

IN THE MATTER OF:)
)
 WATER QUALITY STANDARDS AND)
 EFFLUENT LIMITATIONS FOR THE) No. R08-9
 Chicago Area Waterways System)
 AND THE LOWER DES PLAINES RIVER:)
 PROPOSED AMENDMENTS TO 35 ILL.)
 ADM. Code Parts 301, 302, 303)
 and 304.)

TRANSCRIPT OF PROCEEDINGS held in the
 above-entitled cause before Hearing Officer Marie
 Tipsord, taken before Tamara Manganiello, RPR, at 14
 West Jefferson Street, Room 308, Joliet, Illinois,
 on the 28th day of October, A.D., 2008, commencing
 at 9:06 a.m.

1 APPEARANCES

2 ILLINOIS POLLUTION CONTROL BOARD:
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4 Ms. Alisa Liu, P.E., Environmental Scientist
5 Mr. Tanner Girard, Acting Chairman
6 Mr. Nicholas Melas, Board Member
7 Mr. Thomas Johnson, Board Member

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10 Ms. Stefanie Diers
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HEARING OFFICER TIPSORD: Good morning. My name is Marie Tipsord and I've been appointed by the Board to serve as the hearing officer in this proceeding entitled Water Quality Standards and Effluent Limitations for the Chicago Area Waterway System and Lower Des Plaines River, Proposed Amendments to 35 Ill. Admin. Code 301, 302, 303 and 304. This is docket number R08-9.

To my right in the middle is Dr. Tanner Girard, to his right is Board member Nicholas Melas, to Dr. Girard's left is Board member Thomas Johnson, and Alisa Liu will be joining us.

This is the sixth set, day two, which I think someone said was day 24 in hearings. I've stopped counting somewhere along the way.

At the close of yesterday's hearings we had finished with 15 of the Metropolitan Water Reclamation District of Greater Chicago witnesses and we will continue today with the District's witnesses

1 beginning with John Mastracchio and then
2 Thomas Granato.

3 There has been a motion made that
4 we take -- that we allow Thomas Granato to
5 read his testimony. I'll address that when
6 we get there and, obviously, listen to any
7 objections or any comments at that time.

8 We will mark Mr. Mastracchio's
9 testimony as an exhibit and enter it as if
10 read and then begin with questions. Anyone
11 may ask follow-up questions. You need not
12 wait for your turn to ask questions. I do
13 ask that you raise your hand, wait for me to
14 acknowledge you, please state your name and
15 whom you represent before you begin your
16 question and please speak one at a time.

17 Any questions asked by a Board
18 member or staff are intended to help build a
19 complete record for the Board's decision and
20 not to express any preconceived notions or
21 bias.

22 When we finish with Mr. Granato
23 today we will close the hearing for the day.
24 And, also, we will talk about which witnesses

1 we think we can get through realistically on
2 November 17th and we will name those
3 witnesses and those will be the only
4 witnesses we'll hear on the 17th. Hopefully,
5 this will help all of you plan your schedules
6 a little bit better.

7 And considering I had several
8 people yesterday who didn't realize that we
9 still had another whole section from the
10 District and were beginning to think we were
11 moving on from the District I think we'll all
12 be pleased to know we have a few more days
13 with the District.

14 So with that, if we could have
15 Mr. Mastracchio sworn in, please?

16 (Witness sworn.)

17 HEARING OFFICER TIPSORD: And could I
18 have a copy of his testimony, please? If
19 there's no objection, we will mark
20 Mr. Mastracchio's testimony as Exhibit 159.
21 Seeing no objection, it is Exhibit 159.

22 (Document marked as
23 Exhibit No. 159 for
24 identification,

1 10/28/08.)

2 HEARING OFFICER TIPSORD: And,
3 Mr. Andes, you said there was someone else
4 that might be assisting Mr. Mastracchio. Do
5 you want to swear her in?

6 MR. ANDES: Yes, Eileen McGelliott
7 from the District.

8 (Witness sworn.)

9 MR. ANDES: In addition, Mr. Kunetz
10 may help respond to some of the questions but
11 he's already been sworn in.

12 HEARING OFFICER TIPSORD: Thank you.
13 Then I believe we begin with the IEPA today.

14 MS. WILLIAMS: Good morning,
15 Mr. Mastracchio, my name is Deborah Williams
16 and I'm appearing on behalf of Illinois EPA
17 today. I'm going to start at the beginning
18 with number one in my pre-filed questions.

19 Would you tell us what areas you
20 consider yourself an expert?

21 MR. MASTRACCHIO: I specialize in
22 municipal financial planning and public
23 utility financial planning and rate setting
24 as well utility evaluations.

1 THE COURT REPORTER: I need you to
2 speak up.

3 MS. WILLIAMS: Do you want him to
4 repeat?

5 THE COURT REPORTER: No.

6 MS. WILLIAMS: Do you agree with the
7 cost estimates for disinfection as developed
8 by CTE and Dr. Zenz?

9 MR. MASTRACCHIO: I haven't been asked
10 by the District to develop an opinion as to
11 the those cost estimates.

12 MS. WILLIAMS: You're just relying on
13 the structured measures work for those costs?

14 MR. MASTRACCHIO: That's correct.

15 MS. WILLIAMS: How would any mistake
16 in developing these capital and O&M cost
17 estimates affect your conclusions?

18 MR. MASTRACCHIO: I don't really know
19 at this point and it really depends on the
20 magnitude of any changes to those estimates.

21 MS. WILLIAMS: So the larger the
22 changes, the more significant the impact on
23 your conclusions; is that correct?

24 MR. MASTRACCHIO: Yeah, in general,

1 I'd agree with that.

2 MS. WILLIAMS: Question three, you
3 identify in your testimony that the increases
4 to the District's property -- that, quote,
5 the increases to the District's property tax
6 levy are limited to the lesser of, number
7 one, 5 percent, or number two, the change in
8 the national consumer price index plus
9 allowable increases for new property.

10 Which of these two factors has
11 been the lesser or limiting factor over the
12 last decade?

13 MR. MASTRACCHIO: It's my
14 understanding that it's the change in
15 national consumer price index plus the
16 allowable increases for any property.

17 MS. WILLIAMS: Can you explain that a
18 little bit further how that's worked?

19 MR. MASTRACCHIO: Well, the two
20 factors, the lesser of 5 percent or the
21 change in the CPI is looked at by the county
22 clerk's office and I know that they annually
23 calculate that provided information to the
24 District. So the limiting factor is based on

1 those two elements.

2 MS. WILLIAMS: Question four, you
3 conclude on Pages 4 to 5 that, quote, the
4 District cannot generate sufficient revenues
5 within the constraints of the Property Tax
6 Extension Limitation Act and the remaining
7 funds needed would exceed the District's tax
8 cap and non-referendum bonding authority, end
9 quote.

10 Could MWRDGC pay for the capital
11 improvements necessary for disinfection
12 through referendum bonds?

13 MR. MASTRACCHIO: They could to the
14 extent that the voters approve the
15 referendum.

16 MS. WILLIAMS: Question five, what
17 type or level of phosphorous treatment is the
18 estimate of 2.8 billion for nutrient removal
19 based on?

20 MR. MASTRACCHIO: I think what I can
21 offer to answer that question is what was
22 provided as Attachment 8 of my testimony.
23 And, basically, that shows that the cost
24 estimates were based on an assumed effluent

1 limitation of .5 milligrams per liter for a
2 total phosphorous and between 6 and
3 8 milligrams per liter for total nitrogen.

4 MS. MEYERS-GLEN: Stacy Meyers-Glen,
5 for the record. I'm just trying to catch all
6 of this. What was the number for phosphorous
7 again, please?

8 MR. MASTRACCHIO: 0.5 milligrams per
9 liter.

10 MS. WILLIAMS: Since Counsel for the
11 District indicated that Mr. Kunetz could help
12 if we got into this, can we sort of put that
13 in the context of the testimony yesterday
14 from the master plan alternatives? Can you
15 do that for us?

16 It sounds to me like one of the
17 alternatives we discussed yesterday,
18 Mr. Kuentz.

19 MR. KUNETZ: Would you please explain
20 what you mean by putting it in the context of
21 the master plan?

22 MS. WILLIAMS: Well, Mr. Mastracchio
23 is assuming the level of treatment for
24 phosphorus when -- well, let me ask this

1 other question first.

2 Are there currently any regulatory
3 requirements that would require the District
4 to treat at those levels that were assumed?

5 MR. KUNETZ: No.

6 MS. WILLIAMS: So what assumptions did
7 you base those numbers on? Where did those
8 numbers come from?

9 MR. KUNETZ: In the lack of having any
10 type of regulatory information, we looked
11 around as to what's the climate in the
12 regulatory environment around the country,
13 what do we see happening in other places.
14 Some places like Chesapeake Bay area are more
15 stringent.

16 We just wanted to take a guess as
17 to what could possibly happen and we looked
18 at what we considered moderate levels of
19 nutrient removal and very stringent levels of
20 nutrient removal.

21 And so we came to the conclusion
22 that .5 was a stringent level, that if the
23 regulations require treatments at that level
24 of phosphorous removal, that would require a

1 certain amount of infrastructure to meet
2 those limits.

3 And the same thing with nitrogen
4 removal, if we remove them at the limits of 6
5 to 8 milligrams per liter of total nitrogen,
6 that would also encompass a certain amount of
7 infrastructure that's necessary.

8 MS. WILLIAMS: And so these numbers
9 were not -- they were developed for the
10 purpose of your testimony, they weren't taken
11 directly from any of the master planning work
12 that had been done?

13 MR. KUNETZ: No. As I said, the
14 master planning work and different treatment
15 plans, we approached it differently because
16 as time went on ideas, thoughts were
17 changing.

18 For the North Side Plant, for
19 example, we did look at what we said were
20 moderate levels of treatment and stringent
21 levels of treatment. So for the purposes of
22 this testimony we had to try to come to some
23 agreement as to what we are going to lay the
24 cost out here for our cost estimating.

1 So we chose the ranges that you
2 see here, .5 for phosphorus, 6 to 8 for
3 nitrogen as a sense of reasonableness that
4 this is going to establish a certain level of
5 infrastructure needs.

6 MS. WILLIAMS: And how would the level
7 of infrastructure needs change if you had a
8 less stringent nutrient requirement down the
9 road?

10 MR. KUNETZ: Okay. If, for example,
11 we were to have less stringent for
12 phosphorous, say it were 2 milligrams per
13 liter, 1 milligram per liter, we would need
14 less infrastructure to meet those limits.

15 If we were to have less stringent
16 standards for nitrogen, let's say in the
17 range of 8 to 10, we would require less
18 infrastructure.

19 MS. WILLIAMS: Can you explain by less
20 infrastructure do you mean less tanks or
21 less -- could you be more specific in terms
22 of equipment?

23 MR. KUNETZ: Tankage, equipment,
24 energy usage -- that's not an infrastructure,

1 that's an annual cost, of course.

2 MS. WILLIAMS: So all of those would
3 result in lower costs?

4 MR. KUNETZ: Less of that would result
5 in lower costs, yes.

6 MS. WILLIAMS: Okay. Thank you.
7 Mr. Mastracchio, on Page 5 of your report,
8 Table 3 list projections of expenditures into
9 the future ending in 2017. My question in
10 number six of my pre-filed questions is why
11 do the state revolving funds project
12 projections stop prior to 2010 and 2011?

13 MR. MASTRACCHIO: The reason why they
14 stopped was because what's included in that
15 table is the list of projects that the
16 District had identified as targets for SRF
17 funding. Beyond that period of time, the
18 District had not identified projects
19 specifically identified for SRF.

20 MS. WILLIAMS: And I suspect most of
21 us in this room, including myself, don't
22 understand -- well, I shouldn't say the
23 District's staff, but don't understand a lot
24 about how the state revolving funds work as

1 part of the District's capital budget
2 projection process or how -- can you just
3 explain to us a little more generally the
4 money that's coming in from that and how it's
5 projected how much that will be and how
6 that's used?

7 MR. MASTRACCHIO: Well, there are
8 certain criteria that the state revolving
9 loan funds specifies for projects that are --
10 can be eligible for the money that's
11 associated with the SRF loan program.

12 And it's my understanding that the
13 District looks at those requirements and
14 identifies projects that potentially could be
15 eligible, they apply for those loan funds and
16 depending upon the availability of the funds
17 from year to year they are awarded a certain
18 amount of loan funds and that gets
19 incorporated into their budget for the
20 upcoming year.

21 MS. WILLIAMS: Are the amounts
22 relatively stable or do they fluctuate
23 greatly?

24 MR. MASTRACCHIO: Can you clarify what

1 you mean by the amounts?

2 MS. WILLIAMS: The amounts that the
3 District is awarded from those funds, the
4 state revolving funds, on an annual basis.

5 MR. MASTRACCHIO: I would imagine they
6 would fluctuate from year to year, but I
7 don't know exactly how much they fluctuate.

8 MS. WILLIAMS: Do you know if the
9 District receives a certain percentage of the
10 state revolving funds each year?

11 MR. MASTRACCHIO: No. I don't think
12 there's a set --

13 MS. WILLIAMS: You're not aware?

14 MR. MASTRACCHIO: I'm not aware that
15 there's set percentage that they would
16 receive.

17 MS. WILLIAMS: Do any of the other
18 witnesses know the answer?

19 MS. MCGELLIOTT: I'm not sure what the
20 percentage is.

21 MS. WILLIAMS: Are you aware if it's
22 50 percent of the total that goes to the
23 District?

24 MS. MCGELLIOTT: I don't know what the

1 percentage is. We try to get whatever --

2 HEARING OFFICER TIPSORD: Louder,
3 please.

4 MS. MCGELLIOTT: I can't hear and my
5 voice is soft. We try to get whatever SRF
6 funds are available. Any projects that we
7 think are eligible, we go through the
8 application process. I don't know what other
9 agencies are doing it in the state or how
10 much is available.

11 We have, the last few years, been
12 averaging about \$50 million. You have to
13 think of the SRFs as a loan program. It's
14 like a low interest loan program that allows
15 us to save money. We still have to sell
16 bonds in order to pay back the SRFs. But,
17 you know, we try to get everyone that we can.

18 MS. WILLIAMS: Question seven asks,
19 Mr. Mastracchio, you testify that the three
20 impacted MWRDGC plants cannot implement
21 disinfection technologies within their
22 existing financial limitations without
23 obtaining additional taxing authority from
24 the legislature or bonding authority from the

1 voters.

2 Did you evaluate whether
3 disinfection could be implemented at two of
4 the facilities within the existing framework?

5 MR. MASTRACCHIO: No, I did not.

6 MS. WILLIAMS: What about at just one
7 of them?

8 MR. MASTRACCHIO: No.

9 MS. WILLIAMS: So the only option you
10 looked at was disinfection at all three
11 facilities?

12 MR. MASTRACCHIO: Correct.

13 MS. WILLIAMS: Is there a reason for
14 that?

15 MR. MASTRACCHIO: Yeah. It's my
16 understanding that that was the proposal, is
17 the requirement would be to do it at all
18 three.

19 MS. WILLIAMS: And if the Board
20 adopted something different than the proposal
21 that required disinfection at only one
22 facility, for example, would that change any
23 of your conclusions about affordability?

24 MR. MASTRACCHIO: I don't believe it

1 would change my conclusions. When you look
2 at the District's taxing authority and
3 bonding authority, even without the
4 disinfection projects, they're -- the
5 District is very close or projected to be
6 very close to those limits even without
7 projects.

8 MR. ANDES: We have a chart that shows
9 that.

10 MS. WILLIAMS: Is it one of the charts
11 from the testimony or is it a new chart?

12 MR. MASTRACCHIO: It's Attachment 3
13 from my testimony.

14 MS. WILLIAMS: Thank you.

15 MR. ANDES: I think we'd like to put
16 that up on the easel. We haven't used the
17 easel yet.

18 HEARING OFFICER TIPSORD: And this is
19 Attachment 3 to Mr. Mastracchio's testimony?

20 MR. ANDES: Yes. And we have copies.

21 HEARING OFFICER TIPSORD: I don't
22 think we need to mark it as an exhibit since
23 it's an attachment, but it might be easier
24 for viewing.

1 MR. MASTRACCHIO: So just to clarify
2 the answer to your question, what this
3 attachment shows is a summary of the
4 limitations and projections for the District.

5 And what I said before was that
6 the District would be very close to their
7 bonding and taxing authorities even without
8 the disinfection projects and that can be
9 shown in these charts.

10 And if you just focus on the
11 second one here, Exhibit 3-2, which is the
12 forecasted aggregate tax levy requirement
13 compared to the limitation, this black line
14 on the chart, that is the projection of the
15 lesser of 5 percent or the change in the
16 consumer price index plus new growth.

17 And the blue bars represent the
18 aggregate tax levy. It's basically the
19 revenue requirement excluding debt service
20 and storm water costs. So this is
21 essentially looking at O&M costs compared to
22 the taxing levy. And it shows that going
23 forward the actual revenue requirement is
24 close to the limitation.

1 MS. WILLIAMS: Can you explain what
2 value is assumed for the tax -- for the CPI
3 plus new property (inaudible).

4 HEARING OFFICER TIPSORD: I didn't
5 hear that, Deb.

6 MS. WILLIAMS: At the bottom it says
7 CPI plus new property. What value is assumed
8 for CPI plus new property?

9 MR. MASTRACCHIO: I believe it was in
10 the 4 percent range. I can give you a
11 precise number if I get back to my seat here.

12 MS. WILLIAMS: Okay.

13 (Brief pause.)

14 MR. MASTRACCHIO: It ranged from --

15 MR. ANDES: It's on Table A-5 on Page
16 24.

17 MR. MASTRACCHIO: So it ranges from
18 3.7 percent to 4.2 percent per year.

19 MS. WILLIAMS: Could you repeat the
20 page? I'm sorry.

21 MR. MASTRACCHIO: Page 24.

22 HEARING OFFICER TIPSORD: Of your
23 testimony, correct?

24 MR. MASTRACCHIO: Correct.

1 MS. WILLIAMS: Of the report attached
2 to his testimony.

3 So presumably if you were able to
4 use the 5 percent value, that chart would
5 look different, correct?

6 If the consumer price index went
7 through the roof, which is hard to imagine,
8 right, but if it did --

9 MR. MASTRACCHIO: If it did, then the
10 5 percent would be the limiting -- would
11 likely be the limiting factor and the black
12 line would raise up by a few percentage
13 points.

14 MS. WILLIAMS: Thank you.

15 MR. MASTRACCHIO: Getting back to the
16 answer to your previous question, the second
17 limitation is shown on the bottom chart. And
18 this is basically the District's bonding
19 authority. And this black line shows what --
20 the annual principal and interest payments,
21 their offer as to -- to be at. And I think
22 they can't be above that black line.

23 The projection of annual principal
24 payments based on the capital improvements

1 planning, excluding disinfection, is shown in
2 the blue bars here.

3 And you can see through 2015 they
4 get very close to that black line and
5 actually in 2016 and 2017 they slightly
6 exceed it.

7 MS. WILLIAMS: Why did you decide to
8 stop at 2017?

9 MR. MASTRACCHIO: I believe the
10 rationale for that was related to projecting
11 out far enough so that it incorporates the
12 construction time frame. I believe that was
13 an eight year -- eight years out. So I
14 stopped after construction was completed and
15 O&M expenses would commence.

16 MS. WILLIAMS: Are there any
17 significant changes you're aware of after
18 2017?

19 MR. MASTRACCHIO: Not that I'm aware
20 of.

21 MS. WILLIAMS: So when TARP is
22 completed there are not any significant
23 changes to your chart?

24 MR. MASTRACCHIO: I believe that I

1 have incorporated the -- to the extent that
2 the District plans to fund TARP and that's
3 incorporated into the analysis.

4 MS. WILLIAMS: So when the District is
5 done funding TARP?

6 MR. MASTRACCHIO: Some of the
7 limitations such as the bonding authority
8 exclude TARP projects.

9 MS. WILLIAMS: Does the bonding
10 authority also include state revolving fund
11 projects or does it exclude those, as well?

12 MR. MASTRACCHIO: It's my
13 understanding that SRF funding is not
14 included in the limited bond authorizations.

15 MS. WILLIAMS: So it's not included in
16 the bond limitations and it's also not
17 included as one of the potential sources of
18 revenue projecting forward beyond 2010?

19 I really don't understand this
20 stuff very well, so assume I know nothing.
21 I'm just trying to understand why we couldn't
22 basically pay for disinfection with SRF bonds
23 then.

24 MR. ANDES: You want to ask all the

1 other states -- the cities in the state of
2 Illinois?

3 MS. WILLIAMS: It's my understanding,
4 actually, the District gets half of that
5 money. I'm not -- that may not be true. But
6 I don't think I have to ask them because I
7 think the District gets a set pot of that
8 money and I want to understand.

9 MR. ANDES: I'm not sure that's been
10 established. Nobody here testified that the
11 District gets a set amount.

12 MS. WILLIAMS: But did you just
13 testify that I have to ask other cities? I
14 mean, I don't think this is relevant. I'd
15 rather just hear what Mr. Mastracchio wants
16 to stay.

17 MR. MASTRACCHIO: Could you repeat the
18 question, please?

19 MS. WILLIAMS: Yes. Why can't state
20 revolving fund authority be used to pay for
21 the disinfection technology?

22 MR. MASTRACCHIO: I think from a
23 comparison of the relevant amount of SRF
24 funding that the District receives, it's

1 relatively small compared to the size of
2 their capital program.

3 MS. WILLIAMS: So it wouldn't be
4 enough, is that what you're saying?

5 MR. MASTRACCHIO: It wouldn't be
6 sufficient to cover all the costs, that's
7 correct.

8 MS. WILLIAMS: Thank you.

9 MR. ETTINGER: Congress votes on a
10 total for SRF every year, doesn't it?

11 MR. MASTRACCHIO: I believe they
12 appropriate certain amounts of funds each
13 year.

14 MR. ETTINGER: And that varies from
15 year to year?

16 MR. ANDES: I don't think -- do you
17 know what the numbers are?

18 MR. MASTRACCHIO: I don't know
19 specifically what the numbers are.

20 MR. ETTINGER: I didn't ask him about
21 specific numbers. I just asked him about the
22 program. Do you know that there's an
23 appropriation made every year and that it
24 varies from year to year?

1 MR. MASTRACCHIO: Yes.

2 MR. ETTINGER: We really don't know
3 now what Congress is going to appropriate in
4 2012 or 2016 for the SRF fund?

5 MR. MASTRACCHIO: I don't know.

6 MR. ETTINGER: Thank you.

7 HEARING OFFICER TIPSORD:
8 Ms. Williams, I think we're back to you.

9 MS. WILLIAMS: Just a moment.

10 (Brief pause.)

11 MS. WILLIAMS: Question eight from my
12 pre-filed questions, are you able to express
13 the cost of disinfection for MWRDGC in terms
14 of affordability, i.e., as a percentage of
15 median household income to the sewer users
16 served?

17 MR. MASTRACCHIO: No.

18 MS. WILLIAMS: Do you know if anyone
19 has done that analysis for the District?

20 MR. MASTRACCHIO: I don't know.

21 MS. WILLIAMS: Okay. When we spoke at
22 the last set of hearings with Mr. McGowan he
23 referred one of his questions to you and that
24 was related to question 21 from our pre-filed

1 questions for Mr. McGowan.

2 I asked him in his report he
3 identified a variety of economic information
4 gathered from units of local government such
5 as median household income, bond rates and
6 property taxes and I asked him if this
7 information appeared anywhere in his study
8 and he said, no, that it was used -- it was
9 gathered for your report.

