

GREAT LAKES AND MISSISSIPPI RIVER INTERBASIN STUDY
PUBLIC MEETING

Ann Arbor, Michigan
Monday, January 21, 2014

Before Quentina Rochelle Snowden,
Certified Shorthand Reporter-5519, of Capital Reporting
Company, a Notary Public in and for the State of
Michigan, beginning at 5:00 p.m.

Panel Members:

Mr. David Wethington

Mr. John Goss

Brigadier General Margaret W. Burcham

Jo-Ellen Darcy, Assistant Secretary of the Army
(Civil Works)

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1 P R O C E E D I N G S

2 MODERATOR ZABOROWSKI: Good afternoon,
3 ladies and gentlemen. I'll again ask everybody to
4 please find a seat. We're going to get started right
5 now. So, first if I could ask anybody that has -- if
6 you're having any side conversations you're not willing
7 quite to end it, you can take it outside of the room so
8 those of us here can concentrate, please. I'd also
9 like everyone to turn down your cell phones or put them
10 on vibrate -- vibrate or mute, it's kind of like the
11 movies, try not to disrupt things. And we're going to
12 go ahead and get started.

13 So, I'd like to welcome everybody --
14 everyone to tonight's Great Lakes Mississippi River
15 Interbasin Study, or GLMRIS public meeting. My name is
16 Kendall Zaborowski. I'm from the U.S. Army Corps of
17 Engineers Chicago District, and I will be moderating
18 tonight's meeting.

19 So before beginning in the meeting, I'd
20 like to let everyone know that if you need to use the
21 restroom, just go back out, use the doors behind us,
22 hang a right, and they're at the end of the hall. So,
23 additionally, in the event of an emergency, the door
24 behind us is an emergency exit, or there's one to my
25 right, your left, right behind the stage.

1 When you arrived here this evening,
2 there were several materials that you would have picked
3 up at the front desk. So, the first is a green meeting
4 agenda. That's going to speak to our schedule tonight.
5 Please note that at 6:00 p.m. we have scheduled a
6 five-minute break for restrooms.

7 Next is the yellow comment registration
8 form. If you would like to ask a question or make a
9 comment here this evening, if you'd like to submit a
10 written comment, please fill out the yellow form and
11 return it to the sign-in desk.

12 Next, these blue pieces of paper have
13 some frequently asked questions about GLMRIS, and the
14 other aquatic nuisance species efforts by the Corps of
15 Engineers.

16 And then last, as far as handouts go
17 tonight we have this, which is the summary of the
18 GLMRIS report. So it contains information that we're
19 going to be presenting here this evening.

20 I would like to now take a moment to
21 introduce today's panel. Not quite at the end of the
22 table, first we have, the Honorable Jo-Ellen Darcy,
23 who is the Assistant Secretary of the Army for Civil
24 Works.

25 To her right then at the far end of the

1 table on your left is General Margaret Burcham, the
2 Commander of the Great Lakes and Ohio River Division
3 of the U.S. Army Corps of Engineers.

4 Moving in, we have Mr. John Goss from
5 the Whitehouse Council on Environmental Quality.

6 And then closest to me is Mr. Dave
7 Wethington, Project Manager of GLMRIS, also with the
8 U.S. Army Corps of Engineers.

9 For those of you here in person tonight,
10 if you would like to speak at our meeting and you have
11 not -- and you may have pre-registered on the website
12 and not checked in at our sign-in table, please take a
13 moment to do so. Additionally, if you did not
14 pre-register on our website and would like to make a
15 comment here tonight, please check in at our welcome
16 table.

17 So, I would also like to take a moment
18 to thank Deputy Commander Detroit District Major Ruth
19 for hosting us here tonight and helping us out with
20 the logistics of everything.

21 The Corps of Engineers is hosting
22 several public meetings throughout the study area in
23 an effort to give -- to give opportunities to those
24 within the study area to learn about the GLMRIS report
25 and to give us input on the GLMRIS report and the

1 information presented in it. So this is the fourth
2 meeting that we have had so far, and we're glad to
3 have you us with us.

4 The GLMRIS report in its entirety can be
5 viewed and downloaded from the GLMRIS website, which
6 is <http://glmris.anl.gov>.

7 Our GLMRIS team has organized this
8 public meeting to accomplish two goals. The first goal
9 is to present information that is contained in the
10 GLMRIS report. The second goal is to solicit public
11 input on the information presented in the GLMRIS
12 report. The Army Corps of Engineers will be collecting
13 comments through March 3rd of this year. Comments that
14 will -- will then be compiled and posted to the GLMRIS
15 website. For comments to be formally included in our
16 comment period, they need to be given during an oral
17 comment period at one of our meetings, submitted as a
18 written comment or submitted as a web comment through
19 our project website. If you have any questions or
20 concerns during the presentations or during the meeting
21 itself, find somebody with a red lanyard like this and
22 we'll try to help you the best as we can.

23 As mentioned previously, the public
24 comment period ends on March 3rd of this year. As
25 indicated on the green agenda, this public meeting

1 will begin with a few presentations, a couple of
2 speakers, and then we're going to move into a public
3 comment period. The public comment period is
4 scheduled to end at 7:00 p.m. For those of you that
5 are participating today via webinar, I want to let you
6 know that we have a pretty crowded room tonight, and
7 several people have pre-registered. So we may not get
8 a chance to take questions from those of you on the
9 webinar as we would like, but I'd like to let you know
10 that you can still submit your comments on the GLMRIS
11 website or via mail; and I'd like to let you also know
12 that one type of comment does not get any preference
13 or weighting versus any other, so by not being able to
14 speak in person tonight, your comment will not be
15 thought of less.

16 So, I'd like to now turn it over to Ms.
17 Darcy who would like to make a few comments.

18 MS. DARCY: Thank you. And thanks,
19 everybody, for being here. My name is Jo-Ellen Darcy,
20 I'm the Assistant Secretary of the Army for Civil
21 Works. That means I'm the civilian overseer of the
22 Army Corps of Engineers. And I'm glad to be here in
23 Ann Arbor with all of you here today. I also want to
24 recognize Senator Stabenow, who's joining us here for
25 this public hearing here today. If you don't know,

1 you don't have a stronger champion in Washington than
2 Senator Stabenow, as far as the Great Lakes is
3 concerned. She -- she's a dedicated public servant to
4 preserving this incredible resource.

5 And I was going to take a few minutes
6 today to talk to you about the history of the Great
7 Lakes so that you really understand that I think
8 they're important to you all as well as to this
9 country as well, but I don't think anybody here needs
10 to hear from me about the history and importance of
11 this ecosystem because you know it better than
12 anybody.

13 But I do want you to know that I am a
14 Spartan, I'm a graduate of Michigan State University.
15 I got my Master's degree there. Also worked in
16 Michigan for awhile -- I see some Spartans doing this
17 (gesturing) in the back. How about that Rose Bowl?

18 SENATOR STABENOW: That's right.

19 MS. DARCY: And I'm -- I'm proud to be
20 able to say that on this campus. But I lived in
21 Michigan for awhile and I am -- I'm from the east
22 coast, I'm from Massachusetts, but the time I have
23 spent in the Great Lakes and in Michigan, it's my
24 second home. So not only do I know the value of this
25 resource, I've kayaked on this resource, I swam in

1 Lake Superior actually one summertime when it was
2 about -- it was the coldest it's ever been. And it's
3 just an incredible place to be. I was told when I
4 moved to Michigan at that time that the Great Lakes
5 were even better than the ocean, for those of you from
6 the midwest. I haven't been convinced of that, but I
7 have been convinced that it's a pretty special place
8 to be and an incredible resource for us to protect.

9 We've got technical people here tonight
10 to explain to you what our study has found, to explain
11 all of the alternatives that we just discovered and --
12 and hopefully you'll be able to take from this
13 study -- what we're trying to do is paint a picture of
14 what we can do. It's painting a picture of what these
15 alternatives are. And the reason we're here is
16 because of you. You're the stakeholders here. You're
17 the people who know this resource. You know what you
18 need and we need to hear from you. We have
19 decision-makers here, but you're also decision-makers,
20 so we need to hear from you as to what we need to do
21 in the future in order to create the correct
22 environment and the resource so that we will not be
23 hampered by invasive species coming into this
24 incredible resource.

25 So with that, I'd like to introduce

1 General Margaret Burcham. She's the deputy -- she's
2 the Commanding General, actually, of the Lakes and
3 Rivers Division, which encompasses this entire region
4 of the country, so, General Burcham.

5 GENERAL BURCHAM: Okay. Good afternoon
6 Senator and ladies and gentlemen, members of the
7 public. As was noted, I'm General Margaret Burcham
8 and I'm the Commander for the Great Lakes and the Ohio
9 River Division for the whole Corps of Engineers. And,
10 first off I've got to tell you, I'm a product of the
11 Spartans too. My parents met there as students many
12 years ago. And I am -- on behalf of all of the Corps
13 of Engineers, we're really honored to be here tonight
14 to be supporting the nation's toughest engineering
15 challenges. And I would say that we are also very
16 excited to reach what is really the culmination of
17 many, many years of really hard work battling this
18 tough problem in the Great Lakes.

19 I want you to know I'm very proud of the
20 work that our team has done over these years. We're
21 going to be presenting to you what we consider a
22 really great and quality product that meets all of the
23 requirements that were posed to us through Congress.

24 The Chicago District for our division
25 has the lead on this project, but I want you to

1 understand that we have reached out to expertise from
2 across the entire Corps of Engineers. This is -- this
3 project is going to -- and its report is going to start
4 the discussion about what we can do to solve the
5 problem of the movement of invasive species between the
6 Great Lakes and the Mississippi River Basin. What --
7 what will result from that is ultimately a shared
8 responsibility amongst many agencies of the Federal
9 government, perhaps, state agencies, local governments,
10 and perhaps non-governmental agencies.

11 There's tough decisions that need to be
12 made from the information that we're presenting here,
13 and all of us look forward to partnering with you and
14 the other agencies on our way ahead. So thanks. And
15 I'm going to present Mr. John Goss as the next speaker.

16 MODERATOR ZABOROWSKI: John, if you
17 don't mind real quick, I need to -- people on the
18 webinar are having a difficult time hearing, so if you
19 give me a minute I'm going to try -- test, somebody on
20 the webinar, if you wouldn't mind responding. Is the
21 sound any better for you guys? Yes? No? Well, Mr.
22 John Goss.

23 MR. GOSS: Thank you, General Burcham
24 and Assistant Secretary Darcy. Certainly the direct
25 involvement of the Army Corps of Engineers in the

1 GLMRIS study is indicative of the commitment that you
2 have from the people in Washington to reach out to the
3 region. On behalf of the administration I report to
4 the Whitehouse Environmental Policy Office, the
5 Council on Environmental Quality, and we need your
6 help. We need your help to develop a consensus on
7 what is the best alternative to move forward.
8 Hopefully we can narrow it down and do further work
9 soon on one alternative, possibly more than one if we
10 need to. But that's where we are in this process. I
11 think the Corps has done an admirable job laying out
12 the choices. I think you'll be impressed with the
13 detail and the depth of the information that you're
14 going to hear today.

15 I would like to talk just for three or
16 four minutes about Alternative 1. And Alternative 1
17 assumes that we're going to continue the efforts that
18 are currently underway to keep Asian carp out of the
19 Great Lakes.

20 For the past three years, I've had the
21 privilege of coordinating a team of people from
22 Federal agencies in all Great Lakes states and people
23 in the Chicago area who are working on a joint effort
24 to make sure that we do not have carp getting through
25 the Chicago waterway. And this -- this project is

1 funded through the Great Lakes Restoration Initiative,
2 and also base budgets from the Corps and from the
3 Department of Interior.

4 We have a four-part strategy which is
5 creating an effective electric barrier. We're now
6 working on building a third electric barrier in the
7 Chicago ship canal, and constantly testing and
8 improving its quality. We're doing extensive
9 monitoring all over the area in Chicago south of the
10 electric barrier and also lakeside, and all around the
11 Great Lakes. We're developing new control
12 technologies for Asian carp, and then the GLMRIS study
13 is looking at the long-term picture.

14 We have continued to test, in addition
15 to electric barriers, we're looking at possibilities
16 for carbon dioxide, ozone and other things that could
17 be used to keep fish from entering a lock system. So
18 when you hear about the GLMRIS lock today, think about
19 there might be some other things that could be
20 deterrents to keep fish from coming into those locks
21 also.

22 The commercial harvesting of bighead and
23 silver carp down the Illinois River continues.
24 Illinois DNR and the commercial fisherman took out
25 over 50,000 Asian carp in 2013 in that 25- or 30-mile

1 stretch down there where the carp have moved up. We
2 are going to continue this, there's no question that
3 keeping the pressure off the barrier is very
4 important.

5 Not much in the discussion tonight, but
6 I want to give you just a snippet. There were 18 other
7 locations across the Continental Divide that we call
8 the other pathways, possible connection to flood stage
9 from New York to Minnesota where we could have invasive
10 species transferring in the spring flood times. The
11 Corps completed an excellent risk assessment on those
12 18; 10 of them were rated low risk; 7 were rated
13 medium; and 1 was rated high. The one that was rated
14 high was in Indiana, my home state, where Eagle Marsh
15 is the wetland connection between the Wabash River and
16 the Maumee. And I'm very happy to report great
17 progress on closing that connection. Some time this
18 year we'll be announcing a construction project that
19 will give us a divide there that's going to be very
20 protective. And also, in Ohio, we have two projects
21 that are moving ahead with design to try to reduce the
22 risk of any species transfer.

23 There is a national Asian carp plan Fish
24 and Wildlife Services developed with help from all of
25 the states for the river systems. We have not been

1 able to address that with significant resources to
2 date. But we do have a network of organizations
3 working on the Mississippi and Ohio River to come up
4 with strategies for those states also.

5 And I just want to mention, in addition
6 to our Great Lakes states, because of the other half
7 of this study is the Mississippi and Ohio River Basin
8 there are a total of over 30 states that are impacted
9 by this study. Certainly the species that are in the
10 Great Lakes today that may be or could be
11 transferring, if we do not continue our work on this
12 project, are a major concern for those other states.
13 We have great bipartisan support in Congress and Great
14 Lakes. We need to extend that to the rest of the
15 states that are impacted.

16 And I want to conclude just -- excuse
17 me -- reminding you of some Great Lakes success
18 stories. Certainly sea lamprey control, starting back
19 in the 1950s, continues to keep an invasive species
20 from taking over. We have the Great Lakes water
21 quality initiative. Many of you here, I'm sure have
22 worked on that. The Great Lakes Compact which all of
23 the states in the Great Lakes banded together to
24 protect our water levels, and any diversions of our
25 Great Lakes water. The Great Lakes Restoration

1 Initiative, in the past five or six years, has been a
2 tremendous focus of resources with support from the
3 Obama administration and bipartisan support in
4 Congress. And now we're down to Asian carp control. I
5 want to put Asian carp control on that list for you to
6 consider. It's going to take a very serious commitment
7 from all of the states working together to develop a
8 consensus to move forward. It will certainly not be
9 easy to select the program that can be funded and that
10 can be moved forward, but with your help I'm confident
11 that we can get there. So, thank you. David. Sorry I
12 didn't introduce you.

13 MR. WETHINGTON: All right. Well, good
14 afternoon everyone, my name is Dave Wethington. I am
15 the project manager for the Great Lakes Mississippi
16 River Interbasin Study, otherwise known as GLMRIS.

17 I want to spend a few minutes this
18 morning -- this afternoon speaking to you about what's
19 actually in the report. I won't spend a whole lot of
20 time because really the most important feature of this
21 meeting is to hear from you; for you to ask questions
22 of myself and the rest of the team who's assembled
23 here today, as well as for us to provide this
24 information to you.

25 The scope of the GLMRIS study was

1 originally authorized by Congress in November of 2007.
2 The Corps of Engineers received appropriations to
3 begin working on GLMRIS in July -- I'm sorry, in June
4 of 2009. The scope of the study was to evaluate the
5 possible options or technologies that are available to
6 prevent the transit of aquatic nuisance species
7 between the Great Lakes and its river basins. You see
8 those two basins up behind me. That brown line is
9 that interbasin divide. John Goss spoke to the
10 additional sites that are outside of the Chicago area
11 waterways. Those 18 pathways reside along that
12 interbasin divide.

