U.S. ARMY CORPS OF ENGINEERS

GREAT LAKES AND MISSISSIPPI RIVER INTERBASIN STUDY (GLMRIS) BRANDON ROAD DRAFT REPORT PUBLIC MEETING

District Assembly Room
U.S. Army Corps of Engineers
New Orleans District
Headquarters Office
7400 Leake Avenue
New Orleans, Louisiana

1:00 p.m.

Tuesday,

December 5, 2017

USACE PANEL:

COL CRAIG BAUMGARTNER

DENA ABOU-EL-SEOUD

SUSANNE DAVIS

TOM HEINOLD

ANDREW LEICHTY

JEFF ZUERCHER

ATTENDEES:

ANGELA AYERS

LARRY BARBISH

THOMAS BETHUNE

HARRISON CRABTREE

JUSTIN CROSSIE

MICHAEL EBY

GAREY FORSTER

ROBERT HIRSCHFELD

ALFRED HOUSE

VAUGHN McDANIEL

LYNN MUENCH

PATRICK MORTON

SPENCER MURPHY

MATT ROTA

JIM STARK

JAY VICKNAIR

CONTENTS

P R O C E E D I N G S

(1:01 p.m.)

MR. ZUERCHER: Good afternoon, everyone. I'd like to welcome you to the GLMRIS Brandon Road public meeting here in New Orleans. Thank you all for coming.

Just a quick reminder: The exit is to our back, should anything occur. Restrooms are out and around by the elevators if you need them, and anything else, just ask anybody with a Corps employee badge; they'd be happy to help you.

I'm Jeff Zuercher. I am the GLMRIS program manager, and I'd like to introduce our panel that we have here today. We have COL Baumgartner from the Rock Island District; Andrew Leichty, the project manager for Brandon Road; Sue Davis, our planner; and Dena Abou, our economist; and Tom, who is the acting chief of operations in the Rock Island District.

We're very happy and excited to have everyone here today. The GLMRIS Brandon Road team has been working really hard on this report

and preparing for today's meeting.

The GLMRIS program overall encompasses several different aspects. We have two focus areas: Focus area one is on the Chicago Area Waterway System, and that is the main connection between the Great Lakes and the Mississippi River basin. And then we have focus area two, which is all of the other connections along the basin that are usually temporary in nature. And we're working on looking at all of those and working on solutions for those temporary ones.

GLMRIS-Brandon Road is part of focus area one; it is one aspect of looking at the CAWS and closing the aquatic nuisance species pathway between the two basins. We also have our second study that is possible in the future, which is looking at the two-way solution of keeping aquatic nuisance species from traveling through the two basins.

Today we are going to have a short presentation on the TSP and what has been selected as that, and through the report --

hopefully all of you have had a chance to read through the hundreds, if not thousands of pages of documents.

We are on Facebook Live today. We also have an audience on the phone, as you're hearing people beep in. So when it is your turn, when we ask you to come up, please do speak loudly and clearly. We appreciate that for all those that are online.

I'd like to take this time now to just have COL Baumgartner come up and give a few introductory remarks.

COL BAUMGARTNER: Okay. Well, everybody, thanks for joining us today. I always like to start off by letting everybody know that throughout my life I've actually grown up on the river. I live on the Mississippi River right now, matter of fact, and also grew up and still do today go to the Great Lakes very frequently, particularly Lake Ontario, Lake Erie, as I grew up in upstate New York.

So I definitely value water as its

most precious resources that it is. I just wanted to thank all of you for taking the time to join for what is the most critical part of our study process; it's gathering public comment.

This is the fourth public meeting, all of which have significant importance to the United States Army Corps of Engineers, as we share our Tentatively Selected Plan for the Brandon Road study.

As you -- most of you know, we've had three sessions leading us to today -- public sessions to date. We had a public session in Chicago, Illinois; Muskegon, Michigan; and also Joliet, Illinois. So great to be here in New Orleans.

Today we brought together, as Jeff already mentioned, our panel of subject-matter experts, in order to inform you about the Corps' Tentatively Selected Plan. Hopefully you're aware that the report is available for review and has been since early August. It will remain available for public review and comment until 8

December.

Addressing the spread of Asian carp and other aquatic nuisance species is definitely a shared responsibility, and we rely very heavily on our federal, state, and local partners, as well as we have to recognize we have an international obligation with our neighbors to the north in Canada.

These entities and many more have been working very diligently as part of the Asian Carp Regional Coordinating Committee and many other venues as we come together, and I'm certain proud of the Corps of Engineers and our collective partnerships to get where we are today.

After the release of the Great Lakes Mississippi River Interbasin Study report, the assistant secretary of the Army of Civil Works directed the Corps to evaluate potential options and technologies at the Brandon Road lock and dam, to prevent, to the maximum extent possible, the upstream transfer of aquatic nuisance species from the Mississippi River basin to the Great

Lakes basin.

But in doing that, we also recognize that we are doing this while minimizing any potential impacts to waterway uses and users.

It should be noted that the Tentatively Selected Plan is just that; it is tentative. We value very much the input from the collective all, and there are many steps as we move forward together between this Tentatively Selected Plan and the public comment period, and of course, and the Corps Chief's Report that's planned for August of 2019.

I wanted to thank you again, and we very much look forward to your invaluable comment and input that you provide. I will end by thanking the collective teams that have gathered here today that brought this meeting together.

There's been a lot of hard work behind the scenes, a lot of coordination in order to make this day happen, and thank you again for your attendance, and I look forward to speaking with you individually as time permits and

certainly after we're done today.

So thank you very much.

MR. LEICHTY: All right again, my name is Andrew Leichty, project manager for the Brandon Road study, and thank you all for coming here today and participating and providing comments.

So what I'm going to do is go through some slides here that show the plan that we've selected and talk about it a little bit, and then we're going to open it up for comments, and Jeff will set the ground rules for that in a moment.

So that's the main purpose for us being here, so I'll try to get through this, and then after our comment period is over here today, we will have our subject-matter experts that are up here in front here to answer questions later after the comment period is over.

And if possible, for those on the phone that are listening in, if you could please mute your phone during the presentation. Thank you.

So first off, as COL Baumgartner mentioned, we were directed by the Assistant Secretary of the Army's Office to proceed with the study following the GLMRIS report that was completed in 2014.

So, again, looking for a solution at Brandon Road, Brandon Road was identified in three out of eight of the alternatives in the GLMRIS report, and one of the key features for Brandon Road is that it's a control point down here in the lower Chicago Area Waterway System -- before it gets into the Chicago Area Waterway System, a control point before you branch out. So it's a key point geographically, and it's also a key structure because it's a high-head dam. We'll talk about that again here in a moment.

So what we're looking at is the opportunity to reduce the risk of one-way transfer of aquatic nuisance species. As Jeff mentioned, there's other studies that will be following on to look at the two-way transfer, but for this purpose and time here right now, we're

looking at something that we can proactively implement for one-way transfer.

The aquatic nuisance species of concern that the study was formulated on was those that are swimmers, which most people are familiar with the Asian carp, and then there's floaters, which would be floating eggs or larval fish, and then hitchhikers.

So why Brandon Road? Again, as we saw on the map two slides previously, geographically it's downstream of the Chicago Area Waterway system before you get up in there to where it branches out into many other channels and waterways.

But also the dam here, it's a high-head dam, so even during a high flood event, there's at least 24 foot of head at the dam, so there is no opportunity for fish to swim over or around this structure, even during floods.

So in other parts of the country where we have some lower dams, these fish do migrate upstream during flood events because they're able

to get around those obstructions, or over them. But that would not happen here at Brandon Road.

So that leaves the lock chamber itself as the main pathway for aquatic nuisance species. So we have an opportunity here to implement control measures to prevent that passage through this lock, and so that was why it was also selected in three out of eight alternatives in the GLMRIS report.

It's also relevant as we did the scoping meetings that we heard back from the public and others that, you know, that this is a key location to implement features, and it's also responsive and also provides us a layer of defense.

So upstream of Brandon Road there's a Romeoville electric barrier, which is in place that the Chicago District Corps operates. And so that feature is there; it's on now and will continue to be. But this would be in tandem with that, so we're adding a layer of defense.

We'll get to in a moment there's no

one specific silver bullet or one thing that's going to prevent the aquatic nuisance species, so when we have multiple tools that we want to be able to use to have a layered defense.

