NEPA Public Scoping Meeting

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Public Scoping Meetings for the Great Lakes

and Mississippi River Interbasin Study

January 11, 2011

2:05 P.M.

Buffalo Conference Center,

2 Fountain Plaza

Buffalo, NY 14202

A P P E A R A N C E S

KENDALL ZABOROWSKI, Moderator

JIM BREDIN, CEQ

DAVID BERCZEK, Deputy Commander USACE Chicago

DAVE WETHINGTON, GLMRIS Project Manager

JOHN ZIMMERMAN, Chief of Planning and Policy, Great Lakes and Ohio River Division

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KATHLEEN COON, Court Reporter

C O N T E N T S

P R O C E E D I N G S

KENDALL ZABOROWSKI: Good afternoon, ladies and gentlemen. If everybody could make your way to a seat, we could try to get started. Welcome to today's Great Lakes and Mississippi River Interbasin Study, as we call it GLMRIS, public scoping meeting. My name is Kendall Zaborowski and I am from the US Army Corps of Engineers Chicago district and I will be your moderator today. I just want to let everybody know if you need to use the restroom if you go back out into the lobby, go to the right and then walk out to the open space the rest rooms are right on your left. When you arrived today, the following materials were available for you at the front desk, the welcome and registration desks. There's a green meeting agenda. It lets you know what is going on today, what our schedule is. There is a study overview which is this blue booklet and that has detailed information on the preliminary study. There is a trifold brochure which again is similar to the blue book. It gives information on the GLMRIS study. There are these white comment forms if you would like to make a written comment. It also has instructions on

what to do if you mail in a comment, if you want to take your time and digest and write something out and send it in later. If you'd like to register to speak today, we have yellow comment forms that you would have filled out. We also have these purple sheets which are frequently asked questions related to GLMRIS, so if you want to take your time to read this it might answer some of your questions today. These peach sheets are frequently asked questions about other ANS or aquatic nuisance species efforts that the Corps of Engineers is undertaking. Then lastly if you brought a document today and you wish to submit it we have these blue document submittal forms, so please take your time to fill these out. Then also there's copies of portions of the presentation available today if you wanted to follow along for right now. If you are pre-registered on the project website to give an oral comment and have not checked in at the register to speak table which is out front, please feel free to do so. Our GLMRIS team has organized a public meeting to accomplish two goals. To present information about the GLMRIS study and also to solicit your comments on what

you feel are the significant issues or what issues you feel are not significant in relation to the GLMRIS study. We are holding twelve public meetings throughout the study area in an effort to provide opportunities for those throughout the study area to learn about the study and provide oral comments. Please note that the public scoping period ends on March 31st of 2011. As indicated on the agenda, the public meeting is organized into two sessions. An identical presentation will be given at the beginning of each session. This is the beginning of the first session. Each presentation will be followed by an oral comment period. The first public comment period will end at 5:00 today and the second session will begin at 5:30 p.m. There will be a thirty minute break between the two sessions. The study staff will be available during the break for any informal questions and answers that you might have. Please note that during this time any questions or comments that you give will not be included in the scoping record. If you wish your comments to be included in the NEPA scoping record, you have to either speak here during the oral comment

period today or fill out an oral comment form and leave that with us today and mail it in as instructions give or submit your comment on the public web site. If you have any questions or concerns, staff could be found in the lobby during the meeting and study members will be available during the break for questions. Please note you're welcome to speak to our panel, but again any comments that are not given in one of the prescribed ways will not be included in the NEPA scoping process. Now I would like to introduce the members of our panel. First we have Jim Bredin, the deputy Asian carp director from the Aquatic White House Council on Environmental Quality. Next is Lieutenant Colonel Dave Berczek who is the deputy commander of the Chicago district. Then we have David Wethington also from the Chicago district who is the GLMRIS Project Manager. Next to him is John Zimmerman, the chief of planning and policy for the Great Lakes and Ohio River Division. He is filling in for Michael Saffran who is the other pathways Project Manager. Then at the end of the table is Hiroshi Eto, the interim programs director of the Great Lakes and Ohio River Division who has oversight

over military programs, planning and policy, project operations, real estate and regulatory functions. Mr. Eto is also formerly the chief of the civil works programs and will be taking any comments back to the division commander. Now I'm going to turn things over to Mr. Bredin and he will begin the presentation portion.

JIM BREDIN: Thank you very much and thank all of you for being here today. I think this is a great turnout and I look forward to a lively discussion. What I'd like to do is just take a couple of minutes before we get into the GLMRIS study and talk about Asian carp. Asian carp is one of the key species that we're going to be focusing on. I'm the deputy director for Asian carp, so it's something I deal with on a regular basis and I would just like to share with you where we're at right now with this issue. When it comes to protecting our Great Lakes from the spread of Asian carp, the Obama Administration has taken an aggressive, proactive and unprecedented approach to defeating these invasive species. On December 16th, 2010, the Obama Administration released a 2011 Asian

carp control strategy framework outlining a series of new projects to build on unprecedented, proactive efforts to protect the Great Lakes from invasive species. This updated framework outlines forty-five actions in an aggressive multi-tiered strategy to keep Asian carp from establishing a self-sustaining population in the Great Lakes. The migration of the Asian carp through the Chicago Area Waterway System, the Wabash River and the Grand Canal River is one of the most serious invasive threats facing the Great Lakes today. They have left a trail of destruction that has harmed the ecosystem, the economy, recreational and commercial boaters. Now this invasive species is threatening to enter the Great Lakes, the world's largest surface fresh water resource, potentially causing ecological and economic harm to the multi billion dollar commercial fishing industry. On February 10th, the Obama Administration announced commiting seventy-eight million dollars to combat the spread of Asian carp and other invasive species into the Great Lakes. The scale of the effort described in the framework was unprecedented for invasive species

control, unifying federal, state and local action. The original framework updated in May, 2010 established the Asian Carp Regional Coordinating Committee consisting of the US Army Corps of Engineers, the US Fish and Wildlife, the US Geological Survey, the US EPA, the US Coast Guard and other relevant agencies to synchronize the better response to Asian carp. In September, 2010, the administration announced an Asian carp director based at the White House Council on Environmental Quality to coordinate and unify the federal, state and local responses to Asian carp. In November, 2010, each Great Lakes governor appointed a state representative to serve on the committee to continue this coordination. This framework also identifies a non-federal technical and policy group that will include multiple stakeholders looking at various Asian carp related issues and this just describes some of the interest groups that will be included in that policy. The 2010 framework included thirty-two federally funded initiatives in 2010, all whicg have been completed or are currently under way. Key accomplishments in 2010 in response to the issue of carp threat include an

enhanced fish barrier system that includes strengthened electrical barriers, physical barriers to stop migration during floods and closing off smaller waterway connections to the Great Lakes, also construction of a third electric fish barrier in Chicago waterways for extra protection from the primary pathway of concern for carp migration into Lake Michigan and also utilization of emergency authority provided through Section 126 of the Energy and Water Development Act of 2010 to block flood waters from the river with a thirteen mile fish barrier and a permanent block in Illinois, Michigan canal. In addition, the State of Indiana installed a fifteen hundred foot fish barrier fence at Eagle Marsh in Fort Wayne to block the advancement of Asian carp from the Wabash River to Lake Erie. Also through the GLMRIS project the US Army Corps of Engineers identified eighteen other potential pathways for potential transfer of aquatic species between the Great Lakes and Mississippi River basin. That's what we're going to be discussing today. Other key 2010 accomplishments included we began implementing the Asian Carp Control Act following the President's

signing of the bill on December 14th, 2010 prohibiting live big head carp from being shipped or being imported into the United States. We coordinated agencies to employ larger field crews to conduct electric shock and netting operations and increased eDNA testing to a hundred and twenty samples per week. We established asiancarp.org as the official Asian carp web site to provide up-to-date information about Asian carp efforts. The 2011 Asian carp control strategy framework adds thirteen new projects for a total of forty-five actions to prevent Asian carp from establishing self-sustaining populations in the Great Lakes. These projects include, first of all, validation of eDNA as an effective tool for monitoring and tracking Asian carp, development of eDNA genetic markers to more accurately and efficiently detect Asian carp concentrations and expansion of the US Fish and Wildlife service lab at Lacrosse, Wisconsin to increase capacity of eDNA testing for all the Great Lakes. The projects also include development of alternative trap and net designs for Asian carp, development of rapid genetic based methods to detect Asian carp to allow for