10 So my question to you is how is
11 this data, median household income, bond
12 ratings and property tax data used in your
13 report?

14 MR. ANDES: Can you refer to a
15 specific question to Mr. McGowan?

16 MS. WILLIAMS: Question 21.

17 HEARING OFFICER TIPSORD: Question 21.

18 MR. ANDES: Could you provide us with
19 a copy of that? I thought I had it.

20 MS. WILLIAMS: If I can get the book,
21 I will.

22 MR. ANDES: Sure.

23 MR. MASTRACCHIO: As I said
24 previously, the analysis that I did looked at

1 the District's ability to pay for projects
2 associated with disinfection.

3 I didn't look -- the analysis did
4 not look at customer affordability, median
5 household incomes, so that information wasn't
6 used in my analysis.

7 MS. WILLIAMS: Okay. The last point
8 that I think I just wanted to be sure to
9 clarify on this question -- and I don't have
10 Mr. McGowan's testimony in front of me
11 either, but was this information that was
12 identified actually provided as part of the
13 District's testimony and if not, can we make
14 sure that this information that's identified
15 that was gathered be provided for the record?

16 MR. ANDES: You're asking for the
17 information that was used by Mr. McGowan.

18 MS. WILLIAMS: That was gathered by
19 Mr. McGowan and identified in his report.

20 MR. ANDES: Sure.

21 MS. WILLIAMS: If it wasn't -- I'm
22 hoping that it's all there, but if it's not
23 we would like to it.

24 MR. ANDES: So anything referred to in

1 Appendix B that's not there, you want that
2 provided, fine.

3 MS. WILLIAMS: Thank you. That's all
4 I have for this witness.

5 HEARING OFFICER TIPSORD: That moves
6 us to the People.

7 MS. HEDMAN: Good morning,
8 Mr. Mastracchio. My name is Susan Hedman and
9 I represent the People of the State of
10 Illinois in this proceeding.

11 MR. ANDES: Let me clarify one thing
12 before we move further. Just so everyone
13 knows how to pronounce his name, it's
14 Mastracchio.

15 MS. WILLIAMS: I got it right.

16 MR. ANDES: There you go.

17 MS. HEDMAN: I'd like to start by
18 following up on these questions about the
19 state revolving fund. And I think in order
20 to do that it would be useful to look at the
21 2007 and 2008 budgets which have been entered
22 as Exhibit 67 in this proceeding. And for
23 ease of --

24 HEARING OFFICER TIPSORD: Let's

1 clarify. The exhibits were not -- the
2 budgets were not entered as an exhibit. A
3 link to the budgets were entered as an
4 exhibit.

5 MS. HEDMAN: A link to the budgets was
6 entered as an exhibit as No. 67 in this
7 proceeding.

8 HEARING OFFICER TIPSORD: Correct.

9 MS. HEDMAN: And we have a few copies
10 that may be helpful in terms of looking at
11 this now.

12 (Brief pause.)

13 HEARING OFFICER TIPSORD: We'll mark
14 the 2007 budget at Exhibit 160 if there's no
15 objection. Seeing none, it's Exhibit 160.

16 MR. ANDES: These are not questions
17 from the pre-filed questions, am I right?

18 MS. HEDMAN: No. I'm following up on
19 the questions from IEPA on the state
20 revolving funds at the moment. I'll get onto
21 the pre-filed questions momentarily.

22 HEARING OFFICER TIPSORD: We'll mark
23 the 2008 budget as Exhibit 161 if there's no
24 objection. Seeing none, its Exhibit 161.

1 Now are these the entire --

2 MS. HEDMAN: Yes.

3 HEARING OFFICER TIPSORD: Okay.

4 MS. HEDMAN: And these are the budget
5 books taken from the MWRD website from the
6 links that have been marked as Exhibit 167.

7 HEARING OFFICER TIPSORD: Thank you.

8 MS. HEDMAN: I'd like to start with
9 the 2007 budget and turn to Page 39.

10 Mr. Mastracchio, is this a chart
11 that -- or graphic that shows where the
12 District's money comes from and where the
13 District's money goes?

14 MR. MASTRACCHIO: Yes, it is.

15 MS. HEDMAN: And are state revolving
16 fund loans a portion of the money identified
17 and where the money comes from?

18 MR. MASTRACCHIO: The state revolving
19 loans and future bond sales are a component
20 of where the money comes from.

21 MS. HEDMAN: And what's the percentage
22 amount in the 2007 budget?

23 MR. MASTRACCHIO: In the -- I believe
24 the number that's shown on this chart is

1 161.2 million for loans and future bond
2 sales.

3 MS. HEDMAN: And do you have any
4 knowledge as to how -- what portion of that
5 is revolving loans and which -- what portion
6 of it is future bond sales?

7 MR. MASTRACCHIO: I don't have any
8 knowledge of that, no.

9 MS. HEDMAN: So when you've been
10 testifying about the limit on the District's
11 bonding authority, you don't know how big a
12 constraint that is relative to the amount of
13 revolving loan money that would be available
14 to the District; is that correct?

15 MR. MASTRACCHIO: No, that's not
16 correct. I can clarify. The projections of
17 bond fund and loan fund money were developed
18 based on the 2008 budget. There's a
19 five-year forecast in that budget. And
20 beyond that five-year forecast there is --
21 the projection was developed in consultation
22 with the District and --

23 MR. ANDES: Actually, I think that
24 Ms. McGelliott can shed some further light on

1 that.

2 MS. HEDMAN: You're not answering my
3 question, actually. My question was what
4 portion of this is bonding and what portion
5 of this is state loan fund money?

6 HEARING OFFICER TIPSORD: Actually,
7 that was your first question. Your second
8 question to him was a little different and
9 he's trying to clarify the second question.

10 MS. HEDMAN: He said he didn't know
11 the answer to the first question.

12 HEARING OFFICER TIPSORD: Right. And
13 then you asked a second question and you had
14 misstated how he answered the second
15 question, so he's trying to clarify that.

16 We can then ask that question --
17 your initial question if you like, but I
18 think we need to clarify his answer because
19 you asked him a question, he said, no, that's
20 not correct, and now he's trying to explain
21 why what you've rephrased wasn't correct.

22 We can get to both, but I'm just
23 saying keep the record clear. Go ahead.

24 MR. MASTRACCHIO: I guess did I answer

1 to your satisfaction the answer of, no, why I
2 didn't think your statement was correct?

3 MS. HEDMAN: Well, if it were a formal
4 legal proceeding I would have moved to strike
5 as nonresponsive. But I'd like to get an
6 answer to my initial question.

7 MR. MASTRACCHIO: I said I didn't know
8 the answer to that.

9 MS. HEDMAN: Right, you didn't. If
10 you do, indeed, know the answer to the
11 initial question of looking at this chart of
12 state revolving fund loans and future bond
13 sales, can you give us some sense of what
14 percentage would be future bond sales and
15 which would be state revolving loan funds?

16 I think we've established there's
17 no limit on the amount of state revolving
18 loan funds.

19 MR. ANDES: I don't think we've
20 established that.

21 HEARING OFFICER TIPSORD: Yeah.

22 MS. HEDMAN: That was his answer to
23 the question.

24 MR. ANDES: No. He wasn't aware of a

1 limit.

2 MS. HEDMAN: He wasn't aware of a
3 limit.

4 MS. MCGELLIOTT: In the 2007 budget we
5 budgeted \$42 million for SRF revolving fund
6 loans. That's what we were estimating that
7 we would receive.

8 The important thing to remember
9 about SRF loans is we get the money from the
10 state. We still have to levy a tax to pay
11 back those bonds, it's just at a lower rate
12 that we're paying back the state and it
13 revolved, the money goes back to the state
14 and it comes back out.

15 MR. ANDES: You still have to issue
16 bonds to pay back the loans?

17 MS. MCGELLIOTT: We still have to
18 issue bonds to pay back the loans. And those
19 SRF loans, unless it's TARP, it's not
20 excluded from the limitation -- the tax cap
21 limitation.

22 MS. HEDMAN: But those bonds are at a
23 lower rate?

24 MS. MCGELLIOTT: Yes.

1 MS. HEDMAN: And then if we could look
2 at the 2008 budget, Page 39?

3 MR. JOHNSON: Before you leave 2007,
4 on Page 39 you had a total of 161.2 million
5 per state revolving fund loans, which implies
6 that you have to repay the loan, and future
7 bond sales, which I assume you have to repay
8 at some point in time, as well.

9 And then where the money goes,
10 bond redemption and interest funds of 160.2
11 million, so there's not a heck of a lot of
12 difference between the two, where it comes
13 from and where it goes. Am I reading that
14 accurately? Apparently not.

15 (Brief pause.)

16 MS. MCGELLIOTT: I want to give the
17 right answer because, yes, but it depends,
18 too, on what our net assets appropriable are
19 because if there's bond proceeds available,
20 we use that money to pay out when the
21 projects -- as they get completed, the money
22 gets paid out for those projects.

23 When you look at this chart on
24 where the money comes from, sometimes we'll

1 put in bond sales that we anticipate. If we
2 anticipated a bond sale this year, it would
3 be included in this state revolving fund
4 loans and future bond sales in order to
5 balance our budget. So it's not a one-to-one
6 relationship.

7 MR. JOHNSON: Okay.

8 MR. ANDES: Of that 161 million
9 identified there, I believe you said that
10 around \$40 million, that that was SRF,
11 attributable to SRF?

12 MS. MCGELLIOTT: Correct.

13 MR. ANDES: So the balance would be
14 future bond sales?

15 MS. MCGELLIOTT: Correct.

16 DR. GIRARD: Can I just ask one quick
17 clarifying questioning to make sure that we
18 have this straight?

19 When you talk about a lower rate
20 for these state revolving funds, you're
21 talking about a lower interest rate?

22 MS. MCGELLIOTT: Correct.

23 DR. GIRARD: Thank you.

24 MS. HEDMAN: I'd like to turn to the

1 2008 budget, which has been marked as
2 Exhibit 161, Page 39, where there's a similar
3 chart for the 2008 budget year.

4 And I'm not sure who I'm directing
5 questions to at this point, but could someone
6 tell me the amount for the state revolving
7 fund loans and future bond sales in 2008?

8 MR. MASTRACCHIO: The numbers shown on
9 Page 39 of the 2008 budget book for state
10 revolving loans and future bond sales is
11 691.9 million.

12 MS. HEDMAN: So it's four to five
13 times the amount as in 2007?

14 MR. MASTRACCHIO: Yes, it is
15 significantly larger.

16 MR. ANDES: Can I ask Ms. McGelliott
17 to explain that?

18 MS. MCGELLIOTT: In 2008 we budgeted
19 \$54 million in SRF.

20 MR. ANDES: That's on what page?

21 MS. MCGELLIOTT: Page 74 of the 2008
22 budget.

23 MR. ANDES: So the bulk of that was
24 future bond sales?

1 MS. MCGELLIOTT: Correct.

2 MS. HEDMAN: Were those bond sales for
3 the TARP project?

4 MS. MCGELLIOTT: I'm sorry?

5 MS. HEDMAN: Were those bond sales for
6 the TARP project?

7 MS. MCGELLIOTT: They're for the
8 capital improvements. Bonds fund all our
9 capital projects including -- that would
10 include any TARP projects.

11 MS. HEDMAN: Was the bulk of that for
12 the TARP project, do you know?

13 MS. MCGELLIOTT: For the 2008, I
14 believe -- no, I believe it's part of TARP.
15 And I think Mr. Kuentz may be able to clarify
16 that, but I believe in 2008 we had a couple
17 of large projects, one maybe related to the
18 master plan.

19 MR. KUNETZ: I wasn't following your
20 question. Could you please repeat what you
21 asked?

22 MS. HEDMAN: We looked at the 2007 and
23 2008 budgets and we're now looking at the
24 2008 budget, the state revolving fund loans

1 and future bond sales. And we've established
2 that there was a very large bond sale in 2008
3 and I'm asking what that bond sale was for.
4 The answer was it's not TARP, so I'm just
5 trying to find out what it was.

6 MR. ANDES: If we can just take a
7 moment, we're reviewing the numbers.

8 MR. KUNETZ: If you would refer to
9 Page 357 in the 2008 budget book.

10 MS. HEDMAN: 357?

11 MR. KUNETZ: 357, yes.

12 MS. HEDMAN: All right.

13 MR. KUNETZ: We should see a table
14 there called Capital Improvements Bond Fund
15 Program and in the box at the top, Awards in
16 2008 and you will see a listing of projects
17 that are predicted to be awarded in the year
18 2008 that will be paid for from the capital
19 improvements bond fund.

20 So you can see how the money is
21 allocated based on the estimated construction
22 costs of each of those projects.

23 MS. HEDMAN: And if I could ask
24 Mr. Mastracchio if we go to your exhibit in

1 Attachment 3, the one that was just up on the
2 easel, he referred to these as projects
3 predicted to be awarded. Is that what these
4 projects would be, too, this blocked area in
5 your chart?

6 HEARING OFFICER TIPSORD: Which is
7 Exhibit 3 to his testimony.

8 MS. HEDMAN: It's attachment 3 to his
9 testimony. And I have -- anybody who didn't
10 get copies of that, I have some copies of it
11 for them.

12 MR. MASTRACCHIO: Yes.

13 MS. HEDMAN: I'd like to then turn to
14 my pre-filed questions. The first is in your
15 testimony on Page 1 you used the term
16 economic impacts. How do you define that
17 term?

18 MR. MASTRACCHIO: That term was used
19 to mean the financial effect on the
20 District's ability to pay for the costs of
21 meeting the proposed water quality and plant
22 effluent standards in terms of the District's
23 taxing authority and financial capabilities.

24 MS. HEDMAN: So you looked at costs,

1 but not any benefits?

2 MR. MASTRACCHIO: I looked at the
3 financial impact to the District.

4 MS. HEDMAN: Now in Attachment 2 to
5 your testimony -- your disinfection testimony
6 you provide a summary of MWRD's revenues from
7 property taxes for the years from 2002 to
8 2006. What was the tax rate for each of
9 those years?

10 MR. MASTRACCHIO: According to Page 43
11 of the District's 2008 budget book, the tax
12 rates were in 2002 37.1 cents per \$100 of
13 equalized assessed value, in 2003 36.1, in
14 2004 34.7, in 2005 31.5 and in 2006 28.4.

15 HEARING OFFICER TIPSORD: I have been
16 handed Page 43. I assume this is from the
17 2008 budget book, which has been admitted as
18 Exhibit 161. I'm not going to admit it as a
19 separate exhibit since it's already in 161.

20 MS. HEDMAN: Mr. Mastracchio, is that
21 the page of the 2008 budget book that you
22 just referenced?

23 MR. MASTRACCHIO: Yes, it is.

24 MS. HEDMAN: If we look at the chart

1 on the bottom of that page it's clear that,
2 generally speaking, tax rates have gone down
3 over the past ten years.

4 MR. MASTRACCHIO: I would agree with
5 that statement.

6 MS. HEDMAN: At the same time tax
7 levies, the amount of taxes actually
8 collected, have actually gone up over that
9 same time period; is that correct?

10 MR. MASTRACCHIO: Yes.

11 MS. HEDMAN: And that's the amount of
12 money coming into the District's coffers?

13 MR. JOHNSON: Does that lead to
14 assessed value going up?

15 MR. MASTRACCHIO: Yeah. The District
16 is limited by the amount of tax levy they can
17 levy each year. And if the assessed value
18 goes up --

19 MR. JOHNSON: The rate has to come
20 down?

21 MR. MASTRACCHIO: That's correct.
22 Yeah, the rate has to come down, otherwise
23 they would exceed their taxing limitation.

24 MR. MELAS: And if the assessed value

1 goes the other direction, the opposite is
2 true?

3 MR. MASTRACCHIO: You are correct.

4 MR. JOHNSON: Although, you're not
5 required to.

6 MS. HEDMAN: I'd like to talk for a
7 moment about user charges. Tax revenue is
8 part of the revenue that the District
9 collects, user charges are another source?

10 MR. MASTRACCHIO: User charges are
11 another source of revenue, yes.

12 MS. HEDMAN: And who pays user
13 charges?

14 MR. MASTRACCHIO: Industrial customers
15 and tax exempt customers.

16 MS. HEDMAN: I'd like to turn back to
17 the chart on Page 39 of the 2008 budget.
18 What percentage of the District's revenues
19 come from user charges?

20 MR. MASTRACCHIO: According to Page 39
21 of the 2008 budget book, 3.4 percent of the
22 revenue comes from user charges.

23 MS. HEDMAN: How about from taxes?

24 MR. MASTRACCHIO: If you look at the

1 net tax source component of where the money
2 comes from, 18.7 percent comes from net tax
3 sources.

4 MS. HEDMAN: So the District collects
5 approximately three times -- six times as
6 much from tax -- through taxes than through
7 user charges; is that what the chart shows?

8 MR. MASTRACCHIO: Significantly more
9 comes from tax sources, yes.

10 MR. ANDES: Is it generally true that
11 if you substantially increase the user fees,
12 the users can move elsewhere?

13 MR. MASTRACCHIO: Sure. Yes.

14 MS. HEDMAN: And have user charges
15 changed over the years?

16 MR. MASTRACCHIO: Yes, they have.

17 MS. HEDMAN: And could you describe
18 those changes?

19 MR. MASTRACCHIO: If you look at Page
20 413 of the 2008 budget book, there's a chart
21 that shows the user charge rates from 1996 to
22 2007. And what that shows is the components
23 of the user charge rates and how those rates
24 have changed since 1996.

1 MS. HEDMAN: And have those rates
2 increased about the same as the rate of
3 inflation during that time period?

4 MR. MASTRACCHIO: Yeah. They've
5 fluctuated from year to year.

6 MS. HEDMAN: Do you know whether the
7 MWRD user charges are -- aren't they lower
8 than many other jurisdictions?

9 MR. MASTRACCHIO: I don't know the
10 answer to that question. I haven't compared
11 user charges to other municipalities or other
12 utilities.

13 MR. ANDES: Can you explain how the
14 user charges are derived?

15 MR. MASTRACCHIO: Yeah. As I've
16 mentioned, user charges are used to recover
17 costs -- waste water treatment costs from
18 industry and tax exempt. And the way they're
19 established is the District looks at the cost
20 of providing operation, maintenance and
21 replacement within the District and they
22 calculate a cost per million gallons flow, a
23 cost per pound of BOD and a cost per pound of
24 suspended solids and then compare the amount

1 of tax revenue from the industries.

2 And if there's any difference
3 between what the proportional costs are from
4 a unit cost standpoint compared to what
5 they've paid in taxes, the difference is what
6 the user charge is for the industry.

7 MS. HEDMAN: So the user charge is
8 based on the District's costs, essentially,
9 in excess of taxes?

10 MR. MASTRACCHIO: Essentially, yes.

11 MS. HEDMAN: I just have --

12 MR. ETTINGER: Just to be clear, this
13 is costs for providing sewage service for
14 pre-treaters?

15 MR. MASTRACCHIO: Yes, industry that
16 are pre-treaters, that's correct.

17 MR. ANDES: And the District cannot
18 just arbitrarily raise its user charges
19 without a basis in cost?

20 MR. MASTRACCHIO: No, they can't.

21 MR. ETTINGER: What was the basis of
22 that statement? Is there a state law that
23 says that? Why can't it raise its user
24 charges?

1 MR. MASTRACCHIO: The EPA Clean Water
2 Act federal user charge regulations requires
3 that the cost of wastewater service be
4 charged to customers in proportionality to
5 their cost of means. So that was the reason
6 for why the District had established the user
7 charge system to begin with is to comply with
8 the Clean Water Act.

9 MS. WILLIAMS: Can I ask another
10 follow-up? So when Ms. Hedman asked you if
11 the rates were low compared to other
12 municipalities or utilities, you said you
13 don't know, correct?

14 MR. MASTRACCHIO: At this point I
15 haven't looked at those comparisons, no.

16 MS. WILLIAMS: So when you list all
17 the different municipalities in your resume
18 that you dealt with, you don't know from that
19 experience how the rates compare?

20 And I'm looking at city of
21 Columbus, Columbia, South Carolina, Anderson,
22 Indiana, Delaware, Ohio, you don't have a
23 sense from all that experience of just where
24 they fall?

1 MR. MASTRACCHIO: I said that I hadn't
2 done that comparison.

3 MS. WILLIAMS: Right.

4 MR. MASTRACCHIO: And one of the
5 factors that has to be considered here is
6 that a portion of the revenue comes from
7 taxes. And those other communities don't
8 have a mechanism of recovering a portion of
9 the costs through taxes. So I'd have to look
10 at those comparisons in detail to make sure
11 it's an apples to apples comparison and I
12 just haven't done that.

13 MS. WILLIAMS: That answer makes more
14 sense to me than the first one did that you
15 didn't know.

16 HEARING OFFICER TIPSORD: Ms. Hedman.

17 MS. HEDMAN: I'd like to direct your
18 attention to Page 15 of the 2008 budget and
19 I've handed out copies of that.

20 There's a chart there from the --
21 would you agree that there's chart there that
22 shows data collected by the National
23 Association of Clean Water Agencies comparing
24 MWRD's total operating costs with similar

1 entities throughout the country?

2 MR. MASTRACCHIO: It shows a
3 comparison of the costs per million gallons
4 treated compared to some other benchmark
5 utilities, yes.

6 MS. HEDMAN: And among reporting
7 agencies serving populations greater than one
8 million, isn't it true that the Metropolitan
9 Water Reclamation District of Greater Chicago
10 has the lowest average cost for collection
11 and treatment of sewage of any of those
12 municipalities?

13 MR. MASTRACCHIO: That's what this
14 says and it was based on a 2005 comparison.

15 MR. ANDES: Could that possibly mean
16 that the District is making efficient use of
17 taxpayers' money?

18 MR. MASTRACCHIO: Yes.

19 MR. ANDES: Maybe better than these
20 other districts?

21 MR. MASTRACCHIO: That's a
22 possibility, sure.

23 MR. ETTINGER: Could it possibly be
24 that a lot of these other utilities are

1 removing nutrients in disinfecting?

2 MR. MASTRACCHIO: It's possible.

3 MR. ANDES: Are you aware that
4 St. Louis does not disinfect?

5 MS. WILLIAMS: Objection.

6 MR. MASTRACCHIO: I'm not aware of
7 that.

8 MS. WILLIAMS: This is --

9 HEARING OFFICER TIPSORD: I think the
10 point has been made. Let's move on.

11 MS. HEDMAN: Mr. Andes made the point
12 that if user charges were increased -- I
13 believe he asked a question asking whether or
14 not if user charges were increased, companies
15 might move away; is that correct?

16 MR. MASTRACCHIO: Yes, he asked that
17 question.

18 MS. HEDMAN: And you said, yes, that
19 is true.

20 MR. MASTRACCHIO: I said that was a
21 possibility.

22 MS. HEDMAN: If a company in Chicago
23 were to move to Philadelphia, they'd end up
24 bearing higher sewage costs; isn't that true?

1 I'm asking you. I'm not asking Mr. Andes.

2 MR. ANDES: We're allowed to talk.

3 MR. MASTRACCHIO: I think it's hard to
4 do that comparison looking at costs per
5 million gallons treated from one community to
6 the next to know exactly what the rate
7 structures are in the various cities and how
8 that cost can be recovered.

9 MS. HEDMAN: But the costs that are
10 recovered are based on the costs that are
11 incurred; isn't that correct?

12 MR. MASTRACCHIO: Yeah. I mean, it's
13 based on costs but the method of establishing
14 a rate structure to recover those costs may
15 be different between the two agencies.

