

## ILLINOIS POLLUTION CONTROL BOARD

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

REPORT OF THE PROCEEDINGS held in the  
above entitled cause before Hearing Officer Marie  
Tipsord, called by the Illinois Pollution Control  
Board, taken by Steven Brickey, CSR, for the State  
of Illinois, 100 West Randolph, Chicago, Illinois,  
on the 8th day of September, 2008, commencing at  
the hour of 1:00 p.m.

## A P P E A R A N C E S

MS. MARIE TIPSORD, Hearing Officer  
MS. ALISA LIU, Environmental Scientist  
MR. ANAND RAO, Senior Environmental Scientist  
MR. TANNER GIRARD, Acting Chairman  
MR. JOHNSON  
MR. NICHOLAS MELAS

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

BARNES & THORNBURG  
BY: MR. FREDRIC P. ANDES  
One North Wacker Drive  
Suite 4400  
Chicago, Illinois 60606  
(312) 357-1313

Appearing on behalf of the Metropolitan  
Water Reclamation District

MR. RICHARD LANYON  
MR. WILLIAM STUBA  
MR. SAMUEL DENNISON

NATIONAL RESOURCES DEFENSE COUNCIL  
MS. ANN ALEXANDER

THE CHICAGO LEGAL CLINIC  
BY: MR. KEITH HARLEY  
2938 East 91st Street  
Chicago, Illinois 606017  
(773) 731-1762

LA. REPORTING, INC. (312) 419-9292

ENVIRONMENTAL LAW AND POLICY CENTER  
33 East Wacker Drive  
Suite 1300  
Chicago, Illinois 60601  
(312) 795-3707  
BY: MR. ALBERT ETTINGER  
MS. JESSICA DEXTER

OPENLANDS  
BY: MS. STACY MEYERS-GLEN  
24 East Washington Street  
Suite 1650  
Chicago, Illinois 60602  
(312) 863-6265

FRIENDS OF THE CHICAGO RIVER  
BY: MS. MARGARET FRISBIE  
28 East Jackson Boulevard  
Suite 1800  
Chicago, Illinois 60604  
(312) 939-0490

OFFICE OF THE ATTORNEY GENERAL - STATE OF ILLINOIS  
BY: MS. SUSAN HEDMAN  
69 West Washington Street  
Suite 1800  
Chicago, Illinois 60602  
(312) 814-4947

REPORTED BY:

Steven J. Brickey, CSR  
CSR License No. 084-004675

MS. TIPSORD: Okay. I think we left off with Openlands question 16.

MS. MEYERS-GLEN: Number 16, you list frequent barge and large power boat traffic along the CAWS as a safety issue on page five of your testimony. You partially answered this, I believe, earlier. But do you know of commercial barge traffic on the North Branch of the Chicago River to the north of Goose Island?

MR. LANYON: Yes.

MS. MEYERS-GLEN: Can you please describe how heavy that barge traffic is in that area?

MR. LANYON: How heavy, I don't know. I have observed barges docked at -- from the Cortland Street Bridge upstream and downstream of the bridge.

MS. MEYERS-GLEN: And you said there's no commercial barge traffic in the North Channel as to your knowledge now, right?

MR. LANYON: North Shore Channel?

MS. MEYERS-GLEN: North Shore Channel, correct.

MR. LANYON: That's correct.

MS. MEYERS-GLEN: And how far up does the commercial barge traffic go on the Chicago River?

MR. LANYON: Based on his observations?

MS. MEYERS-GLEN: Pardon?

MR. LANYON: You're asking based on his --

MS. MEYERS-GLEN: As to his knowledge.

MR. LANYON: Yes, I believe it's about as far north as Webster Avenue.

MS. MEYERS-GLEN: The --

MR. LANYON: The core of engineers shows on their navigation charts the head of navigation on the North Branch is Addison Street.

MS. MEYERS-GLEN: And then north of that there's very light traffic, if at all? There's little or no barge traffic, correct?

MR. LANYON: Little or no barge traffic.

MS. MEYERS-GLEN: And do the Chicago Park District and Friends of the Chicago River offer numerous canoe trips to the public on the

North Shore Channel, North Branch of the Chicago River, main stem Chicago River, south branch down Bubbly Creek and along the Chicago Sanitary and Ship Canal?

MR. LANYON: They offer such adventures. How numerous, I don't know.

MS. MEYERS-GLEN: But you're aware that they do?

MR. LANYON: Yes.

MS. MEYERS-GLEN: And are you aware of any injuries that paddlers have sustained during these trips that results from either barges or commercial tour boats?

MR. LANYON: I have no personal knowledge of injuries.

MS. MEYERS-GLEN: And are you aware that for the past 11 years Friends of the Chicago River have taken out as least 2,640 people canoeing on the North Shore Channel, North Branch Chicago River, main stem, all the waterways I've previously discussed?

MR. ANDES: Evidence --

MS. TIPSORD: Okay. Hold on.  
Mr. Andes, I note that it's evidence. I'm

assuming you plan to present testimony to these facts?

MS. MEYERS-GLEN: That is correct.

MS. TIPSORD: And I believe that we allowed the district and others to ask facts of the agencies and it is the understanding that they would also be presenting these facts. So I note your objection and please continue to note them on the record, but we'll allow them to present that evidence in their testimony. And are you aware of that, of what she just said?

MR. LANYON: I have no idea as to the number.

MS. MEYERS-GLEN: But you again, you're --

MR. LANYON: There are boats out on the river, yes.

MS. MEYERS-GLEN: I'm sorry. I'm trying to narrow the scope of my question.

MS. TIPSORD: That's okay.

MS. MEYERS-GLEN: In addition, did you know that the Chicago Park District hired Friends of the Chicago River from 2004 to 2007 to take people canoeing on the Chicago River as a

part of its summer programs resulting in 34 trips with a thousand attendees, none of whom were injured from barges or commercial traffic?

MR. ANDES: Same objection noted.

MS. MEYERS-GLEN: Are you aware of this?

MR. LANYON: No.

MS. MEYERS-GLEN: Now, you state on question 17, I'm jumping to the next question. You state that high flows can impair aquatic life uses when habitat is destroyed and aquatic organisms are swept downstream. What do you consider a high flow event?

MR. LANYON: The flow is resulting from a storm event.

MS. MEYERS-GLEN: And what kind of a flow resulting from a storm event would suffice to be a high flow event? Is it any storm or is it --

MR. LANYON: That's a generalization.

MS. MEYERS-GLEN: Okay. And how often do these take place?

MR. LANYON: About a dozen times a year.

MS. TIPSORD: Excuse me. Before you go on. Just to try and quantify this because I'm a little confused also by the use of high flow, are you talking about, like, a 25-year event, are you talking about a normal rain storm, are you talking about what we had last Thursday?

MR. LANYON: Generally, I'd say a rain storm of an inch or more.

MS. TIPSORD: Thank you. Sorry.

MS. MEYERS-GLEN: Thank you. What time of year or season do these events normally occur?

MR. LANYON: They can occur any time during the year.

MS. MEYERS-GLEN: Are they more often in one season than another?

MR. LANYON: No, not necessarily.

MS. MEYERS-GLEN: And what is generally the duration of these high flow events?

MR. LANYON: It varies. I'd say from 12 to 36 hours.

MS. MEYERS-GLEN: I'm going to reserve 17 E through I. I'm going to request that I defer these questions. The ILDCB has the same

questions.

MS. TIPSORD: So you're not deferring them, you're actually letting the ILDCB ask the question?

MS. MEYERS-GLEN: Unless they don't ask them, in which case I would request to be able to follow up with these questions. 17J, are there refugium available for fish and wildlife during these flow events? And this is of course along the CAWS.

MR. LANYON: I don't know.

MS. MEYERS-GLEN: And how many decades has the CAWS periodically experienced high flows?

MR. LANYON: Well, ten decades or more.

MS. MEYERS-GLEN: And is there any evidence of species such as macroinvertebrate fish, birds, riparian mammals like river otters, beavers, muskrats, returning to these areas after high flow incidents?

MR. LANYON: Well, certain of the larger organisms like beavers and river otters can move under their own power and return, but other

types of organisms that are a part of the benthos don't have that ability and they just relocate to some point downstream.

MS. MEYERS-GLEN: Well, after decades of these flood events taking place, there are still macroinvertebrate in the water, correct, at the locations where there are these high flow events, correct? They still live.

MR. LANYON: They're still there somewhere.

MS. MEYERS-GLEN: And there are still fish in these waterways where these high flow events have taken place for decades, correct?

MR. LANYON: Yes, fish, like the other larger forms you mentioned can move under their own power.

MS. MEYERS-GLEN: So they can come back?

MR. LANYON: They can come back.

MS. MEYERS-GLEN: And same thing with mammals like the river otters that we've seen as far as downtown Chicago, we see those return after flood events as well, correct?

MR. LANYON: Personally, I've never

seen a river otter, but animals of that type could return, yes.

MS. MEYERS-GLEN: Do you know of marine mammals such as river otters existing in the CAWS, have you heard of this as being with the district?

MR. LANYON: I don't have in depth knowledge of all of the organisms that are found in the CAWS.

MS. MEYERS-GLEN: But do you know of any, such as river otters, that do?

MR. LANYON: Pardon?

MS. MEYERS-GLEN: How about river otters, have you heard of them being out on the CAWS?

MR. LANYON: No. Other than in your questions, no.

MR. ANDES: I'd like to follow up. With regard to these various species returning, in your original statement you talk about when habitat is destroyed. If the habitat is destroyed, is there less of an ability for a community to return and stay there in a healthy way?

MR. LANYON: Well, yes there

wouldn't be the habit to return to.

MS. MEYERS-GLEN: If there are animals, wildlife, fish, macroinvertebrate that do return, isn't that indicative of the fact that there is something to return to? After these storm events occur, that things do ultimately reset and these animals and these fish come back?

MS. MEYERS-GLEN: I don't have detailed knowledge of that, but other witnesses for the district will testify to that.

MS. MEYERS-GLEN: Thank you. Does the tunnel and reservoir plan or tarp reduce the number of high flow events out on the CAWS?

MR. LANYON: Yes.

MS. MEYERS-GLEN: And won't tarp further reduce flow when the project is completed?

MR. LANYON: Yes.

MS. MEYERS-GLEN: According to the districts report, did fish species in the Chicago and Calumet systems rise from approximately 10 to 70 in number over the last 30 years despite high flow events? These are the districts figures.

MR. LANYON: Despite high flow events?

MS. MEYERS-GLEN: Mm-hmm.

MR. LANYON: Well, we've had already high flow events.

MS. MEYERS-GLEN: And is the number --

MR. LANYON: So that increase was independent of high flow events.

MS. MEYERS-GLEN: I have only a couple of follow-up questions, if I may. Now, do you believe that MWRD does not meet the affordability test or do you believe that the MWRD meets the affordability test under UAA factor six which pertains to control that would result in widespread economic and social impact?

MR. LANYON: I'm not familiar with the affordability test.

MS. MEYERS-GLEN: During the district water quality standards study test, and I will provide this, on October 10th, 2007, do you recall stating "We have not conducted a formal economic analysis according to EPA's guidance. We have looked at this informally. We believe we don't meet the criteria that the EPA has set out, whether that criteria is objective or not," and

that's on transcript page 41 on that date. Do you recall saying that?

MR. LANYON: I may have. I don't recall specifically, but --

MS. MEYERS-GLEN: Would you like me to --

MR. LANYON: No.

MS. MEYERS-GLEN: And you were present also at the following district study session on water quality standards on October 31st, 2007, right?

MR. LANYON: Yes, I was there.

MS. MEYERS-GLEN: And during that study session, do you recall Linda Holst testifying on behalf of the United States Environmental Protection Agency?

MR. LANYON: I can't say that I do.

MS. MEYERS-GLEN: You don't remember her stating that there were statements about the waterways, their channels and they're not natural streams and that under federal regulations they're navigable waters and they are waters of the US and do still have to meet the requirements of the Clean Water Act.

MR. LANYON: Did I say that or did she say that?

MS. MEYERS-GLEN: Do you remember Linda Holst talking about this --

MR. LANYON: No, I don't.

MS. MEYERS-GLEN: -- and making that statement?

MR. LANYON: I don't, but we do have to meet the requirements of the Clean Water Act.

MS. MEYERS-GLEN: You do. So then you don't disagree with the US EPA as far as what I've just stated to you -- their characterization of the federal law method?

MR. LANYON: Characterization of what?

MS. MEYERS-GLEN: Of the federal law method --

MR. ANDES: Are you asking him for a legal characterization?

MS. MEYERS-GLEN: No.

MR. ANDES: I'm going to object to that.

MS. MEYERS-GLEN: No, I'm asking to his impression, his opinion.

MR. ANDES: Of the law.

MS. MEYERS-GLEN: As to whether or not they have to meet the requirements. I guess you've already stated that. I withdraw that question. I'm done. Thank you.

MS. TIPSORD: Then let's continue with the Environmental Law and Policy centers questions to Mr. Lanyon.

MS. WILLIAMS: Can I ask one quick follow up?

MS. TIPSORD: Sure. Absolutely.

MS. WILLIAMS: The hearing officer asked you to be more specific about high flow events and we were talking in terms of the size of the rainstorm, can you define what you mean by high flow events in terms of velocity because that's what flow is, right? Velocity, a measure of velocity, so can you explain what a high velocity is as you use the term?

MR. LANYON: Well, flow and velocity are two different measures.

MS. WILLIAMS: Okay.

MR. LANYON: And the velocities will vary in our system depending upon the flow rate

and the area of water. I don't know what the range of velocity is and I can't give you a numerical range for velocity.

MS. WILLIAMS: Do you have any evidence that when you have high flows, aquatic organisms are swept downstream as you testified to? What is the evidence for that statement?

MR. LANYON: I have no personal knowledge of that. I think others may testify to that.

MS. WILLIAMS: That's fine.

MS. TIPSORD: Are we ready for Mr. Ettinger's questions.

MR. ETTINGER: I think we just preempted my first couple of questions here, but I'll ask them anyway to just -- whatever. It says on page four of your testimony you state that the Cal-Sag Canal high flow can impair aquatic life uses when habitat is destroyed and aquatic organisms are swept downstream. Did I just hear you say you have no personal knowledge regarding that statement?

