to 1995, Mr. Cummings would have been involved with some of the QHEI scoring in the field. I did the vast majority of it. For the EA's 2003 study, I did all of that, and I also did all of EA's 2008 study.

MS. DIERS: What year were you certified, sir?

MR. VONDRUSKA: I can't remember the exact year. It was in the mid '90s. The first certification process was through a place called Volunteer Action Program, and myself and another colleague were one of the first -- part of the first training group. Since that time Mr. Cummings and Mr. Kazinski, they're part of the qualified data collector law that has been instituted in Ohio, and they have been certified by that process.

BY MS. DIERS:

Q. Thank you. Strike 158, 159, 160, 161, 162, 163, and 164. I'm going to go to 165.

On Page 30 of Exhibit 2 being the second paragraph of your prefiled testimony, you state that in your year 2008 survey of Upper Dresden Island Pool, silt was moderate to heavy at 66 percent of locations and the imbeddedness was moderate to extensive at 66 percent of locations. Do these results indicate that silt and imbeddedness were less than moderate at 34 percent of locations in Upper Dresden Island Pool?

A. And by less than, I assume you mean

better than moderate?

Q. Yes.

A. Then based on that assumption, about a third of the locations had normal amounts of silt, basically two-thirds of the location had excessive amounts of silt.

Q. One hundred sixty-six: What quantity of silt represents a moderate condition and what quantity of silt represents a heavy condition?

A. Okay. Again, here we're relying directly on the protocol document that Ohio EPA issued in 2006. So it's not -- definition is that we may not, but we're just following the rules of the game. And according to that document, and this is a direct quote, it says heavy means that nearly the entire stream is layered with a deep covering of silt. And then in parentheses, it says pools/glides in all but the fastest area of the riffles, closed parentheses, period. And then it goes on to define moderate. It says moderate means extensive covering by silt, but with some areas of the cleaner substrates; and then it says, for example, riffles. So basically moderate means there's extensive silt, but generally the riffles, because of the velocity

of the water, are going to be relatively silt free. However, in the heavy condition everything is silted in.

Q. And Question 167, what quantitative amount of embeddedness represents a moderate condition? And then what quantitative amount of embeddedness represents an extensive condition?

A. Okay. Again, this is going to be coming directly from the Ohio EPA guidance document which is what we followed. And it says, quote, embeddedness is the degree that cobble, gravel, and boulder substrates are surrounded, impacted in, or covered by fine materials such as sand and silt. And then it continues on. Substrates should be considered imbedded if greater than 50 percent of the surface of the substrates are imbedded in fine material. And it continues, imbedded substrates cannot be easily dislodged. If you go to grab a rock and you can't pull it up, it's imbedded. And then they continue on the same document defines the following categories of embeddedness. Extensive means 75 percent of the site area, 75 percent or more of the site area has embedded substrates. They define moderate embeddedness between 50 and 75

percent of the area is embedded. And they're saying the normal condition would be less than 25 percent. So, in this case, you're going to look at how much of the total area you're surveying is embedded and then put it into one of those percentage categories.

Q. And, 168, is the Clean Water Act interim aquatic-life goal not attainable if the amount of silt is moderate or greater?

A. Well, I think that that's going to depend on the water body in question. Silt is certainly a major factor. But the presence of silt is just one potentially limiting factor that may prevent attainment of Clean Water Act goals. Here the presence of silt with all the other limiting factors that I've mentioned prevents attainment of Clean Water Act goals, and in this case I cannot separate out the presence of silt because of all the other factors that are going on and say this is -- 90 percent of the problem here is due to silt. And so I can't really speculate as to any particular water body can attain the Clean Water Act goal if silt is moderate or greater. It would depend on the circumstances, what are the other factors in the water body, and also what the water body type is.

Q. Question 169. On Page 30 of Exhibit 2, second paragraph of your prefiled testimony, you state that in the year 2008 survey of Upper Dresden Island Pool, silt was the only substrate at 24 percent of locations. At these 24 percent of locations, did you observe the entire stream bottom?

A. Within each sampling zone, yes.

Q. I'm going to strike 170, 171 and 172, and make sure no one else has anything else. I have nothing further. Thank you, Mr. Seegert?

HEARING OFFICER TIPSORD: All right. We'll go ahead and move on to Environmental Law Policy Center.

MR. ETTINGER: Off the record for a second.

(Off the record.)

MS. FRANZETTI: I actually wanted to ask a couple of IEPA's questions that they skipped. The first one is 36. Besides Midwest Generation, what other industrial facilities has EA conducted aquatic studies for?

