UNITED STATES OF AMERICA ARMY CORPS OF ENGINEERS

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ROCK ISLAND DISTRICT COMMAND

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GLMRIS-BRANDON ROAD

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Thursday, September 14, 2017

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The meeting met at Muskegon Community College Collegiate Hall, 221 S. Quarterline Road, Muskegon, Michigan 49442, at 3:30 p.m., Col. Craig Baumgartner, presiding.

PRESENT:

COL. CRAIG BAUMGARTNER, Commander
COL. AARON W. REISINGER, Commander
MARK CORNISH
SUSANNE DAVIS
DENA ABOU EL-SEOUD
DENNIS HAMILTON
ANDREW LEICHTY
JOHNNA POTHOFF
JEFF ZUERCHER
FRED JOERS

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

4:12 p.m.

MR. ZUERCHER: Well, welcome,
everyone, to today's public meeting. My name is
Jeff Zuercher, and I am the GLMRIS Program
Manager.

effort by the U.S. Army Corps of Engineers in the fight against aquatic invasive species. Our other efforts include operating the electric barriers in the Chicago Sanitary and Ship Canal and working with other agencies and states to monitor the location of Asian carp. Previous efforts under GLMRIS have evaluated both the Chicago Area Waterway System and other pathways between the two basins.

With this current effort, the Corps has been tasked with evaluating potential options and technologies to prevent the upstream transfer of aquatic invasive species at the Brandon Road Lock and Dam.

Before I introduce our panel, let me

just go over one quick announcement about logistics in this room. You'll note that emergency exits are located over here to the right and directly behind you. Restrooms are located out the door.

So our team has organized this public meeting to accomplish two goals. First, we want to present to you information on the Tentatively Selected Plan. Second, we are here to solicit your input.

The Army Corps of Engineers will be collecting these comments through November 16, 2017, comments then will be compiled and posted on our website. For comments to be formally included, they need to be given during one of these three public comment meetings. You can submit them as a written comment via mail, or you can go on our website and submit them via the website.

We're going to begin today's meeting with a brief presentation followed by the public comment period. The public comment period is

scheduled to come to a close at 6:30 this evening.

I'd now like to introduce our panel for this evening. Starting at our far end, we have Dena Abou, our economist. Next to her is Mark Cornish, our planning environmentalist. And next to him, Johnna Pothoff, our planner, Sue Davis, our Chief of Planning, Dennis Hamilton, the Deputy District Engineer, Colonel Baumgartner, the District Engineer for Rock Island.

To my right here we have Andy Leichty, the Project Manager for Brandon Road. And next to him is Fred Joers, the Director of the Inland Navigation Design Center.

With that, I'd like to turn it over to Colonel Baumgartner for a few opening remarks.

COL. BAUMGARTNER: Okay. Well, certainly glad to join you here on a beautiful day, and recognizing that this week was September 11th, 16 years after a tragedy struck our nation, and then also recognizing both the hurricanes,

Harvey that impacted the states of Texas,

Louisiana and beyond and also Hurricane Irma and
her impacts on the Caribbean and the state of

Florida and beyond also. My thoughts and prayers
remain with the victims' family and friends.

Great to be joining you today. I grew up on the river. I grew up with access going to the Great Lakes since I was a small boy and grew up, you know, not only the weekends and summers on Lake Ontario and Lake Erie and other areas, but also live on the Mississippi River now.

So I've always been close to water.

I understand how precious water as a resource.

So exciting to be here and joining all of you.

So thank you for taking the time to join us for what is a most critical part of our study process. And that's gathering public comment.

This is the second of three public meetings that we've had. We were in Chicago just this past Monday on the 11th. And then we'll be, for our third session, we'll be going to Joliet,

Illinois this coming Monday.

And all of these meetings have significant importance to the Corps of Engineers as we share the Tentatively Selected Plan for the Brandon Road Study.

As already mentioned, today we brought our subject matter experts in order to inform you about the Corps' Tentatively Selected Plan. And I hope you're all aware that the report has been available for review since early August and will remain available for public comment.

To clarify, originally the public comment period was 45 days. It was going to close on 2 October. And I'm happy to announce this week we worked through the approval process. And the public comment period will be extended 45 additional days and now end on 16 November. You should see this extension posted to the Federal Register here in the coming days.

Addressing the spread of Asian carp and other aquatic nuisance species is a shared responsibility. Federal, state, local entities

continue to work together. As well, we recognize our international obligation with our neighbors to the north in Canada.

These entities have been working very closely together and diligently as part of an Asian Carp Regional Coordinating Committee or ACRCC, as well as many other venues. And I'm very proud that the Corps of Engineers, what we've accomplished to date in fulfilling our roles and responsibilities.

After the release of the Great Lakes
Mississippi River Interbasin Study report in
2014, the Assistant Secretary of the Army for
Civil Works directed the Corps to evaluate
potential options and technologies at the Brandon
Road Lock and Dam to prevent to the max extent
possible the upstream transfer of aquatic
nuisance species from the Mississippi River Basin
to the Great Lakes Basin while also minimizing
impacts to waterway uses and users.

It should be noted, and I want to stress the point, that this is a Tentatively

Selected Plan that you'll learn about today. And it's just that. It's tentative. There are many steps between the tentative plan and the Corps' Chief's Report planned for August 2019.

Thanks again for your attendance and valuable comments and input that you will provide. I will end by thanking the collective teams that have come together and brought this meeting here to us today. There's been a lot of hard work and coordination in order to make this day happen.

Thanks again for your attendance. And I look forward to speaking with you individually as time allows. Thanks again.

(Applause.)

MR. LEICHTY: Good afternoon. Again, my name is Andrew Leichty, the Project Manager for the GLMRIS Brandon Road Study. So thank you all for coming out here today.

And the main purpose for today's meeting is to get input from you. So we want to hear from you.

So I'm going to tell you just a little bit about the study, what we have done, and what we're doing right now, and then the timeline to complete. And I'll cover that as quick as I can so we can get to hear from you.

As Colonel Baumgartner mentioned, we have the Assistant Secretary of the Army for Civil Works that directed us to go ahead and proceed with the study. And the reason why she recommended a study at Brandon Road was to look at technologies that could prevent the one-way transfer of aquatic nuisance species from the Mississippi River Basin up to the Great Lakes Basin.

The Brandon Road site was identified in three of six structural alternatives in the GLMRIS report which would have come out in 2014. So Brandon Road is a key location in the Chicago Area Waterway System.

As you can see up here in the map, it's just downstream before you spread out into the CAWS area waterways. So it's a choke point.

And I will talk about some more features of that site here in just a moment.

But it was also identified in that report as a location where something could be quickly implemented. The first step, so to speak. What's the first thing that we can do to fight the invasive species? Again, this is a one-way transfer. And we'll talk about that in a moment.

So the study goal, then, is to reduce the transfer of aquatic nuisance species into the Great Lakes while minimizing impacts to waterway users and uses.

There are three modes of transportation of aquatic nuisance species. And so the team formulated our alternatives based on these three modes of transportation. So there's swimmers, floaters, and hitchhikers.

The swimmers are, Bighead and Silver
Carp have been identified. Floaters would be
things such as fish eggs and fish larvae. And
hitchhikers would be a freshwater crustacean or

scud.

The GLMRIS report that came out in 2014 had identified bighead and silver carp and scud as aquatic nuisance species coming from the Great Lakes, I'm sorry, coming from the Mississippi River Basin towards the Great Lakes.

And what the team did during this study for Brandon Road is we looked at those species and did the additional research and confirmed that those still are the aquatic nuisance species of concern migrating from the Mississippi River Basin.

So why Brandon Road? Again, it was identified in the GLMRIS report of 2014 as a location in three out of six structural alternatives that could prevent the one-way transfer of aquatic nuisance species upstream.

And that is because of the high head dam located at Brandon Road.

So, in the Mississippi River Basin and
Ohio River Basins when they have high water
events or flooding, there's lots of obstructions

in the river. But during high water events, that can allow species such as Asian carp to go over or around those obstructions.

Here at Brandon Road that would not happen. For example, at a 500-year flood there are still 24 foot of head here at the dam.

So what that means is the lock chamber itself is the last pathway for species to migrate upstream. So that provides us with an opportunity here to install control measures in the approach channel to that lock to prevent that transfer of aquatic nuisance species upstream.