13 The goals of GLMRIS were to number
14 one -- the goal of GLMRIS -- the goal of GLMRIS is to
15 prevent the transfer of aquatic nuisance species, as
16 well as address what possible impacts there may be to
17 existing uses and users of the system of the Chicago
18 area waterways in the event that aquatic nuisance
19 species controls are implemented, and to suggest what
20 types of measure may be appropriate for appropriately
21 mitigating for those adverse impacts.

22 Stakeholder engagement has been a key
23 focus of the GLMRIS team since the inception of the
24 study, the reason why we're having a meeting such as
25 this. The public has been involved very much. We've

1 had various stakeholder engagements. And so getting
2 stakeholder input, speaking to that shared
3 responsibility, is really a key part of this study.

4 In July of 2012 we received legislation
5 that did a few things to the study. Number one, it
6 expedited the timeline for completion of the GLMRIS
7 report. We received this legislation in July -- on
8 July 6th of 2012, and 18 months later, on January 6th,
9 2014, turned in a completed report.

10 The legislation also asked us to focus
11 in on the Chicago Area Waterway System. Some have
12 asked how come we didn't go into more detail? But I
13 hope that the comments that John, as well as other
14 activities by the Corps of Engineers on those other
15 pathways, have spoken to those other continuing
16 efforts outside of the Chicago area waterway system.
17 If you have an interest in any one of those sites, any
18 of those 18 pathways, there is a significant amount of
19 information on our website, again, glmris.anl.gov,
20 including pathway reports, looking at those risk
21 characterizations that can be very useful to you if
22 you're seeking additional information.

23 The legislation that we received in 2012
24 also asked us to focus specifically on hydrologic
25 separation among the alternatives that we present

1 within the GLMRIS report.

2 The Chicago Area Waterway System is a
3 very complex system. It has a number of very
4 important uses, several of the most important of which
5 I've listed on the slide behind me. They include
6 navigation, commercial cargo navigation as well as
7 recreational navigation, water supply and conveyance.
8 Even the folks who live within Chicago are surprised
9 when I tell them that, on average, between 65 to
10 85 percent of the volume of the Chicago River is
11 actually treated municipal wastewater discharge. So
12 it serves a significant conveyance stream for water
13 within the Chicago area.

14 The Chicago Area Waterways System or
15 CAWS, as we call it, is also a very important outlet
16 for our flood risk management system within the
17 Chicago area. Chicago serves about 9.2 million
18 residents in the downtown areas and adjoining suburbs.
19 And we use the CAWS as a very important outlet for --
20 during significant precipitation events that may
21 impact the city. We're able to move water not just
22 downstream as it normally does, but also return water
23 back to Lake Michigan to alleviate significant
24 pressure on the industry and residents of the City of
25 Chicago and outlying suburbs. The Chicago Waterway

1 System also does serve as that primary connection,
2 primary aquatic connection between the Great Lakes and
3 Mississippi River basins.

4 The GLMRIS report itself, which can be
5 again downloaded on our website, presents information
6 about the range of alternatives. It presents a
7 conceptual level of design for those alternatives as
8 well as those mitigation needs. Again, those
9 mitigation needs being those -- the adverse impacts to
10 the navigation, the water conveyance or water quality,
11 the flood risk management, what type of impacts would
12 potential controls, that I'll discuss in a moment,
13 have on those existing needs.

14 We also present a range of cost
15 estimates based on existing Corps of Engineers' cost
16 estimating procedures. However, the extent and the
17 detail of a lot of these costs will not be appropriate
18 for further authorization. This tool, this report, is
19 best used as an alternative decision-making tool.
20 There are evaluation criteria which are presented in
21 the report, which can then be used to help
22 decision-makers look at the trade-offs among the
23 different alternatives. Those trade-offs could
24 include costs, economic impacts, environmental
25 impacts, total time for implementation. And I'll

1 speak to those a little bit more at the conclusion of
2 my discussion. We do not include a specific ranking
3 or rating of the findings; and certainly additional
4 analysis would likely be necessary with any one of
5 these alternatives to go to a construction phase.

6 If you're to break the GLMRIS down into
7 several basic steps, they would include identification
8 of the connections; how can species transfer through
9 aquatic pathways between the Great Lakes and its river
10 basins? It includes an evaluation of species. At the
11 outset, we identified over 200 species that we then
12 refine down to a list of about 35 that were of
13 potential concern. We conducted a risk-based
14 assessment looking at the probability of species
15 transfer and the potential consequences to identify a
16 risk and identified 13 species of particular concern
17 for this study.

18 We also spent a good amount of time
19 assessing available types of controls. We initially
20 identified over 90 different aquatic specie control
21 technologies ranging from separation to use of aquatic
22 herbicides or other mechanical screening methods, et
23 cetera. And we took that information and screened it
24 down using expert input and public input. We took
25 these three pieces of information, combined with the

1 background information on economies within the Chicago
2 Area Waterway System as well as larger economies of,
3 let's say, commercial fishing or recreational fishing
4 within both the Great Lakes and Mississippi River
5 basins and took all of this information and put it
6 together to compile the GLMRIS report.

7 This study book, that hopefully everyone
8 had the opportunity to pick out, is an excellent tool.
9 It's about 25 pages. And you can kind of use it along
10 -- to follow along with me as I continue the rest of
11 my presentation.

12 The GLMRIS report itself -- this is not
13 the report -- the GLMRIS report itself is about 232
14 pages, and has over 8,000 pages of additional
15 information, technical appendices that will be very
16 valuable to certain (inaudible).

17 A little bit about some of the
18 technologies that we discuss within the GLMRIS report.
19 Some of these may be very familiar to you. Over on
20 the right-hand side you will see a concept like a
21 physical barrier. That could be utilized to prevent
22 surface waters from mixing between the Great Lakes and
23 Mississippi River Basins. Other technologies, you
24 might have heard it before, but we maybe took a little
25 twist on them from the report, such as the electric

1 barrier. Electric barrier itself is currently being
2 utilized to control aquatic nuisance species,
3 specifically Asian carp transfer, up toward Lake
4 Michigan.

5 In GLMRIS we included additional
6 engineering features, including an engineer channel
7 that will allow us opportunities to gain from lessons
8 learned, to optimize designs.

9 We also in GLMRIS, came up with new
10 novel technologies or at least takes on existing
11 technologies applied in a novel way. We used -- we
12 came up with the concept of the GLMRIS lock, which is
13 a flushing lock chamber, which helps get rid of those
14 aquatic nuisance species of concern which may float
15 within the water column. We use treated water,
16 aquatic -- ANS treated water from aquatic nuisance
17 species treatment plants to supply the clean feed for
18 this lock system.

19 I'm going to spend just a few minutes
20 going over each of the alternatives and then conclude
21 and turn it over to the important speakers in the room
22 this afternoon, which are yourselves. You can follow
23 along in the lower left-hand corner. I'll start with
24 Alternative Plan Number 1 and move on subsequently.

25 The first plan within the GLMRIS report

1 is the baseline alternative. We call it a No New
2 Federal Action plan, but I prefer to call it the
3 Sustained Activities Alternative. This plan describes
4 the baseline which would continue to be implemented in
5 the absence of any new action as a result of this
6 study. We call it sustained activities because there
7 are many, many significant efforts that are currently
8 ongoing, not only at the Federal level, but at the
9 state and local resource agency level toward
10 combatting, toward controlling aquatic nuisance
11 species. Corps specific activities include operation,
12 maintenance and construction of electric barrier
13 systems, as well as other research and monitoring
14 activities that are helping to be funded by the Great
15 Lakes Restoration Initiative. Each of these current
16 activities acts as a baseline for us to essentially
17 measure the additional risk reduction which can be
18 bought, which can be achieved by each of the following
19 alternatives.

20 Alternative Plan 2 is our non-structural
21 control technologies alternative. These are very
22 simply aquatic nuisance species controls that do not
23 require a specific structure to be built, to be
24 implemented. For example, non-structural control
25 technologies could include active management such as

1 the advanced fishing of Asian carp populations or the
2 identification of various -- where certain aquatic
3 invasive plant species may be and the advanced
4 application of aquatic herbicides in those situations.
5 They include methods such as education and outreach or
6 the promulgation of new laws and regulations.
7 Education and outreach could include campaigns to stop
8 aquatic hitchhikers via cleaning your boats and
9 knowing not to dump bait buckets into open bodies of
10 water.

11 Successful implementation of all of
12 these non-structural technologies, we certainly share
13 responsibility. We identified them within the GLMRIS
14 report as good ideas, as best management practices,
15 not to be necessarily implemented by the Corps of
16 Engineers, but by those agencies and those resource
17 holders who have the appropriate authority and the
18 funding to implement them as a strategic way to
19 control aquatic nuisance species. I'm not going to
20 stand here this evening and tell you that
21 non-structural measures will be effective at
22 controlling all of the aquatic nuisance species
23 concerned, but they are certainly best management
24 practices. As such, we have included elements of
25 these non-structural controls in each of these

1 subsequent technologies to help bolster the -- those
2 particular alternatives. Non-structural control
3 technologies are most effective at slowing down the
4 potential transfer, potential arrival of aquatic
5 nuisance species.

6 The unique thing about non-structural
7 control technology is that it can be implemented very
8 quickly, and at a significantly smaller cost than some
9 of these other structural technologies that you'll
10 see. We have estimated a time implementation at
11 zero years, in essence if there are resources
12 available and if there are appropriate authorities,
13 any of these could be implemented tomorrow. We
14 estimated the cost by looking at a -- an amalgamation
15 of what current aquatic nuisance species control
16 technologies or efforts were being implemented by the
17 state resource agencies and averaging that cost across
18 that watershed divide. That 68 million, it may be
19 high, it may be low, it might be right on. This is
20 the best -- any of the costs that are identified in
21 this report are not necessarily for use for specific
22 numbers, but are best used to compare among different
23 alternatives.

24 Alternative Plan 3, the flow bypass
25 alternative, is the first of two technology

1 alternatives that we discuss in GLMRIS. This
2 alternative includes two bidirectional choke points
3 that will be utilized and implemented to control the
4 transfer of aquatic nuisance species. As the title
5 suggests, the flow bypass would include the rerouting
6 of the volume of the river, in two points behind me,
7 through an aquatic nuisance species treatment plant.
8 This rerouting of the flow through the treatment plant
9 would actively address and incapacitate all applicable
10 aquatic nuisance species of concern. We would include
11 with this alternative an adjacent navigational
12 channel. This would allow existing use of navigation
13 to continue within the Chicago Area Waterway System.
14 We would implement a GLMRIS lock, that flushing lock
15 system which would be used to remove any floating
16 aquatic nuisance species, bookend by a pair of
17 electric barriers to prevent, in that engineer
18 channel, to control fishing species -- or fish species
19 from going through those two checkpoints.

20 Now, with this, as you might imagine, if
21 you're rerouting the flow of the Chicago River, you
22 have to have a plant that is sufficient to -- to deal
23 with various flows. Or conversely, you could build
24 storage within the Chicago Area Waterway System to
25 control for large precipitation events. Within the

1 Chicago area, we have seen in the past five years
2 approximately three or four different events that have
3 met or exceeded a quote, "100-year level storm." As
4 such, we constructed infrastructure in GLMRIS to be
5 conservative, if you will, to actively help us control
6 species transfer. We constructed infrastructure to be
7 able to stand up to a 500-year level event. The reason
8 why we chose this level is, again, we wanted to have
9 our alternatives be as preventative as the initial
10 legislation asked us to be.

11 Because of this large amount of
12 mitigation infrastructure which needed to be
13 constructed, we looked at an approximate time of
14 completion about 25 years, with an approximate cost of
15 about \$15.5 billion.

16 The Buffer Zone Alternative, Alternative
17 Number 4, is the second of our two technology
18 alternatives. This takes a different -- little bit of
19 a different take on aquatic nuisance species control.
20 As opposed to having two bidirectional checkpoints
21 where you have single points that are trying to stop
22 all aquatic nuisance species of concern, we instead
23 take that and we stretch it so that we bookend the
24 Chicago Area Waterway System with one-way checkpoints.

25 If you look on the map behind me, there

1 are three spots along Lake Michigan shoreline or
2 adjacent to Lake Michigan, as well as one location
3 down Brandon Road which serve as those one-way
4 checkpoints. This alternative also includes the
5 introduction of two physical barriers within the
6 southern part of the system.

7 These -- this combination of physical
8 checkpoints as well as the one-way checkpoint
9 bookending the CAWS helps us create a buffer zone.
10 The buffer zone is unique in that area in between that
11 you see shaded in white is controlled for aquatic
12 nuisance species. It allows us to monitor for
13 potential passage of one way or the other for aquatic
14 nuisance species as well as allows us to continue to
15 operate the system as it does today. During
16 significant precipitation events, water can still flow
17 both directions outside of the Chicago Area Waterway
18 System because you imagine that the -- the area
19 highlighted in white would be able to have the only
20 input being a precipitation input, and so water could
21 still flow in either direction.

22 The estimated time of completion with
23 this, since there is less flood risk management
24 infrastructure necessary, is approximately 10 years
25 with a less cost of about \$7.8 billion.

1 Alternative Plan 5 is the first of our
2 two hydrologic separation alternatives. In our two
3 different hydrologic separation alternatives we look
4 at a lakefront and then a mid-system potential
5 separation to look at the requirements for mitigation
6 for each. In the lakefront scenario you end up
7 putting barriers at or adjacent to that interface
8 between Lake Michigan and the Chicago Area Waterway
9 System. As such, you are blocking off a significant
10 flood risk management outlet for the Chicago and
11 surrounding suburbs. And so there's, again, a
12 significant amount of flood risk management
13 infrastructure which is necessary to be constructed as
14 part of this alternative. To this end, there are two
15 large reservoirs which would help drive that time of
16 estimated completion to about 25 years as well as help
17 drive that cost of about \$18.4 billion.

18 The second of the two hydrologic
19 separation alternatives is the mid-system separation.
20 The team went back and looked at all of these
21 significant challenges with regard to that flood risk
22 management mitigation and thought where could we
23 potentially put physical barriers in the system to help
24 alleviate this -- this flood risk management issue. So
25 we chose two points that are adjacent to or

1 approximately at where that historic divide used to be
2 among the different watersheds. We placed barriers at
3 two locations you see on the map behind me and they
4 have successfully, for the most part, alleviated those
5 flood risk management issues. However, if you place
6 barriers at the middle part of the system, you open up
7 the rest of the Chicago River from that point toward
8 Lake Michigan into the Great Lakes environment. That
9 part of Chicago River has several important existing
10 uses. Number one, there are two significant water
11 reclamation plants with -- which discharge into that
12 part of the system. Additionally, there are several
13 hundred different combined sort of outfalls which,
14 although not on a regular basis, but occasionally will
15 have flows that flow into the system. If you now open
16 that part of the river, into Lake Michigan, those
17 waters become waters of the Great Lakes essentially.

18 Therefore, wanting to alleviate any type
19 of environmental harm to Lake Michigan via water
20 quality and water contamination, we chose to do a
21 couple different things. First, we chose to reroute
22 the effluent from those water reclamation plants and
23 those pipes shown in green to points immediately
24 downstream where the barriers are. Those alleviate a
25 potential contaminate load into Lake Michigan as well

1 as allow water to continue to support the navigation
2 mission downstream. I mentioned at the outset that
3 water reclamation plant discharge or that wastewater
4 infrastructure provides anywhere from 65 to 85 percent
5 of that total volume. So if you remove those two
6 water reclamation plant discharges from the system
7 downstream, you would lose a significant volume of
8 water, thus inhibiting or hindering, I guess, further
9 the potential navigation issues that we have seen in
10 the past couple of years.

11 In addition, we include infrastructure
12 that would capture those combined sewer outfalls
13 during significant rain events and hold them so that
14 that combined sewer water does not get into Lake
15 Michigan.

16 We've heard some questions about this
17 particular scenario that I'd like to take a quick
18 moment to address, and that's significantly with regard
19 to the wastewater treatment infrastructure within
20 Chicago. There's been some questions as to how come we
21 instead don't just allow the water to go into Lake
22 Michigan and instead clean it up to better water
23 quality standards. If you were to take the water
24 reclamation plant volume of water and clean it to
25 existing Lake Michigan water standards, you would still

1 be adding a significant load of contaminants into Lake
2 Michigan environment. Lake Michigan itself has about a
3 100-year residence time, which means it takes on
4 average a drop of water about 100 years to circulate
5 through all of Lake Michigan. So if you were to
6 introduce that significant contaminant load, which does
7 not exist today, you'd be introducing a significant
8 overall contaminant load to the Great Lakes body in
9 general. Because of this infrastructure, the estimated
10 time to completion for this alternative is, again,
11 about 25 years with a cost of about \$15.5 billion.