16 MS. HEDMAN: But if two cities had
17 taxes and user fees based on costs strictly
18 across rate payers on an equal basis, the
19 rate payer would pay more in Philadelphia, in
20 fact, a couple times more, almost three times
21 more than in Chicago; isn't that right?

22 I'm going to withdraw the
23 question.

24 MR. ANDES: To follow up,

1 Mr. Mastracchio, is it also possible that
2 industry in Chicago could choose to move to a
3 community of less than a million?

4 MR. MASTRACCHIO: Yeah, I would think
5 that would be possible.

6 MR. ANDES: And those numbers would
7 not be represented in the table?

8 MR. MASTRACCHIO: No.

9 MR. ANDES: Can I ask if I can
10 follow-up with one other question?

11 Is it true that independent of
12 what the operating costs are of costs per
13 million gallons treated that the practical
14 limitation here on the District's ability to
15 raise money is the tax limitations that
16 apply?

17 MR. MASTRACCHIO: I would agree with
18 that.

19 MR. ANDES: Thank you.

20 MR. ETTINGER: Just for clarity, do
21 the tax limitations apply to user fees?

22 MR. MASTRACCHIO: No, it does not.

23 MR. ANDES: Do the applicable Clean
24 Water Act requirements as to charging people

1 for their costs apply to user fees?

2 MR. MASTRACCHIO: Yes, they do.

3 DR. GIRARD: Just to clarify a little
4 further, do individuals that discharge to the
5 system pay any user fees to the District?
6 I'm talking about individuals, not
7 individuals corporations. I'm talking about
8 individual homeowners.

9 MR. MASTRACCHIO: It's my
10 understanding that they don't. They get
11 charged based on a tax -- assessed value.

12 DR. GIRARD: Does the District have
13 any authority to charge individual homeowners
14 for their discharge?

15 MR. ANDES: I think we provided a
16 legal answer to that question, but I believe
17 the answer was no.

18 MR. ETTINGER: As long as you're
19 providing legal answers, would you come up
20 with a citation regarding the pre-treatment
21 fees (inaudible).

22 THE COURT REPORTER: I can't hear him.

23 HEARING OFFICER TIPSORD: Remember to
24 keep your voices up and talk to the court

1 reporter.

2 MR. ETTINGER: As long as you are
3 doing legal research, could you provide a
4 citation to the pre-treatment fees
5 limitations also?

6 MR. ANDES: We can provide statements
7 to applicable user charge requirements.

8 MR. ETTINGER: Thank you.

9 MS. HEDMAN: Now it's basically your
10 contention that MWRD doesn't have sufficient
11 financial resources to fund capital
12 expenditures and the O&M costs necessary to
13 disinfect; is that correct?

14 MR. MASTRACCHIO: Not within the
15 current limitations.

16 MS. HEDMAN: And if we go to
17 Attachment 3 to your testimony, that's the
18 chart that we passed out, I'd like to make
19 sure that I understand that basically the
20 teal colored area is projects expected to be
21 awarded for -- sewer projects expected to be
22 awarded between today and 2019; is that
23 correct?

24 MR. MASTRACCHIO: It's the annual

1 amount of expected capital improvement
2 program expenditures.

3 MS. HEDMAN: And the yellow is for the
4 actual wastewater treatment plants?

5 MR. MASTRACCHIO: Yes.

6 MS. HEDMAN: Part of it is sewers,
7 part of it is wastewater treatment plants and
8 then the dark blue on top is TARP; is that
9 correct?

10 MR. MASTRACCHIO: TARP is on the top,
11 yeah. It's not blue in my copy here.

12 MS. HEDMAN: My copy is from your
13 testimony. Now you have something that's
14 indicated as CIBF cash balance. Is that the
15 capital improvement bond fund balance?

16 MR. MASTRACCHIO: Yes.

17 MS. HEDMAN: And according to this
18 chart, what do you show that balance to be in
19 2008?

20 MR. MASTRACCHIO: In 2008 it's just --
21 it looks like to be just shy of 400 million.

22 MS. HEDMAN: It looks like about
23 375 million; would you agree?

24 MR. MASTRACCHIO: Yes.

1 MS. HEDMAN: I would like to direct
2 your attention to Page 90 of the 2008 budget.
3 Does that page -- is that page the balance
4 sheet for the capital improvements bond fund?

5 MR. MASTRACCHIO: Yes, it is.

6 MS. HEDMAN: And does it show that
7 cash and investments available in the capital
8 improvements bond fund are about \$447 million
9 in 2008?

10 MR. MASTRACCHIO: Yes, that looks to
11 be correct.

12 MS. HEDMAN: And so when we look at
13 your chart here with the cash balance in the
14 capital improvement bond fund, is that
15 referring only to the cash portion of that
16 and not the investments? Because it's just
17 shy of a \$100 million difference and I'm
18 trying to establish where that difference
19 comes from.

20 MR. MASTRACCHIO: I believe what's
21 shown in my attachment is the ending 2008
22 balance, not the beginning balance in the
23 capital improvements cash balance.

24 So in other words, use of the bond

1 funds in 2008 would drop the balance down
2 from what's shown on Page 90 of the budget
3 book to what it would be at the end of 2008.

4 MS. HEDMAN: Now this cash balance
5 that is shown on Page 90 in the capital
6 improvement bonds fund, does that include
7 investment income that is accumulated in the
8 fund?

9 MR. MASTRACCHIO: Yes.

10 MS. HEDMAN: And does that include
11 interest that may have been earned on grants
12 that have been reimbursed from the state
13 revolving fund and other loan revenue?

14 MR. MASTRACCHIO: I believe so, yes.

15 MS. HEDMAN: Do you have any idea how
16 much of the money in that fund comes from
17 those sources? Isn't that amount about
18 \$130 million?

19 MR. ANDES: I'm sorry, which amount?

20 MS. HEDMAN: The amount of investment
21 income sitting in that account.

22 MR. MASTRACCHIO: Well, I think if you
23 look at Page 91 of the 2008 budget there's
24 a -- to give you a sense of investment income

1 estimated to be included in 2008 budget, you
2 can see in 2008 on Page 91 of the budget that
3 the District was budgeting about 18.9 million
4 of investment income and miscellaneous.

5 MS. HEDMAN: That's the amount of
6 investment income earned in that year?

7 MR. MASTRACCHIO: Correct.

8 MS. HEDMAN: All right. But isn't
9 there an accumulated amount of money that is
10 sitting in that fund that's interest that's
11 been earned on other monies that the District
12 has collected over the years to the tune of
13 about \$130 million?

14 MR. ANDES: Is there a particular line
15 item you're looking at?

16 MS. HEDMAN: I'm looking at the cash
17 and investments line item on Page 90.

18 MR. ANDES: The \$130 million number?

19 MS. HEDMAN: I'm asking him whether
20 that amount is about right for the
21 accumulated interest and income?

22 MR. ANDES: I was just asking where
23 you got the number from?

24 MR. MASTRACCHIO: I don't know.

1 MS. HEDMAN: You don't know.

2 MR. MASTRACCHIO: I don't know right
3 now what -- how much has been accumulated
4 that's still in the fund from interest
5 revenues.

6 It may be in the comprehensive
7 annual financial report. I can leaf through
8 that and see if I can give you a number, but
9 right now I can't put my hands on a specific
10 number and I don't --

11 MS. HEDMAN: Do you know the answer to
12 that question?

13 MS. MCGELLIOTT: Any interest or funds
14 would have -- they would show in the cash and
15 investments, the 447 million. So any earned
16 interest over the years or the bond proceeds,
17 that would show on the cash and investments.

18 MR. ANDES: That includes investments
19 as well as cash, so it's not just cash?

20 MS. MCGELLIOTT: Right.

21 MR. ANDES: And if I can follow up
22 with Mr. Mastracchio or Ms. McGelliott, can
23 you explain the benefits to the District of
24 having cash on hand?

1 MR. MASTRACCHIO: I think having cash
2 on hand provides the District with financial
3 flexibility to go to the bond market when it
4 sees that there are favorable times to do
5 that.

6 I know currently if the District
7 would go to the bond market, due to the
8 credit issues that the bond market is
9 experiencing, it may not be a favorable time
10 to do that.

11 So having cash on hand allows the
12 District the flexibility of timing when they
13 decide to go to the market.

14 MR. ANDES: If I can also follow up
15 with Ms. McGelliott, can you explain a little
16 bit about how those can be balanced off, the
17 cash against liabilities on the same page,
18 Page 90?

19 MS. McGelliott: If you look at Page
20 90 on the current liabilities you'll see
21 \$470 million, that is projects that had
22 already been awarded and that we're obligated
23 to pay at some time, whether it be in the
24 next five years.

1 So it depends what the cash
2 disbursements are each year, but the net
3 assets appropriable of 32 million would be
4 what we had left over on 1/1/08 when you take
5 into account those obligations.

6 MS. HEDMAN: Now let me be clear, you
7 work for a consulting firm; is that correct?

8 MR. MASTRACCHIO: Yes.

9 MS. HEDMAN: And you work for the
10 District?

11 MCGELLIOTT: Yes.

12 MS. HEDMAN: Have you ever heard any
13 references to a surplus or an excess of
14 investment income in the capital investment
15 bond fund?

16 McGelliott: Yes.

17 MS. HEDMAN: And, in fact, in 2008
18 some of that surplus was transferred to the
19 reserve claim fund; is that correct?

20 MS. MCGELLIOTT: The excess interest
21 income, some of it was an equity transferred
22 to the reserve claim fund, yes.

23 MS. HEDMAN: And how much of the
24 excess interest income remains?

1 (No verbal response.)

2 MS. HEDMAN: Would it surprise you if
3 I were to tell you that Mr. Lanyon thought
4 that amount was 130 million in August of this
5 year?

6 MS. MCGELLIOTT: I'm not sure how to
7 answer the question.

8 MR. ANDES: Is there a particular
9 statement that he made that you're citing to?

10 MS. HEDMAN: Mr. Lanyon didn't testify
11 on any of these issues. I was told to defer
12 to these questions to later issues. If this
13 witness is unable to confirm, I will be --

14 MR. ANDES: I mean, where is this
15 statement you're referring to about the 130
16 million?

17 MS. HEDMAN: I asked her if she would
18 be surprised about that.

19 MR. ANDES: You're not going to offer
20 evidence?

21 MS. HEDMAN: If we're going to talk
22 about Mr. Lanyon, I'll speak to you about a
23 stipulation later.

24 HEARING OFFICER TIPSORD: This might

1 be a good time to take about a ten-minute
2 break. We'll come back in about ten minutes
3 so that Mr. Andes can confer and perhaps the
4 two of you can discuss -- you might be able
5 to tell him a little bit more of where you're
6 going, Ms. Hedman.

7 (Whereupon, after a short
8 break was had, the
9 following proceedings
10 were held accordingly.)

11 HEARING OFFICER TIPSORD: Let's go
12 back on the record. I believe we actually
13 have a question pending.

14 (Whereupon, the following
15 portion of the record
16 was read accordingly:
17 Q. Would it surprise
18 you if I were to tell
19 you that Mr. Lanyon
20 thought that amount was
21 130 million in August of
22 this year?)

23 MR. ANDES: I asked for the basis for
24 that statement.

1 HEARING OFFICER TIPSORD: Right. But
2 we left with you conferring with your witness
3 about some of the questions. I thought you
4 were developing an answer with your witness.

5 MS. MCGELLIOTT: I don't know what
6 Mr. Lanyon is referring to. The \$400 million
7 in the cash and investments is the cash and
8 investments estimated as of 1/1/08 and it
9 would include any interest or -- there
10 couldn't be anything else in that fund that
11 wouldn't be part of that 440 million.

12 We do try to be careful when we
13 pay out that money that we sell bonds and
14 have bond proceeds in times that we have
15 sufficient funds on hand in that cash and
16 investments as part of the rating agency's
17 review on our AAA bond rating, it assists us
18 in that regard. But that money is -- it
19 would have to be part of that cash and
20 investments.

21 MR. ANDES: Is part of that money
22 also, I believe you said earlier, transferred
23 to the reserve claims fund?

24 MS. MCGELLIOTT: Yes.

1 MR. ANDES: And can you explain why
2 that is?

3 MS. MCGELLIOTT: We tend to transfer
4 funds to the reserve claim fund to try and
5 maximize the statutory limit that we're
6 allowed for the reserve claim fun.

7 MR. ANDES: Which is for what purpose?

8 MS. MCGELLIOTT: The reserve claim
9 fund is -- we are self-insured, so it's our
10 insurance fund. And the District has close
11 to 30 billion dollars of infrastructure and
12 we need to -- if something happens, we have
13 to have that money available and that's what
14 the reserve claim fund is for.

15 MS. HEDMAN: Let's talk about the
16 reserve claim fund. So, basically, is the
17 reserve claim fund a self-insurance fund that
18 the MWRD can draw on to pay out claims from
19 lawsuits, settle claims? Is that basically
20 what it's used for? It's a self-insurance
21 fund, right?

22 MS. MCGELLIOTT: Yes.

23 MS. HEDMAN: And if you look at Page
24 60, the 2007 budget, I see that some of the

1 excess capital investment bond fund income
2 was transferred to the reserve claim fund
3 bringing the total --

4 MS. MCGELLIOTT: What page? I'm
5 sorry.

6 MS. HEDMAN: Page 60 of the 2007
7 budget.

8 MR. ANDES: Page 61?

9 MS. HEDMAN: Page 60 of the 2007
10 budget. There's a sentence on there that
11 says a 2008 transfer of excess CIBF
12 investment income to the reserve fund will
13 bring funds near the statutory maximum and we
14 just referred to that statutory maximum; is
15 that correct?

16 MS. MCGELLIOTT: Yes.

17 MS. HEDMAN: So that fund -- is the
18 current balance of the reserve claim fund
19 about \$55 million?

20 MS. MCGELLIOTT: That's correct.

21 MS. HEDMAN: And does the 2008 budget
22 project about \$4.2 million in liabilities for
23 the reserve claim fund?

24 MR. ANDES: Do you have a page number?

1 MS. MCGELLIOTT: Yes.

2 MS. HEDMAN: So currently in that fund
3 you have something that's more than ten times
4 the projected liability for that fund in the
5 current year; is that correct?

6 MS. MCGELLIOTT: That was our estimate
7 for 1/1/08. As of that date, we estimated
8 that we would have an outstanding liability
9 of 4.2 million.

10 MR. ANDES: For the year 2008?

11 MS. MCGELLIOTT: As of 1/1/08.

12 MS. HEDMAN: You have \$55 million in
13 the fund and a total liability of 4.2
14 million.

15 MR. ANDES: I'm sorry, what was that?

16 MS. HEDMAN: You have \$55 million in
17 the fund and a total liability of 4.2
18 million; is that correct?

19 MS. MCGELLIOTT: Also, in 2008 we
20 estimated an \$8 million expenditure. We had
21 one incident this year alone where we had a
22 flood at a pumping station and it's estimated
23 to cost ten to \$15 million. This is for one
24 event this year. We can't predict these

1 things. It's like an insurance fund. And
2 this is --

3 MR. ANDES: And once you've hit the
4 cap, that's all you're going to be able to
5 put in there.

6 MS. MCGELLIOTT: Right.

7 MS. HEDMAN: And, typically, in the
8 past, though, you tended to have a balance in
9 that fund over the past five years of around
10 34 million; is that correct?

11 MS. MCGELLIOTT: Over the last few
12 years we've been moving up toward the
13 statutory limit.

14 MS. HEDMAN: Adding an additional
15 \$20 million to that fund?

16 MS. MCGELLIOTT: Yes.

17 MR. ANDES: Can you provide some more
18 detail on expected expenditures?

19 MS. MCGELLIOTT: For 2009, even though
20 we're trying to levy the max and transfer any
21 excess interest into the reserve claim fund
22 to reach that maximum, in 2009 we don't
23 anticipate that we're going to be able to do
24 that. We're not even going to levy the

1 maximum amount for reserve claim because it's
2 needed in the other operating fund. So
3 it's --

4 MS. HEDMAN: But you have \$55 million
5 in the fund?

6 MS. MCGELLIOTT: Yes.

7 MS. HEDMAN: Now getting back to you,
8 Mr. Mastracchio, I believe earlier you
9 testified that -- I believe you said the
10 Clean Water Act, possibly the Safe Drinking
11 Water Act acted as a constraint on the
12 District's ability to increase taxes or user
13 fees charged to people; is that correct?

14 MR. MASTRACCHIO: It's not pertaining
15 to the increase, but it is pertaining to the
16 proportional allocation of costs to
17 customers, yes.

18 MS. HEDMAN: Madam Hearing Examiner,
19 I'd like this marked as an exhibit, please.

20 HEARING OFFICER TIPSORD: I've been
21 handed Water and Wastewater Pricing, An
22 Informational Overview, US EPA Office of
23 Wastewater Management, EPA 832-F-03-027. If
24 there's no objection, we'll mark this as

1 Exhibit 162. Seeing none, it's Exhibit 162.

2 (Document marked as
3 Exhibit No. 162 for
4 identification,
5 10/28/08.)

6 MS. HEDMAN: Mr. Mastracchio, I'd like
7 you to turn to --

8 MR. ANDES: Do we have a date on this
9 document?

10 HEARING OFFICER TIPSORD: I'm not
11 finding a date.

12 MS. HEDMAN: There is no publication
13 date on it, but I'm reliably informed that
14 the website indicates it's dated 2003.

15 MS. WILLIAMS: And I think you can
16 tell, like, the way they do their numbering.
17 I don't totally understand it, but I think
18 where it has an 03 after the F. Does that
19 make sense? They usually include the year in
20 the numbering.

21 MS. HEDMAN: So I guess we've
22 established that we're looking at the US
23 EPA's 2003 water and wastewater pricing
24 overview.

1 Mr. Mastracchio, could you read
2 the underlined text on Page 3 of this
3 document?

4 MR. MASTRACCHIO: On Page 3 the
5 underlined sentence reads, federal law,
6 including the Clean Water Act and the Safe
7 Drinking Water Act, does not mandate water
8 pricing policy.

9 HEARING OFFICER TIPSORD: If I may,
10 for the record, that is only underlined in
11 Mr. Mastracchio's copy. That is not
12 underlined in everyone else's copy.

13 MS. HEDMAN: That's correct.

14 MR. ANDES: Can you also read the
15 previous two sentences?

16 MR. MASTRACCHIO: Rate setting can be
17 constrained by the varying legal and
18 regulatory codes of states and local
19 jurisdictions. Most states have a water code
20 or law that outlines the rights of public
21 water and wastewater utilities as well as the
22 state's authority over investor-owned
23 utilities.

24 MR. ANDES: And the District will

1 provide a response to the earlier question
2 about what the constraints are on its setting
3 of property taxes and user fees.

4 MR. ETTINGER: (Inaudible.)

5 HEARING OFFICER TIPSORD: Albert, I
6 can't hear you at all.

7 MR. ETTINGER: It wasn't worth it.

8 HEARING OFFICER TIPSORD: I'm not
9 going to say anything.

10 MS. HEDMAN: Mr. Mastracchio, I think
11 I have one final question for you, and that
12 is --

13 MS. WILLIAMS: Is it on the same topic
14 then?

15 MS. HEDMAN: No.

16 MS. WILLIAMS: I mean, do you want to
17 reconsider your answer to the earlier
18 question about the basis for the limitations
19 on the District being from the Clean Water
20 Act?

21 MR. MASTRACCHIO: No. This says water
22 policy pricing. The Clean Water Act user
23 charge regulations apply to wastewater.

24 MS. WILLIAMS: So that's a citation

1 we're going to be provided, the clean water
2 user charge regulations?

3 MR. MASTRACCHIO: (Nodding head.)

4 MR. ANDES: Any applicable
5 requirements, federal or state or local.

6 MS. HEDMAN: My last question pertains
7 to your Attachment 3 chart. You've laid out
8 there a number of projects expected to be
9 awarded over the next ten years; is that
10 right?

11 MR. ANDES: And where are you
12 referring to?

13 MS. HEDMAN: I'm referring to Page 9
14 of his testimony, Attachment 3, this chart
15 that we've seen repeatedly in different
16 colors.

17 MR. MASTRACCHIO: Yeah, that's the
18 projected capital program expenditure
19 forecast.

20 MS. HEDMAN: I'd like you to turn to
21 Page 43 of the 2008 budget. I'd like to
22 direct your attention to the graph at the top
23 of that page.

24 Does that graph show over a period

1 of ten years how much of the monies that the
2 District expected to spend it actually did
3 spend?

4 MR. MASTRACCHIO: It shows the amount
5 of expenditures and the amount of unexpended
6 appropriations.

7 MS. HEDMAN: And would it be fair to
8 say that in any given year at least a third
9 of what was expected to be spent or
10 appropriated to be spent wasn't spent?

11 MR. ANDES: I think Ms. McGelliott can
12 explain that.

13 MS. MCGELLIOTT: We have to
14 appropriate the entire amount for a capital
15 project. And then because we're on the
16 obligation basis, on January 31st of the
17 year-end, any outstanding obligations get
18 rolled into the next year.

19 It depends on when the work gets
20 completed in these capital projects and when
21 we disburse the money. That's why most of
22 the reason for these gaps is because of the
23 capital improvement bond fund and what we pay
24 out and what we have to encumber. It doesn't

1 happen at the same time.

2 MR. ANDES: So you're appropriating
3 for things that you were not going to spend
4 that year, but you were obligated to spend
5 later?

6 MS. MCGELLIOTT: Right.

7 MS. HEDMAN: But that doesn't account
8 for the entire yellow portion of that?

9 MR. ANDES: I'm sorry, yellow? Your
10 yellow you mean? The unexpended
11 appropriations.

12 MS. MCGELLIOTT: That would be for all
13 of the funds. This is all funds.

14 MS. HEDMAN: Right. But some of the
15 funds are -- in the yellow section are funds
16 that are encumbered for the future years, but
17 not all of that is money that is encumbered
18 for future years, some of it is just not
19 spent; is that correct?

20 MS. MCGELLIOTT: I don't understand
21 the question.

22 MS. HEDMAN: A moment ago you answered
23 the question. You said that some of that or
24 much of that -- I don't recall the phrase you

1 used. You said that some of that is due to
2 the fact that some projects that do not --
3 that some of the monies for a project -- that
4 all of the monies for a project are sometimes
5 appropriated in year one, but they may not be
6 expended until a future year.

7 MS. MCGELLIOTT: Correct.

8 MS. HEDMAN: You said that some of the
9 reasons for the difference here between
10 appropriated funds and expenditures was due
11 to that?

12 MS. MCGELLIOTT: Right.

13 MS. HEDMAN: But not all of it?

14 MS. MCGELLIOTT: Right.

15 MR. ANDES: So what else is in there?

16 MS. MCGELLIOTT: It would be, for
17 example, for our corporate fund, the
18 difference between what we appropriated and
19 what we expended ends up being net assets
20 appropriable, which we appropriate in the
21 next year.

22 MS. HEDMAN: I think that's it.

23 DR. GIRARD: Can I ask a quick
24 question? Looking at the same table here on

1 Page 43, the appropriations and expenditures,
2 1999 to 2008, why is the appropriation for
3 2008 so much higher than the other years,
4 40 percent higher than the other years?

5 MS. MCGELLIOTT: Primarily, because
6 the capital improvement bond fund, the number
7 of projects estimated to be awarded in 2008
8 is that dollar amount. We've got a few very
9 large capital projects that were estimated to
10 be awarded in 2008.