MR. LANYON: Of --

MR. ETTINGER: Do you believe that

statement to be true?

MR. LANYON: I believe that's a generalization as to specific organisms and I don't have personal knowledge of that.

MR. ETTINGER: Do you know whether the water reclamation district has ever studied what habitat is destroyed on the Cal-Sag Canal by such events?

MR. LANYON: I'm aware that we are currently studying that and there have been times in the past with our monitoring that we have data on that phenomena.

MR. ETTINGER: What data would that be?

MR. LANYON: On the organisms that are in the waterways.

MR. ETTINGER: Not specifically with regard to the habitat, what data would you have about habitat destruction regarding -- caused by these high flow events?

MR. LANYON: Well, I'm not sure if we have any specific data that ties high flow events to the habit destruction or movement.

MR. ETTINGER: Okay.

MR. ANDES: I think we will have other witnesses who can speak to that issue in more detail.

MR. ETTINGER: Again, perhaps erring on side of caution here I don't know where you're just making sweeping generalizations based on other people's witnesses and when you're testifying from your own knowledge. So you'll just have to tell me whenever that's the case.

MR. ANDES: That's fine.

MR. ETTINGER: Organic organisms are swept downstream --

MR. ANDES: Aquatic.

MR. ETTINGER: Aquatic or did I say aquatic?

MR. ANDES: You said organic.

MR. ETTINGER: I'm sorry. When aquatic organisms are swept downstream, do we know what organic organisms are swept downstream -- or aquatic? I'm sorry.

MR. LANYON: I do not know what aquatic organisms are swept downstream. Others will testify to that.

MR. ETTINGER: And my question

number four would be where are they swept, do you know where they are swept to?

MR. LANYON: Somewhere downstream.

MR. ETTINGER: Somewhere downstream.

What riparian life lives on the Chicago area waterways system to your knowledge?

MR. LANYON: I have no personal knowledge of what riparian life is along the waterway system.

MR. ETTINGER: Do you know if there are beavers, otters, other critters like that that live on the banks of the system?

MR. LANYON: I've heard of beavers chewing down trees. Other than the testimony in this proceeding, I haven't heard of river otters.

MR. ETTINGER: What birds live near the Chicago Area Waterway System?

MR. LANYON: Well, we've seen the egrets and the great blues. There's a host of other birds. I'm not a trained bird watcher. I couldn't identify one from another.

MR. ETTINGER: Has the Metropolitan Water Reclamation District of Greater Chicago ever studied the effects of its operations on

riparian mammals or birds?

MR. LANYON: I don't believe so.

MR. ETTINGER: I think we've been over nine enough. Ten and eleven we've been over enough. Twelve, has anyone to your knowledge studied what the level of barge traffic would be if some or all of the Midwest generation units at Bits Crawford or Will County are shut down?

MR. ANDES: To your knowledge.

MR. LANYON: No.

MR. ETTINGER: Has the Water Reclamation District ever studied that?

MR. LANYON: No.

MR. ETTINGER: Do you know of anyone else who has studied that?

MR. LANYON: I don't know if anyone else has studied that.

MR. ETTINGER: Has the Water Reclamation District or anyone else to your knowledge studied the value of the recreational boating now on the Chicago Area Waterway System or any segment of it?

MR. LANYON: The district has not and I don't know if anyone else has.

MR. ETTINGER: Okay. The Metropolitan Water Reclamation District has criticized some of the proposed classifications of the Chicago Area Waterway System that has been proposed by ILEPA, but is there another classification system that the district would propose that better characterizes the Chicago Area Waterway System in terms of potential for recreational uses or aquatic life uses?

MR. ANDES: That issue is definitely addressed by the witnesses including some who have provided specific recommendations.

MS. WILLIAMS: Can you say which ones, please?

MR. ANDES: At least, Dr. Granado, who is the last witness on aquatic and the last witness on recreational and will summarize the testimony before him.

MR. ETTINGER: Thank you. Has the Metropolitan Water Reclamation District studied out other heavily modified waterway systems such as the Rouge River near Detroit, the Milwaukee River or the Charles River in Boston?

MR. LANYON: The district has not

studied this. Although, I believe some testimony of those uses may be presented in this proceeding by another witness for the district.

MR. ETTINGER: It says your testimony points to major water quality improvements in the Chicago Area Waterway Systems over the past 30 years, would you generally describe those improvements.

MR. LANYON: Well, as testified earlier we've seen an increase in the number of fish species and the population of fish. We've seen a reduction of cyanide and other metals due to enforcement of industrial discharges. We've seen a reduction in the concentrations of ammonia due to improved treatment at our plants and back in the 80's we discontinued using the toxicant sodium hypochlorite which was cause for a rebound in the fish population in our system.

MR. ETTINGER: What was sodium hypochlorite used for?

MR. LANYON: It was used for disinfection.

MR. ETTINGER: And that was at what plant?

MR. ETTINGER: That was at the Calumet north side and the Stickney treatment plants.

MR. ETTINGER: Does any of the equipment remain on site that was used to disinfect at those plants prior to the 80's?

MR. LANYON: Well, the dosing equipment I doubt if it remains. It was probably all scrapped.

MR. ANDES: We are going to have specific factual testimony on that. I believe Mr. Zens -- I'm sorry. Jennifer? I believe Mr. Zens is the one who will discuss some of that, some of those issues.

MR. ETTINGER: I have read the pre-file Zens testimony and I will be asking him questions, but to your knowledge has the Water Reclamation District ever considered using the existing chlorine equipment at those sites and then adding dechlorination equipment?

MR. LANYON: Adding dechlorination equipment?

MR. ETTINGER: Well, in the 70's, you were chlorinating and not dechlorinating, is

that correct?

MR. LANYON: That's correct. It wasn't required at that time.

MR. ETTINGER: I understand. You do what's required. Would -- Now, obviously you would be required because of the residual pouring requirements of the board, is that correct?

MR. LANYON: Is what correct?

MR. ANDES: Would you have to --

MR. ETTINGER: If you were to chlorinate now, you wouldn't be required to dechlorinate?

MR. LANYON: Yes.

MR. ETTINGER: And that's what you're doing at the Curie, Egan and Hanover Park plants, you're chlorinating and dechlorinating?

MR. LANYON: I presume we would be required to dechlorinate.

MR. ETTINGER: Have you considered using the existing equipment or some or all of the existing equipment at the Stickney, North Side or Calumet plants for chlorination and adding dechlorination equipment to them?

MR. LANYON: Well, no. It requires

a little different technology approach. After you apply the sodium hypochlorite or whatever chlorinating agent you use, you have to allow for a sufficient contact time for a kill before you apply the sodium bisulfate. When we were disinfecting back in the 70's and 80's, we were dosing in the effluent conduits and part of the kill time was in the waterways and only at the Calumet plant did we install a separate chlorine contact basin. That basin couldn't be used today because it was grossly undersized. It was built for a plant size that no longer exists at the Calumet plant.

MR. ETTINGER: Thank you.

MS. TIPSORD: Anything further for Mr. Lanyon? Thank you very much. Let's move onto Mr. Stuba. And can we have him sworn in?

WHEREUPON:

WILLIAM STUBA

called as a witness herein, having been first duly sworn, deposeth and saith as follows:

MS. TIPSORD: And do we have copy for the record?

MR. ANDES: Yes, we do.

MS TIPSORD: If there's no objection, we'll enter Mr. Stuba -- am I pronouncing that correct?

MR. STUBA: Yes.

MS. TIPSORD: His testimony and your attachment as Exhibit Number 62. Seeing none, it is Exhibit Number 62. And whenever you're ready.

MR. STUBA: Good afternoon. My name is William J. Stuba. I'm currently employed by the Metropolitan Water Reclamation District of Greater Chicago known in the District as the assistant chief engineer in the research and development department, known as R&D. I have been R&D's assistant chief engineer since 2006.

As assistant chief engineer I supervise the industrial waste division known as IWD of R&D which has a staff of 132. Prior to becoming the assistant chief engineer in R&D, I was the industrial waste enforcement supervisor from 2000 to 2006. I've been employed by the District since 1977.

I received a Bachelor of Science in civil engineering degree from Bradley University and I'm a licensed professional

engineer in the state of Illinois. My responsibilities as the District's assistant chief engineer in R&D include but are not limited to the following: The control of commercial and industrial waste discharges to the districts sewage system and waterways through the administration of the sewerage and waste control ordinance. Recovery of certain District operating, maintenance and replacement costs through administration of the User Charge Ordinance. Monitoring the water quality of the Chicago Area Waterway System and the Illinois waterways.

The Districts continuous dissolved oxygen monitoring program on the Chicago Area Waterway System was implemented in 1998. Since that time, IWD staff conduct regularly scheduled trips on the board's pollution control boats to service the DO, dissolved oxygen, monitoring equipment. The regularly scheduled runs are as follows. Tuesdays from the Stickney Water Reclamation plant upstream on the Chicago Sanitary and Ship Canal, the South Branch, the South Fork, the Chicago River, the North Branch

and the North Shore Channel. Wednesday's from the Stickney Water Reclamation Plant downstream on the Chicago Sanitary and Ship Canal to the Cal-Sag junction, upstream on the Cal-Sag Channel and the Little Calumet North to the Conrail Railroad bridge downstream of the O'Brien Lock and Dam. In the warm weather months, this run often occurs in the reverse direction starting at the boatyard near the I-94 bridge. Thursday's from the Stickney Water Reclamation Plant downstream on the Chicago Sanitary and Ship Canal to Lemont.

In addition to the DO runs, the IWD boat crew performs other work trips on the waterways. During any trip on the Chicago area waterways, the Chicago -- I'm sorry. The District's patrol boat operators keep daily logs noting any observations of floatable materials, bridge and bank activity and any recreational activity. In support of the Chicago Area Waterway System Use Attainability Analysis, the observations of specific recreation activities were begun on June 24th, 2003. Observation of the following recreational activities on or in the water are recorded on daily log sheets: Swimming,

driving, jumping, skiing, tubing, wading, canoeing, sculling, kayaking, fishing and recreational boating.

An annual summary of observations of recreational activities on each waterway for the years 2005 through 2007 is attached. Observations were made on 39, 48 and 37 percent, respectfully, of the days in each year. For boating type activities, the tally indicates the number of watercraft observed, not the number of individuals.

For fishing activity, the tally generally indicates observations of fishing from the bank rather than from a boat. There have been very few observations of primary contact type activities during the three-year period. In 2005, three people were observed swimming in the Little Calumet River on June 15th, 2005. There were six jet skiers observed. Two on the Cal-Sag Channel on September 7th, 2005, and four on the Chicago River Main and South branch on September 8th, 2005.

One person was observed swimming, diving or jumping in the Chicago

Sanitary and Ship Canal above the junction on September 12th, 2005, and two on September 21st, 2005. There were no observations of primary contact type activities during 2006.

In 2007, there were nine observations of skiing or tubing, six on May 21st and one on May 23rd on Chicago Sanitary and Ship Canal above the junction and two on the Cal-Sag Channel on August 1st, 2007. The summary of observations for the three years indicate that canoeing, sculling, and kayaking were observed primarily in the North Shore Channel and the Chicago River North Branch.

In 2007, no canoeing, sculling or kayaking was observed in Chicago Sanitary and Ship Canal, the Cal-Sag Channel or the Little Calumet River. A review of the three years of observations indicates that there is generally a lack of any trend towards changing any recreational use of the Chicago Area Waterway System. Respectfully submitted, William J. Stuba.  
Thank you.

MS. TIPSORD: And, again, I don't recall that the NRDC had any questions, correct?

MR. JOHNSON: That's correct.

MS. TIPSORD: Then the ILEPA  
please --

MS. DIERS: Good afternoon,  
Mr. Stuba. My name is Stephanie Diers and I'll be  
asking questions on behalf of the Illinois EPA.  
The first question is on page two of your pre-file  
testimony, you state that most of the scheduled  
runs run Tuesday, Wednesday and Thursday -- and  
I'll rephrase the question a little bit. Were any  
observations made on the weekends?

MR. STUBA: No.

MS. DIERS: And why not?

MR. STUBA: The boat crew does not  
work or very seldom works on weekends.

MS. DIERS: And why are observations  
not made on Mondays and Fridays.

MR. STUBA: Observations are made on  
Mondays and Fridays.

MS. DIERS: I'm sorry. I guess the  
ones are just on Tuesdays and Thursdays --  
Tuesdays, Wednesday and Thursday, is that what  
we're seeing on the Attachment 1 to your  
testimony?

MR. STUBA: The attachment includes Monday through Friday.

MS. DIERS: Okay.

MS. TIPSORD: Excuse me then. If the runs are only done Tuesday, Wednesday and Thursday, how are the observations made on Monday and Friday?

MR. STUBA: The scheduled dissolved oxygen runs are on Tuesday, Wednesday, and Thursdays.

MS. TIPSORD: Okay.

MR. STUBA: On Monday and Friday, there are other tasks that the boat crew performs.

MS. TIPSORD: Thank you.

MS. DIERS: And can you give us the timeframe that you're on this water, is it 8 to 4 or the working hours for that day?

MR. STUBA: It's generally the working hours.

MS. DIERS: And is that 8 to 4, 9 to 5 or what would that be?

MR. STUBA: It varies. It could be 7 to 3, 7 to 5. It varies.

MS. DIERS: Okay. I'm going to skip

down to question number five. On page four of your pre-file testimony, you seem to conclude that there is not a trend towards changing recreational use of the CAWS. Can you please explain how you came to such a conclusion?

MR. ANDES: Do you want to go up to the chart?

MR. STUBA: Okay. The conclusion was based on the annual summary of the recreational observations. It's basically just a summary by year, by each part of the waterway and there is no trend.

MS. TIPSORD: You're pointing to a document on the easel board. Can you tell me where that is in your testimony, which attachment that is?

MR. STUBA: That was not an attachment to the testimony. It was in response to the pre-file questions.

MS. TIPSORD: Can we get a copy of that as an exhibit for the record?

MR. ANDES: Absolutely. It's a summary of information that was contained in the attachments to his testimony. It was reformatted.

There are copies available over there.

MS. TIPSORD: Thank you. All right. If there's no objection, we'll mark that as Exhibit Number 63. Seeing none, it's Exhibit Number 63.