faster results than eDNA. They also include evaluation of the affect of removing Asian carp food sources and assessment of the impacts of steel hold barges on the electrical barriers. Also included were projects to evaluate a permanent separation between the Wabash river watersheds through continuation of the GLMRIS study and development of permanent blockages for aquatic invasive speicies pathways throughout the Great Lakes states. In addition, the US Army Corps of Engineers will be conducting an evaluation of the electrical barrier effectiveness through fish tagging and utilization of sonar equipment to monitor, sample and capture Asian carp and we will be increasing enforcement of Asian carp inspections at bait shops, fish processors, fish markets and retail food establishments. In addition, we will be undertaking projects to enable American commercial fishermen to develop markets for Asian carp, thereby reducing Asian carp populations in the Illinois River and creating jobs. We will also be increasing public engagement through outreach and enforcement and collaborating with stakeholder groups, commercial fishermen, industry and

recreational boaters to mitigate the damage Asian carp inflict upon waterway users. The framework also identifies the importance of investigating funds in research and development of long-term fish management strategies for Asian carp control controlling eDNA sampling and habitat. In addition to efforts under the framework, the US Coast Guard has an important role in committee operations involving waterway restrictions including establishing and enforcing a combination of safety and/or security zones to manage the movement of vessels through the affected areas of the Chicago area waterway, any activity that requires vessel movement restrictions and also managing resumption of the maritime transportation vector subsequent to any disruption including those caused by safety considerations. As part of our unprecedented and proactive approach to combat Asian carp, the administration has been working with our state partners to ramp up monitoring and population reduction for these invasive species. Environmental DNA testing is one of the tools we are using to assess distribution of Asian carp. Last fall our Asian carp monitoring crews

collected a hundred twenty water samples each week in either the Chicago Area Waterway System or the Des Plaines River. At present, eDNA evidence cannot verify whether live Asian carp are present, whether the DNA may have come from a dead fish or whether water containing Asian carp DNA may have been transported from other sources. Since October, 2010, we have processed one thousand two hundred and sixty-eight samples above the barriers from both species of Asian carp. These samples have returned only seventeen positive results for Asian carp eDNA. Between August, 2009 and June, 2010, the University of Notre Dame researchers under a US Army Corps of researchers cooperative agreement processed an additional two thousand two hundred and thirty-two samples for both species of carp. These samples returned only sixty positive results for Asian carp eDNA. eDNA testing is useful as a potential early indicating of Asian carp presence. However, there are many uncertainties about what a positive eDNA sample indicates. Its usefulness is limited and there are many other tools that we are employing to ensure we are combating the advancement of

Asian carp. In summing this up, the Obama Administration is commited to protecting our Great Lakes and the people who depend on them. We are proactively addressing all possible pathways that are at risk for the advancement of Asian carp. We are working together to implement an unprecedented framework to protect the ecosystem and our environment over the Great Lakes from these invasive species. Again I would like to thank you. If you have any questions at all regarding Asian carp, this is the address for our Asian carp web site and we'd invite you to go to that web site if you have any other issues or there are buttons on there that you could click to get additional information. We'd be more than happy to hear any comments you have and also any additional information you'd like. Thank you very much.

DAVID BERCZEK: Welcome, everyone. Again, good afternoon and thank you for taking the time to be here today to listen and learn a little bit what is involved with this Great Lakes and Mississippi River Interbasin Study. We told you today that this is a public scoping meeting and a lot of you might not

necessarily know what is involved with the study and whether you wish to comment or not, so that's part of the process of what we're going to do today is help you understand and explain what's going on. I'm David Berczek, deputy commander of the Chicago district for the US Army Corps of Engineers. I have a tendency to like to talk, so I'm going to put this here because it's not about me today. It's about listening what you want to say. If you would be so kind to give me a little bit of your time, about twenty-five or thirty minutes or so, to explain what the study is involved, what it is we're looking at. Jim mentioned a little bit or quite a bit, a lot, about Asian carp and this study here thought of -- I have a three year old daughter, so I thought a little bit about going to Disney type cartoons and thought this is Asian carp and beyond. The study authority came from the Water Resources Development Act of 2007 and you could see highlighted there in blue specifically what it is that you're looking at in the course of this study. Options and technologies available to prevent the spread of aquatic nuisance species between the Great Lakes and

Mississippi River basins through the Chicago Sanitary and Ship Canal and other aquatic pathways. There are two courses of study. That's why you heard in the introduction with Mr. Wethington talking about the Chicago Area Waterways Systems and also Mr. Zimmerman here is the Project Manager looking at the other alternative pathways. We are looking at a couple of -- two pronged approach to this. I'll show you a little bit about the structure and how we're considering this. Special considerations of this study we consider the impacts of each alternative that is being looked at and what comes up that would potentially prevent the interbasin transport of aquatic species. In this study, we talk about prevention and in an effort to go ahead and expand a little bit on that in our instructions to the team members we talk a little bit about reduction of risk to the maximum extent possible. We received some criticism for the use of that word and everything and I think part of it is we don't want to limit our study members and people to ignore activities and technologies or alternatives that could have some positive return short of one hundred percent

effectiveness, so not to take anything off the table, but consider looking at options and alternatives along the way. The GLMRIS study area is rather large in its scope. When you start talking about this Mississippi River watershed, you could see that all of those states highlighted in all three of those colors, the Great Lakes states in the brown up above and these states that constitute the upper Mississippi River watershed and then the rest of the states heading out into the Rocky Mountain and Continental divide. The primary focus on the study are these seventeen states and they would constitute this region as part of the watershed here is really where the focus is along this roughly fifteen hundred miles of water shed divide. Water to the north of that area is what we consider the Great Lakes basin. Below that line is what we consider the upper Mississippi River watershed basin. What's included in the study? The study goes back to -- the original language talks beyond Asian carp. It goes beyond any type of an individual species and again I'll go back. It talks about aquatic nuisance species between the Great Lakes and Mississippi River basins.

The National Aquatic and Atmosphere Association website categorizes and tracks non-native or invasive species in the Great Lakes area. It has a list of I think a hundred and eighty-nine different organisms in those categories and we have study members beginning to work New York I think forty or so that would fall into that nuisance range that have the potential to transfer pretty readily or rapidly between those water basins. We're not looking at the potential that somebody could have a fish in their possession and throw it overboard or something that might make its way into a bait bucket. It does not look at the terrestrial and airborne type of transfer of nuisance species or organisms. . It does not include looking further eastward into the Atlantic slope and the Saint Lawrence Seaway and of course being a study being authorized by our US Congress it does not include Canada and what is happening there. Our Canadian partners have studies that they're doing as well in their areas that would go ahead and feed and support the actions that we're doing here. We will be doing original economic modeling and you could see the other things there. This will result

in an Environmental Impact Statement. I mentioned once when I talked about the authority where it talked about the two areas that kind of lead themselves into some sort of separate strategies to go ahead and achieve and we're looking at geographically the oriented focuses. The primary area being looked at is the Chicago Area Waterway System. Why? Well, that's right now through the evaluation of the types of waterways and connections that are there that's the known continual connection between the Great Lakes and Mississippi River. It's a navigation channel. It's always open to water flowing primarily downward in cases of flood releases and flooding events. Water does backflow into that from Lake Michigan, but primarily it's from Lake Michigan into the Mississippi River, but right now it does open that pathway for organisms to come upstream. Then looking at the other pathways across the other Chicago waterways. We have a couple slides that will show a little bit about some of the focus areas of those. Being such a broad area and looking at this, we had to organize for success, first of all, and we had to look with the Corps of Engineers this being one of

our studies how are we going to do this. General Peabody is the commander for the Great Lakes and Ohio River Division. How do we support each other? How do we work together? We continue to focus on what it is we are being asked to deliver and make sure that that works. By the way, Mr. Bredin mentioned the Asian Carp Coordinating Committee. How do we work with the other federal, state, local, non-governmental, tribal, other organizations that have an interest in this or that have a stake in this? How do we coordinate all those inputs and activities? You could see some of the things we've done there as well, setting up an executive steering committee and focus groups as we go along with the study to explain what's going on and provide kind of progress updates and keep everyone informed of what it is that's going on. That leads into what I talked about, the cycle out interim products and reports. We will get those things out to you. There are some that show a time line of when some of those products could be expected. Part of the other -- one of the challenges with the study is adapting to new and evolving information to the extent possible.