Our team has relied heavily on others, other agencies -- federal agencies and partners, state agencies, and universities and other NGOs, to provide us with the best available information to formulate our report and to put it together.

And many of these same agencies and groups have been working together for a long time, even before the study was started in the fight against aquatic nuisance species and also Asian carp.

So we've relied heavily on best available information and data and input from these groups, and we will continue so, and we will also need to rely on this partnership as we implement our (if you could mute your phone please) -- we will rely heavily on our partners as part of the solution to implement any of our plans, and I'll talk a little bit more about that

here later.

So part of formulating our plan, we know that we have key resources here in North America that we want to protect, and as the Corps of Engineers, that's our responsibility or duty to safeguard our navigation and ecosystems, our water resources and recreation.

So the Great Lakes and Mississippi River basin are key resources for America, and so when we formulate our plan, we want to make sure that we are doing our best to take care and protect our natural resources that we have.

Some of the key features with the Brandon Road, it's highly utilized for commercial navigation, and we have 11 million tons of cargo annually, and it has $319 million in transportation savings benefits through that lock.

And the Great Lakes basin has over 63 million recreational fishing trips per year. It has over 1.3 billion in net economic value, and the commercial fishing adds $20 million in

revenue, and it's also 20 percent of the surface fresh water resources in the world are located in the Great Lakes.

So, again, what are we trying to protect? Again, it's those resources there in the Great Lakes. I mentioned that 20 percent of the world's fresh water -- surface water is right there in the Great Lakes. That's a treasure.

There's over 5,000 tributaries that come into the Great Lakes, and 41 percent of the basin is governed by Canada, so it would have an international treasure here of water in the Great Lakes.

There's over 60 species that are special status and 10 that are endangered in the Great Lakes, and we also support a 1.8 billion Great Lakes Legacy Act to -- which provides resources to protect the Great Lakes through ecosystem and environmental programs.

So the consequences of establishment: So we do know that where Asian carp are established, they do impact the native species by

a percentage of mass. Comparing the Asian carp to the native species that are there, the Asian carp are by far the larger mass. They outcompete the native species at the bottom of the food chain for eating plankton and so forth, so they do take over in mass.

And we also have seen issues with boating in these areas, where they do impact boaters, as you've seen here in the picture. You can see that they do jump out of the water, and so that impacts boating and recreational use as well.

So there are consequences for these species. The National Oceanic and Atmospheric Administration did do a model on Lake Erie; it was completed last year. And the results of that modeling indicated that for Lake Erie there is suitable habitat there for the Asian carp to be established and consume up to over 10 to 34 percent of the biomass of fish in the lake.

So that was for Lake Erie. They are doing ongoing modeling for the other lakes as

well, and that information will be coming out for all them soon.

So the types of controls that we looked at for our study, what could we implement at Brandon Road? So the main feature that we do have at Brandon Road is an engineered channel.

The engineered channel would provide us with a platform to install structural measures and other technologies that are under research and development now that are not ready to implemented yet, but it provides a platform to spiral in new technologies in the future but also enhance the technologies that we have proposed to be implemented, such as complex noise.

The engineered channel would allow for that complex noise to be enhanced and to bounce the sound and vibrations off the engineered channel walls to disrupt or disturb fish, to deter them from entering the channel.

And also the electric barrier is one of the control technologies that we have. It's already implemented at Romeoville. And so we're

looking at how to implement that here in a little bit different environment.

But the engineered channel is a key aspect of that, providing that platform to install that and an attempt to control that electric field, where it's located at, and maintain it there.

Also the engineered channel provides for better monitoring and response, so if we need to sweep that area or remove fish, we have the ability there to have concrete walls without pockets or voids in the bottom, so that provides us a better ability to monitor that area.

The flushing lock is designed for floaters, so that would be, again, the eggs and the larval fish. The flushing lock concept works by utilizing the upstream pool -- that's above the upper gate -- and allow that water to flow through the lock and move anything that would be in the lock chamber that's floating, would be pushed on downstream through the lower lock gate while it is open.

We do have also water jets, so tests have shown that some fish can be entrained between the barges, between the hull and the rake area, and also even along the sides, so we proposed using water jets to dislodge those fish that would be in between the barges, to move them out and get them to move back in downstream before entering in the engineered channel.

So with those control measures we then formulated multiple alternatives. So we have three technological alternatives and then a nonstructural alternative, a do what we call sometimes a do-nothing or no-new-action alternative, and then lock closure.

So first off, with the no-new-action alternative, that was a key alternative with any planning measure you set. You know, if we did nothing, what's going to happen in the future. And so that determines your baseline.

So one key part of that that is ongoing now is the electric barrier at Romeoville will continue to operate. It's not a part of

this project; that's separate. So that continues.

And right now there's funding for the State of Illinois, through the Fish & Wildlife, to do monitoring and response as well as commercial fishing. So those are key aspects of what's happening now.

Our nonstructural alternative would have an enhanced monitoring and fishing removal and would also include additional public education and outreach and boat ramps to provide those conducting the monitoring and response quicker access to the river to conduct those activities and would continue the overfishing or commercial fishing of the population of fish downstream of Brandon Road.

That's a very key component of our plan that's the nonstructural alternative, removing the fish from downstream of Brandon Road to keep the population low, so as a layer of defense, we're going to propose the structural measures, but we also want to use our

nonstructural measures so that they're all working in tandem together. Again, no one solution is going to work all by itself.

The technology alternatives: We have the electric barrier by itself. Then we have complex noise and then the electric barrier and complex noise combination.

So we looked at those alternatives on the last slide, and this is the evaluation criteria that we used to evaluate them. First off, the effectiveness: How effective was that alternative at preventing the passage of aquatic nuisance species.

And then the important thing, again, is life safety: What is the safety risk involved with the implementation of those measures, the impacts to navigation, the costs; the costs of construction, operations, and rehabilitation and repair, and does it provide for a layered defense alternative.

So the plan that was selected was the electric barrier with complex noise, a technical

alternative combination. And it was selected because it is the most effective alternative at preventing the upstream passage of aquatic nuisance species, including Asian carp, while at the same time maintaining navigation.

So I guess back to what our goal was again, direction from the ASA's office, was to provide a recommendation on how to prevent the upstream transfer of aquatic nuisance species while maintaining -- while reducing impacts to navigation users and waterway users.

So that's what this one provides, and, again, effectiveness - at the most effective at preventing that transfer while maintaining navigation.

The cost for this alternative are 275 million for implementation of the structural measures. There would be an $8.2 million operating cost, and then there's also $11.3 million per year operating cost for the nonstructural measure. The estimated time to construct this would be five years, upon funding.

So implementation of this plan, a key part of implementing would be working with the US Coast Guard and the navigation industry as we put these control technologies in place; working to maximize the effectiveness.

So right now with the electric barrier and complex noise alternative, how we would operate that right now is when vessels are approaching the engineered channel or in the engineered channel or lock, the electric barrier would be off, but then complex noise would be on as the deterrent to keep the fish from moving through the engineered channel.

Working through the operations of this as it comes online, and the Coast Guard will have to provide a recommendation on the navigation area or any rules or regulations that would need to be implemented for safety regarding electric barriers.

So when we get that on, there will have to be field testing after it's constructed, to determine what actions need to be taken for

safety.

The study timeline: So right now we're in the public comment phase, in the middle of our overall study, so we have completed -- first off, the public scoping was done in late fall/winter of 2014. Then in 2015 we started the alternative formulation phase.

We completed the Tentatively Selected Plan a year ago with approval from our headquarters, and then we released the study here in August for public comment and review.

We're going to take these public comments that we got from you and also the technical analysis that is ongoing. We've had the agency technical review, which is technical specialists from around the Corps who are not part of the team, and we have contracted out an independent external peer review, which is ongoing right now, be wrapping up in January.

And we'll take their feedback and the feedback from others and the public comment and look at that and say, Well, what do we need to do

going forward in the feasibility? What areas do we need to do further analysis on? What gaps do we have?

So the next step, part four, the feasibility analysis, is the next phase coming up. Key dates there for that phase, we expect to have that completed in February of 2019, which will culminate in a senior leaders review at our Corps headquarters.

So we'll have a final report, and it'll get to our headquarters for a review, and then we'll determine if it's ready to go for public review again.