12 The last two alternatives we call our
13 hybrids, and they're called this because they're
14 combinations of technology and physical separation
15 scenarios. If you haven't already noticed, on the
16 repeated kind of maps behind me, you can see that the
17 Chicago Area Waterway System is split into an upper
18 section, and a lower section. Essentially what these
19 two different alternatives do is place a physical
20 barrier on either the upper or lower while leaving the
21 opposite end open. So in this particular scenario,
22 the hybrid Cal-Sag Open we place a physical structure
23 on the Chicago Sanitary and Ship Canal, which is the
24 northern, the upper end of the system, allowing the
25 lower part to remain open for navigation and other

1 uses. And the other hybrid, we place a physical
2 barrier on the lower part, on the Cal-Sag Canal,
3 leaving the Chicago Sanitary Ship Canal open.

4 The two differences between these
5 scenarios are -- the time to implementation is nearly
6 the same, however, you can see there's a significant
7 difference in cost because of the varying cost of
8 mitigation for adverse impacts. For this particular
9 scenario the estimated cost is about \$15.1 billion,
10 whereas the cost for the CSSC open is about half that
11 at approximately \$8.3 billion.

12 Now there's a lot more really good
13 information. I know I really glossed over these very
14 quickly, but again, there are a lot of folks here
15 today who want to speak, and so I want to make sure
16 that we have the opportunity to have as many comments
17 as possible. I have a couple more closing slides and
18 then we'll turn it over to you.

19 I mentioned at the outset that the --
20 one of the most important uses of the GLMRIS report is
21 a tool for decision-makers. And to that effect, we
22 have established evaluation criteria so that
23 decision-makers such as yourself, members of the
24 public, resource agencies, elected officials could
25 look at among various alternatives and evaluate what

1 the differences may be: The costs, the economic
2 impacts, the environmental impacts and look at the
3 stakeholder groups and what is most valuable to you.
4 There will certainly be tradeoffs among each of the
5 alternatives. Those that are least expensive and
6 could be implemented more quickly may not be as
7 effective at controlling aquatic nuisance species.
8 However, there are some that are more effective, but
9 may take a much longer time and may be much more
10 costly. So the decision is part of the conversation
11 we're here to have today.

12 Before I leave, before I conclude, I
13 want to make sure we hit on a couple of things.
14 Number one is the mitigation. If it hasn't been clear
15 in the few slides that I've had behind me is that the
16 mitigation is a significant contributor to the overall
17 cost and duration for all of these alternatives. I'm
18 not going to stand here and tell you it's going to
19 take the Corps of Engineers or anyone else 25 years to
20 build a dammed waterway. What I will tell you,
21 though, however, is it will take approximately
22 25 years to ensure that the residents of the City of
23 Chicago and surrounding suburbs aren't adversely
24 impacted by flooding or we don't have significant
25 environmental impacts on our significant natural

1 resources, Lake Michigan and the rest of the Great
2 Lakes, in that event. No matter what, there will also
3 be residual risks with regard to any of these
4 scenarios. There are ways for aquatic nuisance
5 species transfer outside of the aquatic pathway. Each
6 of the alternatives I just presented focus on
7 controlling aquatic nuisance species within the
8 aquatic pathway, within a waterway. Human-mediated
9 transfer, I mentioned bait buckets, or the actual
10 movement of aquatic nuisance species through the
11 aquarium trade or the bait trade or -- or sale at
12 market are still significant factors for potential
13 aquatic nuisance species distribution.

14 I did mention very briefly that there is
15 a duration for implementation for each of these which
16 is significant and there is a risk adherent in the
17 fact that we may or may not be able to actually
18 address and prevent these species or at least control
19 these species from transferring within the time
20 allotted.

21 In the report we speak to adaptive
22 management. There are varying levels that each
23 potential alternative could be adapted (inaudible).
24 And we try to answer these two questions: Does the
25 control work as intended and how easy is it or how

1 simple is it to change, reverse or adapt this
2 particular alternative in the event you learn new
3 information.

4 Finally, if I impart nothing else today,
5 it's this final bullet, is that aquatic nuisance
6 species control is a shared responsibility.
7 Implementation of any one of these plans or a number
8 of the plans really is a shared responsibility among a
9 range of Federal, State and non-governmental state
10 boards including the public such as yourselves.

11 Any of these would require significant
12 time and investment and really the engagement by all
13 of you here today, and all of the stakeholders in this
14 problem is really how we'll get to that strategic path
15 forward with regard to aquatic nuisance species
16 control.

17 This slide is a little bit dated. We
18 are actually adding two additional meetings for the
19 public rollout. We have added a meeting in Erie,
20 Pennsylvania where it will be on Friday this week, as
21 well as New Orleans, Louisiana will be on the
22 following Friday, January 31st.

23 As Kendall mentioned at the outset, we
24 do have a public comment period which is open through
25 the 3rd of March. At any time if you don't have the

1 opportunity to make a comment here today or if you
2 think of something you'd like to add, please visit the
3 website, glmris.anl.gov and make a comment. Your
4 voice is important. Stakeholder engagement, your
5 feedback is how we will continue to have this
6 conversation and continue to develop the path for that
7 strategic control of aquatic nuisance species.

8 With that, please do stay in touch with
9 the study. You can e-mail us at any time, follow us
10 on your favorite social media. And with that I'll
11 turn it back over to our moderator, Mr. Zaborowski.

12 MODERATOR ZABOROWSKI: Before beginning
13 the oral comment period tonight, I'd like to again
14 remind everybody that the GLMRIS website shown here is
15 a great source of information. The GLMRIS report in
16 its entirety can be viewed and downloaded from the
17 project website. And to those of you on the webinar,
18 I would like to apologize for the technical
19 difficulties that we've been having. And I realize
20 that the sound has started out almost non-existent,
21 hopefully it's gotten a little better as we've went
22 along. We are recording tonight's presentation, so if
23 you missed any of the presentation, we'll hopefully
24 have that uploaded to our website soon and so you can
25 be able to review it that way.

1 So, now moving into our oral comment
2 period of the meeting. Those who indicated online
3 before tonight or on the yellow comment registration
4 form here today that they would like to make a brief
5 three-minute statement or ask a question of our panel,
6 will now have the opportunity to do so. So if a
7 person would like to ask a question, we ask that you
8 manage the three minutes to allow for any comments you
9 have, your question itself and then the response from
10 the panel. So, the Corps of Engineers will answer any
11 questions that they have the ability to answer. So,
12 for those of you here in person, if you can take a
13 look around and you can see that we're rather crowded
14 tonight, and in order for everybody to have the
15 opportunity to speak we ask that you please abide to
16 that three-minute timeline. Those of you, again, on
17 the webinar, we may not have the opportunity to get to
18 you. If you have a comment or question, I'd like to
19 remind you that you can still submit your comments via
20 the website, through mail and that will take them up
21 to March 3rd. So, if time allows and everybody that
22 signed up to speak has had the opportunity to speak,
23 we'll open it back up, so if you have a second
24 question or those that did not take a moment to
25 register at our welcome table, you'll be given the

1 opportunity to come up and speak.

2 So, and again, if time doesn't allow for
3 those of you here in person even to speak, again, the
4 website, you can fill out that yellow comment
5 registration form, drop it off with one of us tonight
6 or you can submit your comments via e-mail.

7 So, I have a visual set of slides that's
8 going to help us manage our time here tonight. I'm
9 going to pull them up and walk through them just so
10 everybody gets an opportunity to see them beforehand.
11 So, when you come up to speak I'm going to ask that
12 you give your name and ZIP code, so that's for
13 reporting purposes. If you don't give us your name
14 and ZIP code, we will not be able to formally include
15 your comments in our comment period process. So after
16 you give your name and ZIP code, I'm going to start
17 this slide show. So, for two minutes there's a green
18 box on the screen. After two minutes it switches to a
19 yellow box and it updates the remaining time, every 15
20 seconds that you have left. So when it gets to 30
21 seconds, I'm going to give you a reminder and ask you
22 to kind of start wrapping things together, and then
23 after 15 seconds there's a big red box and I'm going
24 to ask you to make any closing comments.

25 So, I'd like to mention that we have a

1 stenographer with us tonight. She's going to be
2 recording your comments and ensuring that we
3 accurately record them and include them in our
4 process. So when you come to the microphone in the
5 center here, this is for you all to address us, to
6 make a comment or ask a question, again, please give
7 your name first, any organization you may represent
8 and then your ZIP code, then I'm going to start the
9 timer.

10 When you speak into the microphone, make
11 sure to speak slowly and clearly and loudly,
12 hopefully. And if you need any assistance, Colonel
13 Drummond here will be able to help you out with the
14 microphone.

15 So, we're now going to hear from those
16 that have pre-registered on your project website and
17 then after them, those that indicated on the yellow
18 forms today that they'd like to make a comment.

19 So I'm going to start out by calling the
20 names of the people that pre-registered, I'll call
21 about three in order so you know where you are.
22 Again, come up to the microphone and then we will get
23 you started.

24 So, first, I have Senator Debbie
25 Stabenow who will be making a comment. And then after

1 her I have Mr. Dave Spangler and then Ms. Ruth Mohr.

2 So, Senator Stabenow, please give your name and ZIP

3 code.

4 SENATOR STABENOW: Debbie Stabenow,

5 48917. Welcome. I appreciate very much all of you

6 being here. Assistant Secretary Darcy, it's always

7 great to see you and General Burcham. Thank you very

8 much. John Goss, great to see you. Dave, thank you

9 for your -- your comments.

10 As you know, Congressman Dave Camp and I

11 working with our whole delegation put forward the

12 legislation that required that the report be done more

13 quickly, realizing that obviously there's a lot to

14 look at.

15 I don't need to tell anyone here how

16 important this is to us. It really is. The Great

17 Lakes are in our DNA. \$16 billion boating industry in

18 the Great Lakes, \$7 billion fishing industry, and more

19 importantly it's about our way of life, as anyone

20 knows who's been here. I think it's better than the

21 ocean, by the way, Darcy, but anyway -- the ocean

22 without the salt is what we have.

23 My concern, and I have already expressed

24 it to you and the -- we have 16 senators, Republicans,

25 Democrats, who wrote a letter, joint meeting letter

1 from the entire region asking that you continue to work
2 with us to narrow this down. This is an important
3 first step. But I have a lot of questions I'll submit
4 in writing, but we need to know how soon you can more
5 fully develop the option so that we can begin moving
6 forward. This is a wide range of options. I would
7 suggest option 1. I -- certainly doing the same thing
8 is not enough. We've been lucky so far. We keep
9 finding the eDNA in various parts now as well as over
10 on the Wisconsin side, as well as in Lake Erie, and so
11 on. There -- the efforts have been good, but I don't
12 believe sufficient, which is why that we are here.

13 Now, John, you mentioned about the
14 Maumee River and Wabash River. I think the good news
15 is, is that because we've looked at more than just
16 Chicago, we did find a high-risk area, and there -- and
17 Indiana is moving forward to address it. And that's
18 great. And that's going to be done and that's very
19 important. But if we're going to address what we need
20 to do in Congress, we have got to have specific
21 information on what is the best option, how much it's
22 going to cost, and we've got to narrow it down.

23 Another area of concern to me is that
24 when we talk about a GLMRIS lock, as I understand it,
25 it's not yet fully developed as a technology. Great

1 suggestion. But, if we're going to move forward, we
2 have to know that given the cost and so on this is
3 something you feel absolutely confident will address
4 things. It's one thing to address the fish
5 floating in the water. We're talking about big fish
6 at the bottom who are used to swimming upstream, and
7 will in fact this lock address the Asian carp.

8 The 10 to 25 years, certainly 25 years
9 is way too long. Way too long. I still want to be
10 around here when we are actually finishing this, I
11 think as everybody else does. And we have got to find
12 a way, or combination. I mean, maybe we'll go back to
13 number 2 and do something on that right away, but we
14 got to have a combination.

15 And then finally I would say, we need to
16 know what your plan is on your next steps of working
17 with us. We have a great sense of urgency about this.
18 These fish have no functioning stomach. They eat
19 everything in sight. They're a threat to every other
20 fish as well as what we know as a very important
21 recreational boating industry, and as I said, our way
22 of life.

23 I just want to -- I actually introduced
24 him sitting down, Joe McGarvey from my staff who is a
25 Michigan guy, who is in DC working on this. And we

1 want to work with everyone here as we move forward on
2 the structure and the way that we can come together,
3 we've got work to do to bring all of the state leaders
4 together, states' leaders together, but we have got to
5 move as quickly as possible.

6 And I would just finish by saying we --
7 we more than anything, need a sense of urgency for all
8 of you working with us. We -- every day is a -- is a
9 risk to us on something that's incredibly important.
10 So thank you.

11 MODERATOR ZABOROWSKI: Thank you,
12 Senator. Next on my list I have Mr. Dave Spangler
13 followed by Ms. Ruth Mohr. And I apologize for
14 anybody if I mispronounce your names. So, Mr.
15 Spangler, when you're ready, can I get your name and
16 your ZIP code, please.

17 MR. DAVE SPANGLER: Yes, my name is Dave
18 Spangler, ZIP code is 43449. I'm president of the
19 Lake Erie Water Keepers. I'm vice president of the
20 Lake Erie Charter Boat Association. So obviously I'm
21 going to focus on Lake Erie. We are the largest
22 charter fleet in the all -- all of the Great Lakes and
23 one of the largest, actually, in the country, and Lake
24 Erie supports the largest commercial fishery, I think,
25 in the world, which there's lots and lots of fish out

1 there, we know what will happen if these carp get into
2 Lake Erie, which is biologically the absolute best
3 place they can be. The Maumee and Sandusky Rivers are
4 ideal spawning habitat as we actually have found out
5 through various (inaudible).

6 There's a lot of options out here, a lot
7 of big dollars, and unfortunately it's too much, too
8 long. We need something to happen very, very quickly.
9 We have to continue this program, look at some cost
10 analysis, please. The eight counties along Ohio's
11 Lake Erie shoreline contribute a third of the tourism
12 dollars to the state, a little over \$1 billion. It's
13 a lot of money. We got 117,000 people employed in
14 that industry. I'm one of them. I can probably get
15 by, but there's a lot of folks that cannot. I'm
16 retired, so I'm okay at that standpoint. There's a
17 lot of jobs associated with that area down through all
18 of the Lake Erie shoreline, and also our friends
19 across the border, Canada.

20 One of the things that I would like to
21 see added to this, because of the time, let's look at
22 a contingency plan that can go from tomorrow morning
23 on. Nowhere have I ever seen anything that shows
24 eradication. And I think we need to look at that.
25 These fish can be eliminated somehow, some way, there

1 are various things I could recommend, but why don't we
2 start at that. One fish can drop a million eggs in a
3 season spawning, one fish. It only takes ten to
4 populate an area. We need to start taking these fish
5 out and do it very, very quickly while we work on
6 other things. There's a lot of technology that's been
7 put into these various options. Some of it is pretty
8 hi-tech. But let's -- let's take it one further step
9 and start someplace so that we can start taking these
10 out. The fewer we've got out there, it just lowers
11 the risk a little bit. And there's obviously a ton
12 out there. Those two rivers in Chicago are almost a
13 hundred percent Asian carp. Nothing is going to be
14 hurt by removing all of them. It will be a mess for
15 awhile, but it's time to take a look at something like
16 that.

17 It was mentioned earlier about Eagle
18 Marsh. I want to keep that in the forefront. That is
19 a high, high risk to us at Lake Erie as a direct
20 route. I remember many years ago the Corps did some
21 amazing things. They put a bridge in for us at a
22 place that was really bad news, we got some cracks out
23 of there. I saw them put a landing strip at a triple
24 (inaudible) in less than a month. They can do some
25 fantastic things. Let's hit it hard. Thank you.

1 MODERATOR ZABOROWSKI: Thank you, sir.

2 Next we have Ms. Ruth Mohr. Following her I have
3 Jared Teutsch and Sara Neville, I think want to make a
4 joint comment. Then following them is Cynthia Leet.
5 So, Ms. Mohr, when you're ready, name and ZIP code and
6 we'll start your time.

7 MS. RUTH MOHR: Good afternoon. My name
8 is Ruth Mohr. My ZIP code is 48115. I'm testifying
9 as a citizen who has a long connection to both the
10 Great Lakes and the Mississippi River Basins. I'm a
11 long-time resident of the State of Michigan, both
12 upper peninsula and lower peninsula and co-owner of a
13 family farm in north central Illinois.