11 DR. GIRARD: Thank you.

12 MR. MELAS: That was on the previous
13 page where we saw the projects. You had
14 something like \$460 million worth of new
15 projects that are all going to be obligated
16 in 2008; isn't that correct? We just saw the
17 number from a previous page.

18 MS. MCGELLIOTT: It's a combination
19 of -- I believe it was Page 357.

20 MR. MELAS: There were a whole list of
21 new projects totaling some 450-some million.

22 MS. MCGELLIOTT: So on Page 357, the
23 estimated awards of \$600 million in 2008 and
24 then we have whatever obligations as of 12/31

1 of the previous year.

2 DR. GIRARD: So the ones that were
3 carried over from '07 you're saying?

4 MS. MCGELLIOTT: Right. The capital
5 improvement bond fund is the only one we can
6 do that way.

7 DR. GIRARD: Thank you.

8 MS. HEDMAN: Actually, that raises one
9 more question in my mind. If we go to --
10 back to your Attachment 3, Mr. Mastracchio.
11 If we look at 2008 what we're seeing there is
12 projects totaling about \$250 million.

13 Now would this just be the amount
14 expended for that year and then -- but more
15 would have been appropriated this year
16 because projects started then would require
17 monies in future years?

18 MR. MASTRACCHIO: Yes.

19 MS. HEDMAN: Okay. Thank you.

20 HEARING OFFICER TIPSORD: I believe
21 that moves us to the Environmental Law and
22 Policy Center's questions for
23 Mr. Mastracchio.

24 MR. ETTINGER: I may wind up changing

1 some of these questions since they were based
2 on a financing model, which it seems the
3 Water Reclamation District doesn't use. So
4 I'll see how we --

5 MR. ANDES: I object to that
6 characterization, but go ahead.

7 MR. ETTINGER: I will see where we go
8 and we may find ourselves off the chart
9 quickly.

10 Number one, what is the analyzed
11 cost of the estimated capital element for
12 disinfection broken down for Stickney, North
13 Side and Calumet sewage treatment plants for
14 ultraviolet disinfection?

15 MR. ANDES: We have a chart. Not a
16 chart, but a --

17 DR. GIRARD: A handout.

18 MR. ANDES: -- handout.

19 HEARING OFFICER TIPSORD: I assume
20 this has been put together for the answer, so
21 let's mark this as Exhibit 163 if there's no
22 objection. Seeing none, it's Exhibit 163.

23

24

1 (Document marked as
2 Exhibit No. 163 for
3 identification,
4 10/28/08.)

5 MR. ETTINGER: May I take Exhibit 163
6 as your answer to my question number one?

7 MR. MASTRACCHIO: Yes.

8 MR. ETTINGER: Question number two,
9 how was the time value of money taken into
10 account in calculating the various capital
11 costs that are presumed by your testimony?

12 MR. MASTRACCHIO: The cost estimates
13 that were prepared by CTE and expressed in
14 2008 dollars were escalated to the --
15 escalated eight years out to the point of
16 construction using an escalation factor.

17 MR. ETTINGER: And what was that
18 escalation factor?

19 MR. MASTRACCHIO: We used an
20 assumption of a 3 percent increase in
21 construction costs per year.

22 MR. ETTINGER: Did you use an interest
23 rate number for that calculation?

24 MR. ANDES: For which calculation?

1 MR. MASTRACCHIO: For the --

2 MR. ANDES: The present value?

3 MR. ETTINGER: For the present value.

4 MR. MASTRACCHIO: We took the 2008
5 dollars, projected them forward using an
6 index in construction costs and did not do
7 anything with it in an interest rate factor
8 for present value calculations. That was not
9 necessary for this particular calculation.

10 MR. ANDES: But I think the questions
11 of present value were answered previously.

12 MR. ETTINGER: I believe so. Is it
13 correct to say that you used the same
14 interest rate as the inflation rate so they
15 countered each other out in terms of looking
16 at an expenditure to be made in 2015?

17 MR. MASTRACCHIO: I didn't use an
18 interest rate, I didn't prepare a discount, I
19 didn't prepare a present value calculation
20 and didn't use an interest rate.

21 MR. ETTINGER: So these are total
22 figures when we look at analyzed capital
23 costs?

24 MR. MASTRACCHIO: Are you asking

1 what --

2 MR. ETTINGER: So you're counting a
3 2015 the same as a 2008 dollar?

4 MR. MASTRACCHIO: What I'm doing here
5 is taking the dollar amount associated with
6 the projected capital costs in the year of
7 construction and determining what the
8 principal and interest payments are assuming
9 certain financing terms and interest rates.
10 That is entirely different than determining
11 what a discount factor would be to compare
12 alternatives.

13 MR. ETTINGER: Yes. And that's what
14 I'm trying to figure out. Let's just use
15 North Side, which has a figure \$10,602,800.
16 Is that the figure you expect to pay each
17 year from the beginning of construction until
18 the end of construction?

19 MR. MASTRACCHIO: No. That's the
20 figure that is expected to be paid from the
21 beginning of the bond amortization term to
22 the end of the bond amortization term, which
23 we had assumed in here would be a 25-year
24 amortization.

1 MR. ETTINGER: Okay. And this --
2 using 25 years, assuming the construction
3 started in 2010 because it makes my math
4 easier, you're counting the dollars in 2035
5 the same as the dollars in 2010?

6 MR. MASTRACCHIO: I have assumed a
7 level debt service payment.

8 MS. WILLIAMS: And can I ask what
9 interest rate you assumed?

10 MR. MASTRACCHIO: Five percent.

11 MS. WILLIAMS: And how does that
12 compare to the state revolving fund interest
13 rate?

14 MR. MASTRACCHIO: I believe the
15 Illinois state revolving fund is currently at
16 3 percent.

17 MS. HEDMAN: And would you be able to
18 speak to the life of the facility compared
19 with the amortization rate or the term for
20 the bond?

21 MR. MASTRACCHIO: Just in general.
22 Wastewater system capital projects consisting
23 of facilities on -- I think in composite have
24 at least a life of 25 years and most likely

1 on aggregate would be longer.

2 MS. HEDMAN: Are any of the facilities
3 that the MWRD operates older than 25 years
4 old?

5 MR. MASTRACCHIO: I haven't looked at
6 that so I don't know.

7 MR. ANDES: Does the standard policy
8 use 25 years for an amortization period?

9 MR. MASTRACCHIO: I think it's common
10 for general obligation bonds to be issued in
11 that 25-year range, yes.

12 MR. ANDES: Thank you.

13 MR. ETTINGER: I think we've answered
14 questions one through four now. And five,
15 the answer is 25 years, correct?

16 MR. MASTRACCHIO: Yes.

17 MR. ETTINGER: Six I'm going to
18 withdraw. Seven and eight I believe have
19 already been answered.

20 Nine, can MWRDGC pay for its
21 existing capital plants without an act of the
22 state legislature or a referendum after 2016?

23 MR. MASTRACCHIO: It's my
24 understanding that the District's authority

1 to issue up to \$150 million in non-referendum
2 bonds during any budget year expires after
3 2016. So to the extent that the District's
4 existing capital plans go beyond 2016 and are
5 financed with bonds, an act of state
6 legislature or a referendum would be
7 required.

8 MR. ANDES: To extend their current
9 authority?

10 MR. ETTINGER: To extend their current
11 authority?

12 MR. MASTRACCHIO: That's correct.

13 MS. WILLIAMS: Or to increase that
14 authority, possibly, right?

15 MR. MASTRACCHIO: Possibly.

16 MR. ETTINGER: Looking now at
17 Attachment 3 of your testimony at Figure 3.3,
18 what does that box 3.3 forecasted debt
19 service compared to debt service extension
20 baseline tell us as to the years 2016 and
21 2017?

22 MR. MASTRACCHIO: What it tells us is
23 that the existing capital program excluding
24 disinfection would result in an anticipated

1 debt service amount, principle -- annual
2 principal and interest payment amount in 2016
3 that is higher than the debt service
4 extension limitation.

5 MR. ETTINGER: Number 10, can MWRDGC
6 pay for completion of the TARP without an act
7 of Congress?

8 MR. MASTRACCHIO: I don't know and I
9 haven't looked at that.

10 MR. ETTINGER: Can MWRDGC complete
11 TARP without an act of the state legislature?

12 MR. MASTRACCHIO: I haven't looked at
13 all the costs necessary to complete TARP.
14 However, on Page 5 of Attachment 7 shows the
15 District's spending plan. And to the extent
16 that that spending plan includes TARP
17 projects that are sufficient to complete
18 TARP, then the District does not need an act
19 of the state legislature.

20 MR. ETTINGER: Question 12, what is
21 the basis for the estimated 2.8 billion
22 estimate of the cost to MWRDGC if effluent
23 nutrient limits are imposed in the future?

24 MR. ANDES: That would be Mr. Kuentz.

1 MR. KUNETZ: These costs are budgetary
2 costs and they were derived through a
3 parametric equation.

4 During the master planning process
5 for the Calumet treatment plant we looked at
6 different alternatives if we were required to
7 do nutrient removal, phosphorous and nitrogen
8 removal.

9 And as I testified yesterday, this
10 was for prudent planning in the event that we
11 needed to reserve space on the site to do so.

12 The same thing for the North Side
13 treatment plant master plan, we looked at
14 what would be the possible technology to meet
15 these limits, we assumed some limits and ran
16 some cost estimates comparing alternative
17 technologies.

18 The cost estimates were budgetary
19 numbers derived for the purposes of comparing
20 various technologies and then determine,
21 well, this would probably be the best
22 technology to use to meet these limits if
23 they were imposed and so that became part of
24 our plan.

1 When the question was raised what
2 would it cost if the District had to go
3 District-wide for nutrient removal? About
4 the only information we had at hand were
5 these cost comparison numbers that we had for
6 the master plan. We took those numbers and
7 extrapolated them on a per gallon -- per
8 million gallon basis, dollars per million
9 gallons.

10 Went up to the Stickney Plant and
11 then down to the smaller plants in size and
12 that's how we came up with the numbers. So
13 they're very rudimentary, extrapolated
14 numbers.

15 MR. ETTINGER: Did you review a study
16 that was done by Dr. Zeis (sic) a few years
17 ago regarding nutrient removal at the
18 Illinois sewage treatment plants in making
19 your current estimate?

20 MR. KUNETZ: I did not.

21 MR. ANDES: Dr. Zeis for whom?

22 MR. ETTINGER: Our witness yesterday.

23 MS. WILLIAMS: Zenz.

24 MR. ETTINGER: Zenz. I'm sorry. I

1 misspoke. It may have affected your answer
2 to the question.

3 Did you review a study that was
4 done by Dr. Zenz in preparing your estimate
5 of nutrient costs?

6 MR. KUNETZ: I did not.

7 MR. ANDES: Is there other information
8 that you did review in assessing nutrient
9 costs?

10 MR. KUNETZ: I did.

11 MR. ANDES: We have several documents
12 to add to the record. The first one is
13 entitled POTW Nutrient Removal in Illinois,
14 Illinois Association of Wastewater Agencies
15 2003 Study Summary.

16 HEARING OFFICER TIPSORD: Thank you.
17 If there is no objection, we'll mark the
18 document as described as Exhibit 164. Seeing
19 none, it's Exhibit 164.

20 (Document marked as
21 Exhibit No. 164 for
22 identification,
23 10/28/08.)

24 MR. ANDES: The second document is

1 entitled Analysis of Nutrient Removal Costs
2 in the Chesapeake Bay Program and
3 Implications for the Mississippi-Atchafalaya,
4 A-T-C-H-A-F-A-L-A-Y-A, River Basin Submitted
5 Water Environment Federation, the 2008
6 Weftech conference in Chicago, Illinois.

7 HEARING OFFICER TIPSORD: If there's
8 no objection, we'll mark the document as
9 described as Exhibit 165. Seeing none, it's
10 Exhibit 165.

11 (Document marked as
12 Exhibit No. 165 for
13 identification,
14 10/28/08.)

15 MR. ANDES: The third document is
16 titled Public Commentary Submitted to the
17 Science Advisory Board, Hypoxia Advisory
18 Panel, Draft Advisory Report, submitted by
19 O'Brien & Gere, G-E-R-E, September 20th,
20 2007.

21 HEARING OFFICER TIPSORD: If there's
22 no objection, we'll mark the document as
23 described as Exhibit 166.

24 MR. ETTINGER: I don't object, but I

1 am a little confused. Were any of these
2 documents considered in connection with your
3 \$2.8 billion estimate or are they simply
4 documents that Mr. Andes has located that he
5 thought would be of interest on this subject?

6 MR. KUNETZ: The documents were not
7 used to derive the \$2.8 million. One of the
8 documents was used as a check to see if that
9 \$2.8 million in an order of magnitude seemed
10 to be reasonable.

11 MR. ETTINGER: Which document was
12 that?

13 MR. KUNETZ: Refer to the Public
14 Commentary Submitted to the Science Advisory
15 Board, Hypoxia Advisory Panel, Draft Advisory
16 Report submitted by O'Brien & Gere,
17 September 20th, 2007.

18 HEARING OFFICER TIPSORD: Which if
19 there's no objection, we'll mark that as
20 Exhibit 166.

21 (Document marked as
22 Exhibit No. 166 for
23 identification,
24 10/28/08.)

1 MR. ANDES: I believe one of the other
2 documents contain similar information also
3 from O'Brien & Gere.

4 MR. ETTINGER: I believe also that
5 this study, the Illinois Association of
6 Wastewater Agency's study, Exhibit 164, is a
7 summary of the Zenz study.

8 MR. ANDES: I believe that's right.

9 MR. ETTINGER: That I mentioned
10 earlier.

11 MR. ANDES: Yes.

12 MR. ETTINGER: One last question.
13 Given the tightness of your ability to raise
14 money as opposed -- in comparison with the
15 current capital planning costs of the Water
16 Reclamation District, would it be accurate to
17 say that a requirement to remove nutrients
18 from MWRD sewage treatment plants would also
19 require that the MWRD go to state legislature
20 to get new authority?

21 MR. MASTRACCHIO: Yes, I would think
22 that would be accurate.

23 MR. ANDES: If I can follow-up on
24 that? I believe this is Attachment 5 to the

1 testimony.

2 HEARING OFFICER TIPSORD: Since this
3 is already an attachment to his testimony, we
4 won't mark it as another exhibit. It's
5 Exhibit 5 to Mr. Mastracchio's testimony.

6 MR. ANDES: Mr. Mastracchio, if you
7 could explain what this exhibit is about?

8 MR. MASTRACCHIO: Sure.

9 HEARING OFFICER TIPSORD: For those of
10 you who can't hear, we have a baby crying out
11 here so remember to keep your voices up.

12 MR. MASTRACCHIO: This exhibit shows
13 the comparison of the District's forecast of
14 aggregate levy and debt service and capital
15 improvement bond fund in comparison to the
16 tax cap limitations and bonding authority,
17 including UV disinfection costs.

18 So in the top chart here, you can
19 see in the orange are the progress to meet
20 proposed standards and the impact that they
21 would have on the bond fund cash balance.

22 The second chart shows the
23 aggregate levy, excluding debt service and
24 storm water costs in comparison to the

1 limitation, which shows the projection being
2 higher than the limitation.

3 And the third exhibit shows the
4 debt service, the projected principal and
5 interest payments associated with funding the
6 capital projects associated with the proposed
7 UV disinfection standards and in comparison
8 to the annual debt service limitation. And
9 it shows the projection of debt service to be
10 higher than that limitation.

11 MR. ANDES: And that doesn't account
12 for additional nutrient control that
13 Mr. Ettinger just talked about?

14 MR. MASTRACCHIO: It does not.

15 MR. ANDES: That would move the curves
16 and numbers up even higher?

17 MR. MASTRACCHIO: That's correct.

18 MR. ANDES: And would result in
19 exceeding the tax cap limitations earlier?

20 MR. MASTRACCHIO: Depending upon when
21 that \$2.8 billion would need to be spent, but
22 yes.

23 MR. ETTINGER: And when does this
24 assume that work would begin on UV

1 disinfection?

2 MR. MASTRACCHIO: When you say work,
3 you mean construction of the projects or do
4 you mean design?

5 MR. ETTINGER: Anything.

6 MR. MASTRACCHIO: We show in here
7 design starting in 2011, going for
8 two-and-a-half years and then construction
9 starting in 2014 and ending in 2016. And I
10 think that overall it's an eight-year period.

11 MR. ANDES: And if I ask Mr. Kunetz,
12 in terms of the \$2.8 billion nutrient
13 control, your review of the O'Brien & Gere
14 information report indicates that number
15 could be higher?

16 MR. KUNETZ: It does. The O'Brien &
17 Gere report that I referred to earlier took a
18 look at the costs for attaining nutrient
19 limits in the Chesapeake Bay area that the
20 cost of the POTWs in the area had to expend
21 to upgrade their plants to meet the limits.

22 They came up with a dollars per
23 gallon treatment cost of \$8.20 per gallon per
24 day treatment cost. If you multiply that out

1 times the design average flows of all the
2 district's treatment plants, it comes up to
3 \$16 billion. So I was using that as a check
4 to see if the \$2.8 billion we had estimated
5 seemed reasonable.

6 MR. ANDES: Now it seems low?

7 MR. KUNETZ: It seems low compared to
8 the O'Brien & Gere study.

9 HEARING OFFICER TIPSORD: Which is
10 Exhibit 166.

11 MR. KUNETZ: Yes.

12 MR. ETTINGER: We were just given
13 this. Do you know what nutrient levels they
14 assumed in the O'Brien & Gere study?

15 MR. KUNETZ: I would have to spend a
16 few seconds --

17 MR. ETTINGER: Well, we can all read
18 the study and we'll figure out what numbers
19 it was based on.

20 MR. ANDES: Probably no less stringent
21 than the numbers in the Environmental Group's
22 petition on the Mississippi River watershed,
23 though.

24 MR. ETTINGER: I hope they're at least

1 that strict since our petition was namby
2 pamby compared to the what EPA Science
3 Advisory BOARD suggested.

4 MR. ANDES: We won't agree on that,
5 but...

6 MR. ETTINGER: However, I would ask,
7 again, with regard to exhibit -- this is
8 Exhibit 5 to Mr. Mastracchio's testimony, is
9 that correct, this document that you now have
10 up here?

11 MR. ANDES: Attachment 5.

12 MR. ETTINGER: As I understand it,
13 Exhibit 5-3 indicates that you would have to
14 go to the state legislature before 2014 to
15 avoid exceeding your debt service
16 limitations; is that correct?

17 MR. MASTRACCHIO: Yes.

18 MR. ETTINGER: So if we build the
19 disinfection, we have to go before 2014. If
20 we don't, we have to go to the legislature by
21 2016?

22 MR. MASTRACCHIO: I think that's
23 correct.

24 MR. ETTINGER: Thank you.

1 MR. ANDES: If the disinfection
2 facilities had to be built not in 2016, but
3 as proposed in the regulation in 2011, that
4 would move everything up considerably; am I
5 right?

6 MR. MASTRACCHIO: Yes, it would.

7 MR. ANDES: If you added in the 16
8 billion or so in nutrient controls having to
9 be built in the same relevant time frame,
10 that would move everything up -- assuming
11 that it was some time during this time period
12 that the money had to be expended, would it
13 move all these numbers up and probably hasten
14 the time when you'd have to go to the
15 legislature?

16 MR. MASTRACCHIO: I would agree with
17 that, yes.

18 MR. ETTINGER: Now we're talking about
19 my wildest dreams. I have no further
20 questions.

21 HEARING OFFICER TIPSORD: Does anyone
22 else? Ms. Hedman.

23 MS. HEDMAN: I do have one question
24 and this may be -- yesterday we went through

1 an attachment to your testimony that listed
2 non-master plan projects; is --

3 MR. KUNETZ: Yes.

4 MS. HEDMAN: -- that correct?

5 And you said that's something that
6 you prepare annually?

7 MR. KUNETZ: Yes.

8 MS. HEDMAN: Actually, following up on
9 a question, the Commissioner asked about the
10 large increase in projects that occurred --
11 or appropriations that occurred in 2008.

12 MR. KUNETZ: Okay.

13 MS. HEDMAN: Would you be able -- and
14 you may not be able to tell me now. But if
15 not, could you prepare an exhibit that would
16 show the total amount of projects on the
17 non-master plan list for each year from, say,
18 2004 to the present, 2005 to the present? I
19 believe that's when the first master plan was
20 completed.

21 MR. KUNETZ: Yes, it's possible.

22 MS. HEDMAN: That would be very
23 helpful.

24 HEARING OFFICER TIPSORD: Anything

1 further? Thank you very much. Let's go off
2 the record for just a second.

3 (Whereupon, after a short
4 break was had, the
5 following proceedings
6 were held accordingly.)

7 HEARING OFFICER TIPSORD: I have
8 before me a motion to allow Mr. Granato to
9 read his testimony into the record. Is there
10 any objection to that motion, any comment?

11 Given the time, I will allow
12 Mr. Granato to read his recreational uses and
13 standards testimony into the record. Let's
14 have him sworn in, please.

15 (Witness sworn.)

16 HEARING OFFICER TIPSORD:
17 Mr. Ettinger.

18 MR. ETTINGER: I guess I was just
19 going to ask what the nature of this
20 testimony is? There are a lot of statements
21 made here that I would -- that maybe
22 Mr. Granato knows the facts that supports all
23 these statements, and that's possible. But
24 that will lead us to have much more than an

1 hour here.

2 Some of other statements seem to
3 be more in the nature of a summary of what
4 other witnesses have said in the past. I'm
5 pleased to let Mr. Granato provide this
6 summary if that's what he's purporting to do.
7 But I want to know going in whether I'm
8 supposed to ask as to all of these facts here
9 as though he was the expert testifying as,
10 for example, disinfection practices in
11 Western Europe or whether he is summarizing
12 his understanding of the testimony that's
13 already been given in the record.

14 MR. ANDES: I think, at the most, with
15 respect to summarizing testimony already
16 given.

17 MR. ETTINGER: Okay. Thank you. With
18 that understanding, I guess we'll hear the
19 summary.

20 HEARING OFFICER TIPSORD: Go ahead,
21 Mr. Granato.

22 MR. GRANATO: My name is Thomas
23 Granato and I am the assistant director of
24 research and development managing the

1 environmental monitoring and research
2 division at the Metropolitan Water
3 Reclamation District of Greater Chicago.

4 I have been employed by the
5 District for over 20 years and have held
6 progressively responsible positions including
7 head of the biosolids utilization and soil
8 science section and coordinator of technical
9 services.

10 I have been assistant director of
11 R&D for the past three-and-one-half years.
12 The EM&R division houses the District's
13 wastewater treatment process research
14 section, the biosolids utilization and soil
15 science section, the analytical microbiology
16 and bio-monitoring section, the aquatic
17 ecology and water quality section, and the
18 radiochemistry section which collectively
19 housed approximately 70 environmental
20 scientists and engineers, soil scientists,
21 biologists, microbiologists, chemists,
22 radiation chemists, biostatisticians and
23 other technical personnel.

24 Over this time period I have been

1 directly involved in planning, development,
2 management and administration of the many
3 research studies that the District has
4 undertaken to support the Chicago Area
5 Waterways Use Attainability Analysis.

6 I hold a bachelor of science
7 degree in agricultural science and a master
8 of science degree in soil chemistry from the
9 University of Illinois at Urbana-Champaign
10 and a doctor of philosophy degree in
11 environmental soil science from North
12 Carolina State University.