One of the reasons especially for doing the scoping sessions is to hear from you, hear what your concerns are, hear what we ought to be looking at, maybe what we should consider so much, but also is there something as we go through this presentation you start to gain familiarity with what it is we're looking at, maybe something we didn't know about. General Peabody mentioned the first time talking about this we're out there uncovering rocks. Part of it right now is we're discovering which rocks to uncover and there may be something else to look at, so that's going to be a challenge as well, adapting to new information. How do we go ahead and work with them and take advantage of other bodies of knowledge so to speak to bring that into and help aid this effort? This slide here shows a little bit again in a more concise format the study purpose, identify the aquatic pathways. You see some of the pictures there across the board, some of the things that we're talking about. Of course the one that makes the news right now, I've heard someone mention it the other day, the flying fish, the silver carp, but it goes as broad as looking at the dotted

duckweed or organisms like that. What is it that we need to do to go ahead and preserve the integrity of both of these water basins and the integrity of the Great Lakes? Part of the study is we have to analyze those possible controls to look at and also look at mitigation efforts or if there should be need for further study. This slide show talks about when we talk about the Chicago Area Waterway System. For this we'll turn over to Dave Wethington to talk a little bit for this slide.

DAVE WETHINGTON: Thank you, sir. Good afternoon, everyone. My name is David Wethington. I'm the Project Manager for the Army Corps of Engineers with regard to the Chicago Area Waterway System and the overall GLMRIS project. This slide you see in front of you basically highlights one of the highest risk connections between the Great Lakes and Mississippi River basins. The reason for that being is a continuous connection and there's actually five points which are outlined on that slide to which the Chicago Area Waterway System, the ship and sanitary canal connects to Lake Michigan. Those points one through

five are labeled on that slide. Three of them are in Illinois and two of them are in the State of Indiana. Although it looks like there are a couple different rivers down there, all those rivers funnel into one which is the ship and sanitary canal and number seven is where we currently, we being the Army Corps of Engineers, currently operate, maintain the electric dispersement area which has been shown to be effective in stopping the movement, the upstream movements toward Lake Michigan of Asian carp. What you notice on the left is basically the outline for the study. This is how the Corps of Engineers is approaching this study. It is -- it does have a certain methodology to it. Although we may receive some criticism that this is maybe too much process orientated, I really would like to stress the potential impacts to waterway users in the Chicago area are much greater than just navigation. Navigation is a serious -- is an important aspect of the study, but there are also many other uses of the Chicago Area Waterway System. They include recreation, flood risk management is a huge one, water supply, water discharge. The entire Chicago land area

discharges their waste water currently to the Chicago ship and sanitary canal and it flows downstream. It services an area of over somewhere in the neighborhood of seven million people. Again, Lieutenant Colonel Berczek mentioned we will be collaborating on this with all of our federal partners, state partners, tribal nations as well as non-government organizations. Right now we are going to those first two steps, inventorying problems and opportunities. The purpose of this meeting today is to listen to you, see what maybe you think may be significant to this project as well as what might not be significant. What is the value of the Great Lakes fishery? What is the value of the commercial navigation? What is the value to flood risk management of the Chicago ship and sanitary canal to the Chicago area and beyond? Thank you, sir. For this I'll turn it over to John Zimmerman.

JOHN ZIMMERMAN: I'm going to ask that unless somebody has objections that I stand down here because I haven't seen this presentation in a while and I kind of want to talk about it so I could tie to it. Can everybody hear me? Okay. I'll be as informal as I

can. As the colonel mentioned, the other pathways is a GLMRIS study and it is designed for us to look at all the other potential connections that may occur between the Great Lakes system and the Mississippi River system, so you could could see that it encompasses almost a fifteen hundred mile area. What we have initially done is a preliminary risk characterization. Potentially that is an inventory of all of the possible connections that we and every other agency and entity involved in all these states knows about. We've come up with thirty-six total. Out of those thirty-six we further took this inventory of all these sites and characterized them based on the potential for a true hydrologic connection. In other words, are there any locations in which there's water running continuously between the two basins and the answer to that is pretty much no. However, during certain flooding events we do know that there is a capability to create a connection based on a significant level of flood and it varies in every single one of those areas. We characterized each one of those sites based on the ability for it to convey water between the two basins. Then we also look

from a biological standpoint at the universe of aquatic invasive species, not just including the Asian Carp, but all of those other floaters and the like that we talked about beforehand, plants and other non-airborne aquatic species in both the Great Lakes and in the Mississippi River system and we looked at their characterizations and determined whether or not there was a probability giving these flooding events that there would be a transfer. Based on that ranking and assessment, we come up with eighteen sites. I don't think on this particular slide that they're marked. The highest risk was one in which a relatively small level of flooding is in Fort Wayne, Indiana, the Wabash connection, and of course the folks in the Buffalo area should be familiar with it. At any rate, it occurs. In some instances, we coordinated with the State of Indiana and they immediately introduced an interim measure which should be good for a period of time and we are proposing to move forward as a result of the GLMRIS effort with a more permanent fix. Could I have the next slide, please? Thank you. That's yours. Thank you.

DAVID BERCZEK: Thanks, John. This shows a little bit of the accomplishments to date as we've been talking and as we've been looking and waiting for some activity to occur with this study. There has been a lot to get to the point where we could come to you and say here is our course of study. There has been some execution as the management plan was being developed and the strategy was being worked. John, you heard mention about some of the characterization of the pathways, the installation of some interim measures there in the Eagle Marsh area and also identified some of the species out there right now. This may be further refined, but you see a hundred and fifty-four species. We are moving along. For a study like this and the magnitude of it, it is rather an aggressive schedule, so how fast is fast? You see the little asterisk there talking about this schedule, sometime in the winter of 2015 or the summer with really a report released for public review in the fall, 2014. That's the best case scenario. We have begun doing a good study, analysis of what's out there and identifying and as much information that's out there and little bit of

surprises that come up along the way that require additional course of study and analysis. We talked about some of the interim products that we would be turning out. Somewhere along those lies Eagle Marsh. This is one of those slides that you look and say okay, big deal, how is this gonna happen, but I think we can make something like this happen and this assumes to continue to work on this study show up as needed and we've done the proper work in moving along. What we talk about are some of the interim products and the updates. It is a long-term study and without hearing anything you could sit back and think nothing is being done, where are we with this and what's happening. We're going to make the effort to come out more often with periodic updates. We are really going to take advantage where it is today. I'll show you some web sites and you'll see a slide at the end. How could you get involved, how could you input to you and us to you that are available when you want them when you have to have access to them and be available. You don't have to be listening to something at a certain time. That's the beauty of some of the technologies we have

nowadays. If I send you an e-mail, you read it when you get to it kind of thing. Here are some of the products that it talks about. The inventory of the means of travel, how they would transfer between the two basins, the control technologies and the surveys. Dave mentioned about the value of some of those surveys and the uses of the waterways and Great Lakes as well and again a fishery survey. How could we help? Today is a good start coming with your words, your thoughts, things that are important to you, the things that are significant to you, getting that inserted into the record. Part of the process we do have some bureaucracy. We do have some process oriented things. Part of it is entering your comments into the public record, either you coming up and speaking it or submitting it in writing and that's why we have some computers in the back. It will become part of the public record of this study. There are some of the example inputs I mentioned about having an aggressive schedule and things that could show up. There are a number of other agencies that we look for their expertise and their areas of strength to provide some

of this information to develop and assist the development of that data and information so we could start looking really hard at how to control and what technologies are out there. Additionally, Kendall I think mentioned about the schedule with more public meetings coming up and you could see here the locations and the dates when the rest of the public meetings will occur again with the public period being opened until the 31st of March of 2011. Other ways to stay in touch and also provide you could see the web sites mentioned there. That GLMRIS web site there, this is the web site to go ahead and enter your comments and submit your comments or on Facebook. If you want to sign up and follow it if you happen to live and die by your cell phone, you could always get a Tweet from Dave Wethington, projects manager, so it's -- we're trying to go ahead kind of speaking a little lightly about those, but they're all ways to communicate and get that interaction to a significant and important study that we have going on right now to keep up with you and you keep up with us. All right. That's it. Thank you for your time.