So sometime there in early 2019 the final report will come out for state and agency and public review, for final comment. And then at that time it gets converted to a Chief's Report, which is scheduled to be August of 2019.

This slide here shows the timeline combining the planning phase, the five phases of planning, and then the assumption or estimated construction timeline. So completing the Chief's

Report in August of 2019, we're assuming that we could get authorization and appropriation of funds in the fall of 2020. We could then begin engineering and design to prepare for construction.

The nonstructural measure will be implemented right away, upon appropriation, and then we would need about three years before we could begin that construction and complete construction in 2025.

So as always, we welcome your comments and your feedback. You can go to the GLMRIS website, where we have information about our report, and the report is there for viewing and download. You can enter comments there as well.

You can keep in touch with us through Facebook and Twitter, as well as email, so we appreciate everybody coming out today and also participating through the website and sending us comments through mail.

And now I will turn it over to Jeff to begin the comment period.

MR. ZUERCHER: Thank you, Andy.

And thanks for being here to listen to that presentation. I would also like to extend thanks to some of our congressional representation that is here today. We have Michael Eby from Senator Cassidy's office; Jay Vicknair from Senator Kennedy's office; and Justin Crossie from Congressman Steve Scalise's office.

Thank you for being here. We appreciate your presence.

At this time what we'd like to do is we'd like to take a few minutes to take any clarifying questions that the audience may have regarding Andy's presentation.

Once we've taken a few -- a couple of questions regarding that, then we'll move into our comment period, and I will give a further explanation of how we're going to go through the comments.

So if anyone has a clarifying question they'd like to ask, I open the floor for that

now.

Yes, sir, in the back.

AUDIENCE: What do you guys mean by complex noise?

MR. LEICHTY: Okay. So the complex noise is just a variation in sounds, so right now we have looked at putting underwater speakers in that can produce various sounds and noises that would deter the fish.

So the fish are affected by vibrations and sound waves in the water, and specifically some of you have noticed possibly when boat motors or engines go through the water, they get -- the props produce small air bubbles in the water, and they collapse, and so that produces a sound and vibration, which is what gets them to jump.

But primarily the vibration through the water is what is impactful to the Asian carp, and it does impact different species differently, so that is still a lot of research going on on complex noise.

COL BAUMGARTNER: I'll just to that real quick, too, is one of the things Andy talked about in his presentation is about how we very much are relying on our other partners for science, technology, research. In the case of complex noise, the United States Geological Survey, or USGS, is the lead agency that's doing the testing and development, or development and testing of complex noise.

And that continues to advance very well, particularly not only have they done model and controlled-environment testing, but they've initiated field testing on that system, too.

MS. MUENCH: Andy, you said that there was no chance of flooding in that area, but I thought in the TSP it said there was a 2 percent chance every year for flooding and connection of the waterway.

MS. DAVIS: It's a .2 percent chance.

MR. LEICHTY: I don't know the frequency of flooding in the area, but I guess in -- there's no chance for upstream passage

through or over, around the dam during flooding, during that .2 percent chance of flood, which people refer to as a 500-year flood. There's still 24 foot of head there at the dam.

So at that point there would not be any opportunity for fish to get around that structure, even at flood stages.

Does that clarify that?

MS. MUENCH: Uh-huh. What's the Brandon Road work group?

MR. LEICHTY: So that, that was a work group that was different agencies that -- and partners that got together to -- it was pretty much the same group as the Monitoring and Response work group but with the specialized information that we were going back and forth with on Brandon Road. They had a lot of calls with that, and that group got together a lot, so we just called it the Brandon Road work group.

It was the -- our partners that helped us with the study, providing us information, and just coordinating that information.

MR. ZUERCHER: Yes, sir.

AUDIENCE: How much of the overall cost of the engineered channel -- well, put it another way: What is the price tag for the engineered channel?

MR. LEICHTY: So your question is what is the overall cost or construction cost just for the engineered channel?

AUDIENCE: Yes.

MR. LEICHTY: Okay. I guess I'd have to look -- Dena, do you know that offhand?

MS. ABOU-EL-SEOUD: If you'd give me one moment, I'll look it up. I do not -- I'm the economist on the study, but I don't remember that offhand, so give me one moment. (Perusing documents.)

MR. ZUERCHER: While she's looking that up, why don't we go ahead and take your question. Yes, sir?

AUDIENCE: The construction period over four years, how much disruption will that have to navigation for the construction period,

and then following completion, how long of a delay do you estimate each tow requiring a crew in that process?

MR. LEICHTY: Okay. So first off was the construction period itself, how long will that take, and what are the impacts to the transportation there. So --

COL BAUMGARTNER: Andy, real quick, just so they can hear and pick up on it for the record, can you just repeat that question one more time, just so that we're picking up on the speaker?

MR. LEICHTY: Again, the question -- the first part of the question is what are the impacts during construction to navigation and what are the delays in the timing there and then also what is the delays after -- or during operation? I think that's the two questions.

So first off, during construction of the engineered channel and then also the flushing lock, our current estimates are looking at combining the construction of the flushing lock

and then part of the engineered channel together.

Right now we're looking at a 40-day closure period to implement blasting of the engineered channel bottom and putting in precast panels and also reconfiguring the conduits at the lock itself for the flushing lock.

And just to note that's part of what we've estimated so far in the Tentatively Selected Plan, there's again feasibility, and we will do further engineering analysis and cost schedule risk analysis and look at how we can refine that to be more effective and efficient.

Right now for the operation phase, the impacts during operation, we do have an average time of about two hours, but our economist -- do you want to say anything else, Dena?

MS. ABOU-EL-SEOUD: Yes. So I believe that my part of the question was what is the change in processing time as you get through the lock?

At Brandon Road we are looking at a difference in processing time of a little more

than 2.5 hours, so that would be the increase. Again, that is attributed to the flushing lock that would be in continuous operation.

At this point in the study we've taken a fairly conservative approach of what those flushing requirements would be, and so we looked what the difference would be for a lockage process, to approach the lock, transit the lock, and exit the lock.

The delay time comprises the majority of that difference in processing time, and so while our flushing is only about 18 minutes, that increases our delay time a little over 2.4 hours.

Did that answer the question? Okay.

I also have the -- I will repeat the previous question that I promised an answer to: What is the cost of the engineered channel for the TSP, and that is $62.3 million estimated at this point.

COL BAUMGARTNER: Okay. I just wanted to make sure I add one more thing. Part of that question about during construction and closure

time, and Andy talked about, you know, a 40-day, that's for the flushing lock, of course; modifications to the existing lock to get the flushing effect, and also the engineered channel piece.

But I just want to make sure I did add that also there will be additional restrictions beyond that 40-day closure window as we complete other phases or aspects of what would be potentially constructed at Brandon Road from a restriction standpoint.

MR. ZUERCHER: Final question.

AUDIENCE: Other than the electric barrier component, are any of the technologies that are contemplated in the TSP -- are any of them beyond design or testing phase? Are any of them being implemented and used anywhere else, or are they all still somewhat theoretical?

COL BAUMGARTNER: So I can jump in on that, and I'll let Andy come in also. So I think what you're getting to is, okay, so what's the degree of confidence do we have in the potential

recommended control measures as outlined in the Tentatively Selected Plan? And is there any precedence of its use elsewhere or previously.

So specific to the electric barrier, the Corps of Engineers has had an electric barrier at Romeoville, Illinois. It's been operated and maintained by the Chicago District of the United States Army Corps of Engineers for approximately 15 years.

And there's been an evolution there onsite that has helped very much in terms of informing our study, so we've learned a lot from over those 15 years about electric barrier operations, how to continue to improve that, improve its effectiveness; also decrease any potential vulnerabilities; adaptive management measures and other things. We take all that feedback, as part and informs our study process.

I briefly talked about the complex noise piece. For complex noise, again, that continues to advance. USGS, as the lead agency that's leading those efforts on our behalf, and

we're relying very much on them for the testing, and complex noise has been not only tested in controlled environments but also it's in field testing right now and showing positive results at this point.

In terms of other measures, there's quite a few other measures we talked about: water jets; for example, we've done field testing of that.

And, Sue, I can tell you want to make a few additional comments. I'll let you chime in.

MS. DAVIS: Complex noise as a fish deterrent technology has been around for a long time: the discussions that the Colonel has been referencing, the work the USGS has been doing. They've been looking at specifically in a navigation environment and some of the locks and dams on the Upper Mississippi.