14 Today I'm here because I'm especially
15 concerned about Asian carp moving into the Great
16 Lakes. I've seen how destructive other invasive
17 species can be and how difficult it is, if not
18 sometimes impossible, to actually eradicate them from
19 areas when they gain a toehold. I want to voice my
20 support for restoring a divide between the Great Lakes
21 and the Mississippi River Basins as a critical means
22 to prevent the movement of Asian carp and other
23 invasive species between these two basins. Current
24 efforts to keep the carp from entering Lake Michigan
25 are vital, but incomplete and vulnerable to failing.

1 Recent research confirms that Asian carp
2 can survive and spread in the Great Lakes and that the
3 Chicago Area Water System is the most likely point of
4 entry. We know that restoring a divide can be done.
5 The report of the Great Lakes Commission and Great
6 Lakes St. Lawrence Cities Initiative shows that
7 restoring a divide could help address existing water
8 quality and transportation problems in the Chicago
9 area, as well as address the problems of Asian carp
10 and other invasive species. Restoration of a divide
11 between the Great Lakes and the Mississippi River
12 needs to be part of any plan for protecting the Great
13 Lakes from Asian carp and both basins from invasive
14 species. Time is critical, as we've been noting with
15 everyone here. Separation of the two bodies of water
16 needs to happen as soon as possible. Engineering
17 shows that separation is possible. Now it is time to
18 find ways to work together to resolve the political,
19 jurisdictional and financial issues that are related
20 to this. Thank you.

21 MODERATOR ZABOROWSKI: Thank you very
22 much, ma'am. Before our next comment, I would like to
23 mention, those of you who have written statements, if
24 you feel comfortable turning those in when you leave,
25 again, that could just make sure that we record your

1 comments accurately.

2 So, when you're ready, ma'am, name and
3 ZIP code.

4 MS. SARAH NEVILLE: My name is Sarah
5 Neville, I'm the Stewardship Coordinator at the
6 Alliance for the Great Lakes. ZIP code 60602.

7 So the Alliance for the Great Lakes
8 succeeds as an organization in Michigan and in the
9 Great Lakes region because of the collaborations and
10 partnerships we make. We align ourselves with not
11 only those who care, like you all and all of our
12 volunteers, but all of those who want to keep learning
13 more, doing better, and improving their work for the
14 benefit of the lake, the beaches and the people of the
15 region.

16 We don't have time to waste. Recent
17 studies confirm that the electric barrier, currently
18 the last line of defense to keep Asian carp out of the
19 Great Lakes, may not be a barrier at all, as it allows
20 small fish to pass through. This status quo is not
21 acceptable and we need quick action on separation.

22 The cost of what happens if aquatic
23 invasive species get into the Great Lakes because we
24 didn't take strong enough prevention measures would be
25 many times higher than the cost of implementing

1 physical separation of the basins. These waterborne
2 invaders are already causing hundreds of millions of
3 dollars in damage each year to health, commerce,
4 recreation and the environment.

5 Lastly, the health of the Great Lakes as
6 well as the communities and the jobs they support are
7 worth it. We cannot put a price tag on our region's
8 quality of life, and we cannot afford to undermine the
9 investments we are making in the protection of the
10 Great Lakes. Thank you so much for your time.

11 MODERATOR ZABOROWSKI: Thank you. Next
12 on my list I have Cynthia Leet, followed by Brad Allan
13 and then Gildo Tori. So, name and ZIP code, ma'am,
14 when you're ready.

15 MS. CYNTHIA LEET: Hello. My name is
16 Cynthia Leet. I'm a citizen of Ann Arbor, and my ZIP
17 code is 48103. I'm speaking on my own behalf. I'm
18 not affiliated with any organization.

19 First of all, I want to commend our
20 politicians in Michigan for their leadership on this
21 issue and the attention they have been giving it over
22 the past few years. I see it as critical to
23 Michigan's economy, its tourism economy and its
24 fishing economy. This is a state surrounded by the
25 Great Lakes. If Asian carp come into the Great Lakes,

1 it is a permanent change to the ecosystem. These fish
2 will compete very heavily with fish that are in the
3 lakes: The lake trout, the salmon we stock the lakes
4 with, it's going to permanently affect how the
5 lakes -- how the animals in the lakes feed. We are
6 going to have to live with it, everyone in this
7 region.

8 Second, these fish reproduce in shallow
9 water. I see them coming into the lakes, if they get
10 in, and moving into the tributary rivers and creeks
11 and really impeding how people in this region can
12 recreate on the lakes; they may not want to swim in
13 the rivers, they may not want to go to the beaches
14 just because they don't want to deal with these fish.

15 I see them getting into the interior
16 lakes too. I -- I -- I think they're a major threat to
17 tourism and fishing, like I said. The 25-year time
18 frame is way too long. It took 20 years for these fish
19 to move up the Mississippi from -- from Louisiana up to
20 Illinois and Wisconsin. \$18 billion cost for building
21 hydrological, I support a complete barrier between the
22 lakes and the Mississippi River Basin for the benefit
23 of both ecosystems. I see \$18 billion, the largest
24 estimate cost, to be not very much at all. It's the
25 cost of two and a half years of sport fisher's income

1 on the Great Lakes.

2 I want to thank you. I feel strongly on
3 this issue and I'm glad I've been able to spend a few
4 minutes discussing my concerns.

5 MODERATOR ZABOROWSKI: Thank you. Mr.
6 Allan, when you're ready, name and ZIP code.

7 MR. BRAD ALLAN: My name is Brad, and my
8 ZIP code is 48170. I want to begin by thanking the
9 Army Corps of Engineers for putting this on and
10 putting the work into the study. I am a member of the
11 Board of Directors of Metro West Steelheaders, and
12 we're the largest chapter of the Michigan Steelhead
13 and Salmon Fisherman's Association which has 7,000
14 members. And we're very concerned about this issue.

15 Also in terms of thank-yous, Senator
16 Stabenow, you communicated with some of our members to
17 provide some information, which we appreciate. Also,
18 Candice Miller wrote a great article in the Detroit
19 News Free Press about two weeks ago on this issue.
20 But our concern is best addressed by option 5. We'd
21 like to see physical separation between the lake. I
22 think you guys called it the lakefront hydrologic
23 option. And we are a part of the \$7 billion in
24 revenue that is generated every year in sport fishing,
25 and I can tell you that there's many, many people that

1 are maybe not members of our organization, but fish
2 with us, or our family members (inaudible) out, and
3 that there's broad-based support to -- excuse me, to
4 address this issue.

5 So again, I thank everyone for their
6 interest and we're really looking for some urgent
7 action.

8 MODERATOR ZABOROWSKI: Thank you, sir.
9 Next on my list I have Gildo Tori, followed by James
10 Stewart by -- followed by Brian Greminger. So, name
11 and ZIP code when you're ready, sir.

12 MR. GILDO TORI: Gildo Tori, Director of
13 Public Policy with Ducks Unlimited's Great Lakes
14 Atlantic Region office, ZIP code 48108.

15 Thank you for putting together the
16 report, both the Corps of Engineers and the Council on
17 Environmental Quality. I know it was no small
18 undertaking, and we appreciate your efforts there.

19 A lot of people ask why Ducks Unlimited
20 is concerned about this study and about Asian carp;
21 what does it have to do with weapons and waterfowl?
22 Well, first of all, we're concerned because aquatic
23 invasive species have greatly impacted wetlands from
24 Phragmites to purple loosestrife, Eurasian
25 watermilfoil. So, anything we can do to lessen the

1 impact of invasive species is of importance to Ducks
2 Unlimited.

3 Secondly, Asian carp can impact
4 waterfowl. Two of the species in particular, the --
5 the grass carp, and black carp both feed on substances
6 that waterfowl do. For instance, grass carp feed on
7 submersed aquatic vegetation, which is critical to the
8 tens of -- millions of waterfowl that come through the
9 Great Lakes twice a year on their way to their
10 breeding and wintering grounds. So we are concerned
11 about the impacts of Asian carp on waterfowl, so much
12 so that Ducks Unlimited Canada, our sister agency
13 across the border, and Ducks Unlimited Inc. issued a
14 joint statement in support of ecological separation of
15 the Great Lakes and Mississippi River basins.

16 In terms of the specific alternatives
17 you presented, we are in support of a physical
18 separation, ecological separation. We're still
19 working on the details of what one we would like to
20 support, and we'll have that to you before the
21 deadline.

22 But our major concern is, as Senator
23 Debbie Stabenow said, is 25 years is a long time. You
24 guys are being much too modest. And the reason why I
25 say that is that you are the Corps of Engineers.

1 There is no finer group of engineers and construction
2 experts in the world. So quit being so modest. Be
3 aggressive. During war you guys built bridges and
4 airstrips within weeks under enemy fire. We know that
5 you can do better and quicker. We are at war with
6 Asian carp and many other species, so, please be more
7 aggressive. And we are here to support you. I think
8 just about everybody in this crowd supports you for a
9 quicker alternative, and we have great champions to
10 support the Great Lakes in Senator Stabenow and
11 Congressman Camp. We'll find the money, we'll work
12 towards the problems of working this out and we'll be
13 here to keep them there and all of our Great Lakes
14 issues and resources here. Thank you.

15 MODERATOR ZABOROWSKI: Thank you. Next
16 on my list is Mr. James Stewart, again, followed by
17 Brian Greminger and then Dianne Baker. So when you're
18 ready, sir, name and ZIP code.

19 MR. JAMES STEWART: James Stewart. My
20 ZIP code is 48243.

21 MODERATOR ZABOROWSKI: Thank you.

22 MR. JAMES STEWART: Thank you for the
23 opportunity to speak today. My name is James Stewart.
24 I'm an attorney with Kotz, Sangster, Wysocki PC and we
25 serve as general counsel to the Michigan Boating

1 Industries Association. And I'm here on behalf of our
2 300 members and the \$7.4 billion recreational boating
3 industry here in Michigan.

4 Knowing that there will be tremendous
5 damage to the health of our Great Lakes ecosystem and
6 the surrounding area if Asian carp enter the Great
7 Lakes, we have again and again asked our leaders to do
8 whatever is necessary to prohibit the carp from
9 entering the Great Lakes. For years we've inquired
10 what -- what are we doing to assure that Asian carp
11 will not invade the ecosystem. We were told the
12 answer would be coming in a study being conducted by
13 the U.S. Army Corps of Engineers, this study, which
14 was just released, and our concerns continue. While
15 the study identifies eight alternatives that address
16 the Asian carp issue, including permanently separating
17 the Chicago Sanitary and Ship Channel (sic) from
18 the -- Lake Michigan, the study fails to include a
19 call for immediate action to protect the Great Lakes
20 from the threat of Asian carp. As others have said,
21 25 years is just too long. And there -- we have been
22 seven years down the road and still no specific plan.

23 So today we join with leaders such as
24 Senator Debbie Stabenow, Representative Candice Miller
25 and many other stakeholders declaring that there must

1 be an immediate plan for action. We must immediately
2 implement a plan that protects the Great Lakes for
3 years to come and for decades to come.

4 After reviewing the alternatives
5 presented in the Corps' study, the only real solution
6 that will truly protect the Great Lakes is the
7 complete separation of the Great Lakes and the
8 Mississippi River Basins. The Mississippi Basin has
9 been identified as a key pathway for Asian carp into
10 the Great Lakes Basin. The estimated cost of the
11 separation is small compared to the estimated losses
12 if separation is not implemented. The damage cannot
13 be calculated if a separation is not implemented.
14 Asian carp will destroy our fisheries. The Great
15 Lakes have some of the worlds best fisheries. Asian
16 carp are voracious eaters and will strip the food web
17 of our key source of food for our native fish.
18 Without our game fish, we will lose our \$7 billion
19 fishing industry here in Michigan and our \$7 billion
20 recreational boating industry in Michigan.

21 In addition to causing direct ecological
22 harm, the silver variety of the Asian carp has caused
23 direct harm to people. The silver carp are skittish
24 and easily startled by the sound of a boat motor. The
25 motor can cause the fish to leap as high as 10 feet

1 out of the water. Some of these fish weigh more than
2 20 pounds, they land in boats, damage property and
3 injure people. Such will make boating less desirable
4 for many people while -- leave boating forever.

5 Communities will suffer with job losses
6 and declining tourism income. In Michigan, many
7 communities are entirely dependent on our boating and
8 fishing industries. Recreational -- or water
9 recreation, a way of life for many Michigan residents
10 for hundreds of years, will be changed forever as
11 these favored recreational pastimes no longer become
12 possible or safe for Michigan families. Asian carp
13 have no current predators and once established cannot
14 be eradicated.

15 We have seen how Asian carp have already
16 caused our ecosystem harm and the boaters in the
17 Mississippi River system.

18 We recognize the significant investment
19 required for complete separation and the entire nation
20 must realize how this direct -- direct impact will
21 cause to the Great Lakes Basin. Thank you very much.

22 MODERATOR ZABOROWSKI: Thank you, sir.
23 Next, Brian, I feel like I have butchered your name,
24 so, we'd like to hear it. Then Ms. Dianne Baker, then
25 Mr. Mohr.

1 MR. BRIAN GREMINGER: My name is Brian
2 Greminger. ZIP code 48103. Thank you for the work
3 you put in and thanks for the opportunity to speak.

4 I speak as a Michigan life-long
5 resident. As a child I often was picking the alewife
6 off the beach to keep the family dog from rolling in
7 them. But that's not really the point I wanted to
8 make today. I want to talk about the fact that we are
9 a capitalist society, but we're not a free market
10 society, completely. We have choices we made about
11 what we fund and what we don't fund. For example, we
12 don't sell children in this country. We don't, other
13 than in a few places in Nevada, sell sex. We have a
14 market operating within the context of cultural values
15 that we prefer to maintain as a group. They're what
16 constrain it, they're what shape it, they're what give
17 us our identity.

18 Looking at the history of the invasive
19 species in the Great Lakes we have taken pretty great
20 economic liberties with the -- and derived quite a bit
21 of value from the canals that we've built, but we've
22 also over time, according to the Inland Seas Education
23 Association, introduced about 160 invasive species of
24 a new one almost every eight months. In our defense,
25 we didn't know better. You know, we did not know that

1 we were going to be introducing sea lamprey, we didn't
2 know that in the Asian carp we were -- that we're
3 putting in catfish ponds in Louisiana, that we were
4 risking what we're risking now. But in this case, we
5 do know. We do know quite a bit more than our
6 ancestors and I think that makes our choice a moral
7 choice as well as an economic choice.

8 I favor Alternative 5, the complete
9 separation. I don't think history will look at us
10 kindly if we do not separate the two water basins
11 completely, and do that successfully. I think we need
12 to muster the political and economic will to do so in
13 less than 25 years. I don't think -- you know, we
14 don't -- we don't sell our children, we made that
15 choice. We shouldn't be selling our children's
16 birthright. Thank you.

17 MODERATOR ZABOROWSKI: Thank you, sir.
18 So next I have Ms. Dianne Baker. And again, following
19 her Mr. Thomas Moore and then Essel Bailey.

20 MS. DIANNE BAKER: Dianne Baker,
21 resident of Ann Arbor and resident of Michigan my
22 whole life, 48103. I wish I had my guitar here to
23 calm myself down and maybe all of you if you are
24 feeling like I am. My blood pressure is going up.

25 Graduated from Michigan as a nurse and

1 I'm a composer and photographer, worked at schools and
2 worked with seniors and all ages and I'm just not
3 being able to relate to your technology and all those
4 problems, but you're scaring me to death with just the
5 little bits and pieces I'm getting.

6 I'm just also confident, though, on the
7 other hand, that there are people that I never have
8 really communicated with on this basis, you know,
9 political, et cetera, and all of the educators and
10 your Army Corps here that gives me confidence. I'm
11 hoping that you can take us or that we have -- give
12 you the faith -- give us the faith to take you to this
13 war that we can win. And I assist -- other things I'm
14 thinking about was that we'll keep connecting up with
15 everybody. I'm just talking about my age, I'm
16 thinking about my kids, I'm thinking about grandkids.
17 I mean, you're talking 25 years my grandkids are
18 having families of their own. That's scary to think
19 what could be bad by that time, but I wish you'd break
20 down everything that you can possibly down to a
21 language that we can grab a hold of and -- and go with
22 the fight with you.