MS. DIERS: Question six, it appears that numbers for the recreational survey that you mentioned in your pre-file testimony start in 2005, but your observations began in June of 2003, can you please explain why you did not submit that data from 2003 to 2004?

MR. STUBA: The data is a summary from looking at each individual log sheet. In the interest of time, we started in 2005. That's all.

MS. DIERS: Who prepared the summary that was in your Attachment 1 to your pre-file testimony? Did you prepare it?

MR. STUBA: Yes.

MS. DIERS: Is it possible to get a copy of the log you're referencing?

MR. ANDES: Sure.

MS. DIERS: No further questions.

MS. TIPSORD: And then I believe Openlands is next.

MS. MEYERS-GLEN: For the record, my name is Stacy Meyers-Glen. I can give you a card. Mr. Stuba, on page two of your testimony, you stated the District's administrative industrial waste division staff conducts scheduled trips on Tuesday, Wednesday and Thursday to service dissolved oxygen monitoring equipment. Do these trips occur every week?

MR. STUBA: Yes.

MR. ANDES: And let me clarify one thing which is the administrative part is incorrect. It's just the industrial waste division.

MS. MEYERS-GLEN: Thank you. So every week, every Tuesday, Wednesday and Thursday of the year these trips occur?

MR. STUBA: Correct.

MS. MEYERS-GLEN: What is the staff's primary responsibility on these trips?

MR. STUBA: To service the destroyed oxygen monitoring equipment.

MS. MEYERS-GLEN: And when they aren't working in this capacity, staff is to note any observations of floatable materials, bridge

and bank activity and recreational activity?

MR. STUBA: They are to note any activity any time they are on the waterways, yes.

MS. MEYERS-GLEN: So it's all of those things, though, it's not just recreational use, correct?

MR. STUBA: Correct.

MS. MEYERS-GLEN: And are there certain people on these trips that are designated to focus specifically on and record such activities?

MR. STUBA: The patrol boat operators keep the logs. The observations are ancillary to their normal function as a patrol boat operator.

MS. MEYERS-GLEN: So the patrol --

MR. ANDES: Can I follow up with that? That's in terms of reporting. In terms of people watching for these activities, is that the obligation of all the staff?

MR. STUBA: No. They have their normal routines that they are to do. If during the course of the routine somebody sees something, there's nothing to prevent him from saying "Look,

there's somebody fishing."

MR. ANDES: And that could happen to anybody on the boat?

MR. STUBA: Anybody on the boat.

MR. ANDES: Okay.

MS. MEYERS-GLEN: And what are their instructions, how are they instructed to -- what specifically are their instructions in recording or making observations regarding recreational use while they are conducting their other primary responsibilities?

MR. STUBA: The instructions are to note any recreation activity.

MS. MEYERS-GLEN: And how frequently is recreational activity recorded?

MR. STUBA: Anytime it is observed.

MS. MEYERS-GLEN: You already answered the question regarding how often IWD staff monitors on weekends, which they don't. How often --

MS. FRISBIE: Can I ask a follow up?

MS. MEYERS-GLEN: Sure.

MS. FRISBIE: Do you recall the weather on these days you've gone out?

MR. STUBA: There may be notes regarding the weather on the log sheet, yeah.

MS. FRISBIE: But regardless of whether it's storming or a bright sunny day, it's the days you go out on the boat you take this?

MR. STUBA: Correct.

MS. ANDES: I'd like to follow up also just to clarify. On the weekends and holidays, are those never done or is that seldom done?

MR. STUBA: Very seldom, practically never.

MR. ANDES: And when would that happen?

MR. STUBA: When would it happen?

MR. ANDES: Yes.

MR. STUBA: A special sampling study that needed to be done, something out of the ordinary.

MS. MEYERS-GLEN: How many times a year do you anticipate or do you call being out on the waterway and having the opportunity to -- or actually recording events that occurred on weekends or holidays?

MR. ANDES: Are you talking about him personally?

MS. MEYERS-GLEN: How often has IWD staff gone out and monitored activity on weekends, what is the frequency?

MR. STUBA: That is not their function to go out and monitor activity. If they work and they see activity, they will record it.

MS. MEYERS-GLEN: I'm just trying to get a sense of whether this happens once a year, once a month, once every three or four years that somebody actually go out on the weekends.

MR. STUBA: I don't know that information. I'd have to review the log sheets.

MS. MEYERS-GLEN: I'd appreciate if that could happen so we have a sense of how often they're out on the weekends.

MR. ANDES: We'll be providing the log sheets.

MS. MEYERS-GLEN: Thank you. And then the same thing for holidays, how often do the IWD staff monitor on holidays?

MR. STUBA: Monitor recreation activities?

MS. MEYERS-GLEN: That's correct.

MR. STUBA: Again, that's not their sole function for being out on the waterways. You're asking how many holidays have they worked. I don't know. I would have to look at the log sheets.

MS. MEYERS-GLEN: If we could have that information as well, we'd appreciate it.

MR. STUBA: Sure.

MS. TIPSORD: He's already indicated they will be providing the log sheets.

MS. MEYERS-GLEN: Okay. I think H is covered and so is I. Under the list of -- under question J, under the list of specific recreational activities, does skiing include both jet skiing and water skiing?

MR. STUBA: Yes.

MS. MEYERS-GLEN: And where do the IWD staff observe jet skiing and tubing on the CSSC and Chicago River Main and South Branch in 2005 and 2007?

MR. STUBA: The observation log does not give specific locations. There were four instances of jet skiing on the Chicago River, the

Main and the South Branch recorded on September 8th, 2005. Six observations of skiing or jet tubing on the Chicago Sanitary and Ship Canal above the Cal-Sag junction were recorded on May 21st, 2007. One observation of skiing or tubing on the Chicago Sanitary and Ship Canal above the Cal-Sag junction was recorded on May 23rd, 2007.

MS. MEYERS-GLEN: So you wouldn't know from these logs, for instance, how close people are to outfalls?

MR. STUBA: No.

MS. MEYERS-GLEN: Where were people observed swimming in the Chicago Sanitary and Ship Canal in 2005? Do you have that information?

MR. STUBA: Again, the observation log doesn't list specific locations. An observation of one person swimming in the Chicago Sanitary Ship Canal above the Cal-Sag junction was recorded on September 12th, 2005. Observation of two people swimming in the Chicago Sanitary and Ship Canal above the Cal-Sag junction were recorded on September 21st, 2005.

MS. MEYERS-GLEN: So those uses did occur?

MR. STUBA: They were observed, yes.

MS. MEYERS-GLEN: Did IWD staff conduct -- This is M. Did IWD staff conduct a scheduled trip on Wednesday, July 16th, 2008?

MR. STUBA: Yes.

MS. MEYERS-GLEN: And did they produce a daily log of that activity?

MR. STUBA: Yes.

MS. MEYERS-GLEN: If it would be possible we would appreciate a copy. Thank you very much. You read my mind. In that particular log, what were the times and locations of any motorized recreational boats the day of the event?

MR. STUBA: The log does not give specific times other than the waterway names. For July 16th, 2008, two observations of recreational boating on the Chicago Sanitary and Ship Canal below the junction. Five observations of recreational boating on the Cal-Sag and two observations on the Little Calumet River were recorded.

MS. MEYERS-GLEN: And there were no times with those observations?

MR. STUBA: No.

MS. MEYERS-GLEN: Did they record any one fishing on that date?

MR. STUBA: No.

MS. MEYERS-GLEN: Did staff further record any one jet skiing on that date?

MR. STUBA: No.

MS. MEYERS-GLEN: On page three of your testimony --

MS. TIPSORD: Before you go on, you asked him to provide a copy and he showed you a copy, but we haven't had that copy provided yet. So why don't we mark that as an exhibit.

MS. MEYERS-GLEN: Thank you very much.

MS. TIPSORD: We probably need to mark this as an exhibit and I'll get some copies made. Let me mark it as an exhibit. I'll let you take a look at it in case you have any follow up and then we'll get copies at the break. Mark this as Exhibit 64. I realize that all of you haven't had a chance to look at it, but we'll mark it and if there's any objections after the break and you've seen it, we'll deal with it then.

MS. MEYERS-GLEN: Thank you very

much.

MS. MEYERS-GLEN: I just have one.

MS. TIPSORD: Okay.

MS. MEYERS-GLEN: The only recreational use that is recorded on the trip log dated 7/16/08 is recreational boating, is that correct?

MR. STUBA: Correct.

MS. MEYERS-GLEN: And there's no other use that was recorded or observed on that date?

MR. STUBA: No.

MS. MEYERS-GLEN: And this is your typical dissolved oxygen trip?

MR. STUBA: This is the typical observation log regardless of the reason that they're out on the waterway.

MR. ANDES: Can I ask what else --

MS. MEYERS-GLEN: And is that the only one from July 16th?

MR. STUBA: The only one from July -- Yes.

MR. ANDES: Can I ask what else is supposed to be going on in the water body that is

the reason for asking questions about that particular date?

MS. MEYERS-GLEN: At this point, no.

MR. ANDES: No, I can't ask?

MS. MEYERS-GLEN: We're going to testify further as to observations and whatnot and we'll provide that to you.

MR. ANDES: Because I don't remember that in any of the testimony of any of your witnesses. Was there testimony of one of your witnesses as to a particular activity on that date?

MS. TIPSORD: In your pre-file testimony.

MR. ANDES: I don't remember it, but point me to it if it's there.

MS. WILLIAMS: I don't think that their testifying to -- I don't understand. Are you trying to ask --

MS. TIPSORD: They've already filed their testimony.

MR. ANDES: So why are they asking about that date? I'm curious. I can't say I'm not going to introduce testimony that hasn't been

produced yet.

MS. TIPSORD: Well --

MS. MEYERS-GLEN: We can certainly provide explanation during our testimony.

MS. TIPSORD: And I would just note that if they don't show the relevance to it, then they've never shown relevance to it.

MR. ANDES: Okay.

MR. TIPSORD: Otherwise, we will observe it as an example of your trip logs.

MS. MEYERS-GLEN: We also, if I may note, did not have access to this daily log when creating our pre-file testimony to know whether or not it would be relevant and we can certainly respond now now that we know we have relevant information.

MS. TIPSORD: You can respond during your testimony. I think his question was just that you centered in on this date and you responded we will certainly be testifying to that and there's no testimony yet in the record to that.

MS. MEYERS-GLEN: We will clarify the later date.

MR. TIPSORD: Thank you.

MS. MEYERS-GLEN: Question number two on page three of your testimony you state that a review of the three years of observations indicates that there is generally a lack of any trend towards changing recreational use on the cause. A, in Attachment 3, only 44 instances of canoeing, kayaking or sculling is recorded on the North Branch of the Chicago River and seven instances along the Chicago River Main and South Branch in September 2007. Are you aware that 511 people participated in the Flatwater Classic alone on September 16th, 2007?

MR. ANDES: I'll just note. I'll be raising the same exact objection to each of these questions that I raised in the earlier questions.

MS. TIPSORD: Right. That evidence is not yet in the record.

MR. ANDES: Correct. Now you can answer.

MS. TIPSORD: That's fine. Yes, you can answer the question.

MR. STUBA: I am aware of the Flatwater Classic. I am not aware of how many

people participated nor the date that it was last year.

MS. MEYERS-GLEN: Were those people accounted for in the District's chart?

MR. STUBA: There's no observation log for September 16th, 2007.

MS. MEYERS-GLEN: In your record from November 2007, list no instances of canoeing, sculling or kayaking on either the Cal-Sag Channel or the Little Calumet River, is that correct?

MR. STUBA: Yes.

MS. MEYERS-GLEN: And is it safe to say that your figures do not include over 300 female rowers from five major universities that compete in the premier Division 1 rowing competition in the Cal-Sag Channel on November 4, 2007?

MR. STUBA: There is no observation log from November 4th, 2007.

MS. MEYERS-GLEN: Do the IWD figures include any sculling races during that year?

MR. STUBA: I don't know.

MS. MEYERS-GLEN: Do the IWD charts reflect routine practices by high school and

college sculling teams from New Trier, North Park University, Loyola Academy and Northwestern University in the North Channel and North Branch of the Chicago River between March and June and again between September through November of each year?

MR. STUBA: I don't know.

MS. MEYERS-GLEN: Are you aware that between 2004 and 2007 Friends of the Chicago River led 34 Chicago Park District canoe trips with nearly 1,000 attendees and summer programs?

MR. STUBA: I am not aware of the number of trips or the attendees.

MS. MEYERS-GLEN: Did you or IWD staff cross reference their figures with any canoe or kayak rental locations along the CAWS?

MR. STUBA: No.

MS. MEYERS-GLEN: According to Attachment 3, IWD staff recorded a total of 168 instances of canoeing, sculling and kayaking at all locations in the CAWS in 2007. Are you aware that according to Chicago River Canoe and Kayak they sent out 55,000 paddling trips on the Chicago River since 2001?

MR. STUBA: Am I aware of that? No.

MS. MEYERS-GLEN: So information from that source was not accounted for when you made your conclusion that recreational use was not increasing on the CAWS, is that correct?

MR. STUBA: My conclusion was based on the observation logs.

MS. MEYERS-GLEN: Did you know that the canoe and kayak rentals on the CAWS has increased annually over the last five years?

MR. STUBA: No, I didn't know that.

MS. MEYERS-GLEN: Then, in particular, Chicago River Canoe and Kayak has grown approximately 20 to 30 percent each year since it's inception in 2001.

MR. STUBA: Are you asking if I knew that?

MS. MEYERS-GLEN: Yes.

MR. STUBA: No, I did not.

MS. MEYERS-GLEN: Lastly, did you know that Kayak Chicago provided access to approximately 600 people per week between June and August 21st, 2008, which rose from 300 to 400 people per week during the same time frame last

year?

MR. ANDES: Can't this wait for actual evidence?

MS. MEYERS-GLEN: These are things that if he's going to be testifying as to whether or not he based -- what he based his knowledge and information on and is concluding whether or not recreational use is increasing on the waterways it is important to understand what the limitations were as to those observations and conclusions because there are a lot of things going on. It is important to note that those things were not taken into account in making that conclusion.

MR. ANDES: He already testified that the only thing taken into account were the observations on the boat.