But as a fish deterrent, complex noise has been used for probably several decades, many times in a mobile setting, where it's used to

deter spawning fish, but it has a pretty good track record as a deterrent.

MR. HEINOLD: If I could chime in here real quick, too. I'm Tom Heinold. I'm the operations chief acting for Rock Island District. It's my job, I've been charged with delivering a nine-foot navigation channel that's safe and reliable to deliver to the navigation industry.

And there was a question before that asked about impacts to navigation during construction. This waterway is in pretty bad need of maintenance and rehabilitation already, and to the extent possible -- and there are a lot of ifs here, depending on authorizations and funding and the timing of all that, but this lock system is due for some major maintenance over the next six to eight years.

The lower six locks on this system will need to be closed and dewatered at some point for gate, sill, and anchorage modifications to accept new gates, and we would make every effort possible to do this work concurrently with

maintenance that is already needed to get this system back to a reliable state so that it can deliver the economic benefits to this nation that it was designed to do. So we'll make every effort to do that.

COL BAUMGARTNER: Okay. So I just want to add one last point. Back to the question about the delay times in terms of processing time and lockage time.

The bottom line, I will tell you up front, is as we work and move into what Andy has described as the study schedule, we're going to move in from the Tentatively Selected Plan, of the public comment period, and then we're moving into the feasibility phase.

And that's going to be a very critical phase where there's great opportunity for us to work, in this case, with navigation interests and the U.S. Coast Guard, along with the Corps of Engineers, to come together, because ultimately we want to have as much of an efficient system and an effective system as possible.

And I think there's a great opportunity for us to come together during the feasibility phase to really take a look at how we can decrease any potential delays.

MR. ZUERCHER: All right. Well, thank you for your questions or clarifying questions. The expert panel will be available following our public comment period to answer any further questions that you might have. They will make themselves available for a period of time after we are done here.

So let's get on to the public comment period, most of what you're here for. This is an important part.

So what we ask is that you limit your comments to three minutes, and to guide you through that, we have a set of slides, and the slides start out green, and then they change to yellow when there's one minute left, and every 15 seconds there will be another yellow slide. And finally, when your time is up, it will go to a red slide.

At that time we ask that you wrap up your comments, and then if you have further comments that you would like to make, we will invite you back up towards the end.

What I'm going to do is I'm going to go through a list of people that have signed up to make comments, and we will have them go first. I'm going to call out three names at a time and ask that you come and sit up here in the front row so that you're ready to speak, and then we won't have to wait for you to get up to the podium.

Please speak into the microphone. When the microphone's red, you'll be heard. Be loud and be clear. We need you to state your name, and your first and last name, along with any organization that you represent, and also we need your zip code.

In order for this to count as a public comment that we can have in our record, we need you to have your first and last name and your zip code for sure; the organization is optional.

So at this time I would like to invite up Angela Ayers, Thomas Bethune, and Robert Hirschfeld.

Once we get through this list of people that are here, I will open it up to people on the phone and also people here in the audience.

So Angela, go right ahead.

MS. AYERS: Thank you. Angela Ayers from Michigan Governor Rick Snyder's office, 48909.

Governor Snyder appreciates the opportunity to be here today to discuss the importance of Brandon Road lock and dam for protecting the Great Lakes.

The invasive carp detection front has continued to advance since 2009. Multiple sampling events in 2015 found invasive carp eggs, larval fish and juveniles, much farther upstream than ever observed before. These data indicate the invasive carp population on the Illinois River system is active and advancing.

Today they are actively spawning and colonizing and have been found within nine miles of Lake Michigan. Ignoring these movements may lead to an inaccurate assessment of the risk posed, as well as missing critical windows for action to protect our natural resources and economies.

Natural resources are a cornerstone of our pure Michigan way of life and of the regional economies of the entire Great Lakes system. Michigan has over 3,000 miles of Great Lakes coastline, 11,000 inland lakes, and 36,000 miles of rivers and streams that provide for the recreational, esthetic, and commercial activities that serve as the foundation of our tourism economy.

Tourism has long been a major sector in Michigan's economy, with visitors spending over $20 billion and generating an economic impact of about 37 billion in 2014 alone.

Invasive carp currently pose the greatest threat to the Great Lakes, Michigan's

natural resources, our tourism economy, and the continued economic growth of our entire Great Lakes region.

We recognize the significant efforts many agencies have taken to date, with congressional and stakeholder support, to further study Brandon Road. Taking action at Brandon Road is the next important milestone in these efforts.

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

Michigan supports and applauds aspects of the plan, including an innovative engineered channel. This is a unique opportunity that could serve as a national test bed for invasive species monitoring and control, and the intermittent electric barrier that would only be active in the absence of barge traffic to help alleviate safety concerns.

All stakeholders recognize that

business as usual is not an option. Governor Snyder supports the TSP and is ready to provide substantial resources to support the operations and maintenance of Brandon Road lock and dam to alleviate impacts to the State of Illinois taxpayers.

We urge other Great Lakes states and provinces to join us in providing the support.

Thank you.

MR. ZUERCHER: Thomas?

MR. BETHUNE: Good day. Thomas Bethune on behalf of Blessey Marine Services here in New Orleans and the Texas Waterways Operators Association in Houston, 70123.

COL Baumgartner, you mentioned earlier about a shared responsibility, and I believe one of the things that everybody in this room recognizes is the shared responsibility that industry has with the government, both with the Corps of Engineers and Coast Guard.

Every major industry group, the TWOA included, and every major tank barge operator in

here sees a shared responsibility to ensure environmental safety while ensuring economic viability.

The two are not mutually exclusive, and they are working together. The nonstructural elements and efforts to contain the Asian carp are working. The fish has not advanced in nearly 26 years but by some accounts.

Texas is the number-two provider of jobs to the inland tugboat and barge industry, with a total of 210,000 jobs related to waterways and waterway support. This contributes to about $34 billion of direct economic impact to the Texas economy and about $400 billion worth of finished goods, petroleum, dry goods, et cetera, through Texas ports and waterways.

Annually Louisiana and Texas handle the most waterborne commerce on the inland waterway system, with Illinois ranking third. So why is Texas important? You have to look at everything as the inland waterways as a system. If you affect something upriver, it affects

something downriver.

If you take the LaGrange lock, for instance, on the Illinois River, there are tens of millions of tons of cargo that move through LaGrange every year. There are cargoes that flow upriver as well as downriver.

If you look at the Calcasieu lock on the Intracoastal, the third-ranking state in terms of economic impact at the Calcasieu lock is the State of Illinois. There are collateral effects to altering the flow of goods anywhere you go.

It adds stress on additional infrastructure resources, it stresses the competitiveness of U.S. commodities and adds stress on additional financial burdens for transport.

So this brings us to Brandon Road. There are about 15 million tons of cargo moving through the Brandon Road lock each year, including coal, petroleum, iron and steel for manufacturing, chemicals, aggregates, cement, and

other commodities essential for national and regional economies.

The TSP collateral damages include reduced capacity for reduced volumes of cargoes. These additional burdens for modal shifts include for each dry cargo barge that you take out of the waterway, that's an additional 16 railcars or 70 tractor trailers.

One 30,000-barrel tank barge is the equivalent of about 46 railcars and 144 tractor trailers on an already stressed system.

Additional lockage costs are estimated to be about $1200 per event for locking delays due to the TSP. And of course the Coast Guard's own risk assessment has calculated the additional risks of electric shock, as well as congestion-related accidents.

At the end of the day, the nonstructural methods are working. They're in use by the Illinois Department of Natural Resources and federal agencies. They've reduced the leading edge of the Asian carp population by

68 percent in the Illinois River, and the leading edge of the carp has not advanced in over 26 years.

We'd like to thank you all for your time today, as well as for the congressional efforts of scheduling this meeting today. Thank you.

MR. ZUERCHER: As Robert Hirschfeld comes up, I'd like to invite Alfred House, Lynn Muench, and Spencer Murphy to come forward.

MR. HIRSCHFELD: Robert Hirschfeld, Prairie Rivers Network, 61820.

Thank you to the Corps for its effort in producing this study for this opportunity to provide comments.

Aquatic nuisance species pose a grave threat to the ecological health of rivers and lakes, as well the people and economies those waters support, in both the Mississippi River basin and the Great Lakes basin.