So, like the Colonel mentioned, there's a group called the ACRCC. And they, along with lots of federal agencies, state agencies, and local agencies, stakeholders, NGOs, and academia, and those in industry, have provided a lot of input and expertise to make this study happen.

So this is groups of people that have been working on aquatic nuisance species already well before the Brandon Road Study started.

So what we sought to do is leverage that expertise and subject matter experts to provide the best available information to us to formulate our alternatives and to conduct our evaluations.

So we rely heavily on these partners.

And in a moment when we get to the actual plan

itself, we have partners that will be a part of

implementing the plan.

And also this highlights the notion that aquatic nuisance species is clearly a shared responsibility because we need the expertise, skills, and abilities, and the authorities that different agencies can bring to bear on this issue of aquatic nuisance species. It takes everybody working together.

Safeguarding the nation's economic interests, so the Great Lakes Basin and inland waterway systems are key to the region and to our nation.

And so what the team did is we looked at this solution, as we had in mind that, you

know, clearly there are major resources here that we want to be able to protect. So, as we formulated our alternatives, we wanted to make sure that we kept that in mind. We value the resources that both the Inland Waterway and the Great Lakes Basin have for our nation.

So what is that we are trying to protect? The Great Lakes has over 20 percent of the world's freshwater. They have commercial fishing, recreational fishing that are huge in this area, as well as endangered species that we're trying to protect.

Consequences of establishment, so first off, what we do know, in the case of the Asian carp, where they are established there is an impact in the native species in those areas. And then the carp have a larger mass, a biomass in those areas. And there's impacts on the plankton.

We also know that there's safety concerns in the areas where Asian carp are established, as well as recreational boating has

seen some decline in these areas where Asian carp are established.

So NOAA conducted a model on Lake

Erie. And what they found is that the lake is

suitable for habitat for Asian carp and could

possibly be, 10 to 34 percent of the lake biomass

could be Asian carp if they were able to

establish there.

So that would clearly impact, you know, what we just talked about for the Great Lakes, the recreational and commercial fishing and property values and safety and much more.

So the controls that the team has looked at, the control measures, one of the first things that we would implement is a non-structural measure. And that is a key part of our plan.

Currently, ongoing is the monitoring and response work group that is conducting research. And they monitor the species in the river and know where they're at. And then they also, through DOI funding from the Fish and

Wildlife Service and the State of Illinois, they provide commercial fishing that keeps the population of Asian carp lower below the Brandon Road Lock.

And so that's a key part of any plan that we would look at when we get to the alternatives here in a moment. But keeping the population low at our control points is key. So we need a layer of defense. There's no one measure here that's going to work by itself.

The engineered channel is a key feature of our structural measure because it allows us to enhance our structural technology such as an electrical barrier or complex noise.

And it also provides a platform to do further testing and research on newer technologies that still need additional development and also provides a platform that when those new technologies come along, we have a place to implement those.

The electric barrier is a deterrent for swimmers. So it stuns or shocks the fish.

The flushing lock would provide a deterrent for floaters utilizing the pool from upstream of Brandon Road bringing water down through the conduits that fill and empty the chamber, bringing in extra water to the downstream gates that would be open and allow fish, eggs, or larval fish to move on out of the lock downstream.

Complex noise would be underwater speakers. And they would provide a sound deterrent for swimmers. Sound or even the vibrations of that sound would impact the fish and deter them from coming into the channel.

And the water jets are designed to be high pressure nozzles that would be under the water shooting upward to dislodge fish that would be carried in between barges or around vessels, try to dislodge them and move them out of the channel.

So we took those measures I just talked about on the previous slide, and we formulated alternatives with the idea in mind to

maximize the effectiveness of preventing species from transferring upstream while minimizing impacts to waterway uses and users.

So this is the layout of the alternatives that we looked at all the way from the do nothing option, where we would not implement any project, then to a non-structural alternative by itself. Then we had three technological alternatives. It involved structures in the waterway and lock closure. So we evaluated these alternatives.

And we'll get to the next slide here. So the evaluation criteria that we used, first was effectiveness, so how effective was that alternative in preventing the transfer of aquatic nuisance species upstream to establish in the Great Lakes.

Life safety was the next key issue we looked at, how safe is it for those in the waterway navigating and for those working around the lock, impacts to waterway users and uses and navigation, costs of construction, operations,

maintenance, the ability to cycle-in new technologies that provide us the platform we need for technologies that are still under development, and the number of structural control points, and then how effective was it against the three modes of transport.

The Tentatively Selected Plan is a technological alternative that includes complex noise and the electric barrier. So this plan was chosen because it reduces the risk of transfer of aquatic nuisance species into the Great Lakes while also at the same time minimizing impacts to waterway users and uses.

It also allows for two structural control points, so upstream in the CAWS, Chicago Area Waterway System, there is the operating electric barrier. Some of you may have heard of it in Romeoville. And that would serve as a, so the Brandon Road would serve as a second control point in conjunction with that. So we have again here a layered defense.

I guess one thing I did want to

mention on this slide of alternatives, as you can see, we have multiple measures so that the way to be able to defend against transfer is a layered defense.

The cost to construct this alternative is \$275 million. The estimated cost to operate and maintain it on a yearly basis is \$8 million. The yearly cost to carry out, implement the non-structural measure, which would be continue the public outreach, monitoring, and commercial fishing and public education, would be \$11 million per year. The alternative could be constructed within five years of appropriation by Congress.

Implementation, this is a key part of our plan of carrying this out in a safe manner so it's safe for mariners and those operating the lock system. So we'll continue to work with the Coast Guard and industry and others to make sure that the controls that we have put in are operated safely.

And part of our plan, too, is to

adaptively manage the alternative as well. And again, that goes back to having the engineered channel. So we expect to be able to introduce new technologies there, test them out, and implement them. But also the control measures that we have, the complex noise and the electric barrier, we want to be able to optimize those

As we're operating them, we're going to be continuing to learn how to dial them in to be more effective, but also doing that with safety in mind. So, clearly, adaptive management is key to making this as effective as possible.

I want to make one key point. So the alternative that is selected, the complex noise with electric barrier, so because of safety concerns, the electric barrier would operate only when there are no vessels approaching the approach channel or in the engineered channel or in the lock chamber. Then at that point, complex noise would be turned on as the swimmer deterrent at that time when vessels are in that operating area.

Study schedule, so we're in a five phase planning process. And so we're in the middle right now at phase three, which is a public review and input.

on. So we're looking to take the input and feedback that we gather from you, the public.

And we'll utilize that as we go on to the final feasibility phase. And that's the stage four of our planning process.

Now, also going on right now is the agency technical review. So there's experts from around the Corps who are reviewing the engineering and analysis that we have so far on the Tentatively Selected Plan that are not part of the planning team, separate from the team.

Later this fall we'll be conducting an independent external peer review. That will be conducted through contract. And we expect to get those comments back late this fall.

So the next, well, as the Colonel already mentioned too, a key part of this is the

comment period does end on November 16th. That changed on Monday when we announced the extension of the comment period to allow for additional review and ability to --- we do have a very large report. And so there's a lot there to look at. So November 16th will be the end of the comment period.

So today is one opportunity to provide comments here orally. And we will accept them on our website. And we'll also accept written comments.

The next milestone is the agency decision milestone where headquarters of USACE Corps of Engineers, the team will provide a recommendation to our senior leaders on what we need to look at in the feasibility phase, taking input that we have from the public and from the other review teams and say this is where we need to do additional study or analysis or close up some gaps in that final feasibility phase process to step four.

So step four phase, what will we be

doing then? Again, additional engineering and planning analysis, also incorporating feedback that we get from the public here as things that we need to look at or address as we finish up our final report.

We will also be conducting a value engineering study, a cost schedule and risk analysis. And then there will also be final agency technical review. And then we'll provide that to senior leaders at that time. That will be the team's final report.

Then to get to a Chief's Report, which is our recommendation to Congress, it goes through additional review. So there's a state and agency review, a legal certification, planning and compliance review, and then also a final independent external peer review.

In this case, we have an environmental impact statement for this study. So we will also need to have a Record of Decision, referred to as a ROD, signed. And the Assistant Secretary of the Army for Civil Works will sign that.

And then the Chief of Engineers will
be able to provide that report, which will then
be called the Chief's Report, a recommendation to
the Assistant Secretary of the Army for review.