MS. MEYERS-GLEN: Well --

MS. TIPSORD: He can answer the question, but I am going to ask that -- These are getting -- You're putting a lot of facts in your questions and I know that we gave some leeway to everyone when we questioned the agency, but you do understand that this is not evidence as far as the board is concerned.

MS. MEYERS-GLEN: Yes.

MR. TIPSORD: This is merely stating that -- what he already stated. That he based his decisions on the log, not any other extraneous information.

MS. MEYERS-GLEN: That's correct. That was actually my last question.

MS. TIPSORD: Go ahead and answer the question.

MR. STUBA: Would you repeat the question?

MS. MEYERS-GLEN: Sure. Did you know that Kayak Chicago provides access to approximately 600 people per week between -- or provided June and August -- August 21st of 2008 which rose from 300 to 400 people per week during the same time frame last year?

MR. STUBA: No, I was not aware of that.

MS. MEYERS-GLEN: Thank you. I think I is the last question. Are you familiar with the findings in the Geosyntec Microbial Risk Assessment Report for the CAWS that it recently completed for the District in April 2008?

MR. STUBA: No.

MS. MEYERS-GLEN: No further questions.

MS. TIPSORD: I do have one question, Mr. Stuba. As far as the trip, the DO trip that we've been talking about, what hours and how long are they out? I mean is it an hour trip, is it an all day thing?

MR. STUBA: The boat crew works an eight hour day.

MS. TIPSORD: And they're out on the boat the entire eight hours?

MR. STUBA: Pretty much all eight hours, yes.

MS. TIPSORD: Mr. Harley.

MR. HARLEY: All of the people who are on the boats have other responsibilities during the time that they're also observing uses of the waterways, is that correct?

MR. STUBA: Correct.

MR. HARLEY: Has there ever been an attempt by the Water Reclamation District to do a quality assurance, quality control evaluation to determine whether or not their observations are,

in fact, accurate?

MR. STUBA: You mean whether they actually saw what they recorded it as?

MR. HARLEY: Whether it's a full and complete record of what was going on while they were on the boat.

MR. STUBA: Other than the observation logs, no.

MR. HARLEY: So you've never sent, for example, an additional boat with the sole responsibility to perform just an observation log of recreational activities?

MR. STUBA: Not to my knowledge, no.

MR. HARLEY: Have you ever attempted to correspond observed uses with logs of uses of boat launches, for example, at Worth or Alsip?

MR. STUBA: No.

MR. HARLEY: Thank you.

MS. TIPSORD: Ms. Williams.

MS. WILLIAMS: Mr. Stuba, I just want to ask you one question that was deferred to you by your counsel from my questions for Mr. Lanyon. In your opinion, is the recreational use potential of the Chicago Sanitary and Ship

Canal different from the South Branch Chicago River in its South Port, the Cal-Sag Channel or other man-made or heavily altered regions?

MR. STUBA: I'm not sure I understand what the question is.

MR. ANDES: I don't remember deferring that to him.

MS. WILLIAMS: You suggested that it was either Mr. Stuba or Mr. Dennison.

MR. ANDES: Let's go to Mr. Dennison on that one.

MS. WILLIAMS: I won't forget. Don't worry.

MR. ANDES: He's up next.

MS. TIPSORD: Is there anything else?

MR. ANDES: I had some follow up.

MR. ETTINGER: You're taking dissolved oxygen, doing dissolved oxygen checking between 8 and -- when was that in the afternoon?

MR. STUBA: Their work hours are from 7 to 3:30. They're union boat operators.

MR. ETTINGER: Do you ever take any DO readings in the early morning like 4 a.m.?

MR. STUBA: I don't know, but I would say probably. I don't know.

MR. ETTINGER: We heard earlier testimony about putting up signs at the direction of the IEPA by the Water Reclamation District. Do you know when those signs were put up?

MR. STUBA: No, I don't.

MS. TIPSORD: Ms. Dexter.

MS. DEXTER: How many boats do you have going out on each day?

MR. STUBA: The industrial waste division has two.

MS. DEXTER: Two boats. And how many miles does that area cover of river miles?

MR. STUBA: I don't know.

MS. DEXTER: Is it the whole CAWS system?

MR. STUBA: It could be the whole thing, right.

MS. DEXTER: And would you characterize this as a study design to discover all the recreation that is happening on the CAWS?

MR. STUBA: Which study?

MS. DEXTER: Your logging in these

sheets. Is this a study -- by taking this sort of log sheets and recreation you see, would you call that a study that's designed to assess all of the recreation that is happening on the CAWS?

MR. STUBA: My review of the log sheets was in response to this testimony.

MR. ETTINGER: I'm sorry. Just one last thing. Is there any -- you're not -- are you in charge of any continuous dissolved oxygen monitoring -- the Water Reclamation District --

MR. STUBA: I'm in charge of the boat crew that services the DO and the sans, the equipment.

MR. ETTINGER: Okay. So you don't actually -- you're not the one who is actually reading the DO data?

MR. STUBA: No.

MR. TIPSORD: Mr. Harley.

MR. HARLEY: You mentioned you were in the charge of the boat crews and the boat crews are unionized, is that correct?

MR. STUBA: The boat operators, yes.

MR. HARLEY: Is it part of their job description of which they are evaluated to record

observed recreational uses?

MR. STUBA: No.

MR. HARLEY: So it's a gratuity that they're performing?

MR. STUBA: A gratuity -- it's an added task to ask them to fill out the log sheets.

MR. HARLEY: But it's on which you could evaluate their job performance whether they were doing it well or not?

MR. STUBA: Depending on how many observations they saw, no.

MR. ANDES: Well, let me try to clarify. Is this part of their job to note recreational observations when they see them?

MR. STUBA: That is part of their job.

MR. HARLEY: But it's not in their job description?

MR. STUBA: No more than follow directions or do what's asked of them. I mean --

MS. WILLIAMS: Other duties as assigned, is that what you're --

MR. STUBA: Pardon me?

MS. WILLIAMS: Mine has other duties

as assigned.

MR. STUBA: Exactly.

MR. HARLEY: This is other duties as assigned. Have you ever reprimanded or -- Strike that. You answered that question. I have nothing.

MR. ANDES: Just to clarify. Their primary job is to maintain the DO monitoring equipment?

MR. STUBA: Correct.

MR. ANDES: And when they are moving between stations, what are they doing as they're moving up and down the waterways?

MR. STUBA: From station to station?

MR. ANDES: Yes.

MR. STUBA: There would be things like maintaining the boat, make sure the boat is operating in a normal and safe condition, cleaning equipment, various navigational chores.

MR. ANDES: And if recreational crafts are going by is it usually fairly obvious?

MR. STUBA: I would think so, yes.

MR. ANDES: Thank you.

MS. TIPSORD: Anything further?

Wonderful then. Let's move on to Mr. Dennison and his testimony on recreational designations for the Chicago Area Waterway System. And do we have a copy we can mark as an exhibit? We will mark Mr. Dennison's pre-file testimony with attachment as Exhibit Number 65. If there's no objection. Seeing none, it is Exhibit Number 65. And then whenever you're ready, Mr. Dennison.

MR. DENNISON: My name is Samuel G. Dennison. I am a Biologist IV in the Environmental Monitoring and Research Division of the Research and Development Department of the Metropolitan Water Reclamation District of Greater Chicago known as the District. I received a Bachelor of Arts degree with a major in biology from St. Mary's University in Winona, Minnesota, a Master of Science degree in Fisheries Biology from Iowa State University in Ames, Iowa, and a Doctorate of Philosophy in biology from the Illinois Institute of Technology in Chicago, Illinois.

I am a Certified Fisheries Professional with the American Fisheries Society and also a past president of the Illinois Chapter

of the American Fisheries Society. I have been employed by the District since 1971. My primary responsibility from 1974 through 2003 was monitoring the fish populations in the Chicago area waterways. Since 2000, I have served as the head of the Aquatic Ecology and Water Quality Section within the Environmental Monitoring and Research Division where I supervise a staff of ten persons.

Today, I will be presenting testimony in regard to the recreational use designation for the Chicago Area Waterway System known as the CAWS. As a biologist with the District, my work often included collecting fish from many 400 meter long sampling locations throughout the CAWS. For fish collecting, I usually used flat bottom electrofishing boats, I boats, 14 to 18 feet long. While collecting fish or traveling to and from the sample locations, I had plenty of time to observe the physical conditions of waterways such as the condition and structure of the banks and what was present on the riparian areas.

In IPCB R08-9, most waterways in

the CAWS have been designated for Incidental Contact Recreation. Incidental Contact Recreation includes fishing, commercial boating, small craft recreational boating, and any limited contact associated with shoreline activity such as wading. At this point it should be noted that it is reasonable for local governments to establish and enforce certain regulations and restrictions in order to ensure the safety of their citizenry.

For example, in Chicago, along the Lake Michigan lakefront, there are numerous signs warning, "no swimming," due to hazards like deep waters, strong currents, or dangerous access to the water. The water quality of Lake Michigan may be very good, but there are many other valid reasons for these swimming restrictions other than water quality alone. The CAWS has similar safety issues that can make swimming, wading, and boating dangerous activities. Safety issues in the CAWS include: (1) the man-made and modified waterways do not have a shallow area along the banks; (2) the depth along the banks increase very rapidly proceeding away from the sides of the waterways; (3) the banks of the waterways

are lined with high vertical sheet piling or large limestone rocks; (4) periodic draw downs of the water level cause an unexpected rapid increase in stream velocity; and (5) a large number of commercial barges and large private power boats operate in the CAWS.

I have had occasional, unexpected, "close calls" over the years that have reinforced the idea that the CAWS can be extraordinarily dangerous for recreational activities throughout its entire length. One time as my sampling crew and I were on the north side of the Calumet-Sag Channel, just inside the point where the Channel bisects the Illinois Michigan Canal (Attachment 1), a barge that broke loose from a tow swiftly and silently moved towards a not so silent collision with the Channel wall just a few feet from our electrofishing boat.

MR. ANDES: Let me make sure we have that right.

MS. TIPSORD: You said attachment three.

MR. DENNISON: I meant Attachment 1. Sorry.

MS. TIPSORD: Thank you.

MR. DENNISON: I had no warning that the barge was headed straight for us and I would not be giving this testimony today had we decided to head out into the Calumet-Sag Channel a minute or so previous to the barges collision with the channel wall.

This is a picture of the junction of the Calumet-Sag Channel in the lower portion with the Chicago Sanitary and Ship Canal above it. This picture was taken probably around 1995, '96 or so and may be a little bit later in the 2000's. And at this time, there's a SEPA station here. The particular incident that I was talking about happened before the SEPA station was constructed, but up here next to the left of this barge on the Cal-Sag channel is the entrance of the Illinois and Michigan canal. That was the spot that I was talking about where we had been in our electrofishing boat just inside that mouth and did not see a barge that had broken loose headed towards us. It hit the side of the channel wall which is a rock wall and had we just gone out at that time, we probably would have been hit by the

barge.

As you can see, there are numerous barges that are in both the Cal-Sag Channel and the Chicago Sanitary Ship Canal. In this particular photo, you can see a motorized pleasure craft that doesn't have that much room to pass through the barge area because of the barges parked alongside the canal.

MS. TIPSORD: And I would just note for the record you have some of that description also in your testimony on the attachment so that people who are reading this transcript will be able to follow that.

MR. DENNISON: There were also many times when I was operating our electrofishing boat that I had to avoid the waves of large pleasure craft or barges in order to keep from getting capsized.

When I first started collecting fish for the District in the CAWS in the 1970's, I had to make the decision to not use a minnow seine. Seining is often conducted in order to capture small fish while wading in a stream.

The decision not to use seines in

the CAWS was predicated on the fact that it was too dangerous to pull a seine along the banks of these waterways because of the complete lack of shallow areas and/or the sudden drop off in depth from a narrow relatively wadeable area to much deeper water.

In spite of the hazardous physical conditions described above, a number of waterways in the CAWS were designated for Incidental Contact Recreation in the CAWS Use Attainability Analysis (UAA) report. Because of the many physical hazards in the CAWS, the following waterways should be designated for Non-Contact Recreation, contrary to the proposed Incidental Contact Recreation classification. Number one, the Chicago Sanitary and Ship Canal from the South Branch of the Chicago River to the junction with the Calumet-Sag Channel, number two, the entire Calumet-Sag Channel, number three, the Chicago River and number four, Bubbly Creek also known as the South Fork or the South Branch of the Chicago River.

Non-Contact Recreation is defined in Section 301.323 of the IEPA's regulatory proposal

as "any recreational activity in which human contact with the water is unlikely, such as pass through commercial or recreational navigation, and where physical conditions or hydrologic modifications make human contact unlikely or dangerous." The physical limitations and hydrological modifications described above clearly apply to reaches of the CAWS that have been incorrectly designated as Incidental Contact Recreation in the proposed regulations. IEPA's Statement of Reasons describes the conditions in the CAWS very effectively as follows: "Wakes coupled with vertical-wall construction in many of the waterway reaches make recreational uses dangerous. Small craft can easily be capsized and persons in the water will have little if any route for escape" (page 33). Approximately 17,000 barges lock through Lockport Lock and Dam and over 9,000 lock through O'Brien Lock and dam each year.

Based on the physical hazards present in the CAWS, the following waterways should be considered as being Non-Contact Recreational contrary to the proposed standards including the

Chicago Sanitary and Ship Canal from the South Branch of the Chicago River to the junction with the Calumet-Sag Channel, the entire Calumet-Sag Channel, the Chicago River and Bubbly Creek, otherwise known as the South Fork of the South Branch of the Chicago River.

Justification and explanation for designating these waterways as Non-Contact recreation are as follows. The Chicago Sanitary and Ship Canal from the South Branch of the Chicago River to the confluence with the Calumet-Sag Channel has unsafe depths for wading and lacks points of egress due to vertical sheet-pile channel walls. This is a pass through area for recreational craft and commercial barge traffic. (Attachment 2.) This photo shows an example of the Chicago Sanitary and Ship Canal with a barge with very many tows traveling down the Chicago Sanitary and Ship Canal with very little free board on each side. I shouldn't say free board, but areas that another boat could pass through on each side of it. This is a location near Hodgkin's and the McCook Reservoir which is near being dug for the TARP program for the

District.