13 I am a member of the Water
14 Environment Federation, the American Chemical
15 Society, the Soil Science Society of America
16 and the American Society of Agronomy. I have
17 been a managing editor of water environment
18 research for the past two years. I have
19 published over 50 research articles and
20 reports pertaining to biosolids management,
21 risk assessment, water quality and other
22 areas of environmental science.

23 This testimony summarizes and
24 concludes the District's testimony on

1 recreational use issues for the Chicago Area
2 Waterway System.

3 The District believes the Illinois
4 Environmental Protection Agency relied on
5 incorrect assumptions and incomplete
6 information to reach faulty conclusions
7 regarding recreational use designations and
8 associated standards for the CAWS. CAWS is
9 the acronym for the Chicago Area Waterways
10 System.

11 Instead of pursuing this
12 rulemaking now, IEPA should wait for
13 necessary studies being conducted by the
14 District to be concluded. These studies will
15 provide essential information to make
16 scientifically supported decisions regarding
17 appropriate water quality standards for the
18 CAWS.

19 However, if the rulemaking does
20 move forward at this time before the studies
21 are complete, the District urges significant
22 revisions to assure that the recreational use
23 designations and criteria for the CAWS are
24 technically and legally supportable.

1 The District participated in and
2 supported the UAA study by providing
3 technical information on the potential
4 recreational use classification for the CAWS.

5 IEPA and the District agreed that
6 a thorough understanding of the CAWS is
7 required before scientifically sound
8 recommendations concerning the recreational
9 use potential and associated protective
10 standards can be established given the unique
11 man-made and altered waterways of the CAWS.

12 IEPA requested that the District
13 undertake and support a structured scientific
14 assessment approach designed to evaluate the
15 need and, if necessary, provide the basis for
16 generating numeric water quality standards
17 for the proposed recreational use
18 designations.

19 To assist IEPA in making this
20 determination and at the Agency's request,
21 the District initiated a multi-phrase
22 research program and has invested substantial
23 funds, over \$10 million, on expert studies
24 that can produce meaningful recommendations

1 for a systematic technical and scientific
2 assessment of recreational health risks to
3 protect the identified uses of the CAWS.

4 The key focus in this
5 comprehensive research program is the
6 assessment of the risks to human health for
7 the identified recreational uses relative to
8 the current practice of not disinfecting the
9 effluents that discharge to the CAWS, as well
10 as a structured scientific assessment to
11 generate data and information upon which
12 science-based water quality criteria can be
13 derived.

14 However, instead of waiting for
15 the conclusions of this scientific
16 assessment, which is well under way, IEPA is
17 proposing to revise recreational designated
18 uses for the CAWS and to impose
19 technology-based effluent standard for
20 treated wastewater.

21 The District disagrees with the
22 decision by IEPA not to wait for the results
23 from the structured scientific assessment
24 approach which it supported and asked the

1 District to undertake.

2 However, if this rulemaking moves
3 forward before completion of the scientific
4 assessment, the District makes the following
5 recommendations concerning specification of
6 recreational uses and standards.

7 Recreational uses: In the
8 proposed rulemaking, most waterways in the
9 CAWS have been designated for incidental
10 contact recreation. Incidental contact
11 recreation includes fishing, commercial
12 boating, small craft recreational boating and
13 any limited contact associated with shoreline
14 activity such as wading.

15 However, the CAWS presents many
16 safety issues that may render contact
17 recreational activities such as swimming,
18 wading and hand-powered boating hazardous to
19 individuals. The man-made waterways do not
20 have a substantial shallow area along the
21 banks, the depths drop off very rapidly, the
22 banks are lined with high vertical sheet
23 piling or large limestone rocks, periodic
24 drawdowns of water levels cause unexpected,

1 rapid increases in stream velocity and there
2 is frequent barge and large power boat
3 traffic. These safety factors are persuasive
4 grounds for restricting primary and
5 incidental contact recreational activities
6 such as swimming, wading and hand-powered in
7 the CAWS.

8 Non-contact recreation is defined
9 in Section 301.323 of the IEPA's regulatory
10 proposal as any recreational activity in
11 which human contact with the water is
12 unlikely, such as pass through commercial or
13 recreational navigation and where physical
14 conditions or hydrologic modifications make
15 human contact unlikely or dangerous.

16 The physical limitations and
17 hydrological modifications of the CAWS make
18 this category more appropriate for the CAWS
19 than incidental contact recreation.

20 Based on the physical hazards they
21 present, the District proposes that the
22 following waterways be designated for
23 non-contact recreation contrary to the
24 proposed standards: The Chicago Sanitary and

1 Ship Canal from the South Branch of the
2 Chicago River to the junction with the
3 Calumet-Sag Channel, the entire Calumet-Sag
4 Channel, the Chicago River and the South Fork
5 of the South Branch of the Chicago River
6 referred to as Bubbly Creek.

7 Recreational standards: The
8 District is confident that the weight of
9 scientific evidence against the proposed 400
10 fecal coliform CFU per 100 mL -- that's
11 colony forming units, acronym -- per 100
12 milliliter effluent standard is clear and
13 overwhelming. To provide confidence in any
14 decision-making regarding disinfection
15 requirements, multiple lines of scientific
16 evidence must be considered collectively.

17 On the basis of the District's
18 systematic technical and scientific
19 assessment of the CAWS as summarized in the
20 testimony presented by those before me, these
21 lines of evidence include the following:

22 One, the microbial risk assessment
23 report concluded that low pathogen levels in
24 the District's plant effluents and in the

1 CAWS downstream of the plants mean there is
2 minimal risk for gastrointestinal illness
3 associated with recreational use of the CAWS.

4 Furthermore, the presence of
5 pathogens is mainly due to secondary loading
6 of the waterway under wet weather conditions
7 from CSOs and other discharges. The
8 microbial risk assessment report also
9 concluded that disinfection of effluent from
10 the water reclamation plants will have
11 minimal effects on overall recreational
12 illness rates.

13 Two, the District's
14 epidemiological study will not be completed
15 until 2010, and undertaking this rulemaking
16 prior to completion of this study is
17 premature. The District's epidemiology study
18 is necessary to develop science-based
19 criteria for incidental contact activities.

20 Three, disinfection to reduce
21 fecal coliform from wastewater effluent
22 discharges is not justified when much higher
23 concentrations of fecal coliform are
24 regularly introduced into the CAWS by

1 tributary flows and during wet weather.

2 A District report concluded that
3 disinfection during wet weather would not
4 improve the microbiological water quality in
5 the CAWS downstream of the District's water
6 reclamation plants in terms maintaining less
7 than 400 fecal coliform CFU per hundred mL.

8 Results from the UAA study also
9 indicate that fecal coliform densities
10 upstream of the reclamation plants and in
11 major tributaries to the CAWS were well above
12 the proposed 400 fecal coliform CFU per 100
13 mL effluent standard, indicating that the
14 proposed effluent standard could not be
15 attained in the CAWS even if the reclamation
16 plants met the proposed effluent standard.

17 Previous testimony regarding the
18 risk assessment study indicated that fecal
19 coliform were not well correlated with
20 presence of pathogens.

21 Four, over the past 23 years
22 wastewater discharges have received secondary
23 treatment but have not been disinfected, and
24 there have been no documented public health

1 outbreaks resulting from recreational use of
2 the CAWS.

3 As Dr. Blatchley presented in his
4 testimony, this is not surprising considering
5 the experience of many other developed
6 countries. In most countries of western
7 Europe, wastewater disinfection is practiced
8 only at facilities where effluent discharged
9 to a public swimming area or where other
10 opportunities for direct human contact are
11 likely, for example, shellfish breeding
12 grounds.

13 Despite the fact that effluent
14 disinfection is uncommon in Europe, the
15 incidence of diseases associated with
16 waterborne pathogens among the residents of
17 these countries does not appear to be
18 substantially different than in the U.S.

19 Five, the proposed effluent
20 standard is normally applied to treated
21 wastewater effluents discharged to receiving
22 waters that may be used for drinking water
23 supply, swimming or shellfishing. However,
24 IEPA has concluded that primary contact

1 recreation is not an attainable use in the
2 CAWS and that the CAWS is not a drinking
3 water or shellfishing source. Therefore, the
4 proposed disinfection requirements should not
5 be applied to CAWS dischargers.

6 Six, US EPA's monitoring methods
7 detect traditional fecal indicators that are
8 not always associated with health risks.
9 Although presence of these indicator
10 organisms can initiate management actions,
11 sound science does not justify such actions
12 for the CAWS.

13 The report of the Experts
14 Scientific Workshop on Critical Research
15 Needs For the Development of New Or Revised
16 Recreational Water Quality Criteria
17 recommended that monitoring tools for
18 bacteria should be reflective of health
19 risks.

20 The current rulemaking addresses
21 fecal coliform bacteria which have been
22 determined by US EPA to be poor predictors of
23 the presence or concentration of pathogens in
24 water.

1 It is essential that the microbial
2 standards for water be reasonably and
3 adequately protective of human health in
4 light of the substantial capital expenditure
5 that may be required to bring the CAWS into
6 regulatory compliance.

7 Seven, there is evidence that no
8 disinfection technology can offer a
9 100 percent guarantee of safe recreational
10 water. Studies have found that although
11 bacterial indicators are significantly
12 reduced by disinfection, there is no clear
13 indication that pathogens are also
14 significantly reduced, particularly viruses.

15 The infrastructure expenditure
16 necessary to achieve a particular effluent
17 fecal coliform level is not an efficient or
18 productive use of limited public resources.

19 Eight, the District's Stickney,
20 Calumet and North Side reclamation plants
21 provide treated wastewater of exceptional
22 quality. The District is addressing the
23 current and future needs of the plants for
24 handling wet weather flow.

1 The District has also instituted
2 an effective research program to determine
3 the health risks and to study potential
4 public health issues for the CAWS.

5 The risk assessment study found
6 that the risks associated with incidental
7 contact recreational practices on the CAWS
8 are below the most conservative risk
9 threshold that US EPA applies to criteria for
10 primary contact recreation.

11 IEPA acknowledges that the results
12 of the CAWS epidemiological study, which is
13 well underway, will provide the necessary
14 scientific basis for protective bacterial
15 water quality standards for the CAWS.

16 Nine, the costs associated with
17 effluent disinfection are extraordinary,
18 particularly considering the limited benefit.
19 For example, installation and operation of UV
20 disinfection technology, which currently
21 represents the most likely choice for
22 implementation at the District's North Side,
23 Calumet and Stickney plants is estimated at a
24 total present worth cost of \$919.6 million.

1 Chlorination/dechlorination would result in
2 similar costs to the District.

3 Based upon the District's
4 limitations and restrictions on generating
5 revenues to fund programs, funding such an
6 expenditure would require legislature action,
7 a voter referendum or significantly reducing
8 funding of existing District programs.

9 Ten, finally, effluent
10 disinfection will result in substantial
11 environmental impacts in the form of energy
12 usage, air emissions from power generation
13 and transportation of raw and waste materials
14 and land usage. These environmental impacts
15 must be weighed when considering the
16 appropriateness of disinfection requirements.

17 Conclusion, as established by the
18 preceding testimony by the District's
19 witnesses, IEPA's tentative conclusions in
20 the Statement of Reasons are not supported by
21 sound science and are often arbitrary,
22 speculative or not rationally related to the
23 information necessary to establish
24 appropriate recreational uses and supporting

1 criteria.

2 The District, partly at IEPA's
3 request, has undertaken an expeditious and
4 systematic program of study to generate the
5 scientific information necessary to
6 understand the public health uncertainties in
7 the CAWS.

8 Given the enormous capital costs
9 that will be required to meet the proposed
10 effluent standards and the apparent low risk
11 that currently exists for recreational users
12 of the CAWS, it would be most prudent to base
13 the final rulemaking on the completed program
14 of study.

15 For these reasons, the District
16 strongly recommends that the IPCB, Illinois
17 Pollution Control Board, consider delaying
18 the establishment of new recreational uses
19 and the technology-based effluent
20 disinfection requirement.

21 If the rulemaking proceeds, we
22 recommend that those parts of the CAWS as
23 previously stated, including the Chicago
24 Sanitary and Ship Canal from the South Branch

1 of the Chicago River to the junction with the
2 Cal-Sag Channel, the entire Calumet-Sag
3 Channel, the Chicago River and the South Fork
4 of the South Branch of the Chicago River,
5 which is referred to as Bubbly Creek, be
6 designated for non-contact recreation and
7 that the requirement to disinfect be removed
8 as unsupported.

9 Respectfully submitted, Tom
10 Granato.

11 HEARING OFFICER TIPSORD: Thank you.
12 I believe we start with the IEPA.

13 MR. ANDES: Do you need a copy of the
14 testimony?

15 HEARING OFFICER TIPSORD: No, that's
16 okay. He's read it in so won't mark it as an
17 exhibit.

18 MS. WILLIAMS: Good afternoon,
19 Dr. Granato. I'm going to start with my
20 pre-filed questions and those questions are
21 broken up into aquatic life uses first and
22 then recreational, so for the benefit of the
23 court reporter it's Page 29 of our pre-filed
24 questions where the recreational use

1 questions start.

2 The first question refers to Page
3 2 of your pre-filed testimony and it asks
4 what necessary studies are you referring to
5 on Page 2 of your testimony? And to be more
6 specific, I'm looking in the first full
7 paragraph, the third sentence, instead of
8 pursuing this rulemaking now, IEPA should
9 wait for necessary studies being conducted by
10 the District.

11 MR. GRANATO: Primarily, the studies
12 I'm referring to are the quantitative microbial
13 risk assessment, which has been completed,
14 and the -- I guess I'm going to refer to it
15 as CHEERS because it's easier, this is the
16 University of Illinois epidemiologic study.
17 CHEERS stands for the Chicago Health,
18 Environmental Exposure and Recreation Study.

19 MS. WILLIAMS: So those are the two
20 you're referring to?

21 MR. GRANATO: Yes.

22 MS. WILLIAMS: And one of those is
23 already completed, correct?

24 MR. GRANATO: That's correct.

1 MS. WILLIAMS: So if the Board were to
2 wait for the CHEERS study to be completed,
3 how long would that delay this rulemaking?

4 MR. ANDES: Well, to answer that
5 doesn't he need to know how long it's going
6 to take regardless of that?

7 MS. WILLIAMS: I'm just asking him
8 when the CHEERS study will be completed.

9 MR. GRANATO: I can tell you when it
10 will be. We are anticipating it to be
11 completed in the year 2010 around mid year.

12 MS. WILLIAMS: So if this rulemaking
13 is still going on in 2010, it won't delay it
14 at all?

15 MR. ANDES: There you go.

16 MS. WILLIAMS: Okay. Great. That's
17 reassuring.

18 MR. ANDES: Glad to help.

19 MS. WILLIAMS: On Page 2 you state
20 that the Agency, quote, requested that the
21 District undertake and support a structured
22 scientific assessment approach designed to
23 evaluate the need and, if necessary, provide
24 the basis for generating numeric water

1 quality standards for the proposed
2 recreational use designations, unquote.

3 What do you mean by a structured
4 scientific assessment approach in this
5 sentence?

6 MR. GRANATO: Basically, what I mean
7 by that is a structured scientific assessment
8 approach would include defining and
9 designating the uses, assessing existing
10 water quality criteria for developing water
11 quality standards for designated uses in the
12 CAWS, determining the risk for designated
13 recreational use, evaluate whether new
14 criteria are necessary to protect the
15 designated uses, calculate protective water
16 quality standards, if necessary, and
17 determine whether the uses are attainable,
18 for instance, during wet weather, non-point
19 source impacted conditions.

20 MS. WILLIAMS: So of those elements
21 that you've described, explain to me what's
22 not present and what we're doing in this
23 proceeding.

24 MR. GRANATO: In terms of the proposal

1 that you submitted?

2 MS. WILLIAMS: Yes. I take that back.
3 Not just in terms of that. In terms of the
4 proposal submitted or the additional
5 testimony that the District has provided to
6 the Board as part of this proceeding to help
7 their decision making. What's missing?

8 MR. ANDES: What's missing when you
9 consider all the information that has been
10 put forward?

11 MS. WILLIAMS: On recreational uses at
12 this point.

13 MR. GRANATO: Well, basically, the one
14 outstanding piece of information, as we just
15 pointed out in the previous question, is the
16 CHEERS study which will be needed to complete
17 our determination of risk and, also, our
18 evaluation of whether new criteria will be
19 necessary to protect the designated uses
20 and, also, will be needed if it is necessary
21 to calculate protective water quality
22 standards.

23 MS. WILLIAMS: Okay. So the CHEERS
24 study is not necessary, though, to designate

1 recreational uses then, is it?

2 MR. GRANATO: The CHEERS study will be
3 helpful in assessing whether the recreational
4 uses were appropriately designated because
5 the CHEERS study includes an exposure study
6 which will give us more information about
7 whether uses that you have grouped into
8 incidental contact recreation, for instance,
9 do, in fact, have similar type of exposure.

10 In other words, what we're now
11 calling limited contact recreation was really
12 lumped together based on a best guess that
13 those activities result in similar exposure
14 to water contact exposure.

15 This study will enable us to begin
16 to quantify the actual exposure and to
17 determine whether it was appropriate to lump
18 those activities under the same use.

19 MS. WILLIAMS: Can you explain -- I
20 want to move on to question 12 because I
21 think it follows from what we're talking
22 about here.

23 Can you explain what you mean when
24 you say on Page 7, quote, IEPA acknowledges

1 that the results of the CAWS epidemiological
2 study, which is well underway, will provide
3 the necessary scientific basis for protective
4 bacterial water quality standards for the
5 CAWS?

6 Can you he explain when or where
7 the IEPA acknowledged this?

8 MR. GRANATO: This is question 12?
9 I'm sorry, I was thumbing through here.

10 MS. WILLIAMS: Uh-huh.

11 MR. GRANATO: Yeah. I've outlined a
12 few citations in the Statement of Reasons on
13 Page 42. It states, the Agency recommends to
14 defer setting numerical standards for
15 bacterial parameters for all three of the
16 proposed recreational use designations
17 proposed pending completion of additional
18 scientific evaluations.

19 It then goes on on Page 44 of the
20 Statement of Reasons to state, to fill the
21 void in scientific knowledge and lack of
22 federal criteria recommendations for
23 non-primary contact recreational, MWRDGC has
24 commissioned an epidemiologic study of health

1 risks and illness incidences associated with
2 current recreational activities in the CAWS.

3 Then the Statement of Reasons goes
4 on to outline and discuss the Quantitative
5 Microbial Risk Assessment Study that
6 Geosyntec Consultants conducted and
7 summarized a discussion with the following on
8 Pages 45 to 46 of the Statement of Reasons.

9 In summary, the recreational use
10 components of this proposal include
11 designation of non-contact and incidental
12 contact recreational activities with
13 technology-based disinfection requirements
14 for treated domestic wastewater and deferral
15 of a numeric bacteria standard until
16 scientific studies currently underway yield a
17 defensible and meaningful bacterial parameter
18 and numeric value.

19 MS. WILLIAMS: So when that statement
20 says scientific study currently underway,
21 you're taking that to mean the CHEERS study?

22 MR. GRANATO: Yes.

23 MS. WILLIAMS: It could also mean
24 studies being conducted by US EPA, correct?

1 MR. GRANATO: Could mean that, yes.

2 MR. ANDES: Are there any current
3 studies on the way about limited contact
4 recreation?

5 MR. GRANATO: Not that I'm aware of,
6 no.

7 MS. WILLIAMS: So is it your opinion,
8 Mr. Granato, that the CHEERS study will tell
9 us what the appropriate indicator bacteria
10 should be or what the appropriate water
11 quality standards should be?

12 MR. GRANATO: The CHEERS study, first
13 and foremost, will tell us whether the
14 designated uses are appropriate and are
15 currently being attained.

16 In the event that it's necessary
17 to set protective standards, the study is set
18 up to generate information that can be used
19 to undertake that.

20 MS. WILLIAMS: So when you say the
21 current -- the uses are being -- I'm not sure
22 I'm quite following. So, for example,
23 Dr. Dorevitch sends his researchers out, I
24 understand they're recording uses that are

1 occurring in the places that they are
2 observing, but they're not making an effort
3 to observe every reach of the system, are
4 they?

5 MR. GRANATO: Well, they're going out
6 to all the major points of entry,
7 recreational points of entry where there is
8 significant volume use.

9 MS. WILLIAMS: Do you know if they're
10 observing anywhere on the Sanitary and Ship
11 Canal?

12 MR. ANDES: I think we'll have to go
13 back to Dr. Dorevitch's testimony.

14 MR. GRANATO: I'm not certain. They
15 probably have, but I don't think it's a
16 regular --

17 MS. WILLIAMS: Do you recall -- you've
18 been here for most of the testimony?

19 MR. GRANATO: Yes, I have.

20 MS. WILLIAMS: Do you recall when
21 Dr. Dorevitch testified he never heard of the
22 boat launches at Western Avenue?

23 MR. GRANATO: I don't recall that.

24 MS. WILLIAMS: Let's flip back to

1 question number three and work through from
2 there. On Page 3, Paragraph 2 of your
3 testimony you state, quote, CAWS presents
4 many safety issues that may render contact
5 recreational activities such as swimming,
6 wading and hand-powered boating hazardous to
7 individuals. What type of hazards are you
8 referring to here?

9 MR. GRANATO: I'll run through them
10 and as I'm doing that also answer your second
11 question about where they occur.

12 MS. WILLIAMS: If that makes it easier
13 for you to answer, that's fine.

14 MR. GRANATO: Basically, this is a
15 summary of Dr. Dennison's testimony. The
16 first hazard is that man-made and modified
17 waterways do not have shallow areas along the
18 banks and the depth along the banks increases
19 very rapidly proceeding away from the sides
20 of the waterways, this is in addition to deep
21 deposits the soft sediments posing a drowning
22 hazard. This occurs on the North Branch of
23 the Chicago River, the Chicago River, the
24 South Branch of the Chicago River, South Fork

1 of the South Branch of the Chicago River,
2 Chicago Sanitary & Ship Canal, Cal-Sag
3 Channel and Calumet River.

4 The second hazard is banks are
5 lined with high vertical sheet piling --

6 MS. WILLIAMS: Can you answer part B
7 then, since you just referred to that part?
8 Part B says is the Cal-Sag Channel devoid of
9 shallow areas along the banks? I think you
10 were just referring to this issue there.

11 MR. GRANATO: Okay. No, I don't think
12 it's devoid, but the shallow areas that exist
13 are not substantial or typical.

14 MS. WILLIAMS: Okay.

15 MR. GRANATO: Second hazard, as I
16 said, was that the banks are lined with high
17 vertical sheet piling and large limestone
18 rocks which present few or no points of
19 egress along large stretches of the CAWS.

20 This is found along the Chicago
21 Sanitary and Ship Canal, South Branch of the
22 Chicago River, the Chicago River, the Little
23 Calumet River, Calumet-Sag Channel, North
24 Branch of the Chicago River, South Fork of

1 the South Branch Chicago River and the
2 Calumet River.

3 Third hazard is periodic drawdowns
4 of the water level cause unexpected rapid
5 increase in stream velocity. This can occur
6 throughout the system.

7 Fourth hazard is there's a large
8 number of commercial barge and large private
9 power boats operating in the CAWS. This can
10 be found on the North Branch of the Chicago
11 River south of Webster, Chicago River, South
12 Branch Chicago River, Chicago Sanitary and
13 Ship Canal, Calumet-Sag Channel, Little
14 Calumet River and Calumet River.