Then it goes to the Office of
Management and Budget. And after their review,
they pass it up to Congress for authorization and

Management and Budget. And after their review, they pass it up to Congress for authorization and appropriation. So, again, the Chief's Report is scheduled to be complete August of 2019.

PARTICIPANT: And what are the fish doing during that time?

MR. LEICHTY: Well, we'll take some questions here in a moment. All right. Thank you.

So this is almost the last slide. So this slide here ties in the overall project schedule, so the planning phase, which I just mentioned, the five main phases, and then the authorization and appropriation phase.

So, just to note, we don't schedule when that happens. There's administrative review and congressional review that, for the purposes

of planning out and laying out a timeline, they would make the assumptions. So we assume fall 2020 that we would have appropriation or funding.

At that time, we could immediately implement the non-structural plan part of this alternative. And then we would begin engineering and design. We could begin construction, then, in 2022 and complete construction in 2025.

So, again, I thank everyone for coming out today. And we're looking forward to your comments.

This is some ways that you can stay in touch with us, or also if you have not had the opportunity yet to review the report or review more about the Brandon Road Study or how we got to this point, you can go to the GLMRIS website. You can also provide comments there as well. And if you'd like to contact us, you can also do so through Facebook, Twitter, or by email.

We do have one more public meeting next Monday in Joliet, Illinois. And then that will be the end of our public meetings. But,

again, our comment period will be open through 1 2 November 16th. So I'll turn it over to Mr. Zuercher 3 4 here to start the comment period. 5 Thanks, Andy. MR. ZUERCHER: we get going with the comments, which is a very 6 7 important part of this, we did want to give the 8 audience an opportunity to ask some clarifying 9 questions about anything that you've just seen. We'll give you a chance to ask a 10 11 couple of questions. But because comments are so 12 important and we wanted to give you the chance to 13 voice your comments, we're going to cut it off 14 after a few questions. So, if anybody has a question, the panel would take those now. 15 16 sir. 17 (Off-microphone comments.) 18 MR. ZUERCHER: Could you stand up and 19 use the mic up here, please? 20 PARTICIPANT: My question was, has 21 this plan ever been tested anywhere? What's the 22 effectiveness of the plan?

MR. CORNISH: Thank you for your question. Electric barriers have been implemented in the Chicago region now for over a decade. We've learned a lot.

We started at a Demonstration Barrier level building up to Barrier IIA and IIB, which are currently operating in the Chicago Area Waterway, culminating with Permanent Barrier I, which will come online within the next year we're hopeful.

The other technologies including sound are being tested currently through a collaborative effort with USGS and the Corps of Engineers using money that was provided by the EPA to conduct those studies.

We're also working with state agencies to understand better how fish are moving so that we can apply the non-structural measures, which include commercial fishing. We're more successful today than we've ever been with commercial fishing to reduce the numbers of Asian carp.

So the question is, has this ever been done anywhere? It has never been done at Brandon Road. But the techniques and technologies that are being applied with this study are being developed and have been developed over the last couple of decades.

PARTICIPANT: Thank you.

MR. ZUERCHER: Yes, sir.

MR. STRECKER: Hi, I'm Mike Strecker from Whitehall. If I understand correctly, I thought I heard some say that the electric barriers are shut down when the vessels come through. How often does that happen on a daily basis?

MR. JOERS: For the existing electrical barriers up at Romeoville, they operate continuously. And there is restrictions for how boats and how recreation craft and commercial vessels go through that area. But those are operated all the time.

The proposed ones at Brandon Road still need to be evaluated by the Coast Guard on

how the operations would go with vessels going 1 2 through. So that part is to be determined yet. (Off-microphone comments.) 3 4 MS. POTTHOFF: And at this point, our 5 assumed operation of the TSP, in the flyer and what Andy had showed you, is that the electric 6 barrier would be off when vessels are approaching 7 8 the electric barrier, when they're going through 9 the channel and when they're in the lock. During that time, complex noise --10 11 this plan has two features for swimmers, the 12 electric barrier and complex noise. Complex noise would be on when the electric barrier is 13 14 turned off. Our goal is to maximize the 15 16 effectiveness of this plan. And so we would be 17 working with the Coast Guard and the navigation 18 community and ourselves to figure out the best 19 way to operate the electric barrier so that it is safe as well as effective. 20 21 MR. LEICHTY: One more question. 22 PARTICIPANT: So, if those are off,

how do the fish not get through, if those things 1 2 are off when the boats are there? 3 MS. POTTHOFF: Yes, ma'am. So the 4 plan, the Tentatively Selected Plan, proposes to 5 have two swimmer controls, the electric barrier and then complex noise. So, if the electric 6 7 barrier is turned off, the complex noise will be 8 So those are two swimmer controls that are on. 9 going to be working together so that we have a swimmer control on all the time. 10 11 PARTICIPANT: Okay. And the secondary 12 question, so you've now stopped the fish from 13 going there. And let's say they're just outside 14 the locks. What are you doing then? Are you catching the fish? Are you getting rid of them? 15 16 Are they just going to try to get in again? 17 are you doing at that point? 18 MS. POTTHOFF: So our goal is --19 PARTICIPANT: Corralled or what? 20 MS. POTTHOFF: So our goal is to keep 21 them out of the approach channel. You see the --(Off-microphone comments.) 22

MS. POTTHOFF: So the electric barrier is at the downstream, you know, at the end, where the complex noise there will be speakers throughout the channel. And so our goal is to keep the fish out of the approach. We wanted to turn them around, deflect them into this area. And so that's our design goals and operational goals.

PARTICIPANT: If you're turning them around and deflecting them, what are you doing with them then, just leaving them there?

MS. POTTHOFF: Oh, okay. So part of our plan, it includes the ANS controls, those structural ones, but then also non-structural ones. And those are the overfishing. So we realize that the lower the population is right below the lock, the more efficient our plan is going to be and more effective. And so it includes a robust overfishing and monitoring.

PARTICIPANT: Thank you.

PARTICIPANT: My question is how effective is the flushing lock? As the boats go

through, you have a flushing system that's going up from the bottom and going to flush out the Asian carp. And then how effective is this? It hasn't worked on the zebra mussels. I don't know.

MR. CORNISH: The purpose of the flushing lock is actually to get floating organisms, things that might be in the water, out of the lock chamber before the water rises in the lock chamber and the upper end is opened and then they can be released in the upper part.

So the idea is that the water will be moved out of the chamber once the boat is in there so that eggs which are floating in the water, as well as plant material -- we haven't talked much about plant, but the GLMRIS study is not just for Asian carp.

We're looking towards the future and thinking about other invasive species, which include aquatic plants. Those would be moved downstream and away from the Great Lakes entrance as part of that flushing lock.

The flushing lock isn't powerful enough to wash zebra mussels off the side of a barge. It wouldn't do that. Nor is it powerful enough to wash the scuds off the side of the barge as well. But what it is, is for floating material, including eggs and plant matter.

MR. ZUERCHER: All right. So thank you for those questions. But in order to conserve time and get to the public comments, we really want to move on to that.

I will say that our experts that are here at the table will be around after the comment period to answer any more questions you might have. So we encourage you, if you have further questions, approach them after the comments are concluded and ask them your questions at that time. They'd be happy to talk with you.

All right. So, to get to our comment period, this is what we're going to do, because we have a number of you signed up and a number of you in the audience that may wish to make

comments that haven't signed up.

We would ask that you keep your comment to three minutes. After your three minutes are up, we're going to ask you to sit down. But once everyone has had a chance to go, you will get a chance to come up and speak again if you would like to do so.

The other option is is if you don't get to say everything that you want to, as we've mentioned before, you can write us a letter and mail that to us, or you can go on our website and fill out the form there and enter that comment.

All comments, either online or mailed or spoken at any of these meetings, are all the same. They all get entered into the public record.

Speaking of the public record, in order to put you on the public record, we have our court reporter over here that is listening in.

We'd ask that you approach the roundtable up here where the microphone will be

sitting, pick up the microphone. You need to state your name. If you desire to, you can state the organization that you're representing. And then we also need your zip code. We need definitely your name and your zip code in order to be entered on the public record.

To help you with the three-minute time limit, we have devised a system of slides. It will start with a green slide. After two minutes, it will move to a yellow slide. And it will warn you after every 15 seconds are up through that last minute. Once it turns red, either wrap up your comments, or I'll ask you to please give the opportunity to the next person.