KENDALL ZABOROWSKI: Before beginning the oral comment period, I would like to again thank Lieutenant Colonel Steven Bales and Lieutenant Colonel Berczek. The study website is a good source of information. Interested persons could subscribe to the public website. The GLMRIS web address could be found in the study brochure, written comment form and the GLMRIS cards and also the social media that was mentioned on Facebook and Twitter could be found on the business card as well. Now moving into the oral comment period of the meeting. Those who indicated on the registration form that they wanted to make a brief three minute statement or ask a question will have an opportunity to do so. If a person wants to ask a question, we request that you manage your three minutes to allow for comment, question and Corps of Engineers response. The Corps of Engineers response will answer questions that are answerable. Again, in order for everyone to have the opportunity to speak, we ask that everyone abide to the three minute timeline. After everyone has had an opportunity to address the panel and if time permits, those who have additional comments

or questions will be given the opportunity to speak again. If time does not allow, please note that you could enter remaining comments or written comment form again. Again, in the back lap-tops are provided. All forms of comments received during the scoping period will be weighted equally. I have a visual set of slides that we will help manage our time while we begin our speaking. After two minutes the box will change to a yellow color and every fifteen seconds update the remaining time of use that you have. I will also announce to you there are thirty seconds to make a complete statement. At the end of the three minutes, the box will turn to a red color and I will ask that you conclude your statement. I'd like to mention that we have a stenographer with us tonight. She will be reporting your comments and questions. When you come to the microphone to make an oral comment or ask a question, please give your name first, any organization you might represent and your zip code, speak into the microphone and speak slowly. Thank you for doing that. If you do not give your name and zip code, we won't be able to formally record your comment in any of the

scoping period. We'll now hear from those who pre-registered to speak on the project website and those who indicated on the registration form that they want to make any oral comments. For those that pre-registered on the project website, I ask that you come to the middle microphone color coded as blue any time you're ready to speak. For those who have not registered I ask that you go to the microphone color coded yellow. You received a yellow index card. I will be calling that number and your last name to the microphone. For those that did not pre-register on the project web site, please come to the microphone when I call your name. I apologize in advance if I mispronounce any of your names. That's why we ask you to give them up front. At this time let me read the first three person's names for the yellow line and I'll get you lined up. Again, anybody with a blue comment card please come up whenever you're ready and we'll get you started. If you come to the blue line, please just show me your number so I could announce your name. Mr. Thomas Marks?

THOMAS MARKS: Correct.

KENDALL ZABOROWSKI: Please state your name and your zip code and the organization you might represent.

THOMAS MARKS: My name is Thomas Marks. I'm with the Great Lakes Sports Fishing Council. I'm the New York State director. My zip is 14047. Thank you very much for allowing me this brief time to speak. The Army Corps of Engineers has been the face of the battle and the Asian carps, trying to prevent them from reaching the Great Lakes, so I would like to start by saying not many people know that in 2001 or 2002 it was decided to have a three part plan to stop Asian carp to reach the Great Lakes as well as the Mississippi watershed. The original plan if implemented could work. The plan called for an electrical barrier, an ecologic barrier and finally hydrologic barrier separation. That would stop the floaters that we heard mentioned. Anybody involved knew the electrical barrier is the weakest part of this plan. It would only slow the advancement of Asian carp to the Great Lakes and only slow the species down to the Mississippi. This is a grand experiment. What is an ecological barrier which

is part of the plan? The ecologic barrier is a dead zone, impossible to fish. How could you make a dead zone? You can turn off the aeration and seepage stations along the canal. These stations oxygenate the water for aquatic lake and fish. This is just a temporary measure until the hydrological separation could be achieved. That was in the original plan. We knew hydrological separation would be difficult to accomplish, political and shipping interests and such. My plan turning off the pumps is basically free. The ecological barrier could be almost free. Does anybody in the room disagree with implementing a free solution? An ecological barrier is what we had prior to 1972.

KENDALL ZABOROWSKI: Thirty seconds.

THOMAS MARKS: However, we won't be dumping chemical in there. I want to really sum up real quick. The Army Corps of Engineers has squandered a lot of time working on the electric barrier. Major Peabody was quoted recently in the journal that he is not confident that we could get a hundred percent solution to this problem. He believes that the Asian carp are going to get into Lake Michigan. If you don't believe

in the mission, resign, step down. Mr. Obama, if he doesn't design, please fire him. This twenty-five million dollar study right now is a cost.

KENDALL ZABOROWSKI: Sir, your three minutes are ended.

THOMAS MARKS: I'll be back, but you failed miserably in this process I'm sorry to say.

KENDALL ZABOROWSKI: Thank you, Mr. Marks. If any other blue people would like to comment. Art Klein.

ART KLEIN: Art Klein. I'm a member of the Sierra Club. I'm not here today to represent the Sierra Club, but I'm on a couple of Great Lakes committees for the Sierra Club. I have just some general questions because there's some concepts in your presentation that call for the transfer of data and transfers. I'm not sure what that means, if that means that you're actually going to deliver products to the people who could do something about the problems and implement it. We've got a lot of studies on the Great Lakes and I'm not certain if we're going to be able to get to some the people are concerned about. Today Mr.

Marks is concerned about the Asian Carp. Some of these study deliver some partial solutions or you reach a stage that you have an opportunity understanding of the problem like Fort Wayne there. We couldn't enjoy the benefit at that time because it seems to me a lot of this stuff gets overwhelmed. We have the Asian carp, by example. By the time its identified and some stoppage is implemented, it's overwhelmed all the resources, so we can't do anything about it. I'm not sure if these other studies that I do not have with, are they just going to be part of the footprints or are you actively implementing those studies into your final studies on an ongoing basis? It sounds to me like these could be like footnotes or indexes and not really part of the plan. Thank you.

DAVE WETHINGTON: If I may respond very briefly to your question regarding to other data sources, we do intend to use other information from department agencies or other individual agencies who are performing some of these studies. They can be wrapped into the overall feasibility study that the Corps of Engineers is implementing. If nothing else,

the information that is in there will be incorporated into the overall study, so we're not trying to recreate the wheel and reach out to many of our partners as possible to incorporate into the study.

JOHN ZIMMERMAN: Once again, I'm John Zimmerman. I'll address the second part of your question the best I can for right now and I think that was essentially a comment about what would be the proposal, what is being done right now with regard to those other potential vectors for transfer between the basins and the line. I can tell you that through this framework that we put together that involve all these federal agencies, state governments, local entities there has been a fair amount of work done already. There is certainly more to be done with regard to addressing those other potential vectors like the transfer through water, Great Lakes shipping, the potential transfer, for example, from one body of water to another and live wells. There are some issues with regard to the State of Illinois has stepped up and done a number of things already with regard to the selling of the small Asian or some other small species which

are considered invasive. There is a number of these kind of things that are being addressed right now and certainly the federal government does not have authority over all of those issues that our state issues, but there's a great deal of coordination going on. There is things going on in terms of making those other vectors less of a threat for the transfer as we speak, but there is a lot of work being done.

KENDALL ZABOROWSKI: Thank you for your questions, Mr. Klein.

AN UNIDENTIFIED PERSON: The other part of his question are we going to spiral out projects? If we come to a solution, we're willing to kick that product out and let somebody take that action.

JOHN ZIMMERMAN: And included in not only those projects, there are technologies that are being investigated also which may evolve into fixes on something, so the answer is we don't plan on sitting on anything that's developing that we think will help come back and their approval and can be financed, yes, he will move those as quickly as possible.

KENDALL ZABOROWSKI: Do we have any other

blues that would like to speak at this time? Mrs. Mary Muter.

MARY MUTER: I'm here representing Sierra Club Ontario Great Lakes section. My comments will take about five minutes. I was told at the registration people wish to speak. I was wondering if you could ask for a show of hands. I can't see speaking for three minutes and cutting it off and coming it back again.

KENDALL ZABOROWSKI: We'll allow it.