23 I'm thinking about, you know, you've
24 probably gone through all of this thought process, but
25 are there other countries or other people that have

1 even come close to any problem like this before? I
2 sure have never heard of it. And I just wonder if you
3 are also putting money into research and keep going
4 every year to -- for more technology. It changes all
5 the time, and get all of these kids involved. Get all
6 of this focus of things and points down to the high
7 school kids and college kids and kids that are going
8 to be really right in the middle of all of this,
9 right?

10 I really thank you so much and I thank
11 everybody behind me for backing me up here. I just --
12 very excited about some of the things I've heard today
13 and there's no way I could help in any
14 decision-making, but I just wanted to give you some
15 gut reactions, emotional reactions from -- from people
16 that I know. And again, I'd just say, go for it,
17 whatever you have to do and just be sure you can get
18 the information down so we can get on board with you,
19 okay? Thank you.

20 MODERATOR ZABOROWSKI: Ma'am, before you
21 go, could we get your ZIP code one more time. I'm not
22 sure --

23 MS. DIANNE BAKER: Pardon?

24 MODERATOR ZABOROWSKI: Could I get your
25 ZIP code one more time.

1 MS. DIANNE BAKER: 48103.

2 MODERATOR ZABOROWSKI: Okay. Thank you
3 very much. Next, Mr. Thomas Moore.

4 MR. THOMAS MOORE: Members of this
5 panel --

6 MODERATOR ZABOROWSKI: Sir, can we get
7 your name, please.

8 MR. THOMAS MOORE: Thomas Moore, 48103.
9 I am just here as a citizen having observed a good bit
10 of what has been the Great Lakes and with Illinois,
11 grew up in Illinois and now have a place also in -- in
12 Canada which I've been observing, it's on the shores
13 of Lake Huron, the changes there over a 10-year
14 period. And the ZIP code there is P0P1Y0 in case
15 you're interested in that one also.

16 I favor the separation as complete as
17 possible. I think there -- it's probably the least
18 expensive in the long-run alternative of what can
19 happen, but I'm concerned about the focus only on the
20 CAWS area. I understand why that has been a
21 principal focus, but there's so many others. You've
22 evaluated 18 sites. There are a lot more of the
23 rivers and tributaries that come very close to the
24 Great Lakes. We're likely to have some unusually
25 unanticipated flooding events in the year like the one

1 we're having now with the amount of snow and the
2 amount of frozen land and the depth the frost has
3 gone. It only takes one other place. You have
4 evaluated 18, you find one or two that are of serious
5 risk, but I'm concerned that we may be looking at one
6 spot for the problem and it occurs at another place
7 and I don't know how you maintain enough flexibility
8 to respond to that, but I think that maintaining this
9 flexibility once these carp get there, and it's not a
10 single species, and they surely are quite different in
11 many ways, not well enough understood yet in terms of
12 what happens when they get into it, an environment,
13 the lake environment. And our history with trying to
14 eradicate species once they have been introduced and
15 begin to reproduce in an area is really very poor.
16 When -- despite the fact that we spend lots of money
17 on it, lots of time we've often created unintended
18 consequences that have been far more extensive and far
19 more long-lasting in cleaning up those problems than
20 the original one was.

21 So, that's the main thing that I'm
22 concerned about, is trying to find a way to maintain
23 some additional flexibility and not lose track of the
24 fact that this may not be the only place that we
25 should be particularly careful in making the judgment.

1 Thank you.

2 MODERATOR ZABOROWSKI: Thank you, sir.

3 Next to the microphone I have Essel Bailey followed by
4 Richard Bowman and then Jim Diana. When you're ready
5 sir, name and ZIP code, please.

6 MR. ESSEL BAILEY: Thank you for
7 providing me the opportunity to share my concerns
8 about this issue. My name is Essel Bailey. My ZIP
9 code is 48104 and I'm interested in and involved in a
10 number of civic and environmental organizations. I
11 live here in Ann Arbor. I have also a cottage on Lake
12 Michigan in Montague, so I have a special affection
13 for the big lake.

14 As a member of the Michigan
15 Environmental Council, a major conservancy, and the
16 Huron River Watershed Council, I'm very concerned that
17 we get it right and that we get it done now. While
18 the Corps' presentation is comprehensive, detailed and
19 very professional, it misses a basic point. Speed of
20 implementation is important on some reasonable action.
21 Right now there are 29 invasive species in the Great
22 Lakes that would like to get into the Mississippi
23 River Basin, and 10 that would like to get into the
24 Great Lakes from the Mississippi River. Unless we
25 find a cost effective way to separate these basins and

1 do this in a much shorter time frame, it's really all
2 over.

3 There are other potential invasives that
4 have not yet entered either basin. The Great Lakes
5 and the Mississippi River Basins need a solution that
6 considers the full range of potential invasive
7 species. Stopping all invasives moving in both
8 directions is really vital to protecting the two of
9 the world's greatest and most important freshwater
10 resources. We need to take action soon if we have any
11 hope of being effective. We need to identify actions
12 that can be taken in the next year, in the next
13 five years, that will reduce the ability of invasives
14 to move between the basins.

15 While the report provides us several
16 good final outcomes and raises a number of interim
17 actions that could be taken, what we need today is an
18 action plan that gets us to an outcome and that we can
19 start implementing. The lock system may be an
20 introductory way for short-term to a timely answer on
21 part of this, but even more important, though not the
22 subject of this report, it's essential that we adopt
23 at the Federal and State level, serious restrictions
24 on the exchange of tainted ballast water in the Great
25 Lakes or there are many, many other invasives that

1 will come our way. While Michigan has taken the lead
2 in prohibiting ballast water exchange in the Great
3 Lakes, no other state, nor has the Federal government
4 recognized the importance of the introduction of
5 invasive species by this means. Frankly, management
6 after the fact will never be enough. Thank you.

7 MODERATOR ZABOROWSKI: Thank you, sir.
8 When you are ready, sir, name and ZIP code.

9 MR. RICHARD BOWMAN: Hi. My name is
10 Richard Bowman, I'm the Director of Government
11 Relations for The Nature Conservancy in Michigan. My
12 ZIP code is 48906. I'm actually here on behalf of one
13 of our trustees, Terry Barclay, who wanted to speak
14 tonight but was ill, so I'm bringing her comments.

15 The first thing that we want to
16 emphasize, and it was presented in the first
17 presentation, is that this cost of the status quo is
18 not -- nothing to indicate the status quo. 68 million
19 a year, if it stays that, is 1.75 billion over the
20 next 25 years and there's very little likelihood that
21 it will stay at 68 billion. It will simply go up.
22 And so we really want to set that aside and not have
23 that be a barrier to go forward. Our staff is going
24 through the entire report right now, and we have a
25 couple of suggestions that we'd like to share that we

1 think would make it easier for the -- for the public
2 to understand some concepts and to communicate some
3 things, because frankly the way it's presented right
4 now, while it's useful, the end period of 25 years and
5 \$15 billion tends to promote sticker shock and a
6 certain feeling of inevitability. And what we'd like
7 you to really focus on are the interim measures. You
8 know, when you build a house you have to do it in a
9 certain order, you have to put in the foundation and
10 put in the flooring and put up the walls and the fact
11 is, is that as I can tell you as the owner of an old
12 house, there are some projects that still aren't done,
13 but it's livable after a certain amount of time. And
14 what we have been trying to do is we analyze all of your
15 options, is actually set up a matrix and so we have a
16 couple criteria we'd encourage you to suggest in
17 addition to the ones in the presentation today.

18 So you've done a good job of talking
19 about the cost to build in total and the time to
20 build. It's really hard to find the cost to operate
21 once it's done. The fact is some infrastructure
22 actually should save money over time in addition to
23 providing benefits. And so look for that. We're
24 assuming that the final risk is no passage back or
25 forth by waterborne organisms. But if that's not the

1 final risk of implementing a solution, you should call
2 that out.

3 You're looking at impacts to flooding,
4 water quality and transport. Adding interim steps to
5 implement a new cost of those interim steps and the
6 amount that interim step reduces risk would all be
7 really helpful and are the kind of things we're trying
8 to dig out of your report as we look at the options
9 you've put forward.

10 With that, I'd be happy to answer any
11 questions and we have a statement that you can place
12 on file.

13 MR. WETHINGTON: Richard, thank you so
14 much for your comments. I just want to take a quick
15 moment to address a couple of your points. I think
16 this is on. Yes.

17 With regard to O&M costs, if you have
18 the little book, the summary one, there are O&M costs
19 that are actually listed for each of the scenarios and
20 it's the operation, maintenance, repair, replacement
21 and rehabilitation annual costs. Each of those annual
22 costs are in each of these. There's also much more
23 detail in the actual report itself, you know, in the
24 cost appendix.

25 With regard to passage risk, we have

1 appendix C in the report which is several thousand
2 pages. I understand that's a lot of information, but
3 when you want to talk about passage risk and the
4 uncertainties associated with each of those, it goes
5 into significant detail there as well as interim
6 steps.

7 Our authority, our goal was to look at
8 preventive transfer in either direction, trying to
9 identify options or technologies to get to that.
10 There are certainly opportunities to reduce risk, ways
11 to take interim steps, and that's part of why we're
12 having this conversation. We really appreciate your
13 input in that as well as everybody else's input in the
14 room, so thank you.

15 MR. RICHARD BOWMAN: Great. Thanks very
16 much.

17 MODERATOR ZABOROWSKI: Thanks. Next to
18 the microphone I would like Mr. Jim Diana or
19 following -- followed by Harriet Ald and then David
20 Hamilton.

21 MR. JIM DIANA: I'm Jim Diana, ZIP code
22 48103. I'm a professor here at the University and
23 also the Director of Michigan Sea Grant Program, but
24 as usual I don't speak for either of those
25 organizations.

1 I want to focus on a couple of things.
2 One is that we need to think in terms of invasive
3 species, not Asian carp, because Asian carp are here.
4 They may get through to the Great Lakes before we have
5 a chance to do something. That doesn't stop the need
6 to stop the spread of invasive species. In the next
7 25 years, we will have many more to deal with.

8 From that point of view then, I think
9 the main option is complete separation. I would say
10 Option Number 6. Why? Because we don't really know
11 how effective these aquatic (inaudible) controlled
12 treatment systems might be. They have been untested.
13 They involve locks, gates, flooding and all sorts of
14 things that can happen. We also know that electrical
15 barriers are a temporary solution that really only
16 work for fish.

17 I have issues like everybody else does.
18 I think this needs to happen fairly quickly. I think
19 the cost is well worth it. But, I think we should
20 also think about that cost in other terms. That is,
21 is this the only way we can spend \$15 billion on the
22 Great Lakes? There are things that have happened in
23 the Great Lakes in the past that are happening now
24 that are as bad or worse than what happened -- what
25 would happen with the Asian carp invasion. For

1 example, the salmon fishery on Lake Huron has
2 collapsed. There's fear that the fishery on Lake
3 Michigan will collapse, and Lake Ontario. The same
4 thing that we're worried about with the Asian carp can
5 happen just as well because of other issues going on
6 with invasive species in the Great Lakes.

7 So far we have spent about \$1 billion on
8 the Great Lakes Restoration Initiative, most of which
9 has gone to remediating sediments and things that are
10 obviously of big concern. But we have those same
11 issues on the ecology of the lakes which continue into
12 the future and should have equal precedence to
13 something like stopping the Asian carp.

14 So what's next? I think we need to
15 prioritize. Both prioritize what we're intending to
16 do for invasive species, but also what we intend to do
17 to restore the Great Lakes. I think we need to get
18 better ideas on whether these various designs will
19 actually function, and we need to think about all of
20 the species involved because that is a major issue, I
21 think. And we need to think of the time frame. While
22 it may take 25 years to do this, we do recognize that
23 many of these species will have been invaded by that
24 time. We, therefore, need to move quickly and at the
25 same time we need to think of the future and the new

1 species that might be brought in. Thank you.

2 MODERATOR ZABOROWSKI: Thank you, Mr.
3 Diana. When you're ready, ma'am, name and ZIP code,
4 please.

5 MS. HARRIET ALD: My name is Harriet
6 Ald, and my ZIP code is 48180. But I also live in
7 Leelanau County in the summer and sometimes in the
8 winter. It's a wonderful place, the best place on
9 earth. It's 49670.

10 I have experienced firsthand, the
11 alewife die-off where for several years no beaches
12 could be approached. You could smell the rotting fish
13 even though you were driving down a road that was a
14 couple of hundred of feet away. Just last summer I
15 experienced zebra mussels who are causing algae bloom
16 and you can't use the beach, it's impossible.

17 If the Asian carp comes in and ruins our
18 tourist -- ruins probably the most beautiful place on
19 earth, it will have a huge impact. I can't believe
20 that we really have to wait 25 years to think about
21 this. My experience, I worked in Detroit Public
22 Schools, is that the larger the group, the longer it
23 takes to make a decision. So I'm pleading that you
24 will please make this quicker. We have to do something
25 right away. There are private organizations, like

1 Inland Seas and Sutton's Bay that have volunteers to
2 work on things like this, but they can't do it alone.
3 And I grew up in Illinois, near Chicago. I know the
4 Calumet. I know the Des Plaines River. They both have
5 floodplains, have always had floodplains. There should
6 be a quick way to manage those, and I just can't see
7 any reason why economically the trade, the beaches, the
8 tourists, the businesses, they all need the help of the
9 Federal government. In light of what we spend on other
10 things that are boondoggles a lot of times, I don't
11 think the price is too high. And I certainly hope that
12 you'll follow Ms. Stabenow's suggestion to do it now,
13 not later. Thank you.

14 MODERATOR ZABOROWSKI: Thank you, ma'am.
15 Next, Mr. David Hamilton followed by Jim McIntosh and
16 then Margaret Bennett.

17 Sir, when you're ready, name and ZIP
18 code.

19 MR. DAVID HAMILTON: David Hamilton,
20 48906. I'm a senior policy director for the Michigan
21 Conservancy and I work Great Lakes region-wide on
22 aquatic invasive species fishing. The Chicago Area
23 Waterways (inaudible) must be a two-way aquatic
24 invasive species highway. Invasive species such as
25 zebra mussels and quagga mussels have already spread

1 from the Great Lakes through the Chicago area
2 waterways, moving through the Mississippi system, and
3 beyond. Minnesota water managers now dealing with not
4 only Asian carp but zebra mussels as they invade
5 through the tributaries and through the lakes into
6 Minnesota.

7 Recent monitoring, as some evidence
8 (inaudible) invasive species already in the Great
9 Lakes maybe in southern Lake Michigan. If this is
10 confirmed, then this is a major threat to the
11 Illinois/Mississippi rivers from this invasive
12 species, which is actually a river species instead of
13 a lake species.

14 There are 29 species in the Great Lakes
15 that affect the Mississippi, 10 species including
16 Asian carp that are a threat to the Great Lakes
17 through the Chicago Area Waterways. But there are
18 species beyond this. The study looked at a limited
19 number of species that are current concern, but the
20 Great Lakes and Mississippi River Basins need
21 solutions that consider all species, the full range of
22 potential invaders. This includes golden mussel and
23 killer shrimp that are an ongoing threat to North
24 American freshwater ecosystems. Stopping all invasive
25 species moving in both directions is vital in

1 protecting two of the greatest freshwater resources,
2 the Mississippi River and the Great Lakes. The
3 timelines are too long. 25 years is not acceptable.

4 The economic and ecological risks are
5 too high. It's been 25 years since zebra mussels were
6 first found in Lake St. Clair and western Lake Erie and
7 in that 25 years it essentially moved through -- across
8 most of North America, so a lot happens in a 25-year
9 period. The Army Corps of Engineers study has shown
10 that there are viable options to achieve long-term
11 separation while maintaining crucial transportation and
12 economic activity. This information is good, and the
13 information you have gathered with ideas that have been
14 collected by other groups and brought together, we
15 believe it is possible to promote intermeasures
16 (inaudible) support quickly to reduce the risk of ANS
17 moving into and out of the Great Lakes.

18 There's a lot of talk of asking the
19 Corps to continue this work to develop options. We
20 believe action is very important to bring together
21 regional leaders and regional stakeholders to help
22 figure out what is the next step and to craft a
23 pathway that to -- not only in terms of what's a
24 ultimate solution, but also what are the interim steps
25 that can begin reducing the risk of invasive species

1 moving in both directions now and ultimately

2 eliminating the risk. Thank you very much.