So this is the order that we're going to go in. And we are trying a few new things today. We are on Facebook Live. We will not be taking comments from there. But people are watching you from Facebook. So welcome to the 21st century.

And we're also trying a webinar. And so we are going to go to the phones. After our

pre-registered people have gotten a chance to speak, we're going to go to the phones and ask if anyone on the phone line would like to make a comment.

Once that is done, then we will go to anyone else who has not had a chance to register or who wishes to finish their comment from earlier.

So I would like at this time to invite up to start their comment period the following three individuals. If you would just line up, this way we don't have to wait for too many people. Tom Matych, Nathaniel Ross, and Drew YoungeDyke, please come over to this table.

We'll start with Tom. You'll have three minutes once we get the slides up. And then we will listen to your comments.

MR. MATYCH: I had a stroke in May when I tried to do this with the NRC. And so I might have a problem. But everybody's been pretty good on it. So, but the thing is --

MR. ZUERCHER: State your name and zip

code.

MR. MATYCH: Tom Matych, M-A-T-Y-C-H, 49457, Twin Lake, Michigan.

Okay. The thing with these Asian carp, the conditions exist for them to spread out, where if we had instead 95 percent Asian carp and we restored the native fish just like this USGS says so. It says it's critical to do because they'll have just repetition.

The carp, if you take, Peter Sorensen said and this is that studies, you take out the carp, but if you don't restore the predators, you just get more carp. And that's what's happening now. They're just making the bigger, whatever.

They're taking the carp out by the barrier. But there's no restrictions anywhere else. And then we have Harvey and Irma spreading who knows what with the floods.

So this says we can fix it. We can do this tomorrow. We can start putting ponds up tomorrow. You can do this thing all you want and argue for money and -- but we can do this

1 This is, the USGS says we can do it. 2 So why aren't we doing it? And it all makes sense. 3 If we put 4 perch and bluegills and crappie -- and they'll 5 eat them before they get too big and smack you in And that's what everybody wants to do. 6 the head. But we can't do it because you guys 7 8 need a permit. So give us a permit. You can do 9 this all you want. But I need a permit. That's all. 10 11 MR. ZUERCHER: All right. Nathaniel 12 Ross. Good afternoon. 13 MR. ROSS: Nathaniel 14 Ross with the Illinois Marine Towing, zip code 15 60439. 16 I'm here today to represent Illinois 17 Marine Towing and the inland marine 18 transportation industry. Illinois Marine Towing 19 owns and operates 15 towboats in the Chicago Area 20 Waterway System. We also operate a shipyard that 21 completes repairing and services.

Our primary operating area is both

immediate downstream and immediate upstream of the Brandon Road Lock and Dam. As such, our ability to safely navigate this section of the river and engage in commerce is essential to the continuity and longevity of our business.

We transit this area multiple times a day, seven days a week, every week of the year.

We are one of the 20 members of the American

Waterways Operators who rely upon the Illinois

Waterway not only for the livelihood of our

business but for the livelihood of our over 250

employees.

Before I go any further, I'd like to thank you for extending the comment period to 90 days. On the other hand, we are disappointed that there will not be additional locations for public hearings due to the fact that this is a national issue. The waterways to which Brandon Road is a component of cross many boundaries, serve many cities and many states.

Cities and ports like Houston, New Orleans, Pittsburgh, and St. Louis to name a few

all have a vested interest, as structural impediments could affect their individual economies and prosperity.

We support a suite of nonstructural efforts implemented by the Illinois DNR and federal agencies that has significantly reduced the leading edge of the Asian carp population.

Non-structural efforts have ensured that this population has not moved in 25 years.

Continued application of these efforts will provide the best economic and environmental protection value for our nation.

There are a plethora of natural and human influence actions, such as unaware fisherman, migrating waterfowl and others, that could cause aquatic nuisance species to be introduced into non-natural habitats, and to assume that any physical separation of these two watersheds is a long-term solution is definitely absurd.

After preliminary review of the reports, I do not have a level of comfort that

the safety of our mariners was taken into account.

One prime example, our mariners must physically be on the decks of the barges when transiting locks. This exposes them to all the elements both natural and manmade.

Any structural efforts to alter the lock and dam may have safety and efficiency impacts. Our mariners may be forced to reconfigure tows. This physically demanding work could greatly increase the safety risks.

Navigation to the Chicago Area

Waterway System is difficult and congested

presently. And any structural changes could

increase time and cost to Illinois Marine Towing

and the industry as a whole.

ability to deliver cargos in a timely manner, eventually possibly forcing some customers to switch modes of transport. For us, clearly, this would be devastating. But more so, it would take a toll on society as a whole.

1 MR. ZUERCHER: I'm sorry, but your 2 time is up. If you'd like to finish later, I'll invite you back up. 3 4 MR. ROSS: Sure. Thanks for your 5 time. Thank you. All right. 6 MR. ZUERCHER: 7 As Drew comes up, Drew YoungeDyke comes up to 8 talk, I'd like to invite Sean Hammond, August 9 Treu, and Ed Dombrowski to line up over here. Hi. 10 MR. YOUNGEDYKE: Thank you for 11 having us up. My name is Drew YoungeDyke. 12 with the National Wildlife Federation. 13 represent our organization, as well as our six 14 million members and supporters. You heard from 15 us in Chicago, so I'll try not to repeat too much 16 of that. 17 First of all, we'd like to address 18 what's at stake. It's a \$7 billion Great Lakes 19 sport fishery. In addition to fishing, we have a \$26 billion outdoor recreation economy as well. 20 21 And here it's part of our way of life as well.

When we look at the risk, we look at

the carp that was found in June just nine miles from Lake Michigan. We don't know how it got past the barrier, but yet it did somehow.

So we can't afford to assume that our current defenses are adequate without taking additional measure to stop them. There's simply too much at stake.

We do appreciate the plan. It looks like you arranged a gauntlet for them to run through. We appreciate that. Rather than picking one or two technologies, you're really throwing everything at them. Letting the strengths of some of the technologies make up for the weaknesses in the other.

We've waited a long time for a concrete plan. And you guys have spent a long time working on this and planning on that. We appreciate that effort. So let's do it. Let's go put something in place that reduces the risk of Asian carp getting into the Great Lakes.

However, after this, this is a one-way solution. We do still need a two-way long-term

solution, however that looks. So, while we move forward with the TSP and we support that, let's also look at ways to stop the two-way transfer of invasives from the Great Lakes going the other way as well.

This is a national issue. So we also support a 100 percent federal cost share. There is ways that that can be done.

When you look at the \$7 billion sport fishery at risk, and that's annually, then \$275 million is well worth the cost to protect that much larger investment.

This is a great plan. We're initially very optimistic about it. We're excited that we have the opportunity to get something in the ground and stop Asian carp. If you can do it sooner, that would be great.

But even if you can't, let's think about it. If you complete this on time in 2025 and we could have stopped Asian carp that may not get into lakes until 2026, we will regret not taking that chance.

So we have a plan. Let's go do it. 1 2 Thank you very much. Could you state your 3 MR. ZUERCHER: 4 zip code? 5 MR. YOUNGEDYKE: Oh, yes, 48103. Thank you. 6 MR. ZUERCHER: Sean. 7 MR. HAMMOND: My name is Sean Hammond, 8 I'm here representing the Michigan 48915. Environmental Council. We're a statewide 9 coalition of approximately 70 environmental and 10 11 conservation groups. And we thank you for 12 putting this report together and for the 13 opportunity to have this hearing today. And I will note we will be submitting 14 a formal comments at a later date. But I want to 15 16 give a brief overview of kind of our three main 17 points at this time. 18 First, we do support the taking action 19 here with this report. We think that anything 20 that will delay an Asian carp invasion in the 21 Great Lakes is a worthy effort. And we should be

pursuing this and this report fully. So please

don't take any other comments or criticism of the report as saying that we don't want this to continue.

However, we do have two major concerns that we think this report has shortfalls. First is the economic analysis of the potential impacts of carp invasion in the Great Lakes.

We understand this modeling is lacking at this point on some of these. But we know some of the impacts, \$7 billion for fishing and boating, \$62 billion in wages from Great Lakes in Michigan alone. These are major impacts. And if carp come in, we don't, we need a full analysis, a full economic impact of what this is.