As such, we urge the Corps to move forward with the Tentatively Selected Plan. It's

clear that Asian carp would be a disaster to the Great Lakes and its economy, and we should thus take the strongest preventative actions to protect the lakes.

The Tentatively Selected Plan is a good first step in preventing the further spread of ANS, but it's also the bare minimum of what should be done and only a first step.

The TSP is the minimum of what should be done because, as the study makes clear, nonstructural measures are not enough. The Corps states -- and this is a direct quote from the study -- "the no-new-federal-action and nonstructural alternatives cannot deter the continued upstream movement of bighead and silver carp from the lower Illinois Waterway and the Mississippi River."

And to say that the leading edge of the carp haven't moved in 26 years is to ignore population dynamics in the lower pools, to ignore the fact that larvae, eggs, and small fish have increasingly been found upstream, and to ignore

the fact that silver carp is found beyond the electric barriers this year, 2017.

The Tentatively Selected Plan can only be a first step, as it will not stop aquatic invasive species from moving from the Great Lakes into the Mississippi River.

Under the original GLMRIS authorization, Congress tasked the Corps with developing solutions to prevent the two-way transfer of ANS. Brandon Road is not a two-way solution; it can never be a two-way solution.

No matter how many controls are installed in the lock chamber at Brandon, invasive species coming from the Great Lakes can simply go over the spillway of the dam at Brandon and continue on at the Mississippi River and all of its tributaries.

The Corps has identified more invasive species threatening to move from the Great Lakes into the Mississippi River than vice versa. Some of these species headed towards the Mississippi River are labeled a greater threat even than

Asian carp, yet little to nothing is being done to address the threat of these ANS to the Mississippi River region. That is unacceptable.

The Corps should fulfill Congress' original mandate to develop solutions that prevent the transfer of all ANS moving in both directions. If the Corps needs additional funding to continue this work, sufficient funds should be so allocated.

The TSP is ultimately also not protective enough against the Asian carp threat. Even after completion, the TSP leaves a substantial risk of the establishment of Asian carp. One of the experts surveyed in the study estimates that risk near 40 percent.

We are not comfortable subjecting the health of the Great Lakes and its industries to that level of risk. Indeed, the Corps study makes a strong case for lock closure.

Under lock closure the probability of establishment effectively goes to zero. Of course, lock closure is also cheaper for the

public. The reason for discarding the lock closure option, as stated today, is disruption to navigation, but we should examine the assumption that navigation must continue unimpeded, at all costs.

In the Corps fiscal year 2017 budget, public expenditures for the inland waterway system added up to $1.7 billion. Through the Inland Waterway Trust Fund, the navigation industry chipped in only 75 million. That is a public subsidy of 95 percent.

The health of our rivers as well as the multibillion-dollar Great Lakes industries and thousands of jobs they support should not be held hostage to a navigation industry that does not pay its own way and that could not stay afloat without the largesse of public subsidies, rather we should be implementing the strongest, most protective two-way solutions to protect these waters for the benefit of the public that pays for them.

The artificial connection between the

Great Lakes and Mississippi River that allows for ANS transfer exists because, at the end of the 1800s, decisions were made to send municipal industrial waste to the Illinois and Mississippi Rivers in order to keep Lake Michigan clean.

It is well past time we stopped sending pollution to the Mississippi River, and it's past time that we stopped allowing ANS to come into the Mississippi River.

I encourage the Corps to take holistic, comprehensive, and robust two-way solutions. Thank you.

MR. ZUERCHER: Could you state your name and zip code just to make sure.

MR. HIRSCHFELD: Yeah. Robert Hirschfeld, Prairie Rivers Network, 61820.

MR. ZUERCHER: Thank you.

Alfred House.

MR. HOUSE: Alfred House, Apostle Islands Sport Fishermen's Association, and Lake Superior advisor to the Great Lakes Fisheries Commission, U.S. Board of Advisors, 54891.

Ladies and gentlemen, thank you for the opportunity to report on the draft GLMRIS Brandon Road TSP.

As president of the Apostle Islands Sport Fishermen's Association, as well as a advisor to the Great Lakes Fisheries Commission, I would like to thank the Corps for its continuing efforts to deal with this threat to the fishery's environment of the Great Lakes.

The health and well-being of this fishery allows it to contribute multiple billions of dollars to the economy of the United States, as well as being the livelihood of countless people and families in the Great Lakes region.

It would be easy to dismiss the threat of Asian carp to Lake Superior, where I live, the most remote of the Great Lakes, except for the overwhelming evidence of the frightening rapidity with which these species have colonized the Mississippi River and all of its tributaries within the space of 20 years.

This invasion indeed has come with a

tremendous cost to the citizens and environment of the Mississippi, Ohio, and Missouri River watersheds.

A peer-reviewed binational risk assessment found that if allowed into the Great Lakes, Asian carp would colonize all the Great Lakes within 20 years. This colonization would be followed by large-scale economic and environmental disruption as the carp displaced native species.

In the face of this threat, the actions to date to prevent the spread of Asian carp, while deeply appreciated, do not reduce the risk to an acceptable level in the future.

Indeed, the recent discovery of a silver carp that was documented by otolith analysis to originate from the Ohio watershed but was found above the current electric barrier points to the pressing need for further roadblocks.

It is my opinion, as well as that of my association and of my fellow GLFC advisors,

that further efforts to build a strong, redundant invasive species control structure to thwart Asian carp as well as other invasive species is the next critical action in preventing the colonization of the Great Lakes by unwanted and dangerous species.

And the Brandon Road plan offers the logical next step to do that, due to its unique location and current existing structures, while eventual physical separation needs to be the ultimate goal. A larger strategy is necessary for the Chicago Area Waterway System, and the Brandon Road TSP plan is where to start.

Thank you.

MR. ZUERCHER: Lynn Muench.

MS. MUENCH: Are you going to start me out with one minute remaining?

MR. ZUERCHER: No. I was waiting for you to start --

(General laughter.)

MR. ZUERCHER: -- so I could give you the full three minutes. Here. Better?

MS. MUENCH: Lynn Muench with the American Waterway Operators and National Trade Association for the Tugboat, Towboat, and Barge Industry; zip code 63104.

First I'd like to thank the Louisiana delegation that's here for encouraging the Coast Guard to come down here to hold a public hearing. This is where a very large percentage of the Brandon Road stakeholders live. However, I'm still disappointed that you've decided not to go to Houston, where another very vibrant group of folks are impacted by this and will not have an opportunity to testify in person.

AWO is committed to protecting the Great Lakes and the Mississippi River from aquatic nuisance species, while preserving commercial navigation. GLMRIS identified 13 species in the Great Lakes that have a medium to high risk to the Mississippi River and only three that pose a medium and high risk in the Mississippi River to the Great Lakes.

Logically we should be focusing on the

13 and not the three if we're really trying to do what's best for the nation.

AWO, however, does support the suite of nonstructural control measures contained in the TSP, and another other nonstructural control measures that come to light as we move forward.

Nonstructural control measures such as overfishing have reduced the leading edge of the Asian carp population by 68 percent in the Illinois River and have ensured that the Asian carp population has not moved in over 26 years. I'm going to say that over again, because it is absolutely true, no matter what else anyone says: The Asian carp population has not moved in over 26 years. This TSP is nothing more than a solution looking for a problem.

AWO members are the leaders of safety and are committed to zero harm to life, to property, and the environment. This TSP poses serious risk to mariner safety.

The Coast Guard recently released a preliminary risk assessment of the structural

control technologies contained in the TSP. Let me point out just a few of the concerns: obviously, an increased risk of electric shock, but this is even true with the intermittently activated electric barrier; potential audio interference that could occur between crew members and crew members and lock personnel, increasing the possibility of allisions, collisions, and falls overboard; increased congestion-related incidents that could cause allisions and collisions; induced vessel motions from the flushing lock that could cause fall-overboards and allisions; and the list goes on.

If human safety is a priority, this TSP must be thrown away. The TSP would reduce Brandon Road by 10 to 12 million tons a year. That would mean we could possibly move over 400 and 545 trucks on the road, increasing pollution, increasing taxes to repair those roads. It would also increase the delay 2.44 hours per lockage, costing a minimum of $1200 per lockage and really having an avalanche towards a negative NED.