The proposed incidental contact recreation use designation for the Chicago Sanitary and Ship is alarmingly inconsistent with IEPA's realistic verbiage describing the CAWS on page 33 in the statement of reasons. The Calumet-Sag Channel has unsafe depths for wading along the banks of the waterway. It is a pass through area for recreational craft and commercial barge traffic shown in Attachment 3.

MR. ANDES: Let me stop you there for a moment. We substituted a different picture of the same barge for Attachment 3 and I'll give the Board a copy of that to be marked. This is the same exact barge as Attachment 3 just from the other side. From the front instead of the back.

MR. TIPSORD: All right. And for the record, let's mark this as Exhibit 66. If there's no objection, seeing none, it is Exhibit 66.

MR. DENNISON: This is a photo of a barge on the Cal-Sag Channel. You're looking from the 104th Street bridge west as opposed to the one in the testimony which is looking east. A barge

coming down the Cal-Sag Channel also has little room on either side for navigation to pass whether they're pleasure boats or whatever.

The barge also brings up quite a bit of wave behind it and it's a situation that we see often throughout the system. Similar to the Chicago Sanitary and Ship Canal, the Calumet-Sag Channel is a man-made deep trapezoidal shaped channel. The United States Army Core of Engineers, USACE, who operate the Chicago area locks reported 8,792 barges traveled up or down the Calumet-Sag Channel during 2006 alone. Data is available on USACE web site. The Calumet-Sag Channel lacks points of egress along the waterway if a boat capsizes or an emergency situation arises. Industrial riparian land use is common along the Calumet-Sag Channel except for an approximately five mile reach upstream of the confluence with the Chicago Sanitary and Ship Canal which is a forest preserve. Steep lime stoned channel walls, soft contaminated sediments and steep drop offs along the bank characterize most of Calumet-Sag Channel.

Bubbly Creek has extremely deep,

fine particulate silt sediments deposited on the bottom resulting in unsafe conditions for wading. The sediments are contaminated with organic pollutants and heavy metals. There are steep banks and vertical sheet pile walls in some reaches. (Attachment 4) During and following wet weather events, the District's Racine Avenue Pumping Station discharges a large volume of combined sewage overflow into Bubbly Creek that causes an unexpected rise in the water level along with a substantial increase in flow velocity in the narrow creek. These hydrologic conditions are dangerous for any individual in the water and for boaters. In addition to these dangerous conditions, points of egress are very limited due to steep banks and steel sheet piling along the banks of most of the waterway reaches. The Chicago River is analogous to the section of the Calumet River from Lake Michigan to Lake Calumet which the IEPA has designated as Non-Contact Recreation and IPCB R08-9. Similar to the comparable section of the Calumet River, recreational boaters use the Chicago waterway as a gateway to enter Lake

Michigan from the inland waterways. Like the Calumet River, the Chicago River has high vertical sheet-pile channel walls and no shallow areas occur along the waterway. The same reasoning that IEPA used to designate the Calumet River Non-Contact Recreational should be applied to the Chicago River. While the number of commercial barges operating in the Chicago River is small, the river does support navigation from a significant and growing number of large commercial tour boats, in addition to the high volume of recreational power boats. The Chicago River lacks points of egress from the waterway should a boat capsize or an emergency situation arise (Attachment 5). Respectfully submitted by Samuel G. Dennison.

MR. TIPSORD: Mr. Dennison, I believe we can go right to the IEPA with questions.

MS. DIERS: Mr. Dennison, I'm going to skip question number one because I believe that was covered by Mr. Lanyon. So I'll go to two. In your opinion, what types of recreational boating activities should be protected in the incidental

contact water proposed by IEPA, but not protected in the Non-Contact waters proposed by IEPA?

MR. ANDES: Can I ask for clarification? What do you mean by protected, allowed, noted? I'm not sure what protected means there.

MS. DIERS: I think I'll refrain to the designated uses.

MR. ANDES: So you're asking for his recommendation in terms of how his proposal should be revised? Because the --

MS. DIERS: I was asking his opinion as to for the uses that we've proposed be protected with incidental contact waters, but not protected by the non-contact waters.

MR. ANDES: So what activities should be listed in the category for incidental contact versus which ones should be listed in the definition of non-contact, is that it?

MS. DIERS: Yes.

MR. DENNISON: Hand powered recreational boating, no hand powered recreational boating is allowed in the non-contact waters.

MS. DIERS: Number three, is fishing

on the South Fork of the South Branch Chicago River occurring?

MR. DENNISON: I have seen people fishing from the banks at Origins Park which is at the mouth of the South Fork of the South Branch of the Chicago River and which I've referred to as Bubbly Creek.

MS. DIERS: Do individuals that fish there need to be protected from potential harm to their health related to the use of the CAWS?

MR. DENNISON: Well, there's always physical safety issues that should be considered when fishing in the CAWS. For example, in Bubbly Creek, there are steep banks with abrupt drop offs below the water line into deep soft unstable contaminated sediment deposits. Hazardous flow conditions can be present during and following rain events due to combined sewer overflow discharges from the Racine Avenue Pumping Station.

MS. DIERS: Anything else?

MR. DENNISON: Those are the main ones.

MS. DIERS: Okay. On question four on page six of your pre-file testimony, you state

that the agency should treat the Calumet River from Lake Michigan to Lake Calumet and the Chicago River main stem in the same manner for recreational use purposes. Does the Calumet River also have evidence of existing hand powered recreational boating?

MR. DENNISON: I have no personal knowledge that it does.

MS. DIERS: Question five on page four of your pre-file testimony, you state the proposed incidental contact recreation use designation for the Chicago Sanitary and Ship Canal is alarmingly inconsistent with Illinois EPA's realistic verbiage describing the CAWS on page 33 in the Illinois Statement of Reasons. Does the Chicago Sanitary and Ship Canal from the South Branch Chicago River to the confluence with the Calumet-Sag Channel have public access facilities such as boat rental and/or boat launches?

MR. DENNISON: I know about a boat launching ramp at Summit.

MS. DIERS: What about Western Avenue?

MR. DENNISON: I know about Western Avenue being constructed. I wasn't sure if it was open. If it is, then there's another one.

MS. DIERS: And do you know if these facilities restrict small craft such as canoes, kayaks or jet skis?

MR. DENNISON: I don't know if there are restrictions.

MS. DIERS: Six, is there anything from preventing canoes or kayaks entering the Chicago River?

MR. ANDES: A follow up.

MS. TIPSORD: Go ahead.

MR. ANDES: Are we talking about anything physical, physical restrictions? I assume that's what you mean.

MS. DIERS: Any type of restrictions.

MR. ANDES: Is there something other than physical? I'm just trying to figure out -- Are you talking about warnings? Are you talking about just physical restrictions where they can't get in? I wasn't sure if there was anything else being referenced there.

MS. DIERS: That's fine.

MR. ANDES: Okay.

MS. DIERS: And your answer was, no, correct, to that question?

MR. DENNISON: Correct.

MS. DIERS: Seven, on page 4-46 of the CAWS UAA, which I believe is attachment B, reports indicates that sculling and hand powered boating occur in the Chicago River. To your knowledge, are there canoes or kayaks in the Chicago River?

MR. DENNISON: Yes.

MS. DIERS: Number eight, on page two of your pre-file testimony, you speak about the dangers of how -- and I'm paraphrasing going to four, periodic draw downs of water level causes unexpected rapid increase in stream velocity. Can you quantify the degree to which velocity varies during drawdowns and then describe the reaches in which such velocities rapidly increase and present a hazard to recreational users?

MR. DENNISON: I don't have the numbers to quantify the degree of drawdown velocities. A drawdown that I remember on the

Chicago Sanitary and Ship Canal upstream of the Lockport Lock and Dam was especially swift and dangerous and I don't believe that I could have controlled a hand powered boat and possibly not even a fishing boat with an outboard motor at that point in the Chicago Sanitary and Ship Canal at that time.

MR. ANDES: I'd like to follow up on that. Can you give any information as to which reaches you believe have these velocity issues during drawdowns?

MR. DENNISON: Well, it's pretty much the lower portion of the waterway system. Especially, in the, I suppose, the Cal-Sag Channel, the Chicago Sanitary and Ship Canal both above and below the junction with the Cal-Sag.

MR. ANDES: That also indicates Bubbly Creek.

MR. DENNISON: Well, with Bubbly Creek you've got a situation of both drawdowns as well as CSO discharge during wet weather events, rain events which are very dangerous.

MS. DIERS: Do you disagree with the UAA observations and findings that incidental

contact activities occur at these reaches?

MR. ANDES: Which reaches are we talking about?

MS. TIPSORD: The ones referred to earlier in the questions with the velocity issues.

MR. DENNISON: I have no reason to doubt the UAA observation.

MS. DIERS: Mr. Dennison, I'm going to try again.

MR. ANDES: All right.

MS. DIERS: In your opinion, is the recreational use potential of the Sanitary and Ship Canal different from the South Branch Chicago River and its South Fork, the Cal-Sag Channel, or other man-made or heavily altered reaches?

MR. DENNISON: No.

MS. DIERS: Thank you. That's all we have.

MR. TIPSORD: This might be a good point. I see Openlands has several questions. Why don't we take a ten-minute break and come back. And I'll take that exhibit and make copies.

(Whereupon, a break was taken  
after which the following  
proceedings were had.)

MS. TIPSORD: Are we ready to go  
back on the record? Are you ready? Are we ready?  
Mr. Dennison, are you ready?

MR. DENNISON: Yes.

MR. TIPSORD: Okay. Let's go back  
on the record again. I apologize. I missed the  
PHD, Dr. Dennison. Go ahead.

MS. MEYERS-GLEN: Thank you. For  
the record, Stacy Meyers-Glen with Openlands.  
Mr. Dennison, on page two of your testimony you  
discuss general concerns about safe use of the  
CAWS. All reaches of the Chicago and Calumet  
River systems identical in nature?

MR. DENNISON: No, they're not  
identical.

MS. MEYERS-GLEN: They have  
different characteristics, right?

MR. DENNISON: As I've stated in my  
testimony, they're not identical.

MS. MEYERS-GLEN: And you state this  
in -- this is question number two. You state that

the man-made and modified waterways do not have shallow areas along the banks. That's page two of your testimony.

MR. DENNISON: Yes.

MS. MEYERS-GLEN: Later in your testimony on page three you state there were some narrow, relatively wadable areas in the CAWS, is that correct?

MR. DENNISON: Mm-hmm.

MS. MEYERS-GLEN: To clarify, can you state which stretches of the CAWS have shallow areas along the banks?

MR. DENNISON: By narrow, relatively wadable areas, I was referring to those portions of the CAWS that do not have vertical sheet pile walls on concrete walls or wood walls or limestone rock. I was concerned that people should know that stepping into the water more than a foot or two in the CAWS can put you in danger of slipping down on a steep slope to unsafe depths.

MS. MEYERS-GLEN: Sir, I don't believe, however, that answers my question. My question was to clarify just the position in your testimony. Could you please indicate which

stretches of the Chicago area waterways have shallow areas along the banks? Specifically, where.

MR. DENNISON: One, I mean it's occasional. It's not going to be occurring very often. One place that sticks out in my mind might be Route 83 on the Cal-Sag Channel just upstream on the South Bank, but keep in mind that shallow doesn't necessarily mean wadable. You could sink into the soft sediment.

MS. MEYERS-GLEN: Are you aware in the North Shore Channel of how deep it is along that channel?

MR. DENNISON: Well, I think originally the channel was cut as about a ten foot channel or more. Now, it varies in depth. Sometimes we'll even hit the bottom in the center of the channel, the soft bottom with the outboard motor.

MS. MEYERS-GLEN: So there are shallow areas in the North Shore Channel?

MR. DENNISON: Shallow in terms of you wouldn't want to stand in them.

MS. MEYERS-GLEN: So you're saying

you would not want to stand in the North Shore Channel?

MR. DENNISON: Because of the unstable, soft sediment, that's what I mean. You know, wadable can be dangerous if you're wading in them.

MS. MEYERS-GLEN: Objection.  
There's no question pending.

MR. TIPSORD: Your objection is overruled. He's explaining wadable a little bit more.

MS. MEYERS-GLEN: Okay. You list as additional concerns that the water increases in depth quickly from the sides of the waterways and that the river banks are, quote, lined with high vertical sheet piling or large limestone rocks on page three of your testimony, 3A, is where I'm at. Are there places along the CAWS that have gradual slopes?

MR. DENNISON: Yes, but isolated.

MS. MEYERS-GLEN: And are there areas along the different stretches that are not lined with sheet piling or large rocks?

MR. DENNISON: Yes, but isolated.

MS. MEYERS-GLEN: And aren't there large wooded expanses along the banks of the North Branch Chicago River and the North Shore Channel that do not have high vertical sheet piling or concrete walls?

MR. DENNISON: I'm not sure by what you mean by large wooded expanses, but there are lengths of stream banks that have trees along them that also do not have high vertical sheet piling of concrete walls.

MS. MEYERS-GLEN: And that's a decent percentage of those two stretches, is that correct?

MR. DENNISON: Are you referring to the North Branch in the North Shore Channel?

MS. MEYERS-GLEN: Yes.

MR. DENNISON: I don't know the percentage. Certainly -- I certainly remember them enough to say that they're there in a large number, I suppose.

MS. MEYERS-GLEN: It's definitely not isolated, correct?

MR. DENNISON: Well, it depends on your definition of isolated, I guess. It's less

than it is there, less then there are no areas of large wooded expanses in your words.

MS. MEYERS-GLEN: I'm sorry. Can you clarify because I'm not understanding.

MR. DENNISON: I guess what I'm saying is the percentage is less than 50 percent of the area that has trees in my mind.

MS. MEYERS-GLEN: But it's substantial.

MR. DENNISON: It depends on your definition of substantial. I guess, so.

MS. MEYERS-GLEN: Question four, on page four of your testimony you attribute the following quote from the Illinois Environmental Protection Agency statement of reasons to the Chicago area waterways as a whole, quote, wakes coupled with vertical wall construction in many of the waterway reaches make recreational use dangerous. Small craft can easily be capsized and persons in the water will have little, if any, route for escape. And you attribute that to the statement of reasons page 33. 4A, doesn't the IEPA then largely attribute these characteristics to areas that encroached for Non-Contact

recreational use such as the Chicago Sanitary and Ship Canal from it's confluence with the Calumet-Sag Channel to the confluence with the Des Plaines River and, again, that would be referencing statement of reasons page 33 a little bit further down the page.