And we're trying to weigh an economic case of impacts to the Great Lakes versus impacts to navigation. We need to know a fully fleshed out version of both of those numbers.

So we encourage that we cannot stop here. We have to get that full impact and see whether a lock closure, separation, whatever has an economic case to prevent carp from getting

into the Great Lakes.

And lastly, we have questions and concerns about the probability analysis included in the report. We understand that this was used only to determine kind of a relative risk reduction and a cost benefit based on that.

However, in your own appendix and it notes that the composite expert is a widely debated piece, I will note we are still digging into that and seeing exactly how that is debated and if it's a good method for this particular instance.

Secondly, we feel the elicitation may have had a smaller than necessary sample size with some of the subjective components of that.

As you increase sample size, of course, you decrease the chances of major outliers.

And we feel that we need to have a full blown probability analysis, making sure that we truly know what an outlier prediction is of carp establishment if we're going to have a true cost benefit analysis here.

1	That's really where we're going is we
2	just want to make sure we're comparing apples to
3	apples, and we're really working both the
4	economic and the ecological case to keep Asian
5	carp out of the Great Lakes. Thank you.
6	MR. ZUERCHER: Could you make sure you
7	state your zip code for me? That was
8	MR. HAMMOND: 48915.
9	MR. ZUERCHER: Thank you. August.
10	MR. TREU: Thank you for the
11	opportunity to comment.
12	MR. ZUERCHER: Name and zip code,
13	please.
14	MR. TREU: Sorry. August Treu, 49506.
15	Thank you for the opportunity to comment.
16	For my money, the Great Lakes isn't
17	worth risking invasive species, destruction of
18	this natural resource. For my money, you'd be
19	blocking off the lock completely. That's the way
20	I vote. Thank you.
21	MR. ZUERCHER: As Ed Dombrowski comes
22	up, I invite Harold DeHart, David Slikkers, and

David Williams. Please line up over here.

MR. DOMBROWSKI: Ed Dombrowski, 49461.

I think the program is a good starting point to
try to keep the Asian carp out. But I think we
also have to come up with some things to
eradicate the fish.

At some point in time, the system is going to be bypassed. And we're going to get some sort of introduction of fish into the Great Lakes and the water basins associated with it.

And it gets to be even to the point where somebody could potentially capture one and intentionally release it into the waterways of the Great Lakes, which could be disastrous. And I think the plan has to somehow include a reduction in the numbers of fish that are in the Mississippi River.

And the economic impact isn't just -and I think it's been emphasized to the boating
industry and the fishing industry, but you have
to remember the recreational industry, and
especially in the state of Michigan being a very

tourist based economy. So take a look at that, as well as the property values of any house that's along the tributaries of the Great Lakes or on the waters that are closely related to the Great Lakes.

So I think the whole plan could incorporate some means of controlling and reducing the number of Asian carp in the Mississippi would be, again, a bonus to the plan. Thank you for the opportunity.

MR. ZUERCHER: Harold DeHart is up next.

MR. DeHART: Good afternoon. And thanks for allowing us to make this comment. My name is Harold DeHart. Zip code is 49445. I'm Vice President of the Michigan Charter Boat Association. And like the Colonel, I've spent my whole life of 74 years in and around the waterways, even having lived aboard full-time for over 12 years.

Even though I'm retired, I stay involved and have been involved with the Great

Lakes environmental impact effect and, certainly, that effect that Asian carp would reap into the Great Lakes.

I get a little bit tired of hearing the --- I shouldn't say tired. I can appreciate the commercial industry and their desire to keep the Chicago waterway open to commercial traffic.

However, when you compare hundreds of millions of dollars of impact to the Chicago area and the industry, commercial industry, it's no comparison to the tens of billions of dollars that are affecting the Great Lakes, not only in sport fishery, but, you know, it's exponential.

With any proposed remedy, which you presented and presented very well, although we all wish it was more in a timely basis, there must be a multi-tiered redundancy built into it. And I have not seen where that is really addressed. You've got a layer of defense, but it's not redundant.

If one of the tier, for example, the electric part that goes down, you have a backup

for another electric to take its place. If the jets go down, you have another redundancy to take care of that.

Obviously, because of the extreme environmental and economic ramifications, there must be united support in stopping this Asian carp menace from entering the Great Lakes en masse.

So I ask all concerned parties to give comment and put pressure on your state and federal officials. This is too important to ignore. Thank you.

MR. ROIBLES: My name is Dave Roibles, 48198 zip code. I don't represent any group specifically, other than I was born in Chicago, had great times fishing with my grandfather until my dad moved here to Muskegon. And every day we went fishing.

And then I heard about this Asian carp thing almost a decade ago. And I'm looking at it, all the things that we could have done, should have done. But I think we survived before

the Sanitary Canal was built. But I know the economic impact would be pretty -- I wouldn't want to lose my job because of it.

And this is a great plan. But the only thing that I'm concerned with is that from 2015 to 2021 to get it implemented I think is a little long. We got to figure out a way to speed things up to make sure that we don't let this get into the Great Lakes, especially Lake Michigan.

The fishing industry, I have several friends, and I just retired and bought some property. And I would really like to have some fishermen come up from Chicago and rent my cabin, go out fishing.

But I do not want to jeopardize the economics of other people. But I agree that, you know, I don't think we should stop short of building a dam, you know, because I know that this is hard. But that's the only way I can see it happening.

And just to give you an example, we had a file in the barn. We had corn for the

chickens. And we tried to figure out how to keep the damn mice out of them. And so grandpa said, well, we're going to get metal cans. First we tried wood. They ate through it. And then we tried metal garbage cans. And I'll be darned. Those little buggers would figure out some way to get in there any way they could.

And that's the same way I feel about the Asian carp. If they have a chance to get in -- you got to open the door, and we are; we're opening the door every time we turn the barrier off -- they're going to get in. Thank you.

MR. ZUERCHER: As David comes up, I would like Jon Allan, Angela Ayers, and Erika Jensen to line up over here.

MR. SLIKKERS: Good afternoon. Thank you. My name is David Slikkers, 49423.

I can appreciate the challenges that this particular topic has brought to your team.

And I hope you can also appreciate what impact this is potentially having on the Great Lakes.

We have a financial resource here that

is not like anything else in the world. It's already been noted that over 20 percent of the freshwater in the world is located right here.

And why we're considering anything that would put this at risk is kind of mind-boggling.

So, as you continue to pursue the journey that you outlined, which I must say that in the corporate environment would be unacceptable today, there's a lot more expedient ways of getting this done.

So the sense of urgency is missing from this plan. To think that, how long have we known that Asian carp have been in this area, and now it's another eight years away before we have the solution in place. That seems to be careless in my opinion as a corporate guy.

And you have the resources. You have the talents. You have the means to get this done. The \$275 million that's identified in the cost is a pittance to what the economic destruction would be if this was to fail or if this was to take too long, which in my opinion

the plan is too long. Thank you for the opportunity.

PARTICIPANT: Yes.

MR. ALLAN: Good evening or afternoon.

My name is Jon Allan. I'm the Director at the

Office of the Great Lakes for the State of

Michigan, zip 48909.

I have a quick statement I'd like to read, and then Angela Ayers from the Governor's office will be speaking. I know you heard from Director Creagh earlier the last week and continue. This is a matter of significance for the state of Michigan, as you well know.

Colonel, good to see you again.

I do want to thank you for ongoing work and partnerships in helping to keep invasive carp out of the Great Lakes. Thank you, too, for coming here to Muskegon. It's clearly important to the community and to the state, and to take public comments on the Corps' Tentatively Selected Plan for Brandon Road.

I really have the great pleasure of

traveling around Michigan and giving a lot of talks on a whole variety of natural resources.

And I can tell you one of the unifying things that I hear from 9.8 million people across

Michigan and the collective piece is we do not want Asian carp in the Great Lakes.

I think that's clear. That's loud.

And that's consistent. And that's in every

community that I visit whether it's in Muskegon,

stem to stern, top to bottom, left to right, up

and down, all the way through.

This and other meetings held across the region provide important opportunities for the public to be heard on how best to guard against the imminent threat. And it is an imminent threat of invasive carp entering Lake Michigan.

We in the Great Lakes region have a shared responsibility for this unique natural resource. The answer to invasive carp threat should be a shared one as well. Through collaboration and regional cooperation, as we

have in the past, we've been able to successfully address a number of big issues.