15 And then there's also turbulence
16 due you to instream aeration stations on the
17 North Shore Channel and the North Branch
18 Chicago River. And many of these
19 observations are supported by discussion in
20 the UAA report description of various
21 reaches.

22 MS. WILLIAMS: And I think in 3C, I
23 think, there's an item that I don't recall
24 any of the witnesses being able to quantify

1 up until now. The question asks what are the
2 velocity -- with regard to the drawdowns and
3 changes in the velocity, what are the
4 velocities and how do these velocities
5 present a hazard to recreational uses? Do
6 you have any factual information or data
7 related to that issue?

8 MR. GRANATO: I do have some, yes.

9 MS. WILLIAMS: Go ahead and explain
10 what that is.

11 MR. GRANATO: Well, just to present
12 some general information -- I don't know if
13 we're going to hear from Dr. Melching, who I
14 assume can probably expand upon this. The
15 way we had to break up the testimony, some of
16 our witnesses have testimony that are
17 applicable to both the recreational and
18 aquatic use sides, but they're -- they were
19 kind of bundled in with the aquatic
20 testimony.

21 MS. WILLIAMS: I don't have a problem
22 deferring questions on this issue.

23 MR. ANDES: Dr. Melching is next up,
24 but I think there is some Dr. Granato can

1 give.

2 MR. GRANATO: Just some general
3 information.

4 MS. WILLIAMS: Okay. And I'll
5 withhold follow-up probably for him.

6 MR. GRANATO: Just to give some
7 examples, when we drawdown the system,
8 drawdown occurs by increasing flow at the
9 Lockport Lock and Dam, and the drawdown then
10 proceeds up the waterway to the east and
11 north. Elevation changes can be as great as
12 seven feet and water velocity changes in
13 terms of -- water velocity in terms of feet
14 per second can increase by factors of up to
15 seven-and-a-half times during the drawdown
16 event.

17 MS. WILLIAMS: Okay.

18 MR. ANDES: And how does that -- is
19 there an indication of what kind of velocity
20 changes are significant for recreators?

21 MS. WILLIAMS: What is the normal
22 velocity?

23 HEARING OFFICER TIPSORD: We have a
24 question.

1 MS. WILLIAMS: Can I -- well, go
2 ahead. That's fine.

3 MR. ANDES: I had asked about what
4 kind of velocity changes can be significant
5 for recreators.

6 MR. GRANATO: Well, there's guidance
7 by USGS, which basically states that peak
8 depth times velocity, depth in feet, velocity
9 in feet per second should be less than
10 10 square feet per second for safe wading and
11 recreational conditions.

12 MR. ANDES: So in some of these
13 situations would you be over that?

14 MR. GRANATO: I believe we would, yes,
15 considering the depths and velocities.

16 MS. WILLIAMS: Can you give us the
17 title or the number or something to that
18 publication?

19 MR. ANDES: We can provide that.

20 MS. WILLIAMS: Do you know if the USGS
21 document is talking about a natural river
22 system or not? I mean, do you know? Did you
23 review it yourself?

24 MR. GRANATO: I did not review it in

1 depth, no.

2 MS. WILLIAMS: Okay. Would
3 Dr. Melching be able to discuss that document
4 or is that unrelated, because I don't recall
5 that coming up in his testimony?

6 MR. ANDES: I think he was dealing
7 with the characteristics of the water body,
8 but I don't think particularly with respect
9 safety but we'll check.

10 MS. WILLIAMS: Maybe I should ask at
11 this point where did you come up -- how did
12 you find out there was such a USGS document?

13 MR. GRANATO: I became aware of its
14 use in other UAAs with bacteria being used in
15 other UAAs.

16 MS. WILLIAMS: Okay. That may be
17 helpful to answer some of these later
18 questions. What UAAs are you referring to?

19 MR. GRANATO: Specifically, the
20 Mississippi River UAA being conducted by
21 St. Louis. I believe others have used it as
22 well, but...

23 MS. WILLIAMS: I'll go back to my
24 other question, can you help us with the what

1 the typical velocities are in the CAWS? I
2 know you testified about how much they can
3 change during drawdowns, but where do they
4 start?

5 MR. GRANATO: I don't know if I can
6 say typical, but let's say baseline flows --
7 and, again, Dr. Melching can probably speak
8 to this in more detail than I can -- would
9 probably range on the order of close to zero
10 in very stagnant reaches to roughly half or
11 three-quarters of a foot per second.

12 MS. WILLIAMS: I'm going to move on to
13 number four. You testify on Page 4,
14 Paragraph 1 that safety factors that we had
15 just discussed are, quote, persuasive grounds
16 for restricting primary and incidental
17 recreational activities such as swimming,
18 wading and hand-powered boating in the CAWS.

19 Question A, how does the District
20 enforce its policy that prohibits wading from
21 land under its control?

22 MR. GRANATO: The District generally
23 prohibits access to the waterways from land
24 it owns which is not leased. Signs are

1 typically posted to this effect and the
2 District police keep trespassers off of
3 District land.

4 MS. WILLIAMS: Does the District have
5 a policy prohibiting swimming and
6 hand-powered boating, as well, for the
7 reaches in which these safety factors apply?

8 MR. GRANATO: I'm not aware of a
9 specific policy, no. The District prohibits
10 waterway access from property it owns, as I
11 said, that's not under lease.

12 It does not have a formal policy
13 prohibiting uses.

14 MS. WILLIAMS: The second part of that
15 questions asks is it possible for members of
16 the public to launch hand-powered boats from
17 the Summit and Western Avenue boat launches
18 on the Chicago Sanitary and Ship Canal?

19 MR. GRANATO: Well, the Summit and
20 Western Avenue boat launches weren't designed
21 or installed for the purpose of launching
22 hand-powered craft. It's my understanding
23 that the Summit launch is not accessible to
24 the general public.

1 MS. WILLIAMS: Okay.

2 MR. ANDES: Were you asking about --
3 I'm sorry, I need to clarify something. But
4 in the first part of that question are you
5 asking whether the District would prohibit
6 swimming in the water bodies?

7 MS. WILLIAMS: The second part of the
8 question? Wait, what question are you
9 talking about?

10 MR. ANDES: I'm talking about the
11 first part of your question. Were you asking
12 whether the District could directly prohibit
13 certain activities in the water body?

14 MS. WILLIAMS: The first part of the
15 question asks do they have a policy. That
16 was the question I think he answered that
17 he's not aware of a policy.

18 MR. ANDES: And you were talking about
19 prohibiting certain activities in the actual
20 reaches? I'm not sure that would be their
21 jurisdiction, but okay. Go ahead.

22 MS. WILLIAMS: I don't know --

23 MR. ETTINGER: Let's hope the record
24 is getting Mr. Andes' statement that these

1 are not the District's water bodies.

2 MR. ANDES: I'm trying to clarify the
3 question.

4 MS. WILLIAMS: Do you want me to ask
5 him another question that he already
6 answered?

7 MR. ANDES: No. Go ahead.

8 MS. WILLIAMS: I lost track of where
9 we are. I think you were just saying that
10 you don't believe the Summit Avenue boat
11 launch is accessible to the public; is that
12 correct?

13 MR. GRANATO: That's right.

14 MS. MEYERS-GLEN: Can I ask a
15 follow-up question? MWRD, though, does hold
16 a number of leases where municipalities and
17 others have put on boat launches accessing
18 the CAWS; is that correct?

19 MR. GRANATO: I believe so.

20 MS. MEYERS-GLEN: In fact, you've got
21 Clark Park as one; is that correct?

22 MR. GRANATO: I'm not familiar with
23 all the District leases, but...

24 MS. MEYERS-GLEN: Are you familiar

1 with --

2 MR. GRANATO: I think Mr. Lanyon
3 testified to some of that, yes.

4 MS. MEYERS-GLEN: Thank you.

5 MS. WILLIAMS: Are you familiar with
6 the lease that was entered as Exhibit 83 for
7 the Ronan Park?

8 MR. GRANATO: Not very familiar, no.

9 MS. WILLIAMS: When you said you're
10 familiar with Mr. Lanyon's testimony about
11 the leases, do you recall -- what was your
12 understanding of the District's testimony
13 related to whether or not the lease specified
14 what type of activity would be occurring?

15 MR. GRANATO: My recollection is that
16 they don't specify -- they don't restrict the
17 uses.

18 MS. WILLIAMS: Okay. And is it your
19 understanding when the District enters into a
20 lease for recreational uses, though, they're
21 aware that they'll be used for boat launches?

22 MR. GRANATO: I really don't know.
23 I'm not involved in that at all. I don't
24 know at what point they become aware of it,

1 whether it's during the formulation of the
2 lease or following the completion of the
3 transaction.

4 MS. WILLIAMS: If you have a
5 follow-up, go ahead.

6 MS. MEYERS-GLEN: I was wondering if
7 you're aware of whether or not District's
8 employees actually go out to the sites that
9 are anticipated to be used as launch sites
10 and inspect them with interested parties?
11 Are you aware of that occurring?

12 MR. ANDES: Are you speaking of before
13 the leasing occurs?

14 MS. MEYERS-GLEN: That is correct.

15 MR. GRANATO: No, I'm not aware of
16 that.

17 MS. WILLIAMS: Mr. Granato, I'm
18 showing you a document that's previously been
19 entered into the record as Exhibit 83. Have
20 you seen this document before?

21 MR. GRANATO: I don't think so.

22 MS. WILLIAMS: I would just like you
23 to read from one portion of this document.
24 I'm handing you a page of this exhibit that's

1 dated July 13th, 2000, to the honorable
2 president and members of the Board of
3 Commissioners at the Metropolitan Water
4 Reclamation District of Greater Chicago. I'd
5 like you to read from the first item that
6 says "ordered".

7 MR. ANDES: This is dated July 13th,
8 2000.

9 MR. GRANATO: Okay. Ordered, that an
10 amendment of lease with the Chicago Park
11 District dated April 12th, 1962, to
12 approximately .36 acres of land for the
13 construction and maintenance of a boat launch
14 and river walk along the west bank of the
15 North Branch of the Chicago River, north of
16 Argyle Street in Chicago, Illinois, B, and
17 the same is hereby authorized and approved.

18 MS. WILLIAMS: I just wanted that
19 piece of that exhibit read into the record.
20 Thank you.

21 MR. ANDES: If I can follow-up on
22 that? Dr. Granato, did that say anything
23 about what kind of boats were going to be
24 used at the boat launch?

1 MR. GRANATO: I don't believe so.

2 MR. ANDES: Anything about
3 hand-powered boats?

4 MR. GRANATO: I don't believe so.

5 MR. ANDES: Thank you.

6 MS. WILLIAMS: Did it specify power
7 boats either?

8 MR. GRANATO: I don't believe so.

9 MS. MEYERS-GLEN: Are you aware of
10 whether or not Clark Park and River Park are
11 used for hand-powered boating?

12 MR. GRANATO: I'm not aware firsthand,
13 but I believe they are, yes.

14 MS. MEYERS-GLEN: Can you launch a
15 power boat from those locations?

16 MR. GRANATO: I don't know.

17 MS. WILLIAMS: I think Subsection C
18 there in question four asks whether the
19 District has authority to restrict these
20 recreational activities, meaning hand-powered
21 boating.

22 MR. GRANATO: That sounds like a legal
23 question. I don't have an answer for it. I
24 don't know.

1 MS. WILLIAMS: You don't know?

2 MR. GRANATO: No.

3 MS. WILLIAMS: Okay. So I assume you
4 don't know if the IEPA does either?

5 MR. GRANATO: No, I don't.

6 MS. WILLIAMS: Are you aware of any
7 other states that have used safety factors
8 like you've discussed in your testimony in
9 designating recreational uses?

10 MR. GRANATO: Yes, I am.

11 MS. WILLIAMS: Can you please give us
12 some examples, or all the examples that
13 you're aware of?

14 MR. GRANATO: Yes, I can, in a moment
15 when I get reorganized here.

16 MS. WILLIAMS: Take your time.

17 MR. GRANATO: Well, the first examples
18 that I would cite are right here locally
19 where there are areas along Lake Michigan and
20 many other lakes where swimming is prohibited
21 due to unsafe shoreline conditions including
22 presence of submerged rocks or boulders, deep
23 unconsolidated sediments, lack of points of
24 egress, et cetera. There are also areas

1 where power boating is prohibited along
2 bathing beaches.

3 MS. WILLIAMS: You know what, Mr.
4 Granato, let me stop you so we can save some
5 time. I don't want to stop you from
6 answering if you want to answer, but in this
7 question I'm using designating recreational
8 uses in the sense of the term as we're using
9 it at this proceeding, meaning under the
10 sense of the Clean Water Act administration
11 laying out what the designated uses are for a
12 given water body, not maybe something that
13 the coast guard or some other type of entity
14 might say shouldn't happen. Do you
15 understand what I'm saying?

16 MR. GRANATO: Sure.

17 MS. WILLIAMS: Okay.

18 MR. GRANATO: In Missouri, a UAA was
19 conducted on the Mississippi River, found
20 that heavy barge traffic posed a hazard to
21 whole body contact recreation. The UAA
22 recommended against this designation.
23 Missouri Clean Water Commission adopted the
24 finding in state rule 10CSR20-7031.

1 MS. WILLIAMS: Let's slow down. Can
2 you go back again?

3 MR. GRANATO: Sure. Basically, it's a
4 UAA on the Mississippi River found that heavy
5 barge traffic posed a hazard to whole body
6 contact recreation. And the Missouri Clean
7 Water Commission adopted this finding in
8 their state Rule 10CSR20-7031.

9 MR. ANDES: And we have a disk with a
10 copy of the Use Attainability Analysis
11 document for the Mississippi River dated July
12 2005.

13 MR. ETTINGER: Is that for the entire
14 Mississippi River in Missouri or some
15 segments of it?

16 MR. ANDES: I believe some segments.

17 MR. ETTINGER: Thank you.

18 HEARING OFFICER TIPSORD: If there's
19 no objection, we'll mark the CD as described
20 as Exhibit 167. Seeing none, it's
21 Exhibit 167.

22 (Document marked as
23 Exhibit No. 167 for
24 identification,

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10/28/08.)

MS. WILLIAMS: Do you know,
Dr. Granato, whether US EPA approved this
UAA --

MR. GRANATO: I don't know.

MS. WILLIAMS: -- one way or another?

MR. GRANATO: I don't know.

MS. WILLIAMS: That's fine. And do
you know -- I guess before we move on, are
you going to move on to a different location?

MR. GRANATO: Yes.

MS. WILLIAMS: Okay. Before we do
that, do you know whether Missouri found --
it was whole body contact you called it --
recreation to be occurring in the reaches
that were addressed?

MR. GRANATO: I don't recall if that
was found.

MS. WILLIAMS: Okay. Go ahead.

MR. GRANATO: The Alabama Department
of Environmental Management conducted a UAA
on the Mobile River in Alabama after
designating it a limited warm water fishery.

The Alabama Department of

1 Environmental Management's rationale for not
2 designating the lower Mobile River for
3 primary contact recreation includes unsafe
4 conditions due to barge traffic,
5 industrialization in the area and subsequent
6 lack of shoreline access.

7 US EPA approved Alabama Department
8 of Environmental Management's UAA on March
9 15th, 2001.

10 MR. ANDES: We have copies of the Use
11 Attainability Analysis document for the
12 Mobile River.

13 MS. WILLIAMS: I guess I'd ask you,
14 again, Mr. Granato, are you aware of
15 whether Alabama found recreational activities
16 that were not included in this use
17 designation to be occurring in that water
18 body, but yet not protected under the
19 designated use?

20 MR. GRANATO: I don't know for
21 certain. I can offer you a paragraph from
22 the document that was just distributed.

23 HEARING OFFICER TIPSORD: Actually,
24 before you do that, if you're going to read

1 from it, let's mark it as Exhibit 168 if
2 there's no objection. Seeing none, it's
3 Exhibit 168.

4 (Document marked as
5 Exhibit No. 168 for
6 identification,
7 10/28/08.)

8 HEARING OFFICER TIPSORD: Now if you
9 wouldn't mind reading from Exhibit 168.

10 MR. GRANATO: Okay. I'm reading from
11 Page 9, the bottom of Page 9 with respect to
12 swimming. The ADEM, which is the Alabama
13 Department of Environmental Management,
14 believes this portion of the Mobile River is
15 not suitable for swimming or other recreation
16 involving incidental water contact due to its
17 location and use within such a heavily
18 industrialized area of Mobile.

19 In addition, the consistent barge
20 vessel traffic associated with the intensive
21 industrial activity creates an unsafe setting
22 for swimming within this portion of the
23 Mobile River, therefore, the more stringent
24 bacteriological criteria for seasonal

1 protection of swimming and recreation are not
2 appropriate for this water body.

3 The department concludes that the
4 LWF classification, that's limited warm water
5 fishery, for the 7.6 mile segment of the
6 Mobile River is appropriate at this time.

7 MS. WILLIAMS: And this UAA as well as
8 the one you just discussed on the Mississippi
9 River, they were both addressing suitability
10 for swimming, correct?

11 MR. GRANATO: Yes, swimming and I
12 believe what I just read also addressed
13 limited contact recreation.

14 MS. WILLIAMS: But we don't know from
15 this document whether they did a survey to
16 determine whether such activities were
17 occurring?

18 MR. GRANATO: I don't know at this
19 time, no.

20 MS. WILLIAMS: Do you agree that it's
21 relevant?

22 MR. ANDES: What's relevant?

23 MS. WILLIAMS: Whether the activities
24 are occurring or not.

1 MR. GRANATO: Do I think that's
2 relevant?

3 MS. WILLIAMS: Yes.

4 MR. GRANATO: Well, I don't think it's
5 relevant to determining whether it's safe or
6 not for the activities to occur. I think
7 that's regardless of whether they're
8 occurring or not.

9 MS. WILLIAMS: And if activities are
10 occurring which we know are unsafe, is it
11 relevant to what uses must be designated for
12 the water body do you believe?

13 MR. GRANATO: Well, not being an
14 attorney, I would say that that's not
15 relevant. But the fact of whether something
16 is safe or not should be considered
17 regardless of whether the use is currently
18 occurring or not.

19 MS. WILLIAMS: Did you have any others
20 you wanted to raise?

21 MR. GRANATO: A couple others, yes.

22 MS. WILLIAMS: Go ahead.

23 MR. GRANATO: The next one is
24 Pennsylvania Department of Environmental

1 Resources completed a UAA on the Presque Isle
2 Bay and outer Erie Harbor in 1985. They
3 found that boat and shipping traffic in the
4 harbor basin and shipping channel were
5 irretrievable man-induced conditions which
6 have an adverse impact on water contact
7 recreation.

8 The PDER, which is the
9 Pennsylvania Department of Environmental
10 Resources, excluded water contact recreation
11 from the harbor basin and shipping channel
12 due to unsafe conditions presented by the
13 presence of boat and commercial shipping
14 traffic.

15 And another case involving PDER in
16 April 1989. The PDER cooperated with the
17 Delaware River Basin Commission, the UPA and
18 other Delaware River Basin Commission
19 signatory states on a comprehensive UAA study
20 in the Lower Delaware River and Delaware
21 Estuary. The study resulted in appropriate
22 recommendations relating to the swimmable use
23 which Delaware River Basis Commission
24 included in water use classifications and

1 water quality criteria for portions of the
2 Delaware River in May 1991.

3 The primary contact use remains
4 excluded from the designated uses for river
5 miles 108.4 to 81.8 because of continuing
6 significant impacts from combined sewer
7 overflows and hazards associated with
8 commercial shipping and navigation in that
9 case.

10 MS. WILLIAMS: Those are the last two?

11 MR. GRANATO: I have one other from
12 Los Angeles.

13 MS. WILLIAMS: Just with regard to
14 these two in Pennsylvania, are you aware of
15 whether either of those cases involved
16 documented evidence of recreation occurring
17 that was being excluded from the recreational
18 use?

19 MR. GRANATO: No, I'm not.

20 MS. WILLIAMS: Okay. Go ahead.

21 MR. GRANATO: The final one,
22 Los Angeles Regional Water Quality Control
23 Board recommended suspension of recreational
24 beneficial uses, both primary and secondary,

1 and engineer channels during unsafe wet
2 weather conditions. Unnatural flashy
3 conditions of the engineered channels results
4 in intermittent dangerous flow volumes and
5 velocities after rain events which satisfy
6 factor two, UAA factor two.

7 Channels designed with steep
8 slopes for the swift conveyance of water
9 results in life-threatening conditions during
10 and immediately following rain events and
11 effectively prevent easy egress during
12 swift-flowing conditions which satisfies
13 factor four, UAA factor four.

14 The LA Regional Water Quality
15 Control Board relied on the USGS protocol for
16 determining unsafe flow conditions, which as
17 I pointed out previously was a peak depth in
18 feet times peak velocity in feet per second
19 being greater than ten square feet per
20 second.

21 The study showed that the use
22 would not be attained through effluent limits
23 or best management practices because the
24 physical characteristics of the water bodies

1 rather than the water quality preclude the
2 use.

3 MS. WILLIAMS: And they determined
4 that the use could not occur, correct, would
5 preclude the use?

6 MR. GRANATO: Could not occur?

7 MS. WILLIAMS: And was not occurring.
8 Isn't it correct that they determined the use
9 was not occurring under the conditions
10 described?

11 MR. GRANATO: I'm not sure about that.

12 MS. WILLIAMS: Okay.

13 MR. ANDES: I would note that that
14 particular UAA was referenced in Ms. Nemura's
15 testimony as to Ballona Creek in California.
16 And as to Presque Isle Bay and the Delaware
17 River, we'll provide links to the relevant
18 documents.

19 MR. ETTINGER: Can I follow-up with a
20 couple of questions?

21 MS. WILLIAMS: Sure.

22 MR. ETTINGER: Did you look for any
23 instances in which UAAs were proposed to
24 remove recreational uses and they weren't

1 removed?

2 MR. GRANATO: No, I did not.

3 MR. ETTINGER: Did you look at any
4 circumstances in which the state proposed
5 removing recreational uses from waters and
6 US EPA objected to the removal of those
7 re-designations -- I'm sorry, objected to the
8 removal of those designated uses?

9 MR. GRANATO: No.

10 MR. ETTINGER: Thank you.

11 MR. ANDES: To follow up, was the
12 question you were responding to whether
13 safety had been used as a factor in UAAs?

14 MR. GRANATO: No.

15 MR. ANDES: I'm sorry. Was the
16 question that you were asked to answer was
17 provide instances where safety was used as a
18 factor?

19 MR. GRANATO: The question I was asked
20 to answer by IEPA originally, yes.

21 MR. ANDES: Okay. I would also note
22 just to refer back that Ms. Nemura's
23 testimony also mentioned the Indianapolis
24 UAA, unsafe conditions there.

1 MS. WILLIAMS: You're right. Are you
2 asking a question? I didn't mean to
3 interrupt.

4 MR. ANDES: No. I was just referring
5 back that Ms. Nemura's testimony is relevant
6 here, as well.

7 MS. WILLIAMS: I actually want to
8 repeat the question that was asked because I
9 think, actually, Albert's point is --

10 The question was can safety
11 factors be used to eliminate designation of
12 existing recreational uses?

13 MR. ANDES: You're talking about
14 existing use in the legal term defined in the
15 water regulations?

16 MS. WILLIAMS: I am actually using the
17 term in the common sense definition that it
18 is actually occurring.

19 HEARING OFFICER TIPSORD: I'm really
20 confused now because when he first started
21 answering the question and started giving you
22 uses where safety were stopped like Lake
23 Michigan, then you wanted uses under the
24 Clean Water Act. Now you're saying as common

1 sense, existing uses as the common sense
2 definition.