MR. ANDES: I'm going to object on two grounds here. First, I believe that those statements are being mischaracterized. Second, I don't think it's fair to ask the witness to -- the document says what it says, the document is in the record and it stands for what it stands for?

MS. MEYERS-GLEN: May I respond?

MS. TIPSORD: Sure.

MS. MEYERS-GLEN: He is characterizing what this statement means. He is saying as the IEPA has characterized it and he is using this in a specific way to show the intent of the IEPA with this statement. So I think it's important if he's going to extract that statement for a certain purpose in order to set it in context. Especially, if he's going to be stating this applies to all of the CAWS when the IEPA then limits the application of this provision to only a

specific portion. And this is based on his testimony and what he does for the --

MR. ANDES: We can certainly take that page and read it into the record, but I think that's the only accurate way to address this issue.

MS. MEYERS-GLEN: Well, I think it's also, however, the witnesses impression on this and what he does with it. It's not only the raw statement, the reasons itself. It's the conclusions that he bears from these statements.

MS. TIPSORD: I think you can ask him if, in his opinion, the agency contributes these characteristics to non-recreational waters. I don't think you can ask him what the IEPA then states in the statement of reasons. I think the statement of reasons speaks for itself. You can ask him since he has used it, in his opinion, he says this is what I think the IEPA attributes these characteristics to the areas that it at the present does not affect non-recreational waters.

MS. MEYERS-GLEN: Okay. Then I'll ask that. Would you like me to restate that?

MS. TIPSORD: No, I think that's all

right. Dr. Dennison, can you follow the question that is being asked of you? Since you attribute a quote and say the IEPA has used this phrase and now in your opinion does the IEPA then attribute the wake coupled with the vertical wall construction, et cetera, to non-recreational waters? Did I further confuse things?

MR. DENNISON: Yes. It refers to most of the CAWS in the Lower Des Plaines River.

MS. MEYERS-GLEN: Let me see if this works. Are you aware that the IEPA states that the remaining reaches of the CAWS and Lower Des Plaines River are more assessable to the public and support a greater variety of recreational uses?

MR. ANDES: Is he aware that the document says that?

MS. MEYERS-GLEN: Is he aware that the IEPA attributes the remaining reaches of the CAWS and the Lower Des Plaines and they characterize it as more accessible to the public? It supports greater variety of recreational uses. If he's going to be --

MR. ANDES: The remaining reaches --

MS. MEYERS-GLEN: -- giving his opinion on the characterization of the CAWS, is he aware that the IEPA has also attributed the remaining reaches, characterizing remaining reaches in this way?

MR. ANDES: But what you're doing is saying that the statement about remaining reaches is the opposite of the statement in the beginning of your question four and that's conclusion or interpretation of what the agency says in the statement of reasons. He can agree that the document says what it says, but for you to say "Well, isn't it this and then the opposite is that," I think you're asking him to characterize the document and I don't think that's right and I don't agree with that characterization orally.

MR. TIPSORD: As someone who is sitting here with a statement of reasons in front of her, I think the statement of reasons and we can agree that the statement of reasons has all of these quotes in them and the board can draw its own interpretation and couple that with what Dr. Dennison has had to say. I understand what you're doing and understand what -- you're trying to get

further opinion based on what the statement of reasons says, but I'm not sure this is the way to do it. You are beginning to characterize things that I don't necessarily think we can characterize out of the statement of reasons.

MS. MEYERS-GLEN: I'll withdraw the question. 4C, does the District promote some of these recreational activities such as the Flatwater Classic which recently occurred in September of this year and it has been occurring annually?

MR. ANDES: Can we agree that this question has already been asked and answered by the District?

MS. MEYERS-GLEN: I think that --

MR. ANDES: He's not going to give you a different answer than Mr. Lanyon.

MS. MEYERS-GLEN: Didn't Mr. Lanyon -- didn't we state that another witness was going to be covering this?

MR. ANDES: No. I think you said you were going to introduce evidence to this. Mr. Lanyon explained what the District's activities are the Flatwater Classic,

specifically.

MS. TIPSORD: Including addressing the fact that they don't -- the flows and stuff like that.

MR. ANDES: Right. It's been answered.

MS. TIPSORD: You can ask him if he knows of any other -- the second part of the question if he knows of any other activities that the District endorses that Mr. Lanyon didn't because Mr. Lanyon certainly didn't claim to know all of them.

MS. MEYERS-GLEN: In addition the activities that Mr. Lanyon discussed as far as his knowledge of the Flatwater Classic, does the District provide any assistance or has the District provided assistance in the past with recreational activities?

MR. ANDES: That you know of.

MR. DENNISON: Not to the best of my knowledge.

MS. MEYERS-GLEN: So you're unaware of any other activities that the District assists in?

MR. DENNISON: Perhaps previous Flatwater Classics, would that work?

MS. MEYERS-GLEN: 4D, are you aware that there are at least 23 boat launches along the CAWS of the Chicago area waterways and numerous others proposed for construction which allows paddlers to enter and exit the waterways?

MR. ANDES: Same objection noted.

MR. TIPSORD: I think we can ask him about his personal awareness.

MR. ANDES: That's fine.

MR. DENNISON: I know there are boat launches on the CAWS. I don't know the particular restrictions that these boat launches have.

MS. MEYERS-GLEN: Are you aware of how many are along the CAWS based upon your experience out from the waterways?

MR. DENNISON: No, I don't know.

MS. MEYERS-GLEN: So then is it safe to say that you don't know how many launch sites along the CAWS the District helped to establish and provide permission and access to build?

MR. DENNISON: No.

MS. MEYERS-GLEN: Do you know of

places in the CAWS such as the one on the Little Calumet River near the railroad bridge between Halsted and Indiana Avenue that people can and do tie up or store their paddling boats next to the shore, like, right off the shore?

MR. DENNISON: I have no personal knowledge that they are allowed to do that --

MS. MEYERS-GLEN: Not that they're allowed to do that, but that they actually do it.

MR. DENNISON: -- or that they do that.

MR. MEYERS-GLEN: In addition, are there marinas such as Phase Point that have places where paddlers can get out of the water?

MR. DENNISON: By getting out of the water, you mean pulling up to a dock and getting out of the water from --

MS. MEYERS-GLEN: They're able to leave the water if there's a ramp.

MR. DENNISON: From their boat?

MR. MEYERS-GLEN: Yes. If they're in a kayak or canoe or, otherwise, a hand powered boat, can they leave the water at any of the marinas that you know of?

MR. DENNISON: I mentioned that I didn't know the restrictions, but I don't see why a paddler couldn't go over there and just get out if they needed to. They could worry about that later with the owner.

MS. MEYERS-GLEN: On five, in your testimony you proposed the IEPA designate the CSSC from the South Branch of the Chicago River to the confluence with the Calumet-Sag Channel as non-contact recreational use because the waterway has deep areas, lacks access points because of high channel walls and is used by barges and recreational crafts and I'm referring to page four of your testimony. Number 5A, are there boat launch sites that provide canoe and kayak access to this stretch of the CAWS such as boat club launches, Summit boat ramps and the Western Avenue boat launch?

MR. DENNISON: I don't know what their operational parameters are.

MS. MEYERS-GLEN: Do they exist?

MR. DENNISON: Certainly, the Summit boat ramp and the Western Avenue launch, I mentioned before.

MS. MEYERS-GLEN: So those exist?

MR. DENNISON: Yes.

MS. MEYERS-GLEN: And how about the boat club launches, are you familiar with those?

MR. DENNISON: There are -- are you referring to marinas in general?

MS. MEYERS-GLEN: I'm referring to marinas as well as --

MR. DENNISON: Certainly, marinas.

MR. ANDES: What specific sites.

MS. MEYERS-GLEN: Okay. And also floating docks?

MR. ANDES: So boat club launches refers to marinas and floating docks? I'm just trying to understand --

MS. MEYERS-GLEN: Launch points where boat clubs actually use those points to access the waterways. They can be marinas, they can be floating docks.

MR. ANDES: Any launches at boat clubs?

MS. MEYERS-GLEN: That's for the boat clubs, yes, in addition to the Summit boat ramp and the Western Avenue boat launch.

MR. DENNISON: I don't know of any particular boat club. I don't -- marinas.

MS. MEYERS-GLEN: And as far as the -- you had mentioned twice the Summit boat ramp.

MR. DENNISON: Yes.

MS. MEYERS-GLEN: Wasn't that provided with the cooperation and support of the District?

MR. DENNISON: I have no personal knowledge of that, but I believe Mr. Lanyon's testimony, it may be in there.

MS. MEYERS-GLEN: Do you go by the Summit boat ramp in your responsibilities?

MR. DENNISON: I have.

MS. MEYERS-GLEN: Are you familiar with the signs of the District on that property?

MR. DENNISON: Are you referring to the caution signs that are on the --

MS. MEYERS-GLEN: No, I'm referring to the sign that states that the Summit boat ramp is provided with the cooperation and support of --

MR. DENNISON: Yeah, I evidentially didn't recall that. I don't recall that now even.

MS. MEYERS-GLEN: In addition, do you know of any boat launches proposed for construction on the South Branch of the Chicago River near the confluence with the Chicago Sanitary and Ship Canal which would provide further access to paddlers?

MR. DENNISON: No.

MS. MEYERS-GLEN: How many times have you passed -- This is C. I apologize. How many times have you passed recreational craft or commercial barges in your electrofishing boat?

MR. DENNISON: Many times. I don't have numbers.

MS. MEYERS-GLEN: Did you ever capsize as a passenger?

MR. DENNISON: Not quite. Almost, but no.

MS. MEYERS-GLEN: But you did not, correct?

MR. DENNISON: No.

MS. MEYERS-GLEN: Are there areas along the stretch of the CSSC that do not have high vertical walls?

MR. DENNISON: Yes, some areas do,

some do not.

MS. MEYERS-GLEN: And how much of the banks along this waterway are lined with trees and vegetation?

MR. DENNISON: I don't have a number, some are and some are not.

MS. MEYERS-GLEN: If you have to give me a percentage.

MR. DENNISON: Probably, I'll guess at 25.

MS. MEYERS-GLEN: So your testimony is that 25 --

MR. ANDES: That's not his testimony. He guessed at 25. Please don't state it that way.

MS. MEYERS-GLEN: He said about 25. That is your testimony, correct?

MR. DENNISON: I said guess, a guess would be about.

MS. MEYERS-GLEN: Okay. How many great blue heron have you seen while out on this part of the CSSC?

MR. DENNISON: Well, I don't monitor birds species, occurrence, or number of birds in

the CAWS.

MS. MEYERS-GLEN: Do you know what an egret looks like?

MR. DENNISON: I have seen egrets.

MS. MEYERS-GLEN: Have you seen them while out on the CSSC?

MR. DENNISON: I don't recall seeing any.

MS. MEYERS-GLEN: Have you seen them while out in the CAWS?

MR. DENNISON: I believe so, but I don't recall specific incidents because we don't note that as data.

MS. MEYERS-GLEN: I'm just talking about your personal observations, not what you have to record.

MR. DENNISON: Well, that's what I would refer to to remind me of where I've seen things.

MS. MEYERS-GLEN: Have you seen black crowned -- or what are called night herons?

MR. DENNISON: I can remember someone mentioning that there is a black crowned night heron, but I don't recall seeing it myself.

MS. MEYERS-GLEN: Was that along the CSSC?

MR. DENNISON: I don't remember where.

MS. MEYERS-GLEN: How about any green herons or king fishers?

MR. DENNISON: I don't know if I can quickly be able to tell the difference between a black crowned night heron and a green heron, maybe with a king fisher I could, but I wouldn't necessarily know it's a king fisher.

MS. MEYERS-GLEN: Have you observed any eagles out on the CSSC or the Cal-Sag Channel?

MR. DENNISON: I have not personally seen eagles on the CAWS.

MS. MEYERS-GLEN: Do you know of District employees seeing eagles out on these waterways?

MR. DENNISON: I believe that I once received a photo of -- a digital photo from one of the industrial waste division personnel of an eagle that is supposed to be on the Little Calumet River along the shores.

MS. MEYERS-GLEN: Number six, do you

agree that canoeing, kayaking and sculling are existing recreational uses on the Chicago Sanitary and Ship Canal above the confluence of the Cal-Sag Channel?

MR. ANDES: I need to clarify something here. Existing uses is a legal term. If we're asking whether those recreational uses exist -- but I don't want to get into him providing an interpretation on a legal term.

MS. MEYERS-GLEN: I can rephrase the question if you like.

MR. ANDES: Thank you.

MS. MEYERS-GLEN: Do you agree that canoeing, kayaking and sculling have occurred and are occurring on the Chicago Sanitary and Ship Canal above the confluence of the Calumet-Sag Channel? And when I have occurred, I mean after 1975 to present.

MR. DENNISON: I personally don't remember seeing any of those canoeing, kayaking or sculling. However, I've heard that there were sculling activities in the news or something like that.

MS. MEYERS-GLEN: Are you aware that

District staff is starting to monitor dissolved oxygen stations reporting 55 incidences of canoeing, kayaking or sculling on the CSSC above the confluence of the Cal-Sag Channel on weekdays in 2006?

MR. DENNISON: I have no reason to doubt that.

MS. MEYERS-GLEN: So these uses exist on this stretch of the waterway, correct?

MR. ANDES: Can we not use that terminology?

MS. MEYERS-GLEN: These uses occur?

MR. DENNISON: I believe the reports.

MS. MEYERS-GLEN: Number seven, do sculling teams practice on the Chicago Sanitary and Ship Canal and South Branch of the Chicago River?

MR. DENNISON: I haven't actually seen them myself. As I mentioned, I have heard about them.

MS. MEYERS-GLEN: Can I ask, how often are you out on the waterways?

MR. DENNISON: I have had a variable

number of stations that I have to collect from during the years. Between 1974 and 2001, I might be out there 25 to 30 times a year -- 2003, I guess. Between 2003 when I assumed the section head of the aquatic ecology and water quality section, I haven't really been going out as much.

MS. FRISBIE: Have you ever been out in a canoe or kayak or sculling --

MR. DENNISON: What's the last one?