MR. SEEGERT: Well, in round numbers,

we collect -- or we conduct about 20 aquatic studies per year, and we've been in the Chicago area for 30 years. So a reasonable estimate would be about 600 studies, and we've done that for a whole variety of both private sector companies, but also state agencies. Just some examples, I work for many utilities: American Electric Power, WE Energy, Dairy Land Power, Hosier Energy, Duke within Illinois, Amron; also worked for companies like Bethlehem Steel. I previously mentioned Acme Steel, BP Chemical, BP Oil, Coeur d'Alene Mining, blue Ridge Paper. But it's not just working for the private sector. We've done studies for the Illinois DNR, for the City of Springfield, for Claremont County in Ohio, for the Northeast Ohio Sewer District in Cleveland studying places like the Cuyahoga River. So it pretty much runs the gamut, but many, many biological studies.

MS. WILLIAMS: Mr. Seegert, I think you said state agencies. I don't know if I heard a state agency named in your list.

MS. FRANZETTI: I think I heard the

Illinois DNR.

MS. WILLIAMS: Right. But can you be specific about what you did for them.

MR. SEEGERT: I did -- I shouldn't just say I. EA did, but I was the lead person on doing endangered species studies. We looked for a couple different endangered species on their behalf.

MS. WILLIAMS: Any other state agencies you can think of?

MR. SEEGERT: Pardon?

MS. WILLIAMS: Any other state agencies you can think of?

MR. SEEGERT: Not state. I did also get -- I know it's not state, but we've done several projects for various corps of engineer districts, but I'm not -- Oh, and we've done work for the Indiana Department of Transportation.

MS. WILLIAMS: Thank you.

MS. FRANZETTI: And given that there's been a lot of reference to Ohio, these classification systems, Ohio IBI, I want to ask Question 37. What Ohio streams has EA

reviewed with respect to use attainment and nonattainment?

MR. SEEGERT: The Muskegon River, which involved multiple locations -- probably about 15 locations, the Portage River, again, multiple locations; the Ottawa River, multiple locations; the Great Miami River, multiple locations; the east fork of the Little Miami River, multiple locations; Hurford Run, multiple locations; the Scioto River, that's the river that runs through Columbus, Ohio, multiple locations; the leading system in southeastern Ohio, many locations. We had a network of about 25 locations that we ran. We sampled annually for about a four-year period of time many locations on the Ohio River for the Seward District in the Cleveland area. We did multiple locations on the Cuyahoga River, Dick's Creek multiple locations; Domer Ditch, west fork of Beaver Creek, multiple locations; Done Brook, Robinson Run, Flat Lick Creek, Big Creek, Mill Creek, Euclid Creek, West Creek, Shakers Creek, Miller

Creek, North Branch Dick's Creek, Kyger Creek, Paint River, Pleasant Run, Kain Run, and Kain is with a k, K-A-I-N, Brushy Fork, Clifty Creek, Little Darby Creek, East Branch Miamiville creek, Homer Run, Shaylor Run, Shaylor is spelled S-H-A-Y-L-O-R, Wolf Gen Creek, Clear Creek, Rocky Fork, Sugar Creek, and I'm sure there are others that I'm forgetting.

MS. WILLIAMS: Where is the Mill Creek that you're talking about in there? Which one?

MR. SEEGERT: Mill Creek. Was that one of the ones that you guys did for certification?

MR. VONDRUSKA: That was one of the ones.

MR. SEEGERT: As part of this certification process that we were talking about for the QHEI, that Ohio doesn't just sit you in a classroom, they require -- they say, okay, you do the classroom stuff and then you have to go out on your own and on your own nickel, I might add, and collect --

and do whatever they want you to do whether it's QHEI or fish. So our guys had to go around to different streams which they had already sampled and then our scores have to agree within a certain range of the scores. So I believe this was Marty Sneen, one of the individuals I said was certified when he went through his certification process. That was one of the reference streams that he went to.

MS. WILLIAMS: Where?

MR. SEEGERT: I don't know where it is in Ohio. I can't even speculate because there are a lot of Mill Creeks,

MS. WILLIAMS: I want to know if it's the one that runs behind my mom's house.

MR. SEEGERT: Yeah, I think he stopped in there for a bite to eat. I'm not sure.

MR. VONDRUSKA: Is it in North Columbus?

MS. FRANZETTI: I have no further questions.

HEARING OFFICER TIPSORD: All right. Let's take about 15 minutes, come back, and we'll power through.

(Short break taken.)

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STATE OF ILLINOIS)
) SS.
COUNTY OF COOK)

I, LAURA MUKAHIRN, being a Certified Shorthand Reporter doing business in the City of Chicago, Illinois, County of Cook, certify that I reported in shorthand the proceedings had at the foregoing hearing of the above-entitled cause. And I certify that the foregoing is a true and correct transcript of all my shorthand notes so taken as aforesaid and contains all the proceedings had at the said meeting of the above-entitled cause.

LAURA MUKAHIRN, CSR
CSR NO. 084-003592