3 MODERATOR ZABOROWSKI: Thank you, sir.

4 Next on my list is Mr. Jim McIntosh. Again, following

5 Mr. McIntosh I have Margaret Bennett and Roger Martin.

6 MR. JIM MCINTOSH: Hi. My name is Jim

7 McIntosh, 48105. I guess I went to your earlier

8 information session when you were in Ypsilanti a year,

9 year and a half ago and I found myself so frustrated

10 that I just -- I could almost not talk, because

11 everything seemed to be "We'll get to it." You know,

12 "We'll study this, we'll study that, we'll study

13 something else." You know, I remember when I was a

14 child, right after the St. Lawrence Seaway opened, my

15 parents and my siblings and I took a trip and we went

16 to Niagara Falls and we went to the canal. And you

17 know, as an eight-year-old I was really impressed by

18 locks, and I was really impressed by what they were

19 doing. I'd been seeing the ships and everything else.

20 But it was 10 years later when I was walking the beach

21 of Lake Michigan, which was within walking distance of

22 my home, we heard about the people talking about

23 alewife. And when you walk along the beach and you

24 listen to the dead alewife pop between your toes, it

25 was a horrible -- I mean it smelled, but it was a

1 question of do you want to not go to Lake Michigan, or
2 is it just this 6- or 8- or 10-foot wide death zone
3 that you have to figure out how to get around to get
4 into the water.

5 So 25 years, if you think about the
6 St. Lawrence Seaway opened in 1959, and you look at
7 the destruction of the Great Lakes by invasive species
8 over the next 25 years, it suggests that a 25-year
9 time horizon doesn't work. It's got to be a 1-, 3-,
10 5-year time horizon or we might as well do nothing.

11 Now, as frustrated as I was when I went
12 to your first meeting and listened to people talk about
13 how long everything was going to be, and then something
14 really strange happened in Indiana, which is suddenly a
15 point was identified that said we've got to fix this
16 now. And something happened, and that tells me that we
17 can really do it because -- but we need that urgency
18 that says "We need to do it now."

19 Somebody mentioned a bait bucket, and
20 the only thing I'm going to say about a bait bucket is
21 the Emerald Ash Borer, because a few years ago when the
22 emerald ash borer was in Ohio they told us not to move
23 cut wood. Ann Arbor was devastated. The State of
24 Michigan was devastated. We lost, I think, six million
25 trees in Michigan because we didn't have a plan, we

1 didn't have quick action, we failed. Thank you.

2 MODERATOR ZABOROWSKI: Thank you, sir.

3 Next I have Margaret Bennett. Name and ZIP code.

4 MS. MARGARET BENNETT: I'm a

5 Michigander, I've lived here all my life. My family

6 has been actively --

7 MODERATOR ZABOROWSKI: Uh, ma'am --

8 MS. MARGARET BENNETT -- using the

9 Michigan and Great Lakes and the small lakes.

10 MODERATOR ZABOROWSKI: Ma'am, could I
11 get your name and ZIP code, please.

12 MS. MARGARET BENNETT: Pardon me? Oh,
13 my name?

14 MODERATOR ZABOROWSKI: Sorry -- yeah,
15 sorry.

16 MS. MARGARET BENNETT: Margaret Bennett.
17 I live in 48105.

18 MODERATOR ZABOROWSKI: Thank you.

19 MS. MARGARET BENNETT: And -- and so I'm
20 very concerned. I've been actively involved with the
21 Inland Seas Association in Suttons Bay, which was
22 founded by Tom Kelly who's devoted his whole life to
23 preserving the Great Lakes. And I've been hearing
24 that President Obama is supporting the shippers in
25 Chicago who want to keep the connection between the

1 Mississippi River and the Great Lakes open for
2 business purposes. And I -- I'm sympathetic to that,
3 but I think it's a short-sighted idea, and so I wrote
4 a letter, which I haven't yet sent, but I will, to
5 President Obama, Michelle Obama and Vice President Joe
6 Biden, somebody who would read it, because they're off
7 there, and we're here, and we know more about what's
8 happening.

9 Continuing the connection between the
10 Mississippi River and the Great Lakes is stupid and
11 will have expensive and ongoing problems for our
12 country for decades to come. As a lifelong Michiganiaan
13 (ph), seriously concerned about preserving the Great
14 Lakes, the largest freshwater resource in the world, I
15 know we need to be proactive in preventing invasive
16 species from getting into our waters. To allow the
17 present canal that connects the Mississippi River with
18 the Great Lakes to continue, is incredibly
19 short-sighted. I can't imagine that our incredibly
20 intelligent President would support such an idea.
21 Ignorance of the whole invasive species problems we
22 have had in the Great Lakes area for decades must be
23 the excuse for why people in Washington are not
24 concerned too much about this.

25 Of course the President didn't grow up

1 in Michigan and that makes a big difference, or in any
2 other Great Lakes state. And as far as I know, they
3 have not had Asian carp in Hawaiian waters.

4 The cost of managing the invasive
5 species problems in the Great Lakes Basin has cost at
6 least as much as we have spent on recent wars. If we
7 wish to preserve this wonder of nature for our
8 children and grandchildren, we need to take a longer
9 view than the shippers in the Chicago area. Allowing
10 the Asian carp to get into our remarkable freshwater
11 system will almost certainly destroy the Great Lakes
12 as we know them. We ask that the President reconsider
13 his position on this issue. For more input, President
14 Obama and others should consult Tom Kelly who's the
15 executive director of Inland Seas in Suttons Bay who
16 probably knows as much about invasive species as
17 anybody. And I can give that information.

18 MODERATOR ZABOROWSKI: If you could
19 conclude your statement.

20 MS. MARGARET BENNETT: So I'd just say
21 that I'm really concerned that we may end up
22 destroying our lakes as they have been and I take my
23 grandchildren up to Suttons Bay for schooner trips so
24 they can learn more about the invasive species and
25 that sort of thing, and in the hopes that some of us

1 will continue to work to preserve the lakes. And it
2 looks like a whole bunch of grandchildren that are all
3 boys, there's one granddaughter and she seems to be
4 the most fired up so far, so you never know. But
5 anyway, we need to do something about this right now.
6 We need to stop that connection between the river and
7 the lakes right away and then the other projects that
8 you have studied --

9 MODERATOR ZABOROWSKI: Ma'am, please
10 complete your statement.

11 MS. MARGARET BENNETT: -- and the plans
12 that you have made for handling this in the future
13 would be, you know, very good and I'm sure some of
14 them would be very effective, but we need to do
15 something now, we need to stop that connection before
16 it's too late.

17 MODERATOR ZABOROWSKI: Thank you, ma'am.

18 MS. MARGARET BENNETT: Thank you.

19 MODERATOR ZABOROWSKI: So, it's getting
20 close to 6. I propose that we go through two more
21 comments and then we'll take our scheduled break for
22 five minutes, give the panel a chance to get up and
23 stretch their legs. So Mr. Martin.

24 MR. ROGER MARTIN: Yes, it is.

25 MODERATOR ZABOROWSKI: Name and ZIP

1 code, please.

2 MR. ROGER MARTIN: I've been called
3 worse on different days, but Roger Martin is my name.
4 48073 is where I live. I also have property in 48761.
5 I'm a citizen, a fisher person. I'm very rarely the
6 sense of reason. Today I'm the sense of urgency. My
7 daughter moved to Missouri about a year ago and I went
8 down with her husband to St. Joe's to scout out a
9 place to live, look at -- who knows what Missouri is
10 like, God knows I've never been there. And I went to
11 this lovely little shiny nature center, because Kayla
12 (ph) was working and I was scouting, so I was scouted
13 out the nature center. And I ran into this lovely
14 docent who was very exited about the nature center,
15 and I'm looking at the -- I guess it's the Missouri
16 River flowing by and I said, "Are those stupid carp in
17 your river?" And her face dropped. She said, "Yeah,
18 they are." She said it decimated the fishing, it
19 ruined the river, there's no going back and it
20 happened so very fast.

21 And I think that's my sense of urgency.
22 There is no going back. Once they're in, they're in.
23 And it's not going to matter a hundred years from now
24 (inaudible). It's not going to be important if you
25 blocked most of the carp or some of the carp. There's

1 just no second chance once they're in. There is no
2 going back.

3 I'm going to share another little story,
4 if I may. I was videotaping my then 92-year-old
5 mother, get some family history on tape, because I'm
6 60-something and I'm going to be cooling off to room
7 temperature in short order, and I wanted to get some
8 stories right. And we videotaped how mom met dad,
9 blah, blah, blah and she said, "That's enough, Roger.
10 Shut off the video thing. Is there anything else you
11 want me to say?" And I said, "Yeah, mom, tell the
12 kids to have kids." And she said, "I don't know. We
13 screwed up so many systems, I don't know if I can tell
14 them to have kids." I have that on videotape, I hope
15 my kids never see that little blip, but I'm just
16 saying if we screw this up, and we know that there's a
17 problem happening, pour lots of concrete, pour lots of
18 concrete fast. If we have to move concrete later, I'm
19 confident the Army Corps of Engineers can blow that
20 stuff up if we don't need it. But be safer, don't be
21 sorry and somebody out there have some grandkids.
22 Amen.

23 MODERATOR ZABOROWSKI: Thanks, sir. Mr.
24 Paul Scott and that will be the last, then we'll take
25 a quick five-minute break. And I've got plenty more

1 names to call after that, so don't worry. Paul.

2 MR. PAUL SCOTT: Yeah. Paul Scott, ZIP

3 code 48146. I'm a lifelong resident of Michigan.

4 Basically, like some people here I do a lot of -- I

5 kayak the whole state. Been lucky enough to fish in

6 Alaska. I've strayed from rivers and seen -- grayling

7 that we never see here anymore and basically -- I'm in

8 construction, been in construction my whole life and I

9 know the Corps is civil and I'm an architect and I got

10 my hands dirty and I love construction, and there's a

11 term we always use called parallel path, and I -- what

12 I'm concerned about is, and I didn't see it in the

13 study, is if one of these solutions works, I still

14 think we need to have a backup plan, and that backup

15 plan would be -- parallel path would be, I don't see

16 anything working but the complete elimination of these

17 fish, and -- which means we -- we protect our native

18 species and eliminate the fish because they're not

19 going to -- once there's a mistake made and they end

20 up in the Great Lakes, we -- as the last person Roger

21 said, we can't go back. And these fish are -- they're

22 amazing, they can (inaudible) water and they -- and

23 there's one thing we never mentioned, is that man can

24 also transport those into the Great Lakes by mistake

25 or by some other reason drop them off like we -- we

1 did as children with goldfish. And I am concerned
2 that like goldfish they have a -- they have a heck of
3 a life, and we just cannot, you know -- we can rely
4 on -- on ideas of locks and things of that nature, but
5 we've got the zebra mussels, they're here, I see them
6 everywhere in all of the streams and rivers. And it's
7 amazing how fast they replicate here. So if we can
8 only look at the other solution of what -- whatever it
9 might cost, because there's 50 million in this plan.
10 Eliminating these fish from the Mississippi River,
11 because there's no other way, they're just going to
12 keep growing. And that's my two cents worth. Thank
13 you.

14 MODERATOR ZABOROWSKI: Thank you, Mr.
15 Scott. It is now 6:04 p.m. and on our schedule we had
16 at 6:00 a five-minute break scheduled. So, I'd ask
17 everybody to come -- to come back to your seats at
18 6:10. We're going to get started right away and then
19 at that time I'd like Mr. Jon Bulkley to be ready
20 followed by Ivan LaHaie -- LaHaie (different
21 pronunciation). So, thank you very much. Let's take
22 a quick break.

23 (Off the record at 6:04 p.m.)

24 (Back on the record at 6:14 p.m.)

25 MODERATOR ZABOROWSKI: Gentlemen, are

1 you ready to get started?

2 MR. WETHINGTON: Yes. Thank you.

3 Thanks to all for allowing us a short break. We very
4 much appreciate it.

5 MODERATOR ZABOROWSKI: Next I have Mr.
6 Jon Bulkley. When you're ready, sir, please give your
7 name and ZIP code.

8 MR. JON BULKLEY: Jonathan Bulkley,
9 48104. I certainly thank all of you for being here
10 and giving us this opportunity to comment upon what is
11 an extraordinary effort that the Corps associated
12 folks have put together for us. I especially want to
13 commend you for thinking about approaching this from a
14 risk perspective. I do realize that the initial
15 effort is being not analytical, but more of a
16 qualitative risk approach. In that light, though, I
17 would certainly encourage you to begin to think
18 through developing some hopefully simple analytical
19 models, risk models, because that may help in some of
20 the decision-making that is going to have to clearly
21 come in the future.

22 I did find the Appendix C of the
23 document. I guess the term might be mystified. I
24 think it was over 600 pages and I was trying to find
25 certain information and it was sort of a hit and miss

1 deal because they were just -- due to the size of the
2 file and there were 11 of them, and which one was the
3 one you were looking for. Anyway, I think that's just
4 a side comment.

5 But I would also encourage you to think
6 about the Focus Area 2, the areas which are not right
7 in the Chicago area and whether or not it's possible
8 to begin to identify habitats that would be
9 particularly attractive or supportive of these various
10 species that we're trying to -- trying to separate
11 from the two basins, the Great Lakes and the
12 Mississippi. And then it seems to me, if I understand
13 it correctly, Focus Area 2 is primarily states'
14 responsibilities. I hope that you do have a -- some
15 sort of ongoing way to communicate and exchange
16 information and bring those parties together and make
17 this really a team effort. But, thank you very much
18 for the opportunity to be here.

19 MODERATOR ZABOROWSKI: Thank you very
20 much. Next on my list I have Mr. Ivan LaHaie,
21 followed by Jared Teutsch and then Mr. Tim Eder. Name
22 and ZIP code.

23 MR. IVAN LAHAIE: Thank you. My name is
24 Ivan LaHaie, ZIP code is 49240.

25 I am a member of many environmental and

1 conservational organizations, but I'm sure you've
2 heard from many, many more learned individuals than I
3 representing those organizations today, and so I'm not
4 going to speak specifically to -- to those points. I
5 come to you instead as a citizen of the State of
6 Michigan my entire life. I come to you personally as
7 an environmentalist and conservationist who deeply
8 values the single greatest natural resource this
9 country has, the Great Lakes; and that's not to
10 shortchange the Mississippi River by any means.

11 But I also come to you by training as a
12 scientist, so I understand the need for science in
13 backing decisions and I certainly appreciate all of
14 the work that you've done on that front. But I come
15 to you more than anything as an engineer. For
16 35 years I've been an engineer, and I know there comes
17 a time when science is good enough to justify the cost
18 and risk trade-offs associated with the decision.
19 That time is not now, in fact that time -- we have
20 been at that point in time for a long time now. This
21 has gone on for too long. It is now time to act with
22 resolve and commitment and the certainty that
23 separation in the long-term is the only defensible
24 solution to this problem. As such, we rarely have a
25 chance to be proactive. We can talk about all of the

1 invasive species that are here now that we can only
2 react to. We have in front of us now the chance to be
3 proactive. It is time for leadership of all parties
4 involved. The political will is there, you've seen it
5 tonight, you've seen it across the board. It is time
6 to act both with near-term solutions as well as a
7 long-term goal, separation and separation only.

8 What greater good could government play
9 than to serve at the interest of the general public,
10 not of some localized segment of industry such as
11 transportation or shipping or tourism, but the greater
12 good of the overall public, and I don't think anyone
13 in this room or anyone in this office body would argue
14 that that is in fact what preserving the Great Lakes
15 and Mississippi River Basin does. It serves the
16 greater public good. So the government needs to act
17 now for that reason. Thank you very much.

18 MODERATOR ZABOROWSKI: Thank you, sir.
19 Mr. Jared Teutsch, if you're available. Followed --
20 Mr. Teutsch, I'd like to remind you that we are trying
21 to abide to a three-minute time limit, for those of
22 you joined us late, so you know what's going on. When
23 we raise --

24 MR. JARED TEUTSCH: I'm familiar with
25 the color schemes and I know most of the folks here,

1 so. Yeah, for the record, Jared Teutsch, Alliance for
2 the Great Lakes. Where I live, 60543. Where I work,
3 I work all over the basin, but I'm based out of
4 Chicago, 60602. Where I was born and raised and where
5 I still play today and I bring my kids to play,
6 4090 -- 49087. I have too many ZIP codes.