MS. FRISBIE: Have you ever been canoeing, kayaking or sculling on any of these waterways?

MR. DENNISON: Not on these waterways, except possibly with oars and a row boat.

MS. MEYERS-GLEN: When you were out, was it during the work week?

MR. DENNISON: Generally, when I'm out on the canals, it's during the work week, yes.

MS. MEYERS-GLEN: During work hours?

MR. DENNISON: Yes.

MS. MEYERS-GLEN: So are we then on weekends or holidays?

MR. DENNISON: Yes. And that's

probably why I haven't seen some of these things that you've been mentioning. I think that's pretty obvious.

MS. MEYERS-GLEN: Number eight, does the city of Chicago conduct student activities, such as field trips, studies and surveys on the CSSC at Western Avenue? CSSC is Chicago Sanitary and Ship Canal.

MR. DENNISON: I don't have any personal knowledge that it occurs.

MS. MEYERS-GLEN: When you mean you don't have any personal knowledge, can you elaborate?

MR. DENNISON: I don't know if the city of Chicago conducts student activities because I haven't been involved in that. I haven't seen any going on.

MR. MEYERS-GLEN: So then it's safe to say you wouldn't know whether the District has supported these efforts?

MR. DENNISON: No.

MS. MEYERS-GLEN: It's not safe to say or --

MR. DENNISON: It is safe to say.

MS. MEYERS-GLEN: Number nine, on page five of your testimony you state the Calumet-Sag Channel lacks points of egress along the waterways -- both capsizes or an emergency situation arises. A, can people who kayak, canoe and scull get out of the water at the Worth Police Boats Launch and Howe's Landing or Alsip on the Calumet-Sag Channel?

MR. DENNISON: I don't see why not.

MS. MEYERS-GLEN: Is there also access at Phase Point and the Little Calumet boat ramp which is closed to the confluence of the Calumet-Sag Channel?

MR. DENNISON: You know, I'm not familiar with Phase Point. As I mentioned, I hadn't been out there since 2003 very much and I didn't take a look at it on one of the maps on the Internet and it looks pretty impressive, but I haven't -- You know, I'm just not that familiar with it.

MS. MEYERS-GLEN: So you recognize that it exists?

MR. DENNISON: Yes, but if a capsized occurred close enough to these places then perhaps

you could get an egress there or else you could pull a canoe out if it was still afloat.

MR. ANDES: But to follow up on that -- So what would happen if you capsized in the Cal-Sag Channel and you weren't near one of these exit points.

MR. DENNISON: Well, SOL, I guess. I guess you would be in deep trouble. Depending on your experience at using a capsized canoe and either flipping it -- I think people who are more experienced at that may find that of various efficiencies of their being able to do it. If you're not, if you're a novice, I'd hate to be out there.

MS. MEYERS-GLEN: Well, in addition to the boat launches and Phase Point that you talked about -- On ten, are there areas along the banks of the Calumet-Sag Channel without steep limestone channel walls where a canoe or kayak could exit the water?

MR. DENNISON: Isolated areas.

MS. MEYERS-GLEN: Can you please define those isolated areas. What are you thinking of?

MR. DENNISON: Again, perhaps the South Bank upstream of Route 83 and the Cal-Sag.

MS. MEYERS-GLEN: Are there any other areas where there are either spaces where somebody would exit the water or breaks where that's possible as to your knowledge?

MR. DENNISON: I don't recall any offhand on the Cal-Sag.

MS. MEYERS-GLEN: And do some of the crumbled rock walls actually provide refugium or refuge for aquatic life?

MR. DENNISON: Well, you know, I don't even have personal knowledge that they do.

MS. MEYERS-GLEN: Number twelve, are there homes with private docks or ramps down to the water along this Calumet-Sag Channel?

MR. DENNISON: At the Calumet-Sag Channel, had it been the Little Cal that's up, yes, but the Calumet-Sag Channel I don't recall any homes with docks.

MS. MEYERS-GLEN: You don't recall?

MR. DENNISON: Yeah.

MS. MEYERS-GLEN: Are there resting places with benches that slope down to the river

bank? This is question 13.

MR. DENNISON: Well, we do have some benches at the SEPA station and unless you're talking about cemetery's or something like that, I don't know of any other.

MS. MEYERS-GLEN: What I'm talking about is are there any benches that are just places of rest that you would find potentially along the side of the river where you would see then a gradual slope down to the shore at that location. Have you ever seen that?

MR. DENNISON: Again, I've seen benches at some of the SEPA stations along in the Cal-Sag, but I don't recall any necessarily where there was a sloping shore with a bench there.

MR. ANDES: I'd like to follow up on that. Two questions, Dr. Dennison, first for those who are uninitiated, can you explain what a SEPA station is?

MR. DENNISON: A SEPA station is a side stream elevated pool, a ration station that's constructed in order to add dissolved oxygen to the water by a cascading water situation where dissolved oxygen increases into the canal.

MR. ANDES: And are there safety risks of canoeing or kayaking or hand powered boating near the SEPA stations?

MR. DENNISON: Well. It's fairly turbulent right by the SEPA station itself. I guess I would avoid that area if I was in a canoe or a kayak.

MR. ANDES: Thank you.

MS. MEYERS-GLEN: Question fourteen, in addition to the five miles of forest preserve district property upstream of the Chicago Sanitary and Ship Canal, how much of the Calumet-Sag Channel banks are lined with trees and other vegetation, in addition to the five mile stretch of the forest preservation District?

MR. DENNISON: I don't know. I don't know a number. I wouldn't even want to guess.

MS. MEYERS-GLEN: There's quite a bit of property, though, that's lined with trees and vegetation along the Cal-Sag Channel, is that correct?

MR. ANDES: He said he doesn't know.

MS. MEYERS-GLEN: Well, he didn't

know a percentage. I was wondering if he could characterize what he does know about the vegetation. I mean this is something you used to go out and work in on a regular basis, correct?

MR. DENNISON: Well, let me give you some examples that are not in the forest preserve area. One good one would be at Cicero Avenue on the Cal-Sag Channel. That's one of my sampling stations. One side has trees -- lined with trees, the other side is much less. So in that particular situation you have an isolated case of, at least, maybe 40 percent of area that's not lined with trees.

MS. MEYERS-GLEN: And the other 60 percent --

MR. DENNISON: In that location.

MS. MEYERS-GLEN: Are there any other locations where there are trees along the Cal-Sag Channel?

MR. DENNISON: Well, I'm sure there are locations where there are trees, but as far as assuming you mean somewhat dense groves, I can't think of any except for the areas of the forest preserve district.

MS. MEYERS-GLEN: Fifteen, please state whether you are aware of the following existing recreational uses on the Calumet-Sag Channel.

MR. ANDES: And if you could rephrase that beginning portion, I'd appreciate that.

MR. MEYERS-GLEN: Sure. Fifteen, please state -- Actually, strike the initial question, please. Fifteen, please, state whether you are aware of the following recreational uses that have occurred since 1975 and are occurring on the Calumet-Sag Channel. A, routine sculling practices and races includes the 2007 Division I competition where 300 -- Actually, it was surplus. Three hundred women raced on the Calumet-Sag Channel, are you aware of that?

MR. DENNISON: I am aware because I happened to come upon it on the Internet when I was looking for information on Phase Point and I got a chance to see the video on the --

MR. ANDES: But you have no direct knowledge?

MR. DENNISON: No direct knowledge.

I wasn't out there. I didn't know it was going to happen.

MS. MEYERS-GLEN: At the time that you made your assessments and gave your opinions and your testimony, were you aware of it?

MR. DENNISON: No.

MS. MEYERS-GLEN: Were you aware of observations of swimming, driving, skiing and tubing, wading, fishing and power boating during the limited UAA study observations in 2003?

MR. DENNISON: Well, I was aware of the UAA's study observations.

MS. MEYERS-GLEN: And C, were you aware of the District observations of canoeing, kayaking and sculling in 2005 and 2006 along the Calumet-Sag Channel? And I'm referring to --

MR DENNISON: I'm aware of Mr. Stuba's testimony and I read those and I have no reason to disagree with that.

MS. MEYERS-GLEN: And were you aware of those uses in B and C when you formulated your conclusions in your responses in your testimony?

MR. DENNISON: Well, I knew about the UAA study and I may have seen Stuba's

observations. I don't recall.

MS. MEYERS-GLEN: Did you base your opinions, in part, on that information?

MR. DENNISON: Well, I knew that there was something going on of those activities as they were observed.

MS. FRISBIE: Margaret Frisbie. When you looked up Phase Point on the Internet recently, did you notice that the Southland Regatta that Stacy is referring to is happening again this year on the 2nd of November?

MR. DENNISON: No, I didn't.

MR. ANDES: I have a standing objection to all of these. Thank you.

MS. WILLIAMS: Even if these were discussed at the June 16th -- wouldn't that be relevant. If some of these activities were entered into evidence at the June 16th hearing, wouldn't they be --

MS. FRISBIE: The objection wouldn't apply to those, right?

MS. TIPSORD: We had testimony on June 15th to the people kayaking and -- but to the specifics and the details on some of these things

that were not testified to on June 15th, which we are expecting to see testimony on later.

MS. WILLIAMS: Right.

MR. TIPSORD: Much as we're expecting to see economic testimony later.

MS. MEYERS-GLEN: Question 16, you state on page five of your testimony that industrial riparian land use is common along the Calumet-Sag Channel except for a approximately five mile stream reach upstream of the confluence with the Chicago Sanitary and Ship Canal which is forest preserve, how much of the property along the banks of the Calumet-Sag Channel is commercial or industrial along the bank?

MR. DENNISON: Along the bank?

MS. MEYERS-GLEN: Yes.

MR. DENNISON: I don't have a figure. I think it's common.

MS. MEYERS-GLEN: Isn't only a small portion of the property abutting the Calumet-Sag Channel -- or canal -- sorry -- considered to be commercial or industrial?

MR. ANDES: He just answered it. He said it was common.

MS. MEYERS-GLEN: I'll withdraw the question. Seventeen, in your testimony concerning Bubbly Creek on page five you state there are steep banks and vertical sheet pile walls in some or most of the reaches --

THE COURT REPORTER: Can you speak up, please?

MS. TIPSORD: Stacy, you need to speak up.

MR. ANDES: I have to clarify here because I'm not sure what we're doing. Mr. Dennison, as I understand it, has several different testimonies. One of which referred to Bubbly Creek and another where it relates to aquatic life. I have been assuming that we were just asking questions about one of them now and I'm afraid of where the records going to be if we depart from that. And, also, I have follow up questions on some of these aquatic life and Bubbly Creek issues that I don't want to get to if we're not there yet.

MS. WILLIAMS: I think you did misspeak. You said one was for aquatic life, did you mean one was for recreational?

MR. ETTINGER: I'm sorry. One was on Bubbly Creek --

MS. TIPSORD: There's recreational, Bubbly Creek, Cal-Sag and dissolved oxygen and I had assumed we were staying with recreational stuff. If these are not recreational or to the recreational use then they should be reserved until after the Bubbly Creek testimony.

MS. MEYERS-GLEN: My questions are solely concerning recreational use.

MS. TIPSORD: Okay. That's what I thought you were doing.

MR. ANDES: These just happen to be recreational as to Bubbly Creek.

MR. ETTINGER: Now, I understand. Sorry.

MR. ANDES: With that assumption -- We're talking about a statement you made in your Bubbly Creek testimony, but you're specific question is concerning recreational use.

MS. MEYERS-GLEN: That is correct. I am specifically looking at the testimony concerning Bubbly Creek within the recreational use section of Mr. Dennison's testimony and that

is what I am referring my questions to.

MR. TIPSORD: Right. On page five under --

MS. MEYERS-GLEN: That is correct. Sorry for the confusion.

MS. TIPSORD: It's late in the day. I think everybody understands.

MS. MEYERS-GLEN: Question 17, if I may reiterate the question.

MS. TIPSORD: Yes.

MS. MEYERS-GLEN: In your testimony concerning Bubbly Creek on page five, you state that are steep banks and vertical sheet pile walls in some or most of the reaches. Please clarify the areas along the 1.3 mile waterway that do have the these characteristics.

MR. DENNISON: Again, isolated areas such as both the east and west banks at the mouth of Bubbly Creek with the South Branch of the mouth with the South Branch of the Chicago River and the area near the Racine Avenue Pumping Station has relatively not steep banks, I guess.

MS. MEYERS-GLEN: I'm trying to recall, are there bridges also along Bubbly Creek?

MR. DENNISON: Well, there's the 35th Street Bridge.

MS. MEYERS-GLEN: And aren't there --

MR. DENNISON: And there are some at I-55, Archer, the El, I think, crosses it.

MS. MEYERS-GLEN: And with those, aren't there breaks in those walls where there are areas that they do not exist?

MR. ANDES: I'm sorry?

MS. MEYERS-GLEN: Along some of these bridges, aren't there breaks in the steep banks and vertical sheet piled walls so that you don't have those walls?

MR. DENNISON: Yes, there might be isolated spots like that.

MS. MEYERS-GLEN: Eighteen, you also express that Bubbly Creek has limited access points for people to leave the water. Where are these access points and how far are they from the confluence with Bubbly Creek?

MR. ANDES: You mean the confluence with the South Branch?

MS. MEYERS-GLEN: Yes, that's a

typographical error. I apologize.

MR. DENNISON: Well, they'd be right at the confluence, Origins Park and also the East Bank at the mouth, otherwise isolated areas as we've mentioned.

MS. MEYERS-GLEN: Is there also a boat launch at the confluence of the South Branch of the Chicago River which was formally the South Chicago Rowing Center's base of operations, that's still in existence, right?

MR. DENNISON: Say that again, please.

MS. MEYERS-GLEN: The South Chicago Rowing Center before they moved to the Calumet-Sag Channel, they had a boat launch at the confluence of the South Branch of the Chicago River, that's still in existence, correct?

MR. ANDES: To your knowledge.

MR. DENNISON: I don't recall a launch there --

MS. MEYERS-GLEN: What do you recall?

MR. DENNISON: -- at the confluence with the South Branch. Do you mean at the mouth

of Bubbly Creek?

MS. MEYERS-GLEN: Yes. Where the South Chicago Rowing Center used to practice.