I'll give one example. The Great

Lakes Compact is a key example of the way states,

provinces, the region has come together to

protect, again, the lakes, in this case, against

unwanted withdrawals of water.

That kind of cooperation is essential in the case of invasive carp. There are solutions, and we will find those solutions together. We need to find that for these problems that pose threat to the Lake Michigan and the entire Great Lakes Basin and beyond.

We have seen the damage that invasive carp has caused in Illinois Waterway systems.

And we should do everything in our power, in our collective power to make sure that problem does not spread and certainly spread into the Great Lakes.

We appreciate all the good work that has been done to date by government and non-government organizations with an interest in

protecting the Great Lakes. At the same time, we know that we have not done enough, and we have not gone far enough.

The recent finding of a silver carp in the Chicago Area Waterway System just nine miles from Lake Michigan illustrates that the current safeguards are not working and that there are current failures in the system. It is not adequate to protect us, and we know that is the case.

Because of this, Lake Michigan strongly supports additional meaningful measures at Brandon Road Lock and Dam. Those proposed measures present another important step forward.

But we also believe that those are not adequate over the long term. We believe those are short and intermediate-term solutions that we need to focus on.

We think the long-term solution for Brandon Road and for the management of Asian carp is a long-term path towards a two-way separation of the Great Lakes and Mississippi Basin for the

protection of both flows of invasive species in both directions as the national crisis that invasive species are. This is deeply concerning to us. And we know that we need to move ahead together.

Thank you for the cooperation and the opportunity to address an issue that's so vitally important to all of us in the Great Lakes region. The Office of the Great Lakes and the State of Michigan will continue to work with you as we have regularly to protect this natural resource treasure for future generations. Thank you.

MS. AYERS: Angela Ayers, office of Governor Rick Snyder, 48909. Governor Snyder appreciates the opportunity for us to be here today to provide input on the importance of Brandon Road Lock and Dam for protecting the Great Lakes from invasive carp. And we also appreciate you hosting this meeting here in Michigan, especially in the Muskegon community.

This issue is incredibly important to Michiganders. Natural resources are a

cornerstone of our Pure Michigan way of life and of the regional economies of our state.

Michigan has over 3,000 miles of Great
Lakes coastline, over 11,000 inland lakes, and
36,000 miles of rivers and streams. That
provides great opportunities for boaters,
kayakers, canoeists, naturalists, birders,
photographers, residents, and visitors to enjoy
these natural resources. It also represents a
lot of potential habitat for invasive carp.

We recognize the significant efforts many agencies have taken to date with both congressional and stakeholder support to further study Brandon Road. It's taken tremendous time, energy, and effort with experts from throughout the country with many sources of funding to get us to this critical point.

But now it's time for action. Taking action at Brandon Road, the critical pinch point for stopping invasive carp, is the next important milestone.

To be successful, we must continue to

work collaboratively. Through our federal, state, private, and non-profit stakeholder partnerships, no single entity should bear this burden alone.

The preferred alternative outlined in the TSP is the step in the right direction, offering a combination of solutions to reduce the risk of invasive carp.

Michigan supports and applauds many aspects of this plan, including the innovative engineered channel to test future technologies. This truly is a unique opportunity that could serve as a national test bed for invasive species control and the intermittent electric barrier that could be active during the absence of barge traffic.

Recognizing this comment period is the starting point for these conversations, we also see a few areas for additional study, such as better detail on the total transit time for the preferred alternative and an investigation of others areas in the Illinois River system that

could be improved to offset any negative impacts that might occur as a result of Brandon Road.

Governor Snyder supports the continued work on the TSP. And as such, Michigan is ready to step up and support these additional measures at Brandon Road. We urge other Great Lakes states and provinces to join us in providing this support. Thank you.

MR. ZUERCHER: As Erika Jensen comes up, I invite Dean Jessup, Greg VanWoerkom, and Cheryl Kallio to line up over here, please.

MS. JENSEN: Hi, Erika Jensen, Great Lakes Commission, 48104. Thank you to the Corps for hosting these meetings and for the opportunity to comment.

We at the Great Lakes Commission recognize that Asian carp are a significant threat and that preventing their spread is a problem of national importance.

We are supportive of the current control activities undertaken by the Corps, the ACRCC, the Illinois DNR, and other partners. And

these efforts are critical while additional control technologies are developed and evaluated.

And the GLC has consistently advocated for federal funding to support these efforts.

The GLC has also been an active partner on this issue working closely with our eight member states and our two provinces that have invested significantly in these activities and also helping to convene a stakeholder advisory committee that includes a diverse group of interests that have provided input to the Corps and other federal agencies on potential prevention and control activities over the past several years.

The release of this report is an important milestone in the process to decide what can and should be done to prevent further spread of Asian carp and what the consequences of those decisions are.

The GLC has been and will be reviewing the report closely over the coming weeks. And in addition, it will be a topic at our annual

meeting next week in Duluth, Minnesota. I now want to thank the Corps for agreeing to attend and speak directly to the commission at that meeting.

And I'd just like to close by encouraging the Corps and the other federal agencies to continue dialogue and close work with the states and provinces on these important issues. Thank you.

MR. VANWOERKOM: Good afternoon. My name is Greg VanWoerkom. I'm the District Director for Congressman Bill Huizenga. Zip code is 49444 right here in Muskegon County.

Welcome you to the 2nd District. Hope you guys can stay. I hear it's going to be clear skies tonight. So you'll have a beautiful sunset over Lake Michigan.

I'm here to read a letter from

Congressman Huizenga. For the record, I'm also

here to submit. And here's the letter.

As Michiganders, we have a fundamental understanding of the links between our state's

economic health and the environmental health of the Great Lakes. The Great Lakes region provides drinking water, jobs, nearly endless recreational opportunities and, of course, countless memories.

The threat posed to the Great Lakes by Asian carp both ecologically and economically is clear. We must take action to protect our lakes from these invasive species that threaten our Great Lakes ecosystem and our entire blue economy, which includes \$7 billion fishing industry, \$7.4 billion boating industry, and over 58,000 jobs.

The Brandon Road plan provides a potential solution for protecting the Great Lakes and preventing Asian carp from reaching Lake Michigan. With that, I would like to see further explanation of the science and technology that would be utilized to stop Asian carp from advancing.

Just months ago, live Asian carp was found beyond the electric barriers, only nine miles from the Great Lakes. This discovery

demonstrates how the window of opportunity to protect our lakes is rapidly closing. If Asian carp are able to gain access and reproduce within the Great Lakes region, the environmental and economic damage will be severe.

Taking action at Brandon Road is an essential next step in the process to safeguard the Great Lakes from the inundation of this highly destructive invasive species.

Moving forward, legislative leaders
must work together with the Army Corps and the
essential local, state, and federal partners to
craft policies, solutions that preserve our Great
Lakes ecosystem.

We must take action now because failing to do so will needlessly jeopardize one of our nation's greatest natural resources.

Thank you.

MS. KALLIO: My name is Cheryl Kallio.
Zip code is 49456, representing Freshwater
Future, a non-profit Great Lakes binational
organization.

Thank you for the opportunity to present these comments on the Brandon Road Study. And in particular, I want to thank everyone, especially congressional members whose efforts help to stop further delays, putting our Great Lakes in even further risk.

As you've likely heard many times over, with the discovery of an Asian carp just nine miles from Lake Michigan, we are running out of time to stop their invasion into our Great Lakes.

The current electrical barrier is not foolproof. And barges can pull fish through these barriers. And young fish and eggs can move through them. Additional protections are needed at Brandon Road.

In general, we urge you to move forward with increased protections quickly.

Something is better than nothing. And time is running out.

As such, the August 2019 timeline is too long to wait for the final recommendation to

Congress and the Chief's Report. This timeline does not reflect the urgency of the situation.

And we ask you to work towards shortening that timeline.

If the study's Tentatively Selected Plan of creating an electrical barrier with the addition of complex noise is selected, these should be operated in tandem at all times.

As written, this option has approximately a 13 percent probability that Asian carp will establish themselves in our Great Lakes in your report. And while it's better than doing nothing, we do still think that probability is too high.

As such, we urge you to consider selecting the strongest plan identified, lock closure. This plan has the lowest probability of Asian carp establishing in our Great Lakes, such as two percent.

And additionally, lock closure does not pose the safety risk to people who are traveling through the locks that are associated

with keeping an electrical current in the water.