7 Anyway, I'm here today to just touch on
8 few things. We heard from a lot of great people who
9 really are passionate about the issue of separation.
10 You'll -- I think that -- you know, this is ground
11 zero for the Great Lakes, this is the Great Lakes
12 state. You know, everybody here understands the value
13 of not only the ecological impacts that we're going to
14 see from Asian carp if they get through the lakes, but
15 also the economic impacts we're going to see to the
16 State of Michigan, to the Great Lakes basin if this
17 happens. You know, there are -- there are some things
18 that I think we need to see moving forward, we
19 definitely need to see a shorter timeline.

20 You know, I think all of us understand
21 that the price tag, I think we can work on that, this
22 is not a full feasibility study. So these numbers, I
23 think, can be worked with. Could be off by up to
24 60 percent. But what we really need to focus on; the
25 Great Lakes are worth the price tag, whatever it may

1 be for separation. But the timeline is just
2 unacceptable, the timeline we need to work on.

3 Within that price tag I would like to
4 point out that we haven't heard some things that --
5 that we consider to be issues that need to be taken
6 care of regardless of separation. So, for example,
7 flooding in Chicago, that needs to be taken care of on
8 its own, that needs to happen anyway. Water quality
9 issues in the City of Chicago need to happen anyway.
10 So this is beyond the cost scope of separation. So to
11 put that all together under one price tag, it's like
12 saying let's remodel the kitchen and put the price tag
13 on baking the cake. It's not the same thing. So, I'd
14 urge you to think about the next steps, the letter
15 that the Senate provided to the Army Corps on what
16 will be the steps here moving forward. Urging you to
17 continue to move this process forward quickly,
18 recognizing that we have an eminent threat onto the
19 Great Lakes. And I thank you for your time.

20 MODERATOR ZABOROWSKI: Thank you, sir.
21 When you're ready, sir, name and ZIP code, please.

22 MR. TIM EDER: Tim Eder, Great Lakes
23 Commission, 48104. I live at 48118 and I play
24 throughout the Great Lakes basin. Secretary Darcy,
25 General Burcham, welcome to Ann Arbor. John, Dave,

1 Colonel Drummond, great to see you all here.

2 I want to start out by thanking the
3 Corps of Engineers for the terrific body of work that
4 you put into the GLMRIS report. It really does lay a
5 solid foundation for us to move forward to have a
6 discussion about the next steps.

7 Of course what it does not do is provide
8 us a clear path forward and that's what I want to
9 spend a little bit of time talking about. It was in
10 2010 that the Great Lakes Commission commissioners
11 from all eight of the Great Lakes states and both
12 Canadian provinces approved a resolution recognizing
13 that the preferred long-term solution, long-term
14 solution is physical separation provided that the
15 existing uses of the Great Lake -- of the Chicago
16 waterway could be protected and preserved and we
17 called on the Corps of Engineers to accelerate the
18 investigation of that. And at the same time that gave
19 us the authorization to go forward with our own
20 investigation of whether and how physical separation
21 could be proved to be feasible or not. And as you are
22 well aware, the Commission produced this report
23 two years ago, almost exactly two years ago called
24 Restoring the Natural Divide. And I think that did
25 provide a real solid foundation upon which the Corps

1 built and took it to the next step.

2 Now, we had the engineering team that

3 helped us put the Restoring the Natural Divide report

4 together do a quick evaluation and analysis of the

5 GLMRIS report and I just want to share with you that

6 while the report does provide a tremendous foundation

7 and a tremendous body of information upon which we can

8 work with, and move forward, the Corps made some key

9 assumptions in the GLMRIS report that account for

10 significant cost and extensive implementation times

11 for its alternatives including design for 500-year

12 flood, complete removal of contaminated sediments as a

13 cost of separation and no discharges to Lake Michigan.

14 Planning to contain CSOs for a 500-year storm event is

15 far above the design standard generally used for

16 wastewater and storm water systems, and it's not

17 consistent with the standard of care that U.S. EPA

18 requires throughout the rest of the country. And I

19 think this is consistent with what -- with what Jared

20 was just talking about, designing to fix all of the

21 problems: Contaminated sediments, wastewater in

22 Chicago and putting that as a cost of solving the

23 invasive species problem is not quite right. And so

24 we do have some concerns about the report, but more

25 importantly than that, the report does provide that --

1 that foundation for going forward and what we need now
2 is we need Corps of Engineers' leadership to work with
3 us, to work with the Great Lakes states to work with
4 the cities, the mayors to find that solution, that
5 path forward.

6 I urge you to ask us -- to seek our
7 support, to ask us for guidance, we're willing to
8 provide it. We do have an advisory committee, our
9 Board of Directors is going to be meeting in Chicago
10 next week. Our advisory committee is going to be
11 meeting and we're willing and able to help you find
12 that path forward. I hope you'll take advantage of
13 it. Thank you.

14 MODERATOR ZABOROWSKI: Thank you, sir.
15 That's actually everybody that registered before
16 today. I have a list of people that -- I'm not done.
17 Don't worry. So, those are the people that registered
18 on the website. There are some of you that registered
19 here today to speak, so I'm going to begin calling
20 those people's names.

21 So first, if I could have Drew
22 Youngedyke, followed by Joe Hoffman and then Jean
23 King.

24 MR. DREW YOUNGDYKE: Hi, I'm Drew
25 Youngdyke, 48103. I work in 48912. I work for

1 Michigan United Conservation Clubs.

2 First of all, we'd like to thank you for
3 the work you put into the report, as well as thanks to
4 Senator Stabenow, Representative Camp for leadership
5 on this issue. We represent approximately 50,000
6 hunters, anglers and conservationists throughout the
7 state. Our primary concerns are physical separation,
8 making sure that when you're looking at priorities of
9 which options you choose, you're looking at what's
10 most effective at keeping Asian carp and aquatic
11 invasive species out of the Great Lakes. Obviously it
12 is a steep price tag. It was pointed out earlier
13 today that that's only two years' worth of the Great
14 Lakes fishery costs.

15 Obviously we feel that the timeline
16 would not be effective in keeping out Asian carp given
17 the time that they've moved up the river, so it has to
18 be done in a shorter amount of time we believe and
19 that's something that we have to find a way to do.
20 Thank you very much.

21 MODERATOR ZABOROWSKI: Thank you, sir.
22 Next, Mr. Joe Hoffman, please, followed by Jean King
23 and then I have Tim Murray.

24 MR. JOE HOFFMAN: I'm Joe Hoffman,
25 48176. I'd like to first of all thank the Army Corps

1 of Engineers for their expertise that was -- in the
2 effort made to put this study, it's very substantial
3 and also thank you for the opportunity for all of us
4 to speak.

5 I work with a marine engine
6 manufacturer. And -- which is also -- the company is a
7 member of the National Marine Manufacturers
8 Association. Both of these entities are concerned and
9 interested in this particular topic. I'm not here to
10 advocate one particular one of these alternatives,
11 however, I do have a question to be addressed by
12 whoever is most appropriate, I guess. And that is, may
13 more than one of these alternatives be considered for
14 implementation in conjunction with each other as
15 opposed to just picking only one?

16 And -- this would be for additional
17 security as I noticed in the ratings of effectiveness
18 some are more effective than others and I also
19 understand that there are budget considerations for
20 implementing any of the particular alternatives, and
21 that those sort of things are highly considered in
22 establishing viability and also, you know, possibility
23 of these coming into fruition.

24 So, I wonder first of all about that, if
25 more than one could be considered for conjunctive

1 implementation and if so would that require another
2 study or even separate legislation in order to make
3 that happen? Thank you very much.

4 MR. WETHINGTON: Thank you, sir, for
5 your comments. I just want to respond to that
6 briefly. Any one of these alternatives, they actually
7 have been kind of developed so that they could
8 potentially be added upon. If you look at Alternative
9 2, nonstructural methods, those have been included
10 with every subsequent alternative as best management
11 practices. Some of the technology alternatives, there
12 are opportunities for advanced risk reduction, so
13 there is opportunities to implement pieces or parts of
14 them in advance of others.

15 With regard to additional study in
16 general, I don't think that applying two or more or
17 versus one would require any more study than applying
18 one or the other. Everything in this report is kind
19 of designed to a conceptual level. Costs were
20 estimated at a conceptual level so we call it a
21 5 percent level of design. Before we get to any kind
22 of future construction of any one or combination of
23 the alternatives there would certainly be additional
24 detail design. Necessary and part, again, of having
25 this conversation here with everyone today is to focus

1 in on what those next steps should be. So thank you
2 so much for your comments and questions.

3 MR. JOE HOFFMAN: Thank you.

4 MODERATOR ZABOROWSKI: Thank you, sir.

5 Next on my list I have Jean King. Going once, twice.

6 Next after Jean King on my list I had
7 Tim Murray and then Anna Brunner following Mr. Murray.

8 MR. TIM MURRAY: Yeah, my address is
9 4110 East Morgan, 48197. I'm just a dumb American
10 Indian from Sault Ste. Marie --

11 MODERATOR ZABOROWSKI: I'm sorry, can I
12 ask you just state your name, please.

13 MR. TIM MURRAY: Tim Murray.

14 MODERATOR ZABOROWSKI: Thank you, sir.

15 MR. TIM MURRAY: Just a dumb American
16 Indian from Sault Ste. Marie. Chippewa Indian, what
17 do I know? I'm just a dummy. We got mercury, PCB,
18 you can't even really eat the fish in the Huron River,
19 okay? Maybe once a meal for a child a month. What is
20 that? Then you got all the zebra mussels. Right, I
21 ate them too much, okay? Now we got the Asian carp.
22 You got a disease that you ain't going to be able to
23 fix. No matter what you do, no matter how hard you
24 try, you lose, okay? I'm not worried about the ones
25 in the river. I'm the one worried about the ones in

1 the Great Lakes now. What, you don't think they're
2 there? Who are you kidding? Not me. I'm just
3 wondering who's got enough money to start opening a --
4 you know, Asian carp restaurant. Because there's
5 going to be a lot out there, you're not going to stop
6 them, no matter what you do. No matter what. You
7 failed, you waited too long. So here we go, wherever
8 the government goes, nothing grows. Good luck to you
9 fellows, okay? Take care.

10 MODERATOR ZABOROWSKI: Thank you, sir.
11 Next I have Anna Brunner followed by Renee Gregory.

12 MR. TIM MURRAY: Bastards.

13 MS. ANNA BRUNNER: Hello, my name is
14 Anna Brunner. My ZIP code is 48103 and I'm
15 associated, affiliated with the National Wildlife
16 Federation. I just want to thank you, as many people
17 have, for giving us this opportunity to provide
18 comment on the GLMRIS report.

19 The National Wildlife Federation has a
20 strong history of supporting the Great Lakes and ways
21 to keep them healthy, and the National Wildlife
22 Federation has long advocated for physical separation
23 between the Mississippi and the Great Lakes and we
24 were pleased that this Corps study showed that
25 permanent separation is the most effective of the

1 alternative study. Action is urgently needed as
2 almost every voice in this evening has noted.

3 Congress should now move forward in
4 directing the Corps to flesh out Separation Option
5 Number 6 by first outlining what exact steps are
6 necessary to implement permanent separation. Failure
7 to act is not an option. We know fish can move
8 through the current electric barrier. A Corps' study
9 from December determined that the electric barriers
10 currently in place are not fully effective.

11 We need to take the momentum from this
12 study and from all the Great Lakes support shown at
13 this meeting today and ask Congress to act on
14 permanent separation, namely Alternative 6. Thank
15 you.

16 MODERATOR ZABOROWSKI: Thank you, ma'am.
17 Next I have Renee Gregory and then [REDACTED].
18 I probably got that one wrong. The name and ZIP code
19 whenever you're ready.

20 MS. RENEE GREGORY: Renee Gregory,
21 48160. I'm a lifelong resident of Michigan. I'm also
22 a licensed airline transport pilot, an aircraft
23 mechanic. I've worked for the Federal Aviation
24 Administration and the National Transportation Safety
25 Board. And the only reason I bring that up is that

1 gives me somewhat of a bit of expertise on how
2 government does and does not work.

3 So, I'm looking at the study, and it's a
4 very good study, and for if no other reason first do
5 no harm. Pretty obviously Option 1 is not an option.
6 I think Senator Stabenow said it best, we've been
7 lucky so far. Option 2 is really not an option either
8 because the education option doesn't work. We --
9 somebody earlier pointed out about the emerald ash
10 borer, supposedly there was education not to move cut
11 wood, well, you go 10 miles any direction from where
12 we're standing right now you're going to find some
13 pile of wood in somebody's front yard for sale. Trust
14 me, that didn't work.

15 Also monitoring, monitoring doesn't work
16 either. We had an oil spill in Marshall, Michigan
17 here recently and I don't know how many days went by
18 while the monitors were going "Oh, why do you suppose
19 that pressure was so low? I don't get it." So human
20 beings make poor monitors, we have proven that time
21 and time again. So Option 2, other than the
22 legislation and enforcement part of it, is kind of a
23 non-option. So we're going to have to choose from
24 Options 3 through 8. Sounds like 6 is the best
25 option. But, the big deal here is you're going to

1 have to make a decision and move.

2 I'm from the private sector, I expect
3 results. Pretty much everybody here is the same way.
4 We expect results, not an empire. We expect results.
5 Thank you.

6 MODERATOR ZABOROWSKI: Thank you, ma'am.
7 Jennifer, and then after Jennifer I have Kurt Wolak.

8 [REDACTED]: Hello. Thank
9 everyone for allowing me this opportunity and for the
10 report and work you did. I didn't expect to speak
11 today, I apologize, my thoughts are a little rambling.
12 [REDACTED], sorry, 48108.

13 MODERATOR ZABOROWSKI: Thank you.

14 [REDACTED]: So, as of 2012
15 there's over 180 basic species in the Great Lakes
16 basin of reproducing populations. It's been 25 years
17 since the zebra mussels were first introduced and
18 right now they cost over \$300 million a year,
19 conservative estimate, in management. One of my
20 earliest memories is zebra mussels when going fishing
21 with my uncle on the Great Lakes, born and raised
22 Michigander.

23 We have a unique opportunity here with
24 the Asian carp where we can (inaudible) right now.
25 And I urge you to follow Senator Stabenow's

1 recommendations and (inaudible) unanimously, everyone
2 coming here to testify that we need to be more
3 immediate action. If it's a series of steps to final
4 implementation, that's something, but immediate action
5 as well as a physical barrier. The State, you know,
6 has suffered a lot, but the Great Lakes are, you know,
7 our birthright, as far as I'm concerned, and I think
8 that environmentally, economically and just in
9 general, we need to take some action on this so
10 25 years later we're not saying we could have done
11 this with ballast water, we could have done the
12 separation. We know the risks, we know we have the
13 ability to stop it and we need to take action sooner
14 rather than later, so we don't regret it in the
15 future. Thank you for the opportunity.

16 MODERATOR ZABOROWSKI: Thank you. Name
17 and ZIP code whenever you're ready, sir.

18 MR. KURT WOLAK: Good afternoon
19 everyone, my name is Kurt Wolak. I reside at ZIP code
20 48198, but I was raised at 49022 on the shore of Lake
21 Michigan at the mouth of the St. Joseph River. I also
22 enjoy seeing some of you folks again from some of the
23 past events.

24 And, first of all, I'd like to thank you
25 for your attention to the Eagle Marsh area because it

1 was a very high-risk pathway and it was in danger of
2 being overshadowed by the Chicago situation and it
3 would have impacted not only the St. Joe River, but
4 possibly the Maumee. So chain link fence is good as a
5 stop gap measure, but it doesn't keep out many
6 invasive species, including teenage boys like me back
7 in the day.

8 What I was thinking about was your
9 Alternatives 3 to 7, a lot of the figures and
10 timelines you give are a little daunting, so as a
11 recommendation for possibly future public meetings,
12 you should set up some glide paths, maybe a one level
13 down that deal with significant milestones that might
14 be reached and common elements in modules, because I
15 can't believe that everything is going to happen at
16 the end of 25 years. Something is going to happen at
17 three years, something is going to happen at
18 five years and some of those are going to be
19 significant. And that would help the public
20 understand and compare these programs rather than the
21 way you've presented them thus far.

22 The second element is, water
23 temperatures are rising for whatever reason we want to
24 attribute them to, but in the Great Lakes we have had
25 that happen and rising evaporation rates. Asian carp

1 have a problematic aspect in that they are able to
2 spawn more than once if the water temperatures rise to
3 a point that allow them to do that. And I am hoping
4 that in your plans you have considered that possible
5 vector both with the evaporation rates and the increase
6 in Asian carp spawning rates with temperature rise.
7 I'd also -- so recommend that maybe you focus some of
8 your emergent technology applications to things that
9 deal with the eggs and the fry because they are going
10 to be a special -- specially a situation and also with
11 possibly silver carp management, because bighead carp
12 are easy to harvest, but silver carp prove to be more
13 elusive and there's a concern that silver carp will
14 just fill the bighead carp gap.