MR DENNISON: On my most recent trip there, I noticed a dock with some boats by it, but I didn't notice a launch.

MS. MEYERS-GLEN: You noticed the dock?

MR. DENNISON: Yes.

MS. MEYERS-GLEN: And the Western Avenue launch on the CSSC downstream from Bubbly can also provide access, correct, to Bubbly Creek?

MR. DENNISON: Yes, now that I know that it's open.

MS. MEYERS-GLEN: And according to the UAA study, are you familiar with the fact that Chicago has proposed rowing and canoe access for a future park at Eleanor and Fuller?

MR. ANDES: Are these --

MR. DENNISON: Where are you on this?

MS. MEYERS-GLEN: These are follow-up questions.

MR. ANDES: Is there a reason why

these questions couldn't have been included with this set? I don't see how they follow up with what we've just talked about.

MS. MEYERS-GLEN: Because I thought of them afterwards and I felt that they were relevant.

MR. ANDES: Okay.

MS. MEYERS-GLEN: And they stem from the question that I asked to provide.

MR. ANDES: I'm not sure that they do, but go ahead.

MR. DENNISON: Can you say that again, Eleanor and Fuller, did you say?

MS. MEYERS-GLEN: Eighteen C, according to the UAA study are you familiar with the fact that Chicago has proposed rowing and canoe access for a future park at Eleanor and Fuller?

MS. TIPSORD: Stacy, we don't have 18C because you thought of these after you pre-filed. We have 18. These are follow ups. So the question -- this is a follow up to question 18.

MR. ANDES: Can you say that again?

MS. MEYERS-GLEN: Sure. Absolutely. It's a follow-up question to 18. According to the UAA study or as to your knowledge, I should say, are you aware that Chicago has proposed rowing and canoe access for a future park at Eleanor and Fuller?

MR. DENNISON: No.

MS. MEYERS-GLEN: Question 19, please list the date and location of any canoe or kayak tours and event that you are aware of on Bubbly Creek.

MR. DENNISON: Ms. Frisbie just mentioned that there was going to be a sculling event, but as far as the canoe or kayak events, otherwise, I assume there's going to be another Flatwater Classic next year.

MR. ANDES: On Bubbly Creek though?

MR. DENNISON: I'm sorry. No. I have no personal knowledge.

MS. MEYERS-GLEN: Question 20, on page six of your testimony, you propose that the Chicago River be designated as non-contact recreation because it is analogous to the section of the Calumet River from Lake Michigan to Lake

Calumet. 20A, has the residential and commercial community changed along the Chicago River in the last ten years?

MR. DENNISON: Yes.

MS. MEYERS-GLEN: And are you familiar with the recreational goals of the city of Chicago's 2005 river agenda?

MR. DENNISON: No.

MS. MEYERS-GLEN: Did you know that the city of Chicago actually promotes recreational use on the river, providing public access and safety information to paddlers?

MR. DENNISON: No.

MR. ETTINGER: May I ask a clarification question? We have been referring to the Chicago River. I took your testimony as to the Chicago River to just mean -- use to be the main branch.

MR. DENNISON: Right.

MR. ETTINGER: So whenever you refer to the Chicago River, you're not referring to the North Branch of the Chicago River?

MR. DENNISON: Correct.

MR. ETTINGER: Thank you.

MS. MEYERS-GLEN: Are you familiar with any instances where the city of Chicago and the District have worked together to actively promote recreational use on the Chicago River main stem?

MR. DENNISON: The Chicago River main stem, no.

MS. MEYERS-GLEN: Are you aware of the substantial economic and cultural investment that the city of Chicago has made in the Chicago Riverwalk?

MR. DENNISON: I am aware that there is a riverwalk. I don't know about any further information on investment or monetary investment.

MS. MEYERS-GLEN: So you're familiar with the fact that this is something that the city is constructing and working on --

MR. DENNISON: Yes.

MS. MEYERS-GLEN: -- in bringing people access to the water, correct?

MR. DENNISON: Yes.

MS. MEYERS-GLEN: B, observations of swimming, diving, skiing, tubing, wading and fishing, power boating --

MR. ANDES: Is this a follow up question?

MS. MEYERS-GLEN: Actually, I need to turn this page. Sorry. Did you know that the city of Chicago considers the Main Branch Riverwalk to be the crown jewel of the Chicago River's systems, trails and walkways?

MR. ANDES: I need to object. This is basically a political statement.

MS. MEYERS-GLEN: It's out of the city of Chicago river agenda.

MR. ANDES: And you're free to introduce that agenda as a document, but there's no purpose to asking him about it. You can just introduce the document.

MR. TIPSORD: And I believe he already said he wasn't familiar with the 2005 river agenda document. So asking him about specific phrases out of it --

MS. MEYERS-GLEN: You're right. I'll withdraw the question.

MS. TIPSORD: -- are going to get you the same answer, he's not familiar with it.

MS. MEYERS-GLEN: You're right. I

withdraw the question.

MS. WILLIAMS: I thought he said he was familiar with it. Did I hear you right?

MR. DENNISON: I said no.

MS. WILLIAMS: Okay. Thank you. Yes, I heard you wrong.

MS. MEYERS-GLEN: You're familiar with the Riverwalk, but not the 2005 actual document, correct, that's what you were saying?

MR. DENNISON: I'm am familiar with the Riverwalk, but not that document.

MS. TIPSORD: It is getting late in the day.

MS. MEYERS-GLEN: During the 2008 commemoration of the Chicago Riverwalk portion from Lake Shore Drive to Franklin Street, were you aware that Mayor Daley likened recreation and commercial benefits of the Chicago River to Lake Michigan calling it Chicago's second shoreline?

MR. DENNISON: I was not aware of the 2008 commemoration. I wasn't aware of those statements.

MS. MEYERS-GLEN: Have you seen -- you were saying you were familiar with the

Riverwalk along the South Bank of the Chicago River the river bank cafe's, the Chicago River and Bridgehouse Museum and the Vietnam Memorial Park.

MR. DENNISON: I know about the Bridgehouse Museum.

MS. MEYERS-GLEN: And on the North Bank, are you familiar with the restaurants, the private walkways and the Nicolas J. Melas Centennial Foundation?

MR. ANDES: Come on.

MS. MEYERS-GLEN: These are things along the Riverwalk which the city of Chicago is dedicating to try to bring people down to the waterways. He said he was familiar with the Riverwalk, these are significant investments the city has made to bringing people to our waterways. It's important.

MR. ANDES: I'm not saying it isn't important, but your certainly free to introduce evidence as to all these issues at a later point. Why don't we just keep it for that?

MS. MEYERS-GLEN: If he's going to state that the Calumet is basically identical in his testimony to the Chicago River, and for that

reason, it should be characterized the same way, I think it is important to highlight the significant difference, especially in the investment.

MR. ANDES: None of which --

MS. TIPSORD: None of which --

Excuse me. Wait a minute. You're entering and giving testimony and the thing is that -- what you're asking -- you can ask him if he's aware of things, but he's already told you what he is aware of alongside the river. What you're trying to do now is, in fact, I have to agree is introduce evidence. You're certainly free to point out these differences in your own testimony. You can ask him about his awareness of what's along the river, but you can't continue to ask him every single step along the Riverwalk. He's told you what's there. If you wanted to highlight the differences, I think you can do that in your own testimony, but we can spend all day asking him if he's familiar with this stone and this stone and this stone and that's kind of where we're going. I mean, you have asked him about the cafes, you have asked him about the Memorial Park.

MS. MEYERS-GLEN: That was it.

MR. TIPSORD: Thank you.

MS. MEYERS-GLEN: E, what is the percentage of commercial barge traffic on the Chicago River compared to the Calumet?

MR. ANDES: Percentage of what?

MS. MEYERS-GLEN: How much commercial barge traffic is there on the Chicago River main stem? That's what you're comparing --

MR. ANDES: But in terms of the number of barges, I wasn't sure what the percentage of -- what the denominator and percentage is.

MS. MEYERS-GLEN: Commercial barge traffic, how much traffic from commercial barges moves on the Chicago River compared to that of the Calumet River?

MR. DENNISON: I don't have a number.

MR. ANDES: We had earlier testimony with number of barges. It has already been provided.

MS. MEYERS-GLEN: This witness is basically stating that these two bodies of water are equal and deserving of equal protection in

uses. Commercial barge traffic is one of the reasons why the designation should be as it is. So I'm wondering what the difference is in percentage of commercial barge traffic between the Chicago River and the Calumet River.

MR. ANDES: Percentage of what, total boat traffic?

MR. TIPSORD: Let me try this. Let me try this. Dr. Dennison, would you say that the barge traffic on the Chicago River main stem and the Calumet River commercial barge traffic is identical?

MR. DENNISON: No.

MS. TIPSORD: Would you say there's more on Calumet?

MR. DENISON: Yes.

MS. TIPSORD: How much more?

MR. DENNISON: I do not have a figure.

MR. ETTINGER: Can I ask a question about barges?

MR. DENNISON: Sure.

MR. ETTINGER: You've given figures on barges. Now, you know how the barges work.

Generally, you've got a tow boat with some number of barges in front of the tow boat, whenever we're seeing large figures, is that really total number of tow bots or total number of barges?

MR. DENNISON: It varies and probably I would have to get some other source to see how many tow boats and barges were actually tugged.

MR. ANDES: I think we have been quoting numbers from the Core of Engineers reports so we can certainly go back to those reports and see how they have defined it.

MR. ETTINGER: Do you know if they count tow boats or barges?

MR. ANDES: I don't recall.

MS. DEXTER: How many barges would you say can fit side to side in the river in what you've shown in the pictures?

MR. DENNISON: Side to side, the one picture I saw with the most had two. I guess, sometimes they try three, but that really takes up the whole river.

MS. DEXTER: And how wide are those barges?

MR. DENNISON: I don't have a figure on that.

MS. DEXTER: Do you have an estimate?

MR. ANDES: We have pictures.

MS. DEXTER: I don't have a scale on those pictures.

MR. ANDES: You have a scale relative to the size of the river in those pictures.

MS. MEYERS-GLEN: Is there another witness that can potentially answer that question better?

MR. ANDES: Specific question about how many barges can fit across the river?

MS. MEYERS-GLEN: The size of the barge versus the size of the average width of the CAWS.

MR. SULSKI: Can we put up that aerial of the SEPA station at the --

MR. DENNISON: Sure.

MS. TIPSORD: You know what, I appreciate that we're trying to figure out how wide a barge is, but I don't think that's in the

particular expertise of Dr. Dennison or even perhaps anyone at the District because I'm not sure the District sends anything up and down on a barge.

MR. ANDES: Right.

MR. TIPSORD: That being the case we can check the Army Core of Engineers stuff in trying to figure that out, but I don't think that we can expect them to tell you exactly how wide a barge is.

MS. MEYERS-GLEN: I seem to recall there is a figure somewhere in the testimony. So I'll pull it and I'll try to find out who exactly specified that.

MS TIPSORD: That would be wonderful.

MR. SULSKI: The easel looked naked, I'm sorry.

MR. ANDES: Thank you.

MS. MEYERS-GLEN: We're almost done. Question F, are you familiar with the Chicago River Rowing and Paddling Center boat launch on the south bank of the Chicago River on the Riverwalk level at Lake Shore Drive?

MR. DENNISON: No.

MS. MEYERS-GLEN: Please list existing and current recreational activities and events that you are aware of along the main branch of the Chicago River.

MR. DENNISON: Certainly, activities that occur along the Chicago River -- I don't have a list.

MS. MEYERS-GLEN: Are you familiar with rowing clubs practicing on that stretch of the river?

MR. ANDES: On the main branch?

MS. MEYERS-GLEN: On the main branch or using it as a training course for competitions, either one.

MR. DENNISON: I was at the meeting, I think, we were at the Sheraton once and we looked out on the Chicago River and saw sculling going on.

MS. MEYERS-GLEN: So that's --

MR. DENNISON: This would be east of Michigan Avenue.

MS. MEYERS-GLEN: Are you familiar with any private canoe and kayak rental facilities

such as Kayak Chicago as well as city of Chicago park vendors that provide access to or on those water -- on that stretch of waterway?

MR. DENNISON: For canoes and kayaks, no.

MS. MEYERS-GLEN: Either the Park District or a private rental facility like Kayak Chicago.

MR. DENNISON: I am not.

MS. MEYERS-GLEN: Are you familiar with Downtown Canyon Canoe trips or other trips offered by recreational users on the main stem of the Chicago River?

MR. DENNISON: I don't have enough personal knowledge to say that I have.

MS. MEYERS-GLEN: Are you familiar with the Windy City Kayak Symposium and trips offered through them in the summer?

MR. DENNISON: No.

MR. MEYERS-GLEN: That would be specifically on the Chicago River. Last question, what kinds of riparian mammals such as river otters and beavers have you seen on the main branch of the Chicago River?

MR. DENNISON: On the main branch?

MS. MEYERS-GLEN: Yup.

MR. DENNISON: Well, I haven't seen -- I have no specific recollection of seeing riparian mammals such as river otters and beavers on the main branch of the Chicago River.

MS. MEYERS-GLEN: What kinds of birds, like herons or hawks have you observed along this waterway?

MR. DENNISON: On the main branch, I haven't really -- As we mentioned before, we don't record what we see, but I haven't seen any that I can recall herons and hawks on the main branch. Other birds I suppose like swallows or something like that, but --

MS. MEYERS-GLEN: Thank you. No further questions.

MS. WILLIAMS: Can I ask one quick follow up?

MR. TIPSORD: Absolutely. You can ask two if you want.

MS. WILLIAMS: No, just one. Okay. Mr. Dennison -- Well, okay, two. You've been with the District since the early 70's, correct?

MR. DENNISON: Yes.

MS. WILLIAMS: In your opinion, has the amount of recreation on the CAWS increased since when you started?

MR. DENNISON: Yes.

MS. WILLIAMS: Thank you.

MR. TIPSORD: Can we go off the record for just a second?

(Whereupon, a discussion was had off the record.)

MS. TIPSORD: Back on the record. I want to thank everyone for today. We will adjourn for the day and pick up tomorrow morning starting with Chriso Petropoulou.

MR. ANDES: Petropoulou.

MS. TIPSORD: Petropoulou. Thank you very much.