MARY MUTER: Thank you. My environmental colleagues and I are pleased that you are having these hearings. We are here to bring you a Canadian perspective. You have obligations to prevent the carp from crossing our boundary lines. Canadians have very deep concerns about these invasive carp getting into the Canadian waters of the Great Lakes and if we could speak for our native fishery we are sure they are terrified of these huge up to one hundred pound bacon head carp and their large cousins. We have nothing even close to that size currently in the Great Lakes and the carps' introduction as you are well-aware could

virtually occupy the native fishery in a few decades. The big head and silver carp have crossed the electrical barriers and are very close to Lake Michigan at many points. Canada's Department of Fisheries and Oceans completed in 2004 a comprehensive risk assessment of these carp to Canadian waters. The extent of the areas they will invade is quite frankly terrifying. For silver carp into every Ontario river and lake up to James Bay leading into Hudson Bay. There is no need for any further risk assessment work. The 2004 study was definitive. To spend money and time on a new one will be considered wasteful and a stalling technique. More recent work has determined that two years after these carp get into Lake Michigan at Chicago that they will invade all of Lake Huron and its large east arm, Georgian Bay, the sixth great lake. Just to give you some background on Georgian Bay, it has been identified in the Canadian DFO 20 0 4 risk assessment as having suitable habitat for the propogation of Asian carp. It almost makes me sick to say this, but that suitable habitat is in fact the most high quality, most diverse and most extensive well and

seventeen hundred of them determined by Dr. Pat O'Frazier, found anywhere in the Great Lakes. Given that we now have only thirty percent of the original wetland habitat left in the Great Lakes, it will indeed be a tragedy of human failure if these wetlands are ripped apart by the big head and silver carp and permanently turned into mud lets. Wetlands are needed by eighty percent of Great Lakes native fish that some point in their life cycle for spawning and nursery habitat. The destruction of these wetlands will devastate the fishery. American citizens seeking a wonderful experience in nature, marvelous fishing and great natural beauty led the way in the early twentieth century to the development of the Georgian Bay as cottage country. As a result, currently some forty percent of the seasonal property owners in this one hundred and twenty mile long arm of Lake Huron are citizens of the United States of America. I speak on their behalf as well as behalf of my fellow Canadians when I urge you to take immediate forceful action to prevent their entry into Lake Michigan. Let us look at the mandate Congress gave you. Deplorably you have

decided to spend precious time and resources to study ways to reduce the risk, not just prevent it. This change in your mandate was not authorized by Congress. We urgently request that you look only at options that will prevent invasive species movement and will thereof stop the Asian carp invasion. Let us look also at cost benefit analysis. The cost of closing the waterways we know includes upgrading Chicago sewage and stormwater treatment and management. That double action will in fact provide further long-term benefits to the Great Lakes as it will finally end the costly pollution of local waterways, the ongoing diversion and permanent loss of nine thousand cubic feet per second of Great Lakes water. Please bear in mind that Lakes Michigan and Huron are currently much farther below their long-term average water level than any other Great Lakes and have been lower for virtually the past twelve years. This has negative implications for shipping, recreational boating, some municipal and many private water intakes, shoreline species and invasion of sub species and tourism in general. These two lakes will benefit from the termination of the Chicago diversion

with its ongoing permanent loss of water. The sealing of all these connections between Lake Michigan and Mississippi River system and the construction of a lift lock or marine railway for barges and boats to move should begin immediately. We do not have a second to waste on further study let alone on wider studies. The time for the Corps study is far too long. The Chicago portion of the study is not predicted to be completed before mid 2015 or nearly five years from now. The Corps must acknowledge the urgency of finding a permanent solution, condense the timeline and produce final results for the Chicago portion of the study within twelve months rather than by mid 2015. The Asian carp are knocking at the back door of the Great Lakes. It is extremely urgent that the Army Corps study and provide a solution for the Chicago Waterway System first regardless of the need to enact on other aquatic pathways. Thank you. I don't know if you want my postal code. I don't have a zip code.

KENDALL ZABOROWSKI: I think we'll be okay. Thank you very much. I would now like to call those with a yellow number to come and line up at the yellow

microphone starting with number 2, Mr. Roy Schatz. Again, I apologize if I mispronounce your name. Following him, number three, Miss Mary Jane Bolo, then number four, Mr. Mike Bolo.

ROY SCHATZ: First of all, I'm very pleased that Canadians have been allowed to speak at this meeting in Buffalo, but I would request that just as the international upper Great Lakes study held meetings in Canada that you give serious consideration to holding a few meetings of this nature in some of the Canadian cities where the IUGLS held such meetings because there are a lot of Canadians who have been working on the Asian carp situation and I'm sure some would like to speak at a public meeting. We made the two and a half hour trip from Toronto, but I don't think a lot of people will go to the other places. I would like to endorse what Mrs. Muter said. I would also draw to your attention that an organization called Ecojustice Canada sent a registered letter to the Secretary of State, Hillary Rodham Clinton, on June the 24th. Now, that letter was regarding a request on behalf of a whole bunch of organizations and I'll read

the list because quite a few of them are American. Great Lakes United, Environmental Defense Canada, Milwaukee River Keeper, Silver Valley Water Keeper, Lake Ontario River Keeper, Georgian Bay River Keeper, Ottawa River Keeper, Frazier River Keeper and Grand River Keeper Labrador. This letter -- I certainly won't read it all to you because it's two pages long, but this is a request on behalf of the above mentioned groups to the US Secretary of State to formally request the administer of the EPA to prevent the migration of carp into the Great Lakes basin and the no the administrator by giving formal notification under S310 of the clean Water Act to the relevant state water pollution control agencies and to appropriate interstate agencies to take action. The parties further seek the convenienting of a public hearing under S310 of the Clean Water Act to facilitate the consideration of Canadian interests and concerns regarding the transboundary nature of this water pollution issue and it goes on and gives many, many details. I would add that obviously copies of this letter were sent to Prime Minister Steven Harper and we

did receive answers from him and from the minister of -- - Canadian minister of fisheries and oceans and foreign affairs and international trade Canada, all of whom said that they endorse what is said in here and that they are working closely with their equivalent American agencies and in a most operative manner. The letter to Mrs. Clinton has not yet been answered.

KENDALL ZABOROWSKI: Thirty seconds.

ROY SCHATZ: I'm wondering if an answer could be made, please. Thank you.

MARY JAME BOLO: Mary Jane Bolo, 14057. I come today to speak about an issue that is very, very emotional. My family has had a cottage on Lake Huron for more than a hundred years. I also represent the Georgian Bay Association and soon to be Sierra Club. I come to implore you to be the people to avert yet another ecological disaster in the making. When we look outside and we see an abundance of English sparrows and European starlings, we wonder why that happened and how they displaced our native birds. Well, it was because they were brought here by someone and they were allowed to stay and accomplish their purpose

of basically maximizing space and I come to say also that you are the ones that in a very, very quick manner, a manner that can be -- that could accomplish this, that could avert this disaster. You're the ones that can make this happen so that we don't have to look back on the fact that we have a problem, a problem with Asian carp in the Great Lakes. That's a lot of water and pleasure and a lot of fresh water and why would we risk this opportunity to be in the position to make this situation not happen. I just thank you for being the Army Corps of Engineers and for having the ability to do it.

KENDALL ZABOROWSKI: Thank you for your statements. Next, number four, Mr. Michael Bolo, please. Then after him I'll ask for number 5, Mr. David Adams, and number six.

MIKE BOLO: My name is Mike Bolo, zip code 14057. I believe that history is good for two things, pleasant mysteries and what you learn from it. The Army Corps of Engineers has been involved with the St. Clair and dredging it and the issue around lake levels for decades and there have been pledges to do something

about it and commitments to do something about it and it's still being studied and debated how much that excess flow of water down the St. Clair is affecting the continually lower than appropriate water levels at Lake Michigan, Lake Huron. It continues to be an issue. There are per the Army Corps of Engineers solutions to that, technically sound solutions, but they're not being acted on. Here's another situation where it's been going on for quite a while and we're still studying it and the carp aren't going to wait. Let's put up the physical, ecological barriers that will preclude these monster fish from ruining such a vast and precious and irreplacable resource that our six states, bordering states and Canada, enjoy. Let's not study it to death. Let's fix it, please.

KENDALL ZABOROWSKI: Next please, yellow number five, Mr. David Adams.