The Corps also estimates that the O&M per year on this would be $8.3 million. That's approximately 25 percent of the money that is presently spent on the entire Illinois Waterway per year for O&M. That seems a bit ridiculous.

The Corps must add reality to the decision-making process. Only the nonstructural actions make logical sense.

MR. ZUERCHER: As Spencer Murphy comes up, I invite Larry Barbish, Matt Rota, and Jim Stark to come forward.

MR. MURPHY: Good afternoon. I'm Spencer Murphy with Canal Barge Company, 70118.

I'd like to thank you for the opportunity to comment today. We will be submitting more detailed written comments, but I appreciate the Corps holding the hearing here in New Orleans, and I would like to take a second to please thank everybody in the room; please thank our Louisiana delegation for urging the Corps to come here. This was not originally on the Corps' list of hearings, so I really appreciate Senator

Kennedy, Senator Cassidy, Congressman Scalise, and all of our congressmen for making this happen.

Often lost in the noise surrounding the Asian carp is that this is a national issue; it's not a Great Lakes issue. Even though this started with Michigan versus Illinois, the Supreme Court case, it is a national issue that impacts Louisiana if not as much or more than Michigan or any other state.

It's also worth noting this whole process started 10 years ago with a political campaign in Michigan. Attorney General Mike Cox, looking to become governor of Michigan, seized on this as the issue to launch him into the statehouse. He lost his election, and he lost his lawsuit in the Supreme Court, and yet here we are 10 years later.

A lot of the rhetoric that was injected into this issue back then is still around today, even though the fish have not moved since that time.

So I'd like to highlight some of the direct connections between Louisiana, Illinois, and the reason why we should be here today and why it's appropriate to have this hearing.

As you know the Corps Navigation Data Center tracks all waterborne commodity movements in the nation. On their website you can find links to reports that how much cargo moves from one particular state to another in any given year.

According to the Corps' data, Louisiana is by far the number-one point of origin for cargo moving into the Illinois. In 2015, 9.8 million tons of cargo moved by water from Louisiana into Illinois. The next-largest point of origin was interstate traffic within Illinois, of 7.6 million tons.

The next largest out of that -- beyond that was from Canada, across the Great Lakes, at only 1.7 million tons. So what that means is just over one-third of all tons moving into Illinois by water originates in the state of

Louisiana.

You can look at that from the reverse angle as well: Cargo leaving the state of Louisiana, number one is Texas, destination. Number two destination is Florida; number three is Illinois.

If the Corps creates a bottleneck at Illinois in Brandon Road lock and dam, it'll have direct negative consequences on interstate commerce, on the national economy, and on the environment and, from a local perspective, it is absolutely vital to Louisiana that we keep the Illinois River open for business.

Speaking from Canal Barges' perspective, our Baton Rouge to Chicago service is the very heart of what we do, and our over 800 employees are dependent upon the Corps keeping our waterways open.

All those tons that move by water do so not because of the barge industry here, because we're some powerful force that can bend the laws of economics to our will. It's because

it's the most efficient form of transportation for our customers.

We have the fewest spills, we have the least amount of carbon emissions, and we have the best safety record, compared to truck and rail. Every ton that is taken off the water will move, but it will move by truck or rail, with resulting increases in pollution, personal injury, and spills.

The Corps' policy, both at Brandon Road and around the country, should be to maintain and improve navigation on the waterways, not drive traffic into other modes.

The TSP should be a targeted do-no-harm solution, not a wish list of possible options to be experimented upon at a piece of vital maritime infrastructure. We are not pro carp, we are pro common sense.

The current suite of efforts are working and should be continued. The TSP presents a real threat to our company, our industry, our state, and our national economy.

For our reasons, we oppose the TSP and ask you respectfully to focus your efforts on nonstructural solutions.

Thank you.

MR. ZUERCHER: Larry Barbish.

MR. BARBISH: Thank you. My name's Larry Barbish. I'm vice president of marketing for Canal Barge Company, 70112.

I've been involved in the barge industry for over 40 years. In my current role I'm responsible for overseeing Canal Barge Company's dry cargo operations. As a part of that trade, we move bulk commodities and cargoes throughout the inland waterways system.

One of our most vital trade lanes is moving commodities between Chicagoland and the Gulf. It truly is the biggest operation that I think just about every barge line has.

Our towboats move over 2,000 barges per year in each direction in this trade pattern, and it happens 24 hours a day, 365 days a year. We're not the largest barge line, we've not the

only barge line. This gets multiplied by everybody that trades through there, so this is a massive operation.

Accordingly, our customers and in turn our employees have a keen interest in making sure that the Illinois River remains open for commerce, and any disruption of the system has a direct impact on us. As was just said, it moves it off the river, moves it into less favorable modes of transportation for the nation.

The inland waterways are a national system, and they're vital to the economy of the United States. What happens on one end of the system impacts the rest of the system. And given the Corps' role as the sole agency responsible for maintaining our locks and dams, every care should be taken to ensure that whatever is done to stop Asian carp does not unreasonably impact commerce on the Illinois River.

Any period of construction that involves shutting down a lock has a direct impact on us. Any new structure that slows our tows or

requires us to break tow has a direct impact on us. And certainly any electric barrier has a direct impact on us and puts our vessel crew at risk.

In my view, the Tentatively Selected Plan will create hardships for our vessel crews and needlessly harm the flow of cargo, without providing any more benefits than could be gained through nonstructural means.

The current program of work, including targeted overfishing, is having success and should be allowed to continue. We know that the TSP will have a series of costs and negative consequences, yet there are no certain benefits to be gained. I strongly encourage the Corps to abandon the TSP and focus on nonstructural measures.

Thank you.

MR. ZUERCHER: As Matt Rota comes up, I'd just like to mention that if you are on the phone and you are desiring to make a comment, we do have someone that is monitoring the webinar.

If you would go into the chat portion and send a message to everyone, we will make note of your desire to speak, and then we'll invite you to speak here in a couple more people.

With that, Matt, it's all yours.

MR. ROTA: Thank you. My name is Matt Rota, and I am the senior policy director for the Gulf Restoration Network. My zip code is 70130, and I am a resident of Louisiana.

I am here first to just say that we are in support of the Brandon Road project, that we are encouraged or happy to see that the GLMRIS program's actually resulting in something. It is frustrating that this is the very first project after 10 years that is just starting to get off, and this isn't even going to be on the ground till 2025, if everything goes well.

And so, first of all, we think that this process is moving much more slowly than it should be, in that we need to have a two-way solution, and right now we're proposing the very first solution, which is only a one-way solution.

Obviously we care about the Great Lakes, and we don't want the carp getting up there, and so the Brandon Road project is a project that we support and want to see continue.

However, while this is all happening, we would also want to see the two-way solutions being looked at, like has been said before by several other people, that there are -- there were three species of concern going up and 10 going down, and we need to protect our waters down here as well. So while the Brandon Road is moving forward, we need to be getting those two-way solutions online and moving as quickly as possible.

I know some might think there isn't as much of a concern because, you know, the Mississippi River ends up in saltwater, and so once it ends up there, who cares. Right? But we have been opening the Bonnet Carre spillway more and more often over the past 20 years, and if invaders -- nuisance species get into there, that fresh water can go straight up into our waters of

the north shore of Lake Pontchartrain and invade and wreak havoc on the fresh waters of Louisiana, not to mention if it gets into the Intracoastal Waterway and we have conditions there that we could really be seeing a major impact.

So I urge this panel -- I thank you all for coming down here. I urge this panel and everybody that's working on GLMRIS to move forward with the Brandon Road project, but make sure that you're prioritizing the entire river system and that this isn't all about carp and that we need to be looking at all of them.

However, and that being said, I think that the -- we shouldn't be just looking at nonstructural solutions when dealing with carp, because somebody mentioned, Oh, we removed 63 percent. Well, that's still, if my math is right, 37 percent that we didn't catch. And it just takes a small population to get in there and to completely wreak havoc on our largest freshwater ecosystem that we have in the world.

Thank you.

MR. ZUERCHER: As Jim Stark comes up, would Garey Forster please come forward.

MR. STARK: Good afternoon. I'm Jim Stark. I'm the president of the Gulf Intracoastal Canal Association. My zip code is 32932.