Also, it is a fraction of the cost.

However, we do realize this plan will cause headaches for the barge industry, who would be pushed toward implementing 21st century innovations that are used elsewhere around the world.

However, those costs pale in comparison to what is at risk. Our world-class, several billion dollar Great Lakes fishery, impacts to our \$16 billion boating economy, and additional economies that are either wholly or partially dependent on a healthy Great Lakes ecosystem.

However, as I stated before, doing something is imperative at this juncture. And while we urge the strongest possible protection, should you choose the electric barrier and complex noise, we would support these efforts.

It's imperative to recognize this will not stop Asian carp or prevent invasive species from the Great Lakes entering the Mississippi

River Basin. And we need to remember that WRDA 2007 and accompanying guidance was to prevent the transfer of ANS.

At this time, the only option identified that would truly prevent this would be to create barriers and restore the natural divide between the two watersheds. Lock closure at Brandon Road is a step in this direction. And importantly, there's tremendous support around this from the region.

There have been tens of thousands of people who communicated their support for this to members of Congress. And we actually have over 90 communities in the Great Lakes region who passed a resolution in support of separating the Great Lakes.

In closing, I want to urge you to move forward, and thank you for your time.

MR. JESSUP: Good afternoon. Dean

Jessup, 49449 from Pentwater, Michigan. And I'm

President of the Pentwater Sportfishing

Association. We're a 80-member fishing group

within that community of amateur and charter boat captains that operate out of Pentwater, Michigan.

We've talked about the fishing industry. I had the enjoyment of a fishing trip out on Lake Michigan this morning. And it's enjoyable. And I want to make sure I can continue that enjoyment without getting whacked in the head with an Asian carp.

I want to challenge you. I'm not here to be politically correct. I'm here to challenge you as a Corps. It's time to take action.

This TSP plan has been stated as it hopes to reduce or it may reduce or it may have control measures. May and hope are not what we need. We need action.

How many initial sea lamprey, how many initial alewife, how many initial round gobies or quagga or zebra mussels entered our lake that now have an explosive population and causing us challenges? What is that number of Asian carp that needs to enter our Great Lakes to give us this explosive population in the future? We

don't know.

That's why your plan needs one more action measure, closing and total separation of the two water bodies.

Implementing a plan in maybe eight years -- and we all know governmental action.

Eight years probably, maybe turn into 12 to 15 years before implementation. Obviously, I don't know. You don't know.

It's time to take this action and a full closure plan. We don't know. Did a fish enter today? Is a fish entering next year? Or is a fish entering in eight years by the potential implementation of your plan?

That is not good enough to give any kind of protection to our Great Lakes and to our fishing community that we all enjoy. I implore you add full closure to your plan. Thank you.

MR. ZUERCHER: All right. At this time, we had a few individuals that registered to speak online but were not able to check in with us for whatever reason. So just to make sure

that you get a chance, if you are here, I'd like to call off your name. And if you are here, please head over this way so that we can get you a chance to speak.

That would be Tina Cook, Gary Derouin,
Eileen Hoogterp, Richard Hoogterp, Brian LaRue,
Walter Tamulis, or Al Woody. Are any of you
here?

All right. Well, now we get to the fun of going to the phone. And the phone has been on listen-only mode all this time.

(Operator speaking.)

MR. ZUERCHER: Hello, those of you that are the phone. This is your chance to give your public comments. One person that signed up online that I believe may be online, Lynn Muench, are you on the line? All right. Maybe not.

So is there anyone on the phone that would like to make a public comment? All right. At this time, we'll go to an open floor session then. We're hearing, then, from those on the phone.

So, if you have not signed up and would like to come up and make a comment, I ask you to queue up along the wall here. We have one gentleman who is making his way up right now.

And, again, please remember, your name and your zip code. And we will restart the time. So, sir, you have your three minutes.

SEN. HANSEN: Thank you. I'm Senator Goeff Hansen, 34th District. And my zip code is 49420.

First, thank you for being here. I got to tell you, I was a little disappointed that we should have been here ten years ago. We've been asking for this and asking this. This has been a huge part of the problem that we've had is now we're going to wait another eight years.

We have Asian carp that have crept their way up through the water body and are right at our door. And we need to make sure that we keep them from coming in because it will destroy our economy. It will destroy the fishery that we have.

So I implore you, stop waiting, start working. And we really need to have a serious look, which I don't believe has been looked at, is the separation of the water bodies as we do this.

Now, we talked about this. Our legislature in Michigan has sent numerous resolutions asking for the separation, asking for looking at this, asking for getting this going.

It's just so imperative that the work starts because we've already seen what happens.

We've got carp within nine miles of Lake

Michigan, if that's the only one that got through.

PARTICIPANT: Right.

SEN. HANSEN: So I challenge you to try and move this forward. Stop moving at the speed of government, which I know exactly how it goes. And start, you know, moving at the speed of what the folks in the United States expect and absolutely get this done.

So thank you for allowing me to give

this comment. And, please, let's get going.

MR. ROGERS: My name is Mark Rogers, 49456, Spring Lake, Michigan. And I agree with a lot of the comments that have been made so far.

One thing that scares me is not only this eight years. We're including Congress in this. What is that going to lead to? I have some fears on that.

But really I just have three things to say. Number one, has anybody, you know, Canada has a big part, is a big part of this, if they get into the Great Lakes, Canada. Is anything happening with Canada for input, for funding, because if they get in there, it's going to really impact them too?

Secondly, you know, there's other, you know, if they're getting up through the Mississippi, are they also going to get through the Saint Lawrence Seaway or other ways? So this is only just one aspect that I see of the problem.

Thirdly, you know, I know you need

approval. But it would seem that the cheapest thing that, from my standpoint, is complex noise. That would be the cheapest, maybe fastest to implement. You know, you don't have a lot of brick and mortar stuff.

Could that be done before the rest of this stuff to get this thing going, because like everybody has said, nobody wants them in the lake? We don't want them. Let's do what we can to get them out. Thanks for the opportunity.

MR. ZUERCHER: We have someone monitoring our webinar. Laura, do we have anybody on the webinar that has indicated anything? No. Okay. Anyone else that would like to speak?

2014. Why do you think the carp will come in here? What made them come from Louisiana all the way to here?

MR. CALDERON: Cal Calderon, 49442-

And if you look at this guy's map, they're going wherever crops are grown. And wherever crops are grown, there are farm workers with no plumbing. The farm camps here in

Michigan, in particular, are all along the creeks that lead to the Grand River or to the Muskegon River.

And when I read about this problem and if you look at the map that this man handed out, you have to start down in Mississippi, not in Chicago, to get all these fish taken care of.

And you're not doing that.

The interstate system crosses the Mississippi at least ten times from Interstate 10 to Interstate 90. And there's ways to get the fish out in the Mississippi River, not just in the Chicago River or whatever river this is. And we're not looking at the big picture of the whole Mississippi River being flooded with these animals.

And we could feed the poor with all this fish. There's several problems that this could, that this problem could solve if you had evolution in your minds and not government inertia.

And there are more ways to figure out

how to get these animals out of the rivers, the Mississippi River in particular, like I say, starting at Interstate 10, 30, 40, 50, 60, 80, and 90.

And I talked to Mr. Baumgartner
earlier about some of the solutions that we're
not looking at as a nation and not looking at the
big picture overall.

I hope I'm not on this, because, like I say, if we covered the interstates with solar panel roofs and had water pipes leading to the aquifer, we could pump all these fish out of the Mississippi River and into the water at the aquifer. And you could pump clean, nutritious water to the wheat fields that are being pumped dry by the farmers in the Ogallala aquifer area.

So we have to put all these problems together to solve this problem, because we're not stopping the fish right from where they started. And now you think you can stop them just at this one little point when you got to stop them the whole way up. You got to take them out.

And there's ways to do that and, like I say, with the solutions that I've talked about to Mr. Baumgartner. And I haven't talked to these two guys, but I'd love to.

Anyway, you're not looking at the bigger problem, where it's starting and the whole Mississippi River Valley or the whole Mississippi River being included with these animals.

But we got to start taking them out at Interstate 10 down below, not thinking we're going to stop them here, because they're coming here because all these migrants don't have bathroom facilities.

And they're going to come to the Grand River and the Muskegon River and clean out what they originally were meant for, to clean out all the E.coli that all the humans -- 46,000 humans on this side of the state with no bathroom facilities for six months of the year, that's what they're coming for. And you're not going to stop them.