DAVID ADAMS: My name is David Adams. My zip code is 12233. Good afternoon. My name is David Adams. I am an ecologist with the New York State Department of Environmental Conservation office of invasive studies coordination. Thank you for providing

the opportunity for public input. This matter is of utmost importance to the State of New York. As Asian carp threaten the continued viability of our Great Lakes, environmental, recreation and economic resources. We urge you and other participating agencies to see that all measures necessary to prevent the entry of Asian carp into the Great Lakes especially through the Chicago waterway system are taken. We urge you and the participating agencies to, one, employ short-term physical barriers and eradication measures. Two, establish an effective eDNA testing program. Three, coordinate other monitoring and managing activities with eDNA results. Four, expedite the planning and implementation of permanent ecological separation of the Great Lakes from the Mississippi water shed and do this in a time line that is quicker than that presented earlier today in the draft recommendation plan. Lastly, conduct these activities in a transparent and inclusive manner. As you know, Asian carp pose dire threat to the Great Lakes including its bays, connecting channels and tributaries. Establishment of an Asian carp population

in the Great Lakes could result in catastrophic, irrelevant reversible harm to this ecosystem that is one fifth of the world's fresh surface water and devastate the commercial and recreational fisheries that depend upon the Great Lakes. Thank you for submitting these comments. More detailed written comments will be submitted at a later date.

KENDALL ZABOROWSKI: Thank you, sir. Next would be yellow six, Mr. Barry Boyer.

BARRY BOYER: Barry Boyer, River Keeper, zip is 14213 and I'm appearing on behalf of Buffalo River Keeper with the mission of protecting and restoring local waterways. In that capacity, we frequently partner with the Corps of Engineers and thank you for this opportunity to participate in the scoping. We want to make three quick points about the study. One is that the value of the ecosystem services is at least partly reflected in the magnitude of the investments of time that have been made over the past decades while we have been trying to restore these waterways. Currently River Keeper recently received nearly two million dollars worth of grants under the Great Lakes

Restoration Initiative. We're working with the Corps and EPA on environmental dredging of the Buffalo River and across the Great Lakes basin there's a huge investment going forward, some of which we heard about. Please try to evaluate alternatives with respect to protecting that investment. Second, the preferred alternative in evaluating alternatives ought to be hydraulic separation because that appears to be most -- both most effective and most cost effective. It was interesting to hear that prevention has been defined as to the maximum extent feasible. I think that's a point on which there needs to be further dialogue because feasible takes a variety of meanings in American law including particularly the balancing of economics against ecosystem and health hazards, so we would like to have some more discussion of that and urge you also to keep in mind that alternatives other than separation are vulnerable to failure as in the 2004 blackout and they're also required ongoing operation and maintenance expenses which depends on the willingness of future legislators to appropriate the money and the ability of humans to carry them out. Finally, we would urge you

to keep in accord with the principal of responding to subsequent information, keep open the possibility and periodically reconsider whether emergency closure of the Chicago waterway system may be an appropriate response to prevent this from happening. The Corps is a careful organization when it conducts a study, but we don't want this study to become merely an autopsy on the dying ego system. Thank you.

KENDALL ZABOROWSKI: Thirty seconds.

BARRY BOYER: Thank you.

KENDALL ZABOROWSKI: Again I would like to thank everybody. Let me remind you if you have with you any prepared statements or documents that you would like to turn in please find the light blue document submittal form, fill that out and leave it at the front desk. At this time are there any people that I have not called to make a speech that have signed up at the table? If not, then it is currently 3:28 and we are going to open the microphones to anybody that would like to come up and make a comment or have any questions for our panel. Please come up to the blue microphone, state your name and your zip code and begin

speaking. At this time is there anybody that would like to come up to the microphone and make a statement?

RAYMOND VAUGHAN: Raymond Vaughan, home zip code is 14057. I work for the New York Attorney General's Office. I've got a question about the statement that eDNA testing does not necessarily represent the presence of Asian carp. Could we get a statement say from Fish and Wildlife on this? My understanding is that even though carp that are recently dead within forty-eight hours as I understand might be a source of the markers currently being used, but it has to be quite recent in the carp that have been dead for a long time would not produce a signal. May we have clarification of that?

JIM BREDIN: Let me clarify because that's one of the things that we're doing as part of this next series of projects that are going to be funded is to trying to take that. It does not mean there are live carp. There are a lot of unanswered questions regarding that not only whether or not it's live or dead, but also at what period of time was that carp in the area. I myself am not an expert on this, but I was

looking it up the other day and the carp can basically travel anywheres from fourteen kilometers per day, so it's hard to tell what area they have been in even though we have have a positive. It's hard to tell how many carp there may be in the area and a lot of other questions that arise that are going to be answered through the projects that we have funded that are ongoing right now.

RAYMOND VAUGHAN: I think that work will be useful. At the same time what we're hearing today is that a possible does not necessarily indicate the presence of live carp, but I think within a certain time range and time period that it does.

JIM BREDIN: And I think we basically agree with what you're saying. It's just that what we need to do is be able to use signs to show that and that's what we're following up with the report that just came out. We'll be taking that information and trying to show specifically what it means.

RAYMOND VAUGHAN: Good. Just for clarification, I just want to be sure we agreed on that. Thank you.

JIM BREDIN: Okay.

KENDALL ZABOROWSKI: Thank you, sir. Would anybody else like to come to the microphone and ask a question or make a statement?

KAREN PETERSON: Karen Peterson, 14226, I think. I can't remember. I can't remember. I'm unclear at the moment. Is the canal the one place where the lake is kind of draining into the Mississippi River causing flooding down -- all going down to the gulf? This is a question, I guess. I've lived on the lake for thirty years as a kid and the levels keep going down. I am thinking it's a big drain.

DAVE WETHINGTON: The connection has been in place since 1990 and, yes, the water that enters the Chicago River does drain toward the Mississippi River basin. The input of water into the ship and can satisfactory canal in the Chicago River approximately seventy percent of that water give or take or so is waste water from the City of Chicago. It's treated waste water from the City of Chicago.

KAREN PETERSON: Thank you. I agree to close it off.

KENDALL ZABOROWSKI: Thank you. Tom Marks, I believe.

THOMAS MARKS: I have two questions. One regarding the eDNA test. When you get the positive test above the electric barrier up near the Chicago harbor and those places up there, if you get a positive test you don't know if they're really there, they're moving back and forth, do you then feel that maybe they're going south of the barrier again or either they're staying up north of the barrier?

JIM BREDIN: What we're talking about are two different things. One is being able to prove that it's a live carp and that's what we're undertaking -- that's what we'll be doing in this next year because we want to show very specifically -- we want to know exactly what that means, how long -- if there is a live Asian carp when was it there. We don't think they're really going back forth the barriers because that doesn't make a lot of sense from the fish's standpoint. We have caught one. It was killed. All of the fishing we've been doing in this area, all of the trapping we have not been able to catch another live Asian carp. We're

not saying that there aren't Asian carp there. It's the methods that we have been using we haven't been able to catch live Asian carp.

THOMAS MARKS: I understand that. You've also have very little luck at catching Asian carp, so those techniques aren't very good where we know the eDNA has showed some results. The other question has to do with a Senate hearing that I listened to last -- I'm thinking it was January, maybe early February. It happened to be on indicating carp. At that time, Dr. Leon Carl talked more about controlling or managing the Asian carp population. That's where the researchers had -- it seemed in his opinion, in his testimony at that time that we're not really gonna stop the Asian carp from getting into the Great Lakes. We might as well accept that right now. I'm kind of paraphrasing his testimony. But we're gonna be in a phase of control. Is that really where the direction of this Asian carp problem is going? It's really not stopping them from reaching the Great Lakes, but no honesty controlling them so they're populations do not cause environmental damage once they get there?

JIM BREDIN: We do not want to in any way, shape or form see a sustainable population of Asian carp. I don't know what Leon Carl said at the meeting. I've had numerous discussions with him. I believe that the techniques that they're using are to try to keep the pressure off of the electrical barriers. In other words, try to force the fish farther south am right now there's a lot of pressure up from the fish's standpoint of trying to move into other areas. They -- we will we will be trying to move through the electrical barrier. That's why we have numerous projects below the electrical barrier to try to relieve that pressure. That's why we're in full support of commercial fisheries in the area to try to get those fish out of there and to keep that population as small as possible. What Leon is talking about I believe is using the techniques that they're looking at through USGS to keep those fish away from the electrical barrier, not necessarily from a standpoint of dealing with the fish once they go past the electrical barrier. There are -- you know. We are preparing for a -- if we do get a fish above it we need to have tools in our toolbox to

deal with those issues, but most of our efforts right now are to keep those fish below the electrical barriers. We think the electrical barriers -- we believe the electrical barriers are doing a good job. That's what we're going to be looking at over the last couple years is trying to make sure that is the case.