The Gulf Intracoastal Canal Association, or GICA, as I like to refer it, kind of shortened form, is a 112-year-old trade association representing 200 industry members involved in towboat and barge operations, shipping, shipyards, and associated waterways industries which use the Gulf Intracoastal Waterway and its tributaries.

Of course, those tributaries are far reaching, including the Mississippi River system and eventually the Illinois River and all the way to the Great Lakes.

Now, our members aren't limited to the five-state Gulf Intracoastal Waterway, starting in Florida and going all the way over to Texas, but they routinely operate on those tributaries,

moving commerce up and down our vital river systems.

Inasmuch as GICA's mission is focused on facilitating commerce through ensuring safe, reliable, and efficient Gulf waterways, the status of the connecting rivers and waterways infrastructure to the north is always of great interest to GICA members.

GICA and its members are certainly committed to the same aims as the GLMRIS study: protecting the Great Lakes and the Mississippi River basins from aquatic nuisance species, while maintaining commercial navigation.

The Tentatively Selected Plan, the technology alternative of the recent study, has several unresolved issues which may affect and most certainly concern our membership.

Recent data indicates that the leading edge of the Asian carp population in the river has been reduced by 68 percent by overfishing. Further, that leading edge has not moved any further northward in 26 years. Nonstructural

actions like this and others, such as piscicides, ought to be carefully considered before defaulting to expensive, disruptive structural and technical options outlined in the TSP.

GICA's concerns regarding the TSP also center on issues that most affect our membership: safety. According to the Coast Guard, mariners, especially our deckhands, may be at increased risk of death or injury due to both the electric barrier and noise features.

Additional safety concerns arise from potential congestion-related allisions and collisions associated with a backlog of tows waiting to lock, and the effects of flushing and water jets on vessel movements in the locks.

Economic: The TSP estimates increased lockage delays of about 2-1/2 hours. Surely the $1200 per lockage delay costs will negatively affect towing companies, shippers, and ultimately the nation's economy.

The TSP's reliance on unproven and maintenance-intensive technologies is expected to

reduce lock capacity at the Brandon Road lock by 10 to 12 million tons per year. Reduced lock capacity will result in shippers shifting commodities to other modes; for instance, another 545,000 trucks on the roads per year would be needed to carry those 10 to 12 million tons of cargo. This will directly affect and impact commuter travel time, safety, air quality, and highway O&M.

Also this shift away from the more efficient, safe, and environmentally sound barge mode of transportation would significantly decrease our industry's family-wage maritime jobs. These are jobs not only in our river states of the heartland but states along our Gulf Coast as well.

Thank you.

MR. ZUERCHER: Garey.

MR. FORSTER: Good afternoon. My name is Garey Forster. I'm here representing Louisiana Mid-Continent Oil and Gas. I live in New Orleans, 70116.

Most of what has been said -- and first let me start off by thanking the Louisiana congressional delegation for inviting you all, as well as you all for coming to New Orleans to hear what we have to say.

Mid-Continent Oil and Gas represents the major oil companies, everything from exploration out in the Gulf through pipes, refining, and pumping it at the station. So it appears to me, just from listening and reading, that this is a disagreement, a squabble, whatever you want to call it, in one particular area of the country, but we want you to understand that it will dramatically impact the oil and gas coming from the Gulf Coast and moving throughout the country.

And that's basically what I'm here to say, that Canal Barge and others have explained the importance of that transportation model, but I'm talking about just the energy dependence of the country and how it gets from the Gulf of Mexico up to that area where they drive cars and

fly planes and all those good things that need oil and gas.

So we'd ask you to consider the impact that it will have on oil and gas coming from the Gulf Coast in anything that you do that slows the barge traffic.

Thank you very much.

MR. ZUERCHER: All right. At this time I'm going to open it up to anyone that's on the phone. If you are on the phone and you would like to make a comment, same thing; we ask that you announce your name and your zip code for sure, and if you'd like to announce an organization, that's fine as well.

(No response.)

MR. ZUERCHER: All right. Hearing none, since we don't have anybody on the phone that would like to speak at this time, I then open it up to this room. If there's anybody in the room that did not get a chance to sign up but would like to come up and make a statement, we still would like you to keep it to three minutes,

but feel free come up.

MR. McDANIEL: I actually signed up. You should have me listed.

MR. ZUERCHER: Oh, and I do have a couple of names that didn't check in.

MR. McDANIEL: Vaughn McDaniel, LeBeouf Brothers Towing.

MR. ZUERCHER: Okay. Sorry I didn't catch you on the list there.

MR. McDANIEL: That's okay; it's all good.

I'm Vaughn McDaniel. I represent LeBeouf Brothers Towing Company in Houma, Louisiana; that's 70360.

And more importantly, I represent the mariners that work for our company and the ones that transit the Illinois Waterways in its entirety. We operate a fleet of tank barges that depend on the Brandon Road lock to deliver products to Chicago and the surrounding areas and states.

We would like to thank the Army Corps,

Colonel, Andy, Jeff and company -- I've made many trips up there to Chicago, including Brandon Road last month; it was a very informative trip -- for having this very important forum here today.

I think a high percentage of barges that transit the lock, as Spencer Murphy said earlier, originate in Louisiana and the stakeholders at stake should be recognized. The continued safe operation of Brandon Road Lock must be supported.

With that said, we have examined the TSP, our company has, and we've concluded that we cannot support it based on three primary factors: First and foremost is safety. It's been talked about a lot. The proposed installation of electric fish barrier will ultimately prevent tank barges that carry liquid hydrocarbons from accessing the Chicago region.

And we understand it's intermittent at first, but as the old cliche goes, if they build it, they will come. They build it, they will use it, full time. We see that, so we're concerned.

The use of electricity within proximity of this lock or any lock is not workable and, frankly, dangerous.

The safety of our crew members is our foremost responsibility, and the use of this technology cannot be supported.

Secondly, the proposed water jets also present concerns navigating the lock. Most of our tows are 108 feet wide, which only gives us one foot on each side of the tow. The currents will create navigation concerns that could lead to lock allisions, which could jeopardize the safety of the crew and the tow. If they fall overboard during build or breaking tows, it could lead to the death of the employee; it's a big concern.

Secondly is economic factors. The TSP has a significant consequence of financial burdens to our industry and the U.S. economy. It has been established that additional lockage delay of 2.44 hours per tow can be expected. This adds up to roughly $1200 for each lock-in

and does not consider the additional cost to the end users.

This alone shifts products to other forms of transportation that are less friendly to the environment. By reducing the capacity of the lock by 10 to 12 million tons per year results in over half a million truck shipments per year has been discussed earlier.

Construction time and subsequent closure for O&M would adversely affect many businesses that depend on the waterway. The end businesses would burdened by the huge delays and increased costs associated with these periods.

Our own company, with tows originating in Texas and Louisiana, would be forced to tie up with multiple vessels and multiple barges while these closures take place. The trickle-down effect is far reaching and substantial.

Secondly -- thirdly, rather, is the use of taxpayer dollars. A more effective use of taxpayer dollars would be to support the Illinois DNR by fishing down and fishing out the area.

This has been effective, since no detected -- or little detected migration of these listed species has occurred over the past 26 years. This process should be expanded, which will help further mitigation of this species.

Secondly, the existing electric dispersement barrier at Romeoville has become in a state of disrepair and will be -- will require replacement at a cost of several million dollars to the taxpayers.

The life of the existing system fell short of the 25-year expectancy by some 16 years. This is not a good investment for the overburdened American taxpayer.

In summary, we're strongly in opposition to the TSP in its current form. Nonstructural modifications of the plan can be supported -- we do, however, support many of the nonstructural items mentioned in the TSP, including overfishing of the species.

We understand the issue with the migration of the unwanted species in the Great

Lakes, but we must differ with the approach of this plan. There is a better way using nonstructural methods and processes. Please understand our concerns and we hope that changes can be made to support nonstructural methods.

Thank you very much. Appreciate it.

MR. ZUERCHER: Thanks, Vaughn. Thanks for your patience.

MR. McDANIEL: No problem.

MR. ZUERCHER: Let's just check the list one last time. I have Harrison Crabtree and Patrick Morton also signed up online. If either of you are in the room, I invite you to come forward and make your statements.

MR. CRABTREE: I'm Harrison Crabtree with Greater New Orleans, Inc., 70163.