3 MS. WILLIAMS: Well, there are two
4 questions in Subpart D, so I am actually, I
5 guess, asking both of them. And so we were
6 referring, first, to the first part, but I
7 want to be sure that we don't miss the second
8 part.

9 HEARING OFFICER TIPSORD: All right.
10 So you now want to ask the second part of the
11 question?

12 MS. WILLIAMS: Yes.

13 HEARING OFFICER TIPSORD: And in that
14 instance you're no longer using recreational
15 uses in the legal term, but as the common
16 sense terms?

17 MS. WILLIAMS: I'd rather restate
18 myself because I --

19 HEARING OFFICER TIPSORD: Okay.

20 MS. WILLIAMS: -- was talking about
21 the term designated when I clarified to
22 Mr. Granato, not uses.

23 So the term uses is not changing,
24 but he was answering the question talking

1 about places where outside of this --

2 HEARING OFFICER TIPSORD: Ask the
3 second question.

4 MS. WILLIAMS: So here I'm asking can
5 safety factors be used to eliminate
6 designation of existing recreational uses as
7 that term is understood by laypersons?

8 MR. GRANATO: Can they be? I think
9 they can, yes.

10 MS. WILLIAMS: You think they can be?

11 MR. GRANATO: Yes.

12 MS. WILLIAMS: And your answer
13 wouldn't be any different if I used "may"
14 instead of "can," would it? May they be?
15 I'm not sure I'm an expert on this "may" and
16 "can" thing.

17 MR. GRANATO: I think they are being.

18 MS. WILLIAMS: Okay. But you didn't
19 give any examples of where you're aware that
20 the use was existing from what you provided,
21 right?

22 MR. GRANATO: Well, these may be
23 examples of it. I'm just not aware.

24 MS. WILLIAMS: But you don't know?

1 MR. GRANATO: Right.

2 MS. WILLIAMS: Okay. So you can't say
3 that it is being done, though, can you, if
4 you don't know?

5 MR. ANDES: Or that it isn't.

6 MR. GRANATO: When I said that it is
7 being done, I was talking about the common
8 sense arena, not the clean water arena.

9 MS. WILLIAMS: Okay. So you mean
10 there are areas where the coast guard will
11 say don't go here because it's unsafe?

12 MR. GRANATO: Right.

13 MS. WILLIAMS: Okay. I understand.

14 MR. GRANATO: Is there any overlap
15 between the common sense arena and the Clean
16 Water Act?

17 MR. ETTINGER: No. We solved that.

18 MS. WILLIAMS: I would like to find it
19 if there is some, yes.

20 HEARING OFFICER TIPSORD:

21 ms. Williams, if you're ready to move on,
22 it's 1:00 o'clock and we obviously have at
23 least probably another 30 to 40 minutes of
24 your questions and Openlands, as well, so

1 let's go ahead and take a lunch break and
2 come back in about an hour.

3 (Whereupon, after a break
4 was had, the following
5 proceedings were held
6 accordingly.)

7 HEARING OFFICER TIPSORD: Good
8 afternoon. Welcome back from lunch. Due to
9 an emergency, we're going to switch from the
10 IEPA's questions to the questions from
11 Openlands so that we can hopefully get
12 Ms. Meyers on her way.

13 So with that, we'll switch to
14 Openlands' questions. And I apologize for
15 any inconvenience, but this is beyond her
16 control.

17 MS. MEYERS-GLEN: Thank you. I
18 appreciate your allowing the switch. Thank
19 you very much.

20 If we could start with the
21 pre-filed questions. Since I'm running short
22 on time, I might try to summarize a few of
23 these questions so we can move through them
24 and skip a few.

1 You had previously stated in
2 response to an IEPA question that the Cal-Sag
3 has shallow areas along the banks.

4 There are other areas within the
5 Chicago Area Waterways System that also have
6 shallow areas, correct.

7 MR. GRANATO: You can find them, yes.

8 MS. MEYERS-GLEN: And there are banks
9 along the CAWS that are not lined with high
10 vertical sheet piling or large limestone
11 rocks?

12 MR. GRANATO: That's correct.

13 MS. MEYERS-GLEN: There are places
14 where the limestone rock walls have crumbled,
15 creating a more sloped grade?

16 MR. GRANATO: I need to ask you a
17 question on that. When you say more sloped
18 grade, to me more sloped means steeper. What
19 do you mean by more sloped grade?

20 MS. MEYERS-GLEN: Less steep.

21 MR. GRANATO: Less steep grade. I
22 suppose there are. I haven't personally
23 observed them, but I suppose there are.

24 MS. MEYERS-GLEN: What do you base

1 that on?

2 MR. GRANATO: What am I basing it on?

3 MS. MEYERS-GLEN: What are you basing
4 your --

5 MR. GRANATO: Previous testimony.

6 MS. MEYERS-GLEN: And will the
7 completion of District's Tunnel and Reservoir
8 Plan reduce the number of drawdowns that you
9 discussed previously?

10 MR. GRANATO: That's really not known
11 at this time. Until the tunnels are
12 completed, I don't think anybody knows really
13 with a lot of certainty how the system will
14 behave.

15 And there's also a fair amount of
16 the service area that is not affected by
17 TARP. There is a considerable non-combined
18 sewer area that will continue to drain to the
19 CAWS not to be captured by TARP.

20 So really it's going to depend on
21 the type of storms and the intensity and the
22 duration. It's possible the drawdowns may be
23 not as severe in some instances.

24 But it's a risky thing to not

1 drawdown prior to a storm because the storms
2 cannot be predicted with accuracy far enough
3 in advance to determine that the risk of
4 flooding is low enough to avert a drawdown.

5 MS. MEYERS-GLEN: Do you anticipate,
6 though, that the number of the drawdowns will
7 decrease with TARP going online?

8 MR. GRANATO: I wouldn't say that
9 necessarily follows, no.

10 MS. MEYERS-GLEN: And do recreational
11 uses such kayaking and canoeing currently
12 coexist with barge traffic and motor boats in
13 the CAWS?

14 MR. GRANATO: I think they coexist
15 largely in the sense that they both are
16 occurring currently. But a lot of those uses
17 are really not occurring in the same space
18 simultaneously.

19 A lot of the heavy barge and motor
20 boat traffic where those uses are heaviest is
21 not where the hand-powered boating is
22 heaviest or most frequently encountered.

23 MS. MEYERS-GLEN: Will you propose for
24 a non-recreational use to be designated along

1 the Cal-Sag Channel, correct?

2 MR. GRANATO: That's correct.

3 MS. MEYERS-GLEN: And that was, in
4 part, because of your concern about barge
5 traffic; is that right?

6 MR. GRANATO: That's in part because
7 of that, yes.

8 MS. MEYERS-GLEN: Are you familiar
9 with sculling teams and the practice of
10 competing in regattas on the Cal-Sag?

11 MR. GRANATO: I don't know if I'm
12 familiar with them. I'm aware that that's
13 occurring, yes.

14 MS. MEYERS-GLEN: Are you aware of the
15 Big Ten Women's regatta where approximately
16 300 athletes compete on the Cal-Sag Channel?

17 MR. GRANATO: I believe I have heard
18 of that, yes.

19 MS. MEYERS-GLEN: And have you heard
20 of any injuries being sustained from
21 commercial barge or tour boat traffic from
22 sculling teams practicing?

23 MR. GRANATO: No, I don't think so.

24 MS. MEYERS-GLEN: How about people

1 that kayak or canoe in that area?

2 MR. GRANATO: On the Cal-Sag Channel?

3 MS. MEYERS-GLEN: That's correct.

4 MR. GRANATO: No, I don't think I
5 have.

6 MS. MEYERS-GLEN: And how much
7 commercial barge traffic occurs north of
8 Goose Island?

9 MR. GRANATO: North of Goose Island, I
10 can't say I can quantify it, but I'm aware
11 that it exists. I have seen in every aerial
12 photograph I've looked at on internet I see
13 barges in the water north of Goose Island up
14 to about Webster.

15 MS. MEYERS-GLEN: Beyond Webster?

16 MR. GRANATO: Not too much, no.

17 MS. MEYERS-GLEN: Not too much. How
18 much would you say occurs beyond Webster?

19 MR. GRANATO: I can't really quantify.

20 MS. MEYERS-GLEN: Are you familiar
21 with tours that routinely occur on the
22 Chicago River and Bubbly Creek that do not
23 result in injuries from barges or commercial
24 boats?

1 MR. GRANATO: Can you repeat that?

2 MS. MEYERS-GLEN: Sure. Are you
3 familiar --

4 MR. GRANATO: Which number is that, by
5 the way?

6 MS. MEYERS-GLEN: 5(A).

7 HEARING OFFICER TIPSORD: I don't have
8 a 5(A).

9 MS. MEYERS-GLEN: I'm sorry, I didn't
10 file this question. It's a follow-up.

11 MR. GRANATO: I'm sorry, just repeat
12 it.

13 MS. MEYERS-GLEN: Sure. Are you
14 familiar with the fact that there are tours
15 that routinely occur on the Chicago River and
16 Bubbly Creek that do not result in injuries
17 from barges or commercial boats?

18 MR. GRANATO: Tours? I mean, I don't
19 know what you mean by tours.

20 MS. MEYERS-GLEN: Sure. Hand-powered
21 boat tours such as canoes and kayaks.

22 MR. GRANATO: No, I'm not aware of it.

23 MS. MEYERS-GLEN: Are you familiar
24 with the Windy City Kayak Symposium that

1 occurs annually in Chicago where they have
2 tours on the Chicago River as a part of that
3 symposium? And by tours I mean kayaks and
4 canoes going out on the main stem of the
5 Chicago River as a part of that event.

6 MR. GRANATO: No, I'm not familiar.

7 MS. MEYERS-GLEN: I'm going to skip
8 seven and eight and on to number nine of
9 pre-filed questions regarding your statement
10 on Page 6 that despite the fact that effluent
11 disinfection is uncommon in Europe, the
12 incidence of diseases associated with
13 waterborne pathogens amongst the residents of
14 these countries do not appear to be
15 substantially different than the U.S.
16 Question A, did you perform this comparative
17 analysis for the District?

18 MR. GRANATO: No, I did not.

19 MS. MEYERS-GLEN: Do you have any
20 experience with microbiology?

21 MR. GRANATO: I am not a
22 microbiologist, no.

23 MS. MEYERS-GLEN: Can you site to
24 specific countries and statistics to

1 substantiate this statement?

2 MR. GRANATO: No, I can't cite
3 statistics. I'm summarizing Dr. Blatchley's
4 testimony.

5 MS. MEYERS-GLEN: So --

6 MR. GRANATO: At this time, I cannot.

7 MS. WILLIAMS: So Dr. Blatchley's
8 testimony, not Dr. Gerba's testimony.

9 MR. GRANATO: Well, Dr. Gerba also
10 addressed this, yes.

11 MS. WILLIAMS: Do you recall if either
12 of them cited to studies or statistics?

13 MR. GRANATO: No, I don't believe they
14 cited studies. They cited personal
15 information.

16 MS. WILLIAMS: Thank you.

17 MS. MEYERS-GLEN: Do you have any
18 information regarding the popularity of
19 various water recreation activities in any
20 other country relative to the United States?

21 MR. GRANATO: I don't have a lot of
22 specific information, but I do know that
23 water recreation is very popular in other
24 countries.

1 I guess one thing I can point out
2 is that in the UK they have what's probably
3 the most renown crew race in the world, which
4 is the Oxford Cambridge Race. It's been
5 taking place on River Thames since 1829. It
6 draws about a quarter of a million spectators
7 annually, which I think speaks to the
8 popularity of the sport in the UK.

9 And the race occurs downstream of
10 the Modgen Water Reclamation Plant, which
11 does not disinfect its effluents. And it's
12 quite a large treatment plant, larger than
13 our North Side or Calumet plants.

14 MS. MEYERS-GLEN: I'm going to skip
15 ten. And, actually, I believe the Illinois
16 Environmental Protection Agency is going to
17 ask something akin to 11, so I'm just going
18 to leave that for their questions.

19 Twelve, do other wastewater
20 treatment practices at the District's
21 Stickney, Calumet and North Side wastewater
22 treatment plants generate air emissions from
23 energy usage, air emissions from power
24 generation and transportation of raw and

1 waste materials, and land usage?

2 MR. GRANATO: Yes, they certainly do.

3 MS. MEYERS-GLEN: I have two quick
4 follow-up questions. Do you believe that the
5 District should be allowed to suspend
6 disinfection at its Hanover Park, Egan and
7 Kirie plants?

8 MR. GRANATO: Do I think they should
9 be allowed -- can you repeat the question?

10 MS. MEYERS-GLEN: To suspend
11 disinfection. I guess I should back up one
12 step.

13 The Metropolitan Water Reclamation
14 District has at its -- it disinfects at its
15 Hanover Park, Egan and Kirie plants, correct.

16 MR. GRANATO: That's correct.

17 MS. MEYERS-GLEN: Do you believe that
18 the District should suspend that practice at
19 those places?

20 MR. GRANATO: I'm not prepared to
21 answer that at this time. I would say that
22 it's a little different situation. Those
23 plants are discharging to general-use waters
24 and we have not made an assessment of the

1 risks to recreators in those water bodies the
2 way we're doing in the CAWS, so I would say
3 the same process should be undertaken there
4 to address that question.

5 MS. MEYERS-GLEN: And do you think the
6 disinfection is needed for the City of
7 Milwaukee?

8 MR. GRANATO: I'm not that familiar
9 with the -- I'm not that familiar with
10 Milwaukee's receiving water and uses of
11 water.

12 MS. MEYERS-GLEN: Okay.

13 MR. GRANATO: I can't answer that.

14 MS. MEYERS-GLEN: Thank you.

15 HEARING OFFICER TIPSORD: Thank you
16 very much. Let's return then to the IEPA and
17 we were on their pre-filed question number
18 five, I believe.

19 MS. WILLIAMS: On Page 4, Paragraph 3
20 of your testimony you recommend, quote, the
21 following waterways be designated for
22 non-contact recreation contrary to the
23 proposed standards; the Chicago Sanitary and
24 Ship Canal from the South Branch of the

1 Chicago River to the junction with the
2 Cal-Sag Channel, the entire Calumet-Sag
3 Channel, the Chicago River and the South Fork
4 of the South Branch of the Chicago River.

5 Do any of the listed segments have
6 boat access to them?

7 MR. GRANATO: Yes.

8 MS. WILLIAMS: And does that include
9 hand-powered boat access?

10 MR. GRANATO: Well, hand-powered boats
11 can be launched into these water bodies, yes.
12 I don't think most of the sites were designed
13 for that specifically, but...

14 MS. WILLIAMS: The next question lists
15 the remaining -- number six I list the
16 remaining segments that were designated in
17 the Agency's proposal for incidental contact
18 recreation and it asks whether you agree with
19 that designation.

20 Do you agree with the designation
21 for the North Shore Channel, the North Branch
22 Chicago River, South Branch Chicago River,
23 et cetera?

24 MR. GRANATO: No, not all of them.

1 MS. WILLIAMS: Do you want to tell me
2 which ones you don't you agree with?

3 MR. GRANATO: I don't agree with North
4 Branch Chicago River below Webster Avenue,
5 South Branch Chicago River. These are the
6 ones I don't agree with.

7 MS. WILLIAMS: That's fine.

8 MR. GRANATO: Calumet River, Lake
9 Calumet, it's connecting channel.

10 MR. ANDES: And then?

11 MR. GRANATO: Oh, yeah, and Upper
12 Dresden Island Pool, my comments were limited
13 to the CAWS.

14 MS. WILLIAMS: So you you're not
15 expressing an opinion on the Upper Dresden
16 Island Pool?

17 MR. GRANATO: Right.

18 MS. WILLIAMS: What I think I would
19 like to understand, Dr. Granato, is when
20 Ms. Meyers-Glen was asking you questions you
21 said you -- I believe you said, and tell me
22 if this is not correct, that you think the
23 heaviest barge traffic is not necessarily
24 occurring in the same place as the heaviest

1 small craft recreational boating?

2 MR. GRANATO: That's correct.

3 MS. WILLIAMS: So in your mind, is
4 that the distinction you would be making? Is
5 that how you would be -- what would you use
6 to separate out which water bodies should be
7 protected for incidental --

8 MR. GRANATO: Well, that's part of it.
9 That's part of the equation is the competing
10 uses, let's say the commercial navigation,
11 whether it be barge traffic or tour boats or
12 even in some cases dense power boating which
13 produce unsafe conditions in terms of wakes
14 in the water.

15 Typically, those type of craft are
16 kept separate from either primary contact
17 type uses or these hand-powered craft type
18 uses through markings in water bodies. Like
19 we were talking about before, the coast guard
20 might designate areas.

21 Another aspect of it would be the
22 physical features of the water bodies where
23 there is water bodies with -- that have, you
24 know, typical and extensive features of

1 vertical sidewalls with very few points of
2 egress from the water body where if somebody
3 capsizes, it could be due to these wakes or
4 otherwise, there's little opportunity to exit
5 the waterway.

6 Another feature would be the
7 physical configuration of the bank for
8 activities such as wading. If people are not
9 aware of the physical configuration of the
10 bank, they could be drawn to the waterway by
11 what appears to be a shallow and gradual
12 bank, only to find that they've suddenly
13 wandered into deep water. So these type of
14 features are altogether part of the criteria
15 that I would base this on.

16 MS. WILLIAMS: Can you tell the Board
17 which reaches or locations within the CAWS
18 you can support designating as incidental
19 contact recreation use?

20 MR. GRANATO: Yeah. I mean, I can
21 reiterate based on the --

22 MS. WILLIAMS: You answered which ones
23 you didn't agree with, so I'd like to know in
24 the converse which ones do you agree with.

1 MR. GRANATO: Based on the list that
2 you provided in question six, I can go back
3 and list the yesses.

4 MS. WILLIAMS: Go ahead.

5 MR. GRANATO: I listed the nos. I can
6 move back to the list on question six.
7 Basically, just to preface this, what we're
8 discussing now is, you know, based on the
9 physical conditions and the competing uses
10 and what is currently known about exposure
11 due to various uses, if we had to make a
12 recommendation at this time we would say
13 North Shore Channel would be a yes, North
14 Branch above Webster Avenue would be a yes,
15 Grand Calumet River and Little Calumet River
16 from its confluence with the Calumet River
17 and Grand Calumet River to its confluence
18 with the Cal-Sag Channel.

19 MS. WILLIAMS: Okay. On question
20 seven, last paragraph, Page 4 of your
21 testimony continuing onto Page 5 you state,
22 quote, furthermore, the presence of pathogens
23 is mainly due to secondary loading of the
24 waterway under wet weather conditions from

1 CSOs and other discharges.

2 Can you just explain whose
3 testimony you're relying on for this
4 statement or what study or -- what is the
5 basis for this statement in your testimony?

6 MR. GRANATO: Well, the basis of this
7 stems primarily from the Geosyntec risk study
8 and their testimony, all of the sampling and
9 analytical data that they entered into the
10 record.

11 MS. WILLIAMS: I just want to
12 understand that you're relying on what
13 Geosyntec entered into the record, not the
14 work performed by Dr. Rijal entered into the
15 District's studies.

16 MR. GRANATO: Well, basically,
17 Dr. Rijal's work was a fecal coliform study
18 which did not specifically look at pathogens.

19 MS. WILLIAMS: Okay. Question eight,
20 you testify on Page 4 that, quote, the weight
21 of scientific evidence against the proposed
22 400 fecal coliform CFU per 100 milliliter
23 effluent standard is clear and overwhelming.

24 I'm going to skip A for now and

1 turn to B. Do you agree that the 400 CFU per
2 100 milliliters is an effective fecal
3 coliform effluent standard to determine if
4 disinfection is occurring properly?

5 MR. GRANATO: Well, my answer to that
6 is it depends on the goals of the
7 disinfection process. It's an effective
8 effluent standard to determine if indicator
9 bacteria and probably bacterial pathogens are
10 being inactivated. However, the number says
11 nothing at a level of other pathogens which
12 may pose the bulk of the risk to recreators.

13 Proper disinfection should be
14 operated to reduce pathogen levels to meet
15 water quality standard which are set to
16 provide an acceptable level of risk to
17 recreators.

18 MS. WILLIAMS: So does that mean you
19 disagree?

20 MR. GRANATO: Yes, I disagree.

21 MS. WILLIAMS: Okay. Thank you. What
22 number would you use to determine if
23 disinfection is occurring properly?

24 MR. GRANATO: Well, I don't think you

1 can pull a number out of thin air. I think
2 you have to assess the risk that's occurring
3 from exposure to the pathogens in the system.
4 And if that risk is already below acceptable
5 levels, which it appears to be in this
6 system, I wouldn't recommend limit.

7 MS. WILLIAMS: You wouldn't recommend
8 any limit to determine if disinfection is
9 occurring properly?

10 MR. GRANATO: I would say disinfection
11 is not necessary.

12 MS. WILLIAMS: But I'm talking about
13 at a facility where disinfection is being
14 practiced, does 400 CFU per 100 milliliters
15 effectively guarantee that it's occurring
16 properly?

17 MR. GRANATO: Well, I think it really
18 depends on the basis for the disinfection.
19 In other words, what's the purpose for
20 disinfecting? Is it disinfecting to meet a
21 water quality standard, which 400 would allow
22 you to meet? Are you disinfecting to provide
23 a certain level of risk?

24 MS. WILLIAMS: So do you disagree with

1 the testimony that we've heard previously
2 that says you either kill all or nothing
3 then?

4 MR. ANDES: I don't remember that
5 being testimony of anybody. Do you have
6 anybody particular in mind?

7 MS. WILLIAMS: Did you hear anybody
8 testify to that? Mr. Lanyon, that was who I
9 was thinking of.

10 MR. GRANATO: That you kill all or
11 nothing?

12 MS. WILLIAMS: It's all or nothing.
13 But, also -- Mr. Lanyon was the first one to
14 say it. But also yesterday --

15 MR. ANDES: Can you cite to a
16 statement to that effect?

17 MS. WILLIAMS: I don't have it in
18 front of me. I mean, yes, it's in the
19 transcript.

20 MR. ANDES: Well, you're asking him to
21 agree or disagree with the statement. I
22 don't recall anybody saying it.

23 MS. WILLIAMS: I can ask him if he
24 agrees or disagrees that you kill all or

1 nothing, right?

2 HEARING OFFICER TIPSORD: Yeah, I
3 think she can ask that.

4 MR. GRANATO: I don't think that's
5 true, you kill all or nothing. I mean, there
6 are --

7 MS. WILLIAMS: Do you remember
8 yesterday when we were talking about the
9 design --

10 MR. GRANATO: Yes.

11 MS. WILLIAMS: -- of the system.

12 MR. GRANATO: Certainly.

13 MS. WILLIAMS: And it was said that
14 you would design the same system to treat for
15 a 2,000 water quality standard as to treat
16 for a 200 water quality standard?

17 MR. GRANATO: Yes, I recall that.

18 MS. WILLIAMS: Do you agree with that?

19 MR. ANDES: Weren't the numbers
20 yesterday 1,000 and 400?

21 MS. WILLIAMS: One of the numbers was
22 2,700, but another one was 1,000 and, yes,
23 400.

24 MR. ETTINGER: I suggest we not argue

1 about what's already in the record and let
2 the witness just answer the question as he
3 understands it now.