15 Lastly, we work -- or my group works a
16 lot with in -- with sportsman outreach and awareness.
17 I think a lot could be done. One of the presenters
18 say what can you -- we need your help, and we're ready
19 to help, but we really don't know how to help. You
20 have thousands of visitors that are on the Great Lakes
21 that are your monitors, you have outreach orientations
22 like Metro-West Steelheaders, aggregators like the Sea
23 Grant organization that will -- could serve as your
24 eyes and ears out here and we just need to know how to
25 help you better. Thank you very much.

1 MODERATOR ZABOROWSKI: Thank you, sir.

2 At this point this is -- that was everybody whose name
3 I've been given a card for. I'd like to ask, is there
4 anybody that registered on the project website before
5 today whose name I didn't call and didn't get a chance
6 to speak?

7 Okay. So was there anybody that
8 registered at the table today whose name I didn't call
9 and did not get a chance to speak? Sir, if you could
10 come up to the microphone then, please, and then give
11 your name and ZIP code.

12 MR. IAN TRAN: Good evening, and thank
13 you for the opportunity to speak and for coming out
14 our way. And I also appreciate the work you've done.
15 My name is Ian Tran. I come from the 48188 ZIP code.
16 I represent myself as a citizen and potentially with
17 the company called ISMOTION which focuses on community
18 bylaws.

19 One of the things that I wanted to --
20 well, first I want to say I also support and urge the
21 separation of the Chicago River from the Great Lakes
22 as well.

23 The second, I was -- would like to
24 comment about the outreach that has been done so far,
25 just as the gentleman before had mentioned. I live in

1 the area, I graduated in the environmental science
2 program and I just found out about this public meeting
3 today through public radio which made the announcement
4 today as well. So one of my questions for the Army
5 Corps of Engineers and potentially other Federal
6 agencies is what are the primary channels for public
7 outreach and what are some ways that it can improve
8 its outreach to the general public so that people can
9 actually prepare and learn about what's the contents
10 of -- of the report and then perhaps become more
11 informed statements.

12 Second, my question pertains to I guess
13 long-term resilience for some of the communities that
14 might be impacted. Is the Army Corps of Engineers
15 willing and I guess interested to support some sort of
16 community dialogue or, you know, strategic planning
17 even for let's say people in the Chicago area that
18 their industries will be impacted, for example. I
19 don't believe that that kind of resource is available
20 in a way that -- at this point it's going to be very
21 emotional, but in terms of looking at long-term
22 education rather than coming to town with a decision
23 on hand, coming forth just to educate the public about
24 the current state of the environment and then second,
25 possible choices for preparing or finding needs that

1 can be met by other community stakeholders. So that
2 would be some of my comments.

3 MR. WETHINGTON: Great. Let me -- and
4 thank you for your time today. Thanks for coming out.
5 I apologize you didn't get a chance to hear about this
6 earlier. I guess the fact you did hear about it and
7 were able to come out today is at least a positive.

8 With regard to how we disseminate this
9 information, we have had the GLMRIS website as part of
10 our project for the past four or so years and we've
11 tried to engage our stakeholders. Bless you. We try
12 to engage our stakeholders through a number of ways,
13 you can sign up to be on GLMRIS e-mail list, for
14 example, you can also follow us on Facebook and
15 Twitter. I -- I kind of keep a second eye to the
16 Twitter feeds that are going out tonight, there are
17 people live tweeting from what's going on in here. So
18 I think it's a matter of kind of getting plugged into
19 this study itself. Now granted, there's a lot of
20 other ways out there, we have had a lot of media
21 recently, but for anybody who has, like for yourself,
22 just heard about this, and wants to take some time to
23 review the information and make a more informed
24 comment our public commentary is open through the 3rd
25 of March, so you have the ability. As Kendall just

1 said, public comments made here today versus ones that
2 are entered on our website don't hold any different
3 weight, so by all means, really glad you had the
4 opportunity to come out today and if you'd like to
5 make a further comment once you've had the opportunity
6 to digest the information, please feel free to do so.

7 With regard to strategic planning for
8 the future; future steps, future implementation, I
9 think that's certainly a great idea, but, you know, at
10 this point in time we're very much in the planning
11 stages and the very early, I guess, planning stage.
12 We are at a conceptual level design with regard to any
13 of the alternatives within the report. We would
14 certainly need to, as a community, part of the input
15 we get here and working with our, you know,
16 Congressional leadership as well as other resource
17 agencies, need to come up with a collaborative path
18 forward. And then once that's kind of been -- you
19 know, at least an initial idea has been identified and
20 worked through existing Federal decision-making
21 processes like the National Environmental Policy Act
22 to really scope out and identify that public input to
23 those more specific plans.

24 So again, thanks again for your time
25 coming out and thank you for your comments.

1 MR. IAN TRAN: For that last point, is
2 there a way for us to find out how to get involved as
3 well? Or to --

4 MR. WETHINGTON: Absolutely. So, feel
5 free to go to the website, we've got information on
6 that -- I believe on some of the posters as well as
7 the information at the front desk. You can put your
8 e-mail address on our list, sir, and whenever there's
9 information that comes out, by all means follow us on
10 Facebook, friend us on Facebook, follow us on Twitter.

11 MR. IAN TRAN: All right. Thank you.

12 MR. WETHINGTON: Thank you.

13 MODERATOR ZABOROWSKI: At this point in
14 time I've heard from everybody that either registered
15 on the website beforehand or registered at the
16 meeting. I'd like to ask if there's anyone on the
17 webinar that would like to make a comment? I'm
18 getting a "No". It is currently 6:48, we're scheduled
19 to run until 7 so I'd like to ask that anybody that
20 has already made a comment previously, or has not yet
21 had a comment -- or made a comment and not filled out
22 a registration form, if you'd like to come up to the
23 microphone and ask a question of the panel or make an
24 additional comment. We'll still abide by the
25 three-minute timeline. Got one gentleman coming down

1 first and then we'll go to you, sir. We got a few
2 more -- a little more time to interact with you guys
3 tonight.

4 MR. RYAN DARNTON: Hello, my name is
5 Ryan Darnton (ph). ZIP code is 48105. I'm here as a
6 citizen although I do -- I'm not counting on behalf of
7 USGS, but I work as a contractor with USGS.

8 People have pretty much covered, I
9 think, the advantages of the separation in terms of
10 not just Asian carp, but aquatic nuisance species in
11 general and I guess my suggestion -- this may fall a
12 little bit out of the course purview, but I want to
13 encourage serious follow up as we go forward on
14 biological controls in case -- in the event that you
15 have a human vector, somebody transports carp or any
16 other -- well, bighead and silver in particular, into
17 the Great Lakes. You know, something similar to what
18 happened with sea lamprey. Potential biological
19 controls, I know there's some research going on out
20 there, but as we start moving forward with funding for
21 how to -- to try to deal with this problem, I think
22 that really needs to be an important part in addition
23 to separation. So -- and thank you for all the work
24 you've done.

25 MODERATOR ZABOROWSKI: Thank you, sir.

1 And next, sir, when you're ready. And if you're going
2 back up I still would like to ask for you to give your
3 name and ZIP code, please.

4 [REDACTED]: Sure. [REDACTED],
5 48170. I'm here as a concerned fisherman. I've been
6 fishing in Lake Michigan and Lake Erie for the last
7 35 years, so I -- I know what the quality of fishing
8 for salmon and walleye and perch has been and I can
9 also see the degradation, particularly in Lake Erie,
10 of the fishing for walleye. Since ineffective
11 measures were taken many years ago to block the
12 invasions of zebra mussels. It's pretty well known
13 that they've really decreased the experience and the
14 quantity of walleye that have been caught.

15 My background is -- is in engineering.
16 I'm in automotive engineering, and I was -- I have --
17 over my career I've had an opportunity to participate
18 in the failure analysis of some components used in our
19 products, so I'm pretty well familiar with, first of
20 all, extensive engineering studies. I want to
21 congratulate you. It's certainly been extensive, it's
22 well presented, it's a nice document, I think it's
23 worthy of our consideration certainly. But in my
24 experience in failure analysis and running failure
25 mode effect analysis and running risk analysis, it

1 seems like the worst case is always boiled down to a
2 lack of really robust engineering in the planning
3 stages. I think we have now an opportunity before us
4 knowing the -- knowing the detrimental effects that
5 Asian carp potentially have for ruining the fishing
6 and many other aspects of the Great Lakes. I think we
7 have an opportunity now to move and do it and I
8 support complete separation, as most of the people who
9 have spoken here, and also one of the things that you
10 might consider because of the enormous cost involved
11 is why not an international approach to this problem.
12 The Canadian government has been very helpful in
13 supporting the construct -- and paying, helping pay
14 for the construction of the bridge across the Detroit
15 River. I know that the Canadian government that
16 participates in several international commissions with
17 people from the states surrounding the Great Lakes,
18 they're all concerned about the quality of the water
19 and characteristics of the living.

20 So, my quality of life has deteriorated
21 because government has failed to take effective action
22 when it knew what it could have done and should have
23 done, they didn't do it. There's a lot of us who
24 don't have as much fun in life as we used to. Thank
25 you.

1 MODERATOR ZABOROWSKI: Mr. Teutsch, I
2 saw you raise your hand. Name and ZIP code and then
3 get started, please.

4 MR. JARED TEUTSCH: I'm Jared Teutsch,
5 Alliance for the Great Lakes, 60543, 60602 49087. I
6 just -- first, I forgot to thank you for adding the
7 Erie, Pennsylvania public meeting, I think it's really
8 important that all the folks around the basin have an
9 opportunity to speak on this issue and show their
10 support for separation and how important the Great
11 Lakes are to them. I would urge you actually, to
12 continue that thought process and add Indiana and New
13 York to that list. It would be very unfortunate for
14 those folks in those states not to have an opportunity
15 to speak on this issue. So I urge you to do that.
16 And thank you and I'm sure I'll see you again.

17 MODERATOR ZABOROWSKI: Thank you, sir.
18 Got about five minutes before 7:00. Do we have any
19 last taker to fill up that time for us? Sir. Name
20 and ZIP code.

21 MR. BILL SPARROW: Yes, good evening.
22 My name is Bill Sparrow (ph), 48103, and first want to
23 thank you all for the report. And also for the
24 transparency of the process.

25 I actually don't have a comment, but

1 just a couple of questions. The carp have been in
2 several thousand miles of the river now for a number
3 of years. And we've -- I've heard about the effects
4 that they might have in the Great Lakes if they get
5 that far. Could you discuss a bit about what damage
6 has been done in the rivers already, what we've
7 learned from that and if it's been extensive
8 whether -- there's some talk about mitigating the carp
9 eventually in the rivers. And then the last question,
10 I guess, is about the process. Does the Corps
11 eventually make a recommendation among these eight
12 alternatives? Does Congress make a decision? I guess
13 I'm just not clear about what the decision tree is.
14 And how long have -- will it take. How long will it
15 be before the project is shovel ready or dredge ready?
16 Thank you very much.

17 MR. WETHINGTON: Sir, thanks. Thanks
18 for your questions. Let me try and address them as
19 briefly as possible and get you your answers.

20 Number one, with regard to the damage of
21 the carp, carp were introduced to catfish ponds in the
22 late '70s -- '70s and '80s and got loose through
23 flooding and made their way up the Mississippi River
24 toward the Illinois River. Very simply, you know,
25 their effects are more prominent in some areas than

1 others. There are parts of the -- the central part of
2 the Illinois, the Illinois River where you have them
3 exceeding 90 percent of the total biomass, they have
4 essentially out-competed everything else because they
5 feed on plankton, so plankton, (inaudible) plankton
6 which are the base of the food chain. And so, they
7 have the ability to eat significant amounts,
8 20 percent of their body weight on a daily basis. You
9 know, some of these fish are 20, 30 or more pounds.
10 So, they do have potential to cause significant
11 damage.

12 One thing in GLMRIS we did not look at
13 was the certainty of that potential damage with regard
14 to invasion into other basins. We didn't look at that
15 with any of the species. So, I cannot speak with any,
16 you know, amount of certainty with regard to whether
17 or not they would cause the similar type of
18 significant damage on the Great Lakes or adjacent
19 ecosystems.

20 With regard to the process, at this
21 point in time, you know, since the kind of prospect of
22 aquatic nuisance species control is a shared
23 responsibility, you know, we wanted to make sure that
24 our stakeholders understand what the variety of
25 options are and who may need to be involved in making

1 those next steps. Certainly I think the Corps is, you
2 know -- and I guess this is a personal opinion, the
3 Corps has done an excellent job with the leadership
4 role in putting together this information. But now is
5 kind of the time to take this and have the
6 conversation, much as we are today, about what is the
7 desired path forward. What I heard today here is
8 certainly hydrologic separation. That may be very
9 different when we go to other regions. So, I think
10 continuing this conversation among those resource
11 agencies or decision-makers like Senator Stabenow who
12 was here today, would certainly be a helpful route
13 forward.

14 The Corps of Engineers needs two things
15 in order for it to accomplish any type of study or
16 construction project. We need authority, which is
17 given to us by members of Congress, and we need
18 appropriations or dollars or resources essentially,
19 which again, are appropriated by Congress. So, if you
20 look at where the Corps of Engineers would make a
21 decision it would certainly be -- we would certainly
22 do the bidding of Congress, if you will, to continue
23 to move forward with any such recommendation.

24 As a, I guess a matter of policy, the
25 Corps of Engineers wants to -- I mean, we have not

1 made a specific decision on which one of these
2 particular alternatives is the best. Because we
3 haven't heard all of the arguments, we haven't had the
4 opportunity to get this input yet and so once we
5 receive this input I think working with existing
6 resource groups like the Asian Carp Regional Coordinating
7 Committee, like the Great Lakes (inaudible) Council on
8 Great Lakes Governors, I think would help provide
9 additional information on how we can move forward.

10 Traditionally, Corps projects are cost
11 shared in some sense, but again, that's, you know,
12 it's up to the kind of -- the discretion of our
13 Congressional representatives whether or not it's
14 fully Federally funded or traditional cost sharing
15 with our two -- future implementation, future
16 construction of the project.

17 MR. BILL SPARROW: Thank you.

18 MR. WETHINGTON: Thank you.

19 MODERATOR ZABOROWSKI: At this point
20 it's 7:00 in the evening. So, that is up to the
21 timeline that we have on our schedule. I'd like to
22 thank everybody for coming out tonight and having this
23 conversation with us. Before we close I'd like to ask
24 the panel if they have any closing comments for the
25 audience?

1 MS. DARCY: I'd just -- I'd just like to
2 thank everyone for coming. This is the reason we're
3 doing these public hearings is so that -- they're
4 called public hearings so that we can hear from the
5 public. You're the people who live here, you are the
6 people who are impacted by what it is we're going to
7 do and I think that we have gotten great input today
8 and we'll continue to do this around the region and
9 look forward to hearing more from all of you. Again,
10 thank you for your time, it's really important.

11 MR. GOSS: Thanks everyone.

12 MODERATOR ZABOROWSKI: So, we've had 35
13 speakers today for an approximate total of 180 minutes
14 of testimony. Currently we're going to be having five
15 more meetings, although I've heard a call for adding a
16 couple more. But we'll have the same format as this
17 one whatever the determined number ends up being. So
18 I'd like to remind everybody that the public
19 commentary runs until March 3rd of this year.
20 Instructions on how to submit a comment can be found
21 online at GLMRIS website or on the yellow comment
22 forms that you received today. So, if there's anyone
23 here that didn't get a copy of the materials that we
24 handed out or if you'd like to grab an extra set,
25 please stop by the desks on the way out. So I'd like

1 to say again, thank you for coming out tonight. This
2 concludes the public meeting for the Great
3 Lakes Mississippi River Interbasin study. The time is
4 now 7:02.

5 (Proceedings concluded at or about the
6 hour of 7:02 p.m.)

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CERTIFICATE OF NOTARY PUBLIC

I, QUENTINA ROCHELLE SNOWDEN, the
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QUENTINA ROCHELLE SNOWDEN, CSR
Notary Public for
Genesee County, Michigan

My commission expires: January 4, 2018
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