They're coming here to clean out the

Grand River, the Muskegon River, the Kalamazoo River because we don't know how to take care of the crops from one end of the nation to the other. Thank you very much.

MR. ZUERCHER: At this time, I'd also like to invite anyone who did not get a chance to finish their comments or anyone left who would like to make a comment, feel free to come on up. And, again, state your name and zip code.

MR. MATYCH: Tom Matych, 49457. I just wanted to say you can spend all this money to stop one spot. And if you look at those maps, that's just one spot. And I understand we have to do something because the barrier isn't working that we have right now.

But by restoring the native fish, then you make the entire water body -- you guys have been really good. You make the entire water body against Asian carp. The more native fish, it gets healthier, then the less Asian carp you're going to deal with.

But it's the whole water body becomes

-- I know the word, and I can't say the word.

But do you know what I mean? The water body is oppressive to Asian carp, and that's what we need. And we can start restoring native fish tomorrow. But we need permission.

And that's all we got to do, just keep putting it in. And when you take the adults out, and then we have -- until we don't have to anymore. It's very simple. It's just we have to do it. Thank you.

MR. DeHART: Harold DeHart, 49444, excuse me, 445. I don't want to beat this horse to death. But the overwhelming comments that have been made today is the time constraints or the time limits or the timeframe that you're putting on this.

Let me ask the panel, everybody up there or anyone that can answer this question. What can be done to move this ahead? What can be done to put -- is there pressure to be put on a group or particular area? What is the hold up? Why is the time taking so long?

COL. BAUMGARTNER: Well, I'll start off, with two points, and, of course, anybody can jump on.

So one of the significant challenges and it's highlighted in the Great Lakes

Mississippi River Interbasin Study that was published in 2014 is that we were starting really with technologies that were only concept in nature.

And so that's why it's been critically important when we've mentioned, in terms of our interactions and communication collaboration with our federal and state agencies, you know, organizations like USGS, our state DNRs, U.S. EPA, U.S. Fish and Wildlife Service, nongovernment organizations and others, to make every attempt possible, under funding constraints, to be honest, is part of the challenge, to advance those control measures and technologies as fast as possible.

So, you know, it's a complex challenge. It's a complex threat. And so we're

basing those technologies from concept to something we can actually implement in the water and have the effectiveness necessary is an important point.

The other thing that I will mention is our planning process. Yes, we have shown a timeline of that process and how we, and of the planning process itself. I will tell you, though, that there are multiple touch points along that planning process that we look for every opportunity to speed up.

And so, as we move through the process and those multiple decision points and touch points, we, of course, always have in mind to move this as quickly as possible and will continue to explore those opportunities as we move through the process.

Just something just as important as this is public comment. For example, we're anticipating a lot of public comment and feedback both by the different forums that we've talked about here today. The magnitude of that input,

of course, you know, is very important. And the quality of input is also extremely important.

But taking that all into consideration takes time too, because we want to make sure that quality input is taken under consideration as we move forward.

If we find that there's opportunities where we're more aligned, less aligned, that all takes time, too, to take under consideration. It may impact the study schedule itself.

But what I will tell you is that the team, they know this because I'm continually putting the pressure at these multiple touch points in the planning process to explore those opportunities to speed up. And when there's an opportunity to speed up, they certainly can.

Beyond the study itself and the Chief's Report, you know, we have an authorization currently to move forward with the study itself. It's 100 percent federally funded.

The authority to move beyond the study, of course, requires congressional

authorization and then appropriation. And so that's another means by which we will continue to work with our congressional members.

And, of course, you all have a voice there, too, that's extremely important, because ultimately that's another part of that timeline is the ability to seek or get authorization and appropriation to move forward if we have a Chief's Report and recommend something that requires an authorization. Did I miss anything?

MR. HAMILTON: The only thing I might add is, as the Colonel mentioned, authorization by Congress is an extremely important part of this.

And Congress and the administration and the states all have an expectation that the study is thorough, has covered all the bases as best we can using the information available, and that we can put together a recommendation that can be relied on to support a broad range of public interests.

And it has to be something that has

some sort of a consensus agreement or, as you know, often those things won't make it through Congress if they don't have that consensus.

And so that's the importance of working through a study. It does take longer to do that. But upon completion, then you have a report that is actionable and can potentially then result in a congressional authorization.

Without that consensus, you really typically lack the ability to move forward at all. And we can often see, then, just more stalemate. So it makes it very important to do the study right and to do it rigorously, to have the right amount of public input and build that collaboration as we go through the process.

PARTICIPANT: Is it possible to get private industry involved in this in some aspect?

Does this just stay at the federal level?

MR. HAMILTON: There are many attempts right now looking at ways to have public/private partnerships and involve private industry in this. There are some legal barriers right now.

All the legislation is not yet in place that 1 2 would allow that to happen in this current form. And in order for that to work, you 3 have to have a mechanism where there's some 4 5 ability for making profit. Private firms want to, need to have an ability to make some profit 6 off of their investment. 7 8 Those mechanisms do not currently 9 exist today. I believe Congress and the administration are looking at potential ways that 10 11 that might happen in the future. But it isn't 12 that way today. 13 PARTICIPANT: So private industry, 14 then, could not just give a donation, so to 15 speak? 16 MR. HAMILTON: I believe they would be 17 allowed to provide a donation to a sponsor. There still would have to be a local sponsor. 18 19 But their donations, under the right 20 circumstances, could potentially work. OTE: Kirksey likely 21 MR. KIRKSTEIN: Answer back this way. orrect last name. I know lots of squeal. I hadn't wrote any 22

thoughts down, so I'll try to just be brief. In all fairness, respect --

MR. ZUERCHER: Name and --

NOTE: Kirksey likely correct last name.

MR. KIRKSTEIN: Oh, Dennis Kirkstein,

49445. And I'm a resident here all my life.

I've been a Great Lakes Basin lover of the water, and I actually chair the local watershed group.

So I'm not speaking on behalf of them. I'm speaking more as an individual.

But, and all due respect to the Army
Corps and everybody involved, the Congress, our
government as a whole, it's too little too late.
Three, four years ago when the initial Brandon
Road Study came out, you had a meeting here in
Muskegon, as well as a lot of other locations for
feedback on that. And I think overwhelmingly
people said go, build it, start now.

Here we're talking about 2025 for completion. It's not good enough, folks.

Appreciate all the work you've done. And I hear you say you're going to have another study come out in 2019. We got to do something now.

And, you know, suggestions from the public saying that, you know, we could stock some native species that will start to reduce this flow and growth of the Asian carp, why can't we get a permit? Why can't that happen?

Government has become too

bureaucratic, too politically correct. You know,

we've seen it in our election cycles. And, you

know, it's -- and I know it all got created for a

reason, but we all need to back up a few steps

and say let's get 'er done.

And so I appreciate Senator Hansen's comments. If the real answer is closing it, close it. I appreciate the shipping industry. I have a commercial business myself. And I understand that very well. But has anybody considered a rail system to move these barges and to wash them down and get rid of the invasives like we do in the recreational industry?

So I guess, you know, what I'm saying is let's do something. Let's do it now. Let's not wait. Appreciate wanting to give everybody a

chance for input. But we got to take action.

And sooner is better than later. So thank you
for all you're doing and continue to do.

MR. ZUERCHER: Anyone else from the audience? And let me check one more time.

Anyone on the phone who wants to make a comment?

All right. Well, it looks like that everyone has had a chance to give their comments today. And we appreciate you coming out and attending and giving your feedback to us. The team will be taking this back and looking at it and working on it. We are glad that you are here.

And we want to thank all of our partners. And we do work with a broad range of partners, many states and state DNRs that do a lot of work with us on all this, and Canada as well, too. So we thank you. Thank you for hosting us here in Muskegon. And I hope you all have a good evening. The end of the meeting is at 5:52. Thank you.

(Whereupon, the above-entitled matter went off the record at 5:52 p.m.)

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<u>C E R T I F I C A T E</u>

This is to certify that the foregoing transcript

In the matter of: GLMRIS-BRANDON ROAD

Before: US Army Corps of Engineers

Date: 09-14-17

Place: Muskegon, MI

was duly recorded and accurately transcribed under my direction; further, that said transcript is a true and accurate record of the proceedings.

Court Reporter

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