THOMAS MARKS: Just one comment and I'll sit back down. Dr. Carl did say those fish didn't swim past the electric barrier or underground channels. That's in his testimony. You could read that if you want. I really think that if you go back to the original plan to stop the Asian carp and look at what was proposed back around 2001, 2002 that ecological barrier even though it won't stop the floaters, the plants and the pathogens creating a dead zone in the canal and it's very easy to do. You could do it right there at the electric barrier and right where the canal site comes into the ship canal. We're not asking to put harmful chemicals, not asking to put industrial pollutants to put in. All we're asking to degrade the water to a point where there's no oxygen in it. It reinforces your electrical barrier which we know is not

a hundred percent effective. The studies by found that to be true so, you know, create that dead zone which ultimately is the answer.

KENDALL ZABOROWSKI: Thank you again, sir. At this time would anybody else like to step to the microphone and make a comment or ask any questions? Does anyone on the panel have any additional comments they would like to make? Again, one last call for anyone to come to the microphone to questions or comments. It is now 3:38 p.m. Barring the last couple seconds anybody wants to come up, we are going to close the oral comment period. I would like to thank everybody for attending this session. We will again give a presentation at 5:30 and then following the presentation we will open up a second oral comment period. We ask that you help us recycle our materials if you have anything you wish to not take with you tonight, please leave them at the front desk. Just so everybody knows, the staff will be available for informal questions and comments starting now. Thank you again, everybody, for coming.

KENDALL ZABOROWSKI: Ladies and gentlemen, it

is now 5:35. Please find your way to your seats and we'll get started with this evening's session. Again, good evening, ladies and gentlemen, and welcome to today's Great Lakes and Mississippi River Interbasin Study or GLMRIS public scoping meeting. My name is Ken Zaborowski and I'm with the Chicago District with the Corps of Engineers and I will be moderating tonight's meeting. I just want to let everyone know where the bathrooms are before we begin. If you walk down the lobby and to the open space, they'll be right there on the left. When you arrived, the following materials were available to you at the welcome and registration tables. We have the green meeting agendas that list what is going on tonight, these trifold informational brochures about the study, these white written comment forms that detail how to mail in any written comments that you might have about tonight's study, this GLMRIS frequently asked questions sheet. It may or may not be purple. We have such a large turn out this morning that we had to print some more and they may just be on white paper now. Similarly, we have a sheet with frequently asked questions on other aquatic nuisance

species efforts that the Corps is undertaking that may or may not be on peach color paper. If you would like to make an oral comment tonight, you would have had to have filled out one of these yellow forms unless you did so previously online. Then if you have any prepared statements that you wish to submit we have these light blue forms that we would ask you to fill out and turn in with your statements. Then lastly we have copies of the presentation that will be given shortly for you to take home as well. If you have pre-registered on the project web site to give an oral comment tonight and you have not checked in at the register to speak table, please do so. Similarly, if you would like to make an oral comment, you did not register online and not have checked in at the register at the speak table in the lobby, please do so now. Our GLMRIS team has organized this public meeting to accomplish two goals. First, present information about the GLMRIS study and, second, to solicit your comments on the significant issues that should be included in GLMRIS and the insignificant issues that could be eliminated from further study. As indicated on the

green agenda, this public meeting was organized into two sessions. This is the second of those two sessions. It is scheduled to end tonight at 8 p.m. If you have any questions or concerns, staff could be found in the lobby during the meeting and you could address your questions to them. Please note you're welcome to speak to our panelists and staff meeting during the meetings. Now I would like to introduce the members of our panel. Immediately to my left is Jim Bredin. He's the deputy Asian carp director from the Aquatic White House Council on Environmental Quality. Next to him is Lieutenant Colonel Berczek, the deputy commander of the Chicago district. Next is Dave Wethington, GLMRIS Project Manager. Next is John Zimmerman, the chief of planning and policy for the Great Lakes and Ohio River Division. The next is Hiroshi Eto, interim programs director of the Great Lakes and Ohio River Division I would like to thank Lieutenant Colonel Steven Bales for hosting us here this morning. At this time I'm turning it over to Mr. Bredin to begin the presentation portion of this meeting.

JIM BREDIN: Thank you very much and thank you very much to all of you for showing up on a cold night. What I'd like to do is to take a couple minutes and provide a quick update on what's going on with the admissions' efforts towards controlling Asian carp, so with that -- okay. Here we go. When it comes to protecting our Great Lakes from the spread of Asian carp, the Obama Administration has taken an aggressive, proactive and unprecedented approach to defeating these invasive species. On December 16th, 2010, the Obama Administration released a 2011 Asian carp control strategy framework outlining a series of new projects to build on unprecedented, proactive efforts to protect the Great Lakes from invasive species. This updated framework outlines forty-five actions in an aggressive multi-tiered strategy to keep Asian carp from establishing a self-sustaining population in the Great Lakes. The migration of the Asian carp through the Chicago Area Waterway System, the Wabash River and the Grand Canal River is one of the most serious invasive threats facing the Great Lakes today. They have left a trail of destruction that has harmed the ecosystem, the

economy, recreational and commercial boaters. Now this invasive species is threatening to enter the Great Lakes, the world's largest surface fresh water resource, potentially causing ecological and economic harm to the multi billion dollar commercial fishing industry. On February 10th, the Obama Administration announced commiting seventy-eight million dollars to combat the spread of Asian carp and other invasive species into the Great Lakes. The scale of the effort described in the framework was unprecedented for invasive species control, unifying federal, state and local action. The original framework updated in May, 2010 established the Asian carp original coordinating committee consisting of the US Army Corps of Engineers, the US Fish and Wildlife Service, the US Geological Survey, US EPA, the US Coast Guard and other relevant agencies to synchronize the better response to Asian carp. In September, 2010, the administration announced an Asian carp director based at the White House Council on Environmental Quality to coordinate and unify the federal, state and local responses to Asian carp. In November, 2010, each Great Lakes governor appointed a

state representative to serve on the committee to continue this coordination. This framework also identifies a non-federal technical and policy group that will include multiple stakeholders looking at various Asian carp related issues and this just describes some of the interest groups that will be included in that policy. The 2010 framework included thirty-two federally funded initiatives in 2010, all which have been completed or are currently under way. Key accomplishments in 2010 in response to the issue of carp threat include an enhanced fish barrier system that includes strengthened electrical barriers, physical barriers to stop migration during floods and closing off smaller waterway connections to the Great Lakes, also construction of a third electric fish barrier in Chicago waterways for extra protection from the primary pathway of concern for carp migration into Lake Michigan and also utilization of emergency authority provided through Section 126 of the Energy and Water Development Act of 2010 to block flood waters from the river with a thirteen mile fish barrier and a permanent block in Illinois, Michigan canal. In

addition, the State of Indiana installed a fifteen hundred foot fish barrier fence at Eagle Marsh in Fort Wayne to block the advancement of Asian carp from the Wabash River to Lake Erie. Also through the GLMRIS project the US Army Corps of Engineers identified eighteen other potential pathways for potential transfer of aquatic species between the Great Lakes and Mississippi River basin. That's what we're going to be discussing today. Other key 2010 accomplishments included we began implementing the Asian Carp Control Act following the president signing of the bill on December 14th, 2010 prohibiting live big head carp from being shipped or being imported into the United States. We coordinated agencies to employ larger field crews to conduct electric shock and netting operations and increased eDNA testing to a hundred and twenty samples per week. We established Asian carp dot org as the official Asian carp web site to provide up-to-date information about Asian carp efforts. The 2011 Asian carp control strategy framework adds thirteen new projects for a total of forty-five actions to prevent Asian carp from establishing self-sustaining