I'm here today representing Greater New Orleans, Inc., a 10-parish economic development organization for southeast Louisiana. We're reaching out today to express concerns in regard to the proposed carp control system that would be installed at Brandon Road lock and dam.

The proposed plan would severely inhibit the commercial shipping industry that is vital to Louisiana's economy. Encompassing nearly 29,000 jobs and contributing over $4.6 billion to Louisiana's gross regional product, the water transportation cluster is crucial to our state's economy.

Any impediments to commerce on the waterways in Illinois would a ripple effect on our state's economy. In fact, both Illinois and Louisiana are valuable partners when it comes to waterborne commerce.

According to most recent data, more cargo arriving in Illinois by water originates in Louisiana than from any other state. Furthermore, Illinois is the third largest U.S. point of destination of cargo leaving Louisiana by water, behind only Texas and Florida.

This proposed plan would result in timely and costly bottlenecks from numerous companies who rely on the efficient movement of cargo through the Brandon Road lock and dam.

We strongly urge the Corps to reconsider the proposed plans and explore options that both preserve commercial navigation and protect the Great Lakes and Mississippi River basin from aquatic nuisance.

Thank you.

MR. MORTON: Good afternoon. My name is Patrick Morton, assistant vice president of vessel operations for the Gulf for Ingram Barge Company; zip code is 70068.

Being last has got its good points and its bad points. A lot of great points brought up. First off, thank you for the opportunity to come up and talk. Thank you for coming down here and taking the time and showing the interest and sincerity in this.

One other thing is everything's been covered for the most part that I had notes on. As a representative of Ingram Barge, I would like to say that we are -- that Ingram Barge Company is committed to protecting the Great Lakes and Mississippi River basin from aquatic nuisance

species while preserving commercial navigation and that we think the current actions are working.

We've heard some pros and cons on both sides of things and some questioning on the different types of information that's available and data that's available, but I think one that we need to remember is that we're all supposed to stewards of the environment, of the navigation system, of our taxpayers and of our customers and of the economy.

And to be good stewards, we have to make sure that when we do make our decisions and we move forward with things -- like for instance, if we really move away from the transportation on the inland waterways in the Chicago area, what it will do as far as shifting over those movements of tonnages into rail, into truck, and if there's other means that I'm not aware of, that, you know, the economic impact on that is negative. The environmental impact on that is negative. Water transportation, environmentally, is the

best way to go, and economically it is as well.

We also have a -- you know, we have a backbone to the country in our water transportation, and we also -- in that regard we bring stability to the nation in terms of strategic importance and in economic importance.

And we have to make sure that we don't treat that lightly by building in delays in the already taxed system, antiquated system in a lot of ways; taking funds where it needs to be utilized in other areas and moved into an area that maybe hasn't quite been studied quite enough or may have other options that I think as stewards we owe ourselves to look at that.

And I appreciate your time. Thank you.

MR. ZUERCHER: All right. One last check with our folks on the phone. Anybody that wishes to make a comment at this time?

(No response.)

MR. ZUERCHER: All right. Hearing none, again, anyone here in the room who wishes

to make a comment or finish a comment that they didn't get a chance to finish?

(No response.)

MR. ZUERCHER: All right. Seeing none --

COL BAUMGARTNER: Hey Jeff, what I'd like to do, though, is just take the opportunity -- I know we're about to shift gears a little bit here -- is if we could, I'd like to entertain one or two questions, and then -- I know Jeff's going to say this, too -- but emphasize that we are going to stay after, brought the panel of subject-matter experts, whether it be operations, economics, planning, and the planning effort. We're certainly going to stay afterwards, and we're willing to entertain any questions on an individual basis, of course, to make sure you don't leave here with questions unanswered.

But are there any -- maybe one or two questions before we move down the road and close out?

MR. ZUERCHER: Lynn, go ahead.

MS. MUENCH: I had a question -- and I know Andrew and I have been going back and forth. I still don't think I know the answer.

What do you think is going to be the percentage of time you couldn't use the flushing lock because of low water?

MR. LEICHTY: I don't remember that right off the top of my head, but I have that note here. But that's something that we are working through, I understand, because of the pool of water there; there's a potential for certain times of the year to not have enough water to flush the lock.

And that also possibly coincides with the time of year when there would not be floating species, or at least larvae, eggs, at that time of year, possibly, as well.

So there's -- it's not super-definitive, but I think our engineers have a range there. I don't know if it's in that --

MS. DAVIS: Right. I think we've

indicated that there would be some challenges in the late summer/early fall because there might not be enough water in the pool, so -- but that depends on the year. You know, every year the rainfall is different and the volume in the pool will be different.

If we have a low -- you know, drought over the summer, we may not be able to flush the entire summer, but I think based on the analysis they did, there's an average of 70 to 80 percent chance that we can flush without affecting the pool from March to August. So it's the remaining part of the year that that could be problematic.

MR. ZUERCHER: Did that answer your question?

MS. MUENCH: For now.

MR. ZUERCHER: You have more? Go ahead.

MS. MUENCH: One other question. The 1.3 billion recreational fishing trips and the -- what is the source of that?

MS. ABOU-EL-SEOUD: So that estimate was approximately 63 million trips annually, per

year, for recreational fishing and the associated $1.3 billion in that economic value.

The source of that estimate was the GLMRIS report. We worked in coordination with Cornell University to complete an economic analysis. We conducted survey efforts as well as analytical modeling to arrive at those estimates.

MR. ZUERCHER: Any other questions?

Yes, ma'am.

AUDIENCE: It's not really a question. I have to apologize. I was late getting here, but did you talk about what the cost for the channel that's not part of the original plan? I know there were some concerns about even commenting on a plan when you didn't know how much the engineered channel is going to cost.

MS. ABOU-EL-SEOUD: Yes. We did address that question, and I looked it up. It's 62.3 million that we have as the estimated cost for the engineered channel.

MS. MUENCH: Do you have an estimate on the O&M?

MR. LEICHTY: So the O&M for the structural measures is at 8.2 million and the nonstructural is 11.3.

MS. MUENCH: That includes the engineered channel?

MR. LEICHTY: The operations of structural measures is 8.2, maintenance and upkeep. That includes the engineered channel maintenance and upkeep as well as the flushing lock, structural measures.

MR. ZUERCHER: Any other questions?

Yes, sir.

AUDIENCE: Who is the current cost-share partner for the Brandon Road Lock?

MR. ZUERCHER: Well, I can answer that. Who is the current cost-share partner? We currently do not have a cost-share partner. This is 100 percent federal study. We are looking for a nonfederal sponsor. If anyone wants to volunteer, we have paperwork you can sign shortly after this meeting.

COL BAUMGARTNER: I'll continue on

that line of thought real quick. So, yes, the study is 100 percent federal. However, to move forward from the study, Water Resource Development Act of 1986, of course, requires us to have a nonfederal sponsor to execute the planning, engineering, design, then also the construction to move forward.

So, no, we do not have a nonfederal sponsor at this point in time to move beyond the study phase, we continue to seek nonfederal sponsorship, because we think that's critically important.

And for the Corps to move beyond the study phase in the absence of a nonfederal sponsor, you can anticipate we probably still render a report, absent of a recommendation, so that the nation can decide how to move forward, and/or there has to be legislation that changed the nonfederal sponsorship requirements for the study.

MR. ZUERCHER: You had a question?

AUDIENCE: It's been answered. Thank

you.

MR. ZUERCHER: Oh, perfect. Okay. Well, with that, we appreciate all of you taking the time to be here today. It has been a pleasure to be here in New Orleans for this day, to have this meeting.

Thank you all for coming out and making your comments. Again, the team will be here to answer questions on an individual basis should you still have them.

I also want to remind you that through this Friday, through December 8, we will still be accepting comments, and comments submitted via our website, submitted via mail, all count equally as much as comments here today that are at our meeting. We have been sorting through those that are arriving. We know of bunches more that are probably on the way, and we look forward to those, look forward to reading those and going through them and working on answering all those as we -- through the report itself.

So thank you again for your time. It

is 2:34, and we are going to adjourn this public meeting.

(Whereupon, at 2:34 p.m., the public meeting was concluded.)

C E R T I F I C A T E

This is to certify that the foregoing transcript

In the matter of: Great Lakes and Mississippi River Interbasin Study Brandon Road Report

Before: US Army Corps of Engineers

Date: 12-05-17

Place: New Orleans, LA

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

Court Reporter