4 MR. GRANATO: Well, I think what was
5 being discussed yesterday is the fact that
6 from a practical standpoint it's normally
7 not -- disinfection systems are normally not
8 designed with a level of precision to hit a
9 specific numerical limit that would be
10 differentiated, you know, between the number
11 of 400 and 1,000, something like that.

12 It does not say -- I don't think
13 the intention was that disinfection -- if you
14 say it kills everything or nothing, then
15 you're talking about sterilization, which is
16 basically a process that does kill everything
17 in the water. That's not what disinfection
18 effects.

19 So I think the problem with
20 disinfection is that a lot of people practice
21 it and they really have no idea what type of
22 benefit they are accruing from disinfecting
23 their effluents. They really don't know what
24 level of risk recreators are exposed to in

1 the receiving waters, they really don't know
2 what level of reduction of risk they've
3 brought about by installing and practicing
4 disinfection.

5 And we have an opportunity here
6 really to determine that. And I guess being
7 a scientist, I'm kind of puzzled why we're
8 not taking advantage of that opportunity and
9 really seeing these studies through to
10 fruition and, you know, really coming
11 together, say, the whole body of resources we
12 have here in Illinois, bringing it altogether
13 to really determine the answer. It doesn't
14 seem like that's the way we're moving in this
15 rulemaking. And it's a golden opportunity.

16 I mean, if there was no hope on
17 the horizon of generating the science upon
18 which you could base a decision, then I could
19 understand taking up a precautionary measure
20 such as putting a technology-based effluent
21 standard in play.

22 But the studies are well underway.
23 They're exactly the type of studies that are
24 conducted on a national level, set national

1 criteria, which are used at every beach and
2 every primary contact venue in the country.

3 MS. WILLIAMS: Do you think --

4 MR. GRANATO: And we're trying to rush
5 through this and --

6 MS. WILLIAMS: Do you think the study
7 that's being conducted is going to tell us
8 what indicator organism could be used for
9 setting an ambient water quality standard?

10 MR. GRANATO: I think it could, yes.

11 MS. WILLIAMS: How?

12 MR. GRANATO: Same way all the other
13 epidemiologic studies do.

14 MR. ANDES: I think Dr. Dorevitch
15 explained that.

16 MS. WILLIAMS: I don't think he did.
17 I don't think he explained that a study would
18 accomplish that. I'm trying to understand --

19 MR. ANDES: I think he answered that
20 question and actually said that it would form
21 a basis for a water quality standard.

22 MS. WILLIAMS: I'm not going to argue
23 about what he said.

24 I'm going to skip on to the last

1 part of question nine, Dr. Granato. How does
2 the District know that its seasonal
3 disinfection at the Kirie, Egan and Hanover
4 Park plants are working?

5 MR. GRANATO: Kirie, Egan and Hanover
6 Park, as I said, we're discharging to
7 general-use waters. General-use waters have
8 a water quality standard for fecal coliform
9 and we assess whether the disinfection is
10 working by whether the limit in the permit is
11 met which was set to protect water quality
12 standards.

13 MS. WILLIAMS: So you think the
14 permit -- is the permit limit not an effluent
15 limit, it's a water quality based limit?
16 It's not a technology-based effluent limit,
17 it's a water quality based effluent limit?

18 MR. GRANATO: That's my presumption,
19 yeah.

20 MS. WILLIAMS: With regard to the
21 Hanover Park facility, I believe it was
22 mentioned yesterday that there is a pilot UV
23 project going on there; is that correct?

24 MR. GRANATO: Yes, there is.

1 MS. WILLIAMS: In your opinion, could
2 that project be of any use in determining the
3 needs for any of the District's other three
4 facilities where they -- to construct UV
5 disinfection and thereby eliminate the need
6 for a pilot study at each facility?

7 MR. GRANATO: I don't think it
8 eliminates the need for a pilot study at each
9 plant, but it does begin the process, yes.

10 MS. WILLIAMS: Okay. I think number
11 ten gets at what we were just talking about.
12 Let me see if it's been answered.

13 (Brief pause.)

14 MS. WILLIAMS: I guess can I go back
15 for a second and ask do you know why you're
16 doing this study of UV at Hanover Park?

17 MR. GRANATO: Yes, I know why.
18 Basically, our superintendent has mandated
19 that we start to move to replace chlorination
20 systems with UV systems in our north area
21 plants. And we have initiated this study to
22 begin to evaluate the -- having no prior
23 experience with UV, we have initiated this
24 study to begin to evaluate the available

1 technologies. And so this pilot study is
2 basically a technology comparison.

3 MS. WILLIAMS: Thank you. We sort of
4 got into ten, but I think I'm going to walk
5 through it quickly because there's some
6 additional points in here.

7 Please explain how, when
8 completed, the District's epidemiological
9 study, or we've been calling it the CHEERS
10 study here, will be able to be used to
11 develop ambient criteria to protect for
12 incidental contact recreation. And then I
13 ask will it be use useful in developing a
14 standard protective of non-contact
15 recreation?

16 MR. GRANATO: Okay. Basically, after
17 CHEERS is complete we'll know a lot more
18 about the relationship between ambient water
19 quality and the health risks of incidental
20 contact recreation.

21 CHEERS includes physical, chemical
22 and microbial measures in water quality and
23 these will be analyzed as predictors of
24 illness rates.

1 During the study measurements are
2 being made on different days at different
3 locations depending on where recruiting is
4 occurring. This produces a range of water
5 quality measures. The research team at UIC
6 will then determine which of these water
7 quality measures best predicts risk based on
8 the results of the study, of course.

9 For that water quality parameter
10 that's selected as the best predictor of
11 risk, a concentration response relationship
12 will be constructed showing how many cases of
13 illness are expected for a given level of
14 water quality.

15 If the IEPA were to define an
16 acceptable level of risk, a specific level of
17 that water quality measure could be selected
18 to protect the recreating public from risks
19 that are above the acceptable range.

20 MS. WILLIAMS: So what you're saying
21 is still when the CHEERS study is done it's
22 going to be up for the IEPA to recommend and
23 the Board to adopt an acceptable level of
24 risk? That won't be settled by the study?

1 MR. GRANATO: I think that was
2 discussed at -- I think Dr. Haas stated that
3 nicely yesterday when he said that, you know,
4 acceptable risk, risk tolerances, really a
5 public policy type of decision.

6 MS. WILLIAMS: It's not a science
7 decision?

8 MR. GRANATO: It's not scientific.
9 You can't arrive at the answer
10 scientifically. Once you set that limit, you
11 can scientifically evaluate whether you're
12 above or below it.

13 MS. WILLIAMS: Thank you. And do we
14 know if CHEERS is going to provide any useful
15 information for non-contact recreation uses?

16 MR. GRANATO: It is. As I mentioned,
17 there is an exposure study component of
18 CHEERS and that is going to be looking at all
19 types of water contact that occur on the
20 CAWS. We will be trying to quantify water
21 contact for various activities that are
22 undertaken. And this will enable us to
23 better interpret the results of CHEERS and it
24 will also enable us to go back to the risk

1 assessment study and fine tune the
2 assumptions that were made in there regarding
3 water exposure.

4 MS. WILLIAMS: Some of the
5 assumptions, right?

6 MR. GRANATO: Some of the assumptions,
7 right.

8 MS. WILLIAMS: Question 11, when you
9 state on Page 6 that, quote, the proposed
10 effluent standard is normally applied to
11 treated wastewater effluents discharged to
12 receiving waters that may be used for a
13 drinking water supply, swimming or
14 shellfishing.

15 I mean, the first question I have
16 is do you mean in the US when you say
17 normally applied or is this referring back to
18 your discussion of western Europe?

19 MR. GRANATO: The US.

20 MS. WILLIAMS: Okay. And when you say
21 may be used for swimming, what do you mean?

22 MR. GRANATO: I mean that it's
23 designated as a primary contact. In the case
24 of Illinois, a general use water body.

1 MS. WILLIAMS: You don't mean swimming
2 within the actual pipe itself?

3 MR. GRANATO: No.

4 MS. WILLIAMS: Is it your opinion that
5 disinfection should not be used at plants
6 discharging to general-use waters generally?

7 MR. GRANATO: No.

8 MS. WILLIAMS: Okay.

9 MR. ANDES: Is it your -- can you
10 explain that little bit more?

11 MS. WILLIAMS: Do you want him to
12 explain more. I'm fine to move on. But if
13 you want him to explain it more...

14 MR. ANDES: No. Let's go on.

15 MS. WILLIAMS: Question 12, explain
16 what you mean when you say on Page 7 --

17 HEARING OFFICER TIPSORD: You asked
18 this one already, Ms. Williams.

19 MS. WILLIAMS: Thank you. Sorry.

20 Question 13, you testify on Page
21 5, Paragraph 3, quote, the proposed effluent
22 standard could not be attained in the CAWS.
23 An effluent standard's attainment is not
24 measured in the stream, is it, in fact,

1 Dr. Granato?

2 MR. GRANATO: No, it's not. I will
3 say, though, that it really makes little
4 sense to set an effluent standard again when
5 emerging scientific data and information
6 indicate that the designated uses are being
7 attained in the CAWS despite the CAWS having
8 much higher fecal coliform levels than are
9 set in proposed effluent standards.

10 MS. WILLIAMS: Would you apply that
11 concept to all technology-based effluent
12 standards? That if we can't show that a use
13 is not being attained, we shouldn't require
14 technology that's feasible?

15 MR. GRANATO: Could you repeat your
16 question, please?

17 MS. WILLIAMS: I will try. Does your
18 conclusion apply to all effluent
19 technology-based effluents standards? Must
20 we show that -- let me just stop there. I
21 think I'll mess it up.

22 MR. GRANATO: I think my conclusion is
23 that we should be focused on determining
24 whether there is protection of the uses and

1 not --

2 MS. WILLIAMS: And not whether
3 technology is feasible and available and
4 economical?

5 MR. GRANATO: Right. Or where it
6 should be determined how compliance should be
7 determined.

8 MS. WILLIAMS: What about effluent
9 limits like BOD and suspended solids? Should
10 we have not required those when there were no
11 fish that could live or very, very few fish
12 that could live in the CAWS?

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

15 MS. WILLIAMS: Let him answer. I
16 don't think --

17 MR. ANDES: I think I'm allowed to
18 talk to him.

19 MS. WILLIAMS: But I don't want him to
20 forget my question again and have to have it
21 read back.

22 MR. GRANATO: I'll try to remember. I
23 think you're getting into a lot of legal
24 questions and I'm not really --

1 MS. WILLIAMS: I don't think there was
2 anything legal. I didn't intend for there to
3 be.

4 MR. ANDES: You're asking him about
5 technology-based standards and when they're
6 appropriate.

7 MS. WILLIAMS: I would like him to
8 answer. If the hearing officer thinks it's
9 inappropriate --

10 HEARING OFFICER TIPSORD: Well, I
11 think it's consistent with what -- I mean,
12 he's taken a position here in this rulemaking
13 that we shouldn't adopt a technology-based
14 standard and she's saying, well, then should
15 we not have adopted these other
16 technology-based standards. I think it's a
17 fair question.

18 MR. GRANATO: Well, your question is
19 whether standards for BOD and other, say,
20 classical parameters should have been adopted
21 in cases where there were no fish in the
22 waterway?

23 MS. WILLIAMS: Or the designated use
24 was -- where they may not have been necessary

1 purely to attain the designated use.

2 MR. GRANATO: I hadn't really thought
3 about that. I guess I'm trying to ponder
4 that. I hate to waste everyone's time while
5 I'm pondering it.

6 I guess I would say I don't know
7 at this time.

8 MS. WILLIAMS: Well, Question 14, Page
9 6, Paragraph 3 states, quote, US EPA's
10 monitoring methods detect traditional fecal
11 indicators that are not always associated
12 with health risks.

13 Do you know of an indicator that
14 is always associated with health risks at
15 this time?

16 MR. GRANATO: No, I don't.

17 MS. WILLIAMS: Thank you.

18 MR. GRANATO: Let me just say, though,
19 the point of that statement is that fecal
20 indicator levels in the CAWS are not
21 reflective of pathogen concentrations and
22 hence, of, you know, risks particularly if
23 viewed from the perspective of indicator
24 levels that are normally associated with

1 beaches or primary contact recreational
2 areas.

3 You can't look at the indicator
4 levels in the CAWS from the same perspective
5 that you're used to looking at these
6 indicator levels in primary contact
7 recreational areas.

8 MS. WILLIAMS: So you think there's a
9 difference -- I understand you think there
10 may be a difference in magnitude. You think
11 there's a difference in character? For
12 example, if we found an indicator that was a
13 good indicator that told you how many
14 pathogens were present in the effluent, you
15 don't think that would be the same indicator
16 that we'd want to use in all waters?

17 You think we might have actually,
18 say, for example, E. Coli in the CAWS but
19 salmonella in the general use -- I mean, I
20 don't know the example, but you think it
21 might vary, the actual organism that was
22 measured?

23 MR. GRANATO: I think it's going to
24 vary on -- we've heard this in past

1 testimony, it's going to vary based on a lot
2 of factors including the sources of the
3 bacteria and pathogens.

4 MS. WILLIAMS: So it could be a
5 different indicator in this water body than
6 the rest of the state?

7 MR. GRANATO: Could be.

8 MS. WILLIAMS: Okay. I'm going to
9 skip 15. I think we've already addressed
10 that.

11 Question 16, Page 7, Paragraph 2
12 states, quote, there's evidence that no
13 disinfection technology can offer 100 percent
14 guarantee of safe recreational water.

15 Do you think 100 percent guarantee
16 of safe recreational water is ever an
17 achievable goal?

18 MR. GRANATO: Well, there's no such
19 thing as 100 percent safe. Nothing is
20 100 percent safe. You can set the goal, but
21 you can never get there.

22 MS. WILLIAMS: So the fact that you
23 can never get to a goal is not a reason to
24 set one, right, to set some goal? The fact

1 that you can never reach perfection is not a
2 reason to try and set a goal -- not a reason
3 to not set one?

4 MR. GRANATO: I think I know what you
5 mean.

6 MS. WILLIAMS: Thank you. You may be
7 the only one.

8 MR. GRANATO: Basically, I guess what
9 I have said to that is, you know, there's
10 never 100 percent guarantee of safety with
11 any activity. This is why acceptable risk
12 needs to be defined and quantified so that
13 the actual level of safety can be defined and
14 compared with other related risks, for
15 example, the background risk or primary the
16 contact risk.

17 If the current risk is found to be
18 equivalent to background or below some
19 acceptable risk level, then disinfection
20 should be pursued. You know, otherwise, you
21 have basically a slippery slope to
22 continuously reduce risk at higher and higher
23 costs with less and less real benefits.

24 So, again, you can't -- you can

1 never achieve 100 percent safety. So the
2 question is what level of safety is
3 appropriate? How do you know something is
4 acceptably safe for recreation?

5 If you don't set that level, you
6 have no way of knowing whether you've
7 attained a use or not.

8 MS. WILLIAMS: Slippery slope was the
9 word I was thinking of earlier when we were
10 talking about effluent limits and whether
11 they were needed.

12 Let's skip onto 18. Explain the
13 basis for the statement on Page 8, Paragraph
14 2 that, quote, these environmental impacts
15 must be weighed when considering the
16 appropriateness of disinfection requirements.

17 And who must weigh? Who must do
18 this weighing?

19 MR. GRANATO: Okay. Well, again, I'll
20 preface this by saying I'm not an attorney so
21 I can't speak to the legal.

22 MS. WILLIAMS: That's why I left the
23 word "legal" out when I asked the question.

24 MR. GRANATO: Well, I guess, you know,

1 basically, we've got a rulemaking on
2 basically protecting a use that's essentially
3 a discretionary activity on the part of a
4 limited number of citizens of people who
5 choose to recreate on the CAWS.

6 We're endeavoring to, you know,
7 provide protection for those uses, protect
8 the environment that they're going to be
9 using, protect them from unacceptable risk.
10 And in the course of endeavoring to do that,
11 it's only sensible that we would look at the
12 result of that endeavor and its impacts on
13 the rest of the environment and the
14 population at large who are exposed to the
15 impacts of that endeavor.

16 So when you talk about impacts on
17 air quality, everybody has to breathe the
18 air, that's something that is not a
19 discretionary activity. Impacts on climate
20 change is going to affect everybody.

21 So as part of an environmental
22 rulemaking, I would think that the agencies
23 that are charged with protecting the
24 environment would do that weighing.

1 MS. WILLIAMS: Okay. That should be
2 done by the Board or the Agency?

3 MR. GRANATO: Right.

4 MS. WILLIAMS: I just want to ask one
5 last question. On Page 3 of the testimony at
6 the very top you say that the District has
7 initiated a multi-phase research program and
8 has invested substantial funds, over
9 \$10 million, on expert studies.

10 Can you tell us which studies are
11 included in the \$10 million figure?

12 MR. GRANATO: Yes. The CHEERS, the
13 Geosyntec risk study, the expert review panel
14 on the water quality criteria. We have a
15 study ongoing to determine many point sources
16 of bacteria to the waterways. We've
17 undertaken numerous engineering studies.

18 MR. ANDES: Most of those reports
19 being put into the rulemaking by IEPA as part
20 of the docket?

21 (Brief pause.)

22 MR. ANDES: Can you answer?

23 MR. GRANATO: I'm sorry, I was
24 still --

1 MS. WILLIAMS: I don't think any of
2 these studies that he's just cited to have
3 been, have they?

4 MR. GRANATO: I'm sorry. Ask the
5 question again.

6 MR. ANDES: In terms of the studies
7 that have been done by the District as part
8 of this process, have many of those been put
9 into the docket as part of the rulemaking
10 record?

11 MR. GRANATO: Yes.

12 MR. ANDES: Including cost studies on
13 compliance costs at various facilities?

14 MR. GRANATO: Yes.

15 MS. WILLIAMS: Is that part of the
16 \$10 million you referred to? Is that what
17 you meant when you said engineering studies,
18 the cost studies?

19 MR. GRANATO: Right, those are
20 engineering studies.

21 MS. WILLIAMS: That's all I have.

22 HEARING OFFICER TIPSORD: Anyone else
23 for Dr. Granato?

24 MR. ETTINGER: You sat through this

1 morning's session and heard testimony
2 regarding nutrient removal?

3 MR. GRANATO: Yes.

4 MR. ETTINGER: Have you participated
5 in any efforts by the Water Reclamation
6 District to pursue alternatives for dealing
7 with nitrogen or phosphorus from the MWRD
8 plants?

9 MR. ANDES: You mean alternative --

10 MR. ETTINGER: Alternative -- well, I
11 think I like the question the way it was.
12 I'm trying to make a broad question,
13 alternative ways of addressing nutrients from
14 Water Reclamation District plants which would
15 include, say, wetlands treatment.

16 MR. GRANATO: I haven't participated
17 to a great extent, but I'm aware of efforts
18 that are being looked at.

19 MR. ETTINGER: Is there going to be
20 another witness who would be better to ask
21 about this?

22 Well, why don't I just ask you
23 what, generally, do you know about efforts to
24 look at alternative treatments for nutrients

1 from MWRD plants?

2 MR. ANDES: You mean treatment or you
3 mean other things?

4 MR. ETTINGER: Way of treating the
5 pollutants in the broadest possible way,
6 including shooting them to the moon, wetlands
7 treatment --

8 MR. GRANATO: Well, there has been a
9 suggestion of --

10 MR. ETTINGER: -- prohibiting the use
11 of phosphorous on lawns.

12 MR. GRANATO: -- about trying to incur
13 vegetarian diets in the District.

14 MR. ETTINGER: That would be
15 something, too. I just want to know about
16 the District's efforts to consider that
17 problem in the broadest sense.

18 MR. GRANATO: The District has
19 undertaken initial steps to look at that.

20 MR. ETTINGER: What are those steps?

21 MR. GRANATO: The District has worked
22 with some outside agencies to assess
23 feasibility of nutrient farming, we've done
24 some preliminary studies to look at potential

1 use of treated wetlands in the Calumet area,
2 for possibly treating a portion of the
3 Calumet plant effluent. And there's some
4 work underway to look at establishing
5 treatment of wetlands in the vicinity of the
6 Lemont plant.

7 MR. ETTINGER: Have you looked in
8 areas in the area what of we've described as
9 the Upper Dresden Island Pool for creation of
10 wetlands?

11 MR. GRANATO: I'm not clear off the
12 top of my head, Albert, about where the sites
13 are in relation to that. I'd have to --

14 MR. ETTINGER: I'm not either, so what
15 sites have you considered in terms of
16 potential wetland treatment of nitrogen and
17 phosphorus?

18 MR. GRANATO: I don't know if I could
19 even name them all for you without getting
20 confused. At this point, I'd have to go
21 back.

22 MR. ANDES: We can provide the
23 information.

24 MR. ETTINGER: I don't want you to

1 give me any information you're not
2 comfortable giving me. Just, generally, what
3 do you recall of what you're considering in
4 that respect.

5 MR. GRANATO: Well, there's -- I don't
6 want to give you misinformation.

7 MR. ETTINGER: I'm going to show you
8 what has been marked as IEPA Attachment H, I
9 believe, to their original petition. I'm
10 just going to show this to you and ask you if
11 you know of any place along this in which
12 you're considering using some sort of wetland
13 treatment or wetland restoration for
14 addressing nitrogen or phosphorus issues?

15 MR. ANDES: And this is anywhere in
16 the CAWS?

17 MR. ETTINGER: Or anywhere all the way
18 down to the I-55 bridge. Are you aware of
19 anywhere that relates to the proceeding that
20 we're having here today?

21 MR. GRANATO: I'm not sure, Albert.

22 MR. ETTINGER: Okay. You're allowed
23 to say "I don't know." That's a perfectly
24 legitimate question. Do you know who at the

1 District would know?

2 MR. ANDES: We can probably find out.

3 MR. GRANATO: I mean, it's not that I
4 don't want to give you the information. I
5 just don't -- at this time I don't think I
6 can convey it to you accurately sitting here
7 right now.

8 MR. ETTINGER: And you don't know who
9 would have the information, so we'll have to
10 ask somebody else.

11 MR. ANDES: We can find out who it is.

12 MR. ETTINGER: Thank you. I'm done.

13 HEARING OFFICER TIPSORD: Any other
14 questions for Dr. Granato? Let's go off the
15 record for just a very quick brief moment.

16 (Whereupon, after a short
17 break was had, the
18 following proceedings
19 were held accordingly.)

20 HEARING OFFICER TIPSORD: Back on the
21 record. I want to thank you all for your
22 time and attention. On November 17th we'll
23 start with Dr. Melching and hopefully maybe
24 get to Dr. Mackey. If not, we'll talk to him

1 in Des Plaines in December.

2 Thank you all for your time and
3 attention, I appreciate it. Again, I
4 appreciate your courtesy to one another and
5 let's keep up the good work and we'll see you
6 all on November 17th. Thank you. We're
7 adjourned.

8 (Which were all the
9 proceedings had in the
10 above-entitled cause
11 on this date.)

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1 STATE OF ILLINOIS)
2 COUNTY OF WILL) SS.

3

4 I, Tamara Manganiello, CSR, RPR, do hereby
5 certify that I reported in shorthand the proceedings
6 held in the foregoing cause, and that the foregoing
7 is a true, complete and correct transcript of the
8 proceedings as appears from my stenographic notes so
9 taken and transcribed under my personal direction.

10

11

Tamara Manganiello

TAMARA MANGANIELLO, CSR, RPR
License No. 084-004560

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SUBSCRIBED AND SWORN TO
20 before me this 10th day
21 of November, A.D., 2008.

21

Diana Leverso

22

Notary Public

23



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