populations in the Great Lakes. These projects include, first of all, validation of eDNA as an effective tool for monitoring and tracking Asian carp, development of eDNA genetic markers to more accurately and efficiently detect Asian carp concentrations and expansion of the US Fish and Wildlife service lab at Lacrosse, Wisconsin to increase capacity of eDNA testing for all the Great Lakes. The projects also include development of alternative trap and net designs for Asian carp, development of rapid genetic based methods to detect Asian carp to allow for faster results than eDNA. They also include evaluation of the affect of removing Asian carp food sources and assessment of the impacts of steel hold barges on the electrical barriers. Also included were projects to evaluate a permanent separation between the Wabash river watersheds through continuation of the GLMRIS study and development of permanent blockages for aquatic invasive speicies pathways throughout the Great Lakes states. In addition, the US Army Corps of Engineers will be conducting an evaluation of the electrical barrier effectiveness through fish tagging and utilization of

sonar equipment to monitor, sample and capture Asian carp and we will be increasing enforcement of Asian carp inspections at bait shops, fish processors, fish markets and retail food establishments. In addition, we will be undertaking projects to enable American commercial fishermen to develop markets for Asian carp, thereby reducing Asian carp populations in the Illinois River and creating jobs. We will also be increasing public engagement through outreach and enforcement and collaborating with stakeholder groups, commercial fishermen, industry and recreational boaters to mitigate the damage Asian carp inflict upon waterway users. The framework also identifies the importance of investigating funds in research and development of long-term fish management strategies for Asian carp control controlling eDNA sampling and habitat. In addition to efforts under the framework, the US Coast Guard has an important role in committee operations involving waterway restrictions including establishing and enforcing a combination of safety and/or security zones to manage the movement of vessels through the affected areas of the Chicago area waterway, any

activity that requires vessel movement restrictions and also managing resumption of the maritime transportation vector subsequent to any disruption including those caused by safety considerations. As part of our unprecedented and proactive approach to combat Asian carp, the administration has been working with our state partners to ramp up monitoring and population reduction for these invasive species. Environmental DNA testing is one of the tools we are using to assess distribution of Asian carp. Last fall our Asian carp monitoring crews collected a hundred twenty water samples each week in either the Chicago Area Waterway System or the Des Plaines River. At present, eDNA evidence cannot verify whether live Asian carp are present, whether the DNA may have come from a dead fish or whether water containing Asian carp DNA may have been transported from other sources. Since October, 2010, we have processed one thousand two hundred and sixty-eight samples above the barriers from both species of Asian carp. These samples have returned only seventeen positive results for Asian carp eDNA. Between August, 2009 and June, 2010, the University of

Notre Dame researchers under a US Army Corps of researchers cooperative agreement processed an additional two thousand two hundred and thirty-two samples for both species of carp. These samples returned only sixty positive results for Asian carp eDNA. eDNA testing is useful as a potential early indicating of Asian carp present. However, there are many uncertainties about what a positive eDNA sample indicates. Its usefulness is limited and there are many other tools that we are employing to ensure we are combating the advancement of Asian carp. In summing this up, the Obama Administration is commited to protecting our Great Lakes and the people who depend on them. We are proactively addressing all possible pathways that are at risk for the advancement of Asian carp. We are working together to implement an unprecedented framework to protect the ecosystem and our environment over the Great Lakes from these invasive species. Again I would like to thank you. If you have any questions at all regarding Asian carp, this is the address for our Asian carp web site and we'd invite you to go to that website if you have any

other issues or there are buttons on there that you could click to get additional information. We'd be more than happy to hear any comments you have and also any additional information you'd like. With that, I thank you for your attention tonight. If you have any questions about Asian carp, that is our Asian carp website. Feel free to take a look at it. If you have any questions, please let us know. Thank you.

DAVID BERCZEK: Good evening, everyone. As mentioned during the introductions, it is very important we receive your comments and share your concerns. I want to take just take a bit of your time to explain to you some of the study, what the intent is, what the focus is and a little bit about what this is. Jim here just spent a good portion of time talking to you a little bit about the collective and collaborative efforts throughout the region of the partners and the Asian carp regional coordinate committee. That was a lot on the Asian carp. The GLMRIS study goes beyond that. Here's what it is about the GLMRIS study. Authorized by the Corps of Engineers and authorized by Congress under the Water

Resources Development Act of 2007 to conduct a feasibility study. It's a hundred percent federally funded and the idea of the study, the intent of the study is to look at the options and technologies available. We see some of the alternatives that we're going to look at. We look at the impacts and evaluate in the assessment a number of alternatives and technologies to include hydrologic separation as one of those technologies or control measures. We talked a little bit about prevent. On November 9th, 2010, we went and released the project management which is a detailed guide so to speak to our planning people and others involved with the study on the conduct of the study and in there we use the term prevent and also talked about reduction of risk associated with that. I know that that concerns people in thinking we were not looking at the full intent of the law, the authorization and that we're not looking to prevent the spread of aquatic nuisance species. It allows us to look at other options. If there is something not a hundred percent, should it not be considered or should it be taken off the table because it doesn't have a

hundred percent proven effectiveness to bring forward and consider and acknowledge eyes? Since the intent of the study is to explore a range of alternatives and technologies, we have got to do a risk assessment and effectiveness of each of those technologies so that it cumulatively may reach to that point where the single option or an alternative to get ready might not get that one hundred percent effectiveness right off the bat. Sometimes one hundred percent effectiveness may not be tech no logically feasible. Acts of nature over times can overcome even the best design and best built. The GLMRIS study area is rather large. It will take a little bit of time to point out some of these shaded areas. The detail study looks at these seventeen states primarily up here in the Great Lakes basin and the upper Mississippi watershed. You see these areas that are shaded a little bit more and those represents the states and the watershed area that feed the lower Mississippi River basin. As we start to do the studies and control measures, there are things that are happening down range or further downstream. The scope of the study could potentially include thirty-two,

thirty-three date's involvement and looking at and analyzing, but primarily the state -- the scope of the study is looking up in this region here. We've further broken up what does the study look at and what is it not looking at. We are looking at the aquatic connections as far as pathways and looking at those organisms, swimmers, floaters and you see different types here and hitchhikers. The study is not just looking at Asian carp. It is looking at fish, pair sites, plants and pair sites that are very small, so we got to be very thorough and look at this and that adds to the complexity of the study. It does not include some of those areas that are on the right-hand side. It does not look at the human release component in there. The Saint Lawrence Seaway, Atlantic slope and Canada are not necessarily included as part of this study. I mentioned there with the map previously you saw the portions of the seventeen states and there was a little dotted line here that I did not mention. I'm sorry. Part of this dotted line here is where that flow divide is between the Great Lakes basin and the Mississippi River basin, so that's an area to look at as well to

make sure that things stay separated. That area represents roughly fifteen hundred miles. The elements that are looking at conducting an analysis and I mentioned a little bit earlier about taking -- looking at each of the methods or control methods that are out there and analyzing their effectiveness, mitigation strategies as part of this. We will again include as part of that analysis the hydrologic separation, regional and economic model and as well as you could see the other two as well. The end result is an Environmental Impact Statement that we will release as it comes due. The strategy is complex and covers such a large geographic area and we focused it geographically where we have in the primary effort the Chicago waterway and the Chicago ship canal is the only known hydraulic open between those two basins. It doesn't take a flood event to make it a water connection, so it is always there. The other pathways Jim mentioned a little bit about that, some of the work that's going on with. We're looking at those alternatives that could also whether a flood event or rain event or sporadically or periodically allow

passage of aquatic nuisance species between the two river basins. It talks a little bit about the strategy, organizing for success. We've had to step up a little bit on how we control the flow and the chain of demands so to speak and how that works, but then also we got to include the fact that everything done so far in this aquatic basin species fight to include looking at the upper Mississippi and Missouri Rivers in the late '80 has always been a partnership, always been a collaborative effort and will continue to be that way. We rely on every body else's fields and expertise and their own authorities to go ahead and inform the decision that's made or the recommendation that's made, so we -- that executive steering committee to make sure that we have at the highest level share this information and allow the right information to get to the decision makers as well as working in collaborative effort with all stakeholders. You see them lighting there, federal, state, local agencies, non-governmental and individual and private citizens. We're going to cycle out interim products and reports and keep people informed and involved with what's going on and again

we'll talk a little bit when we come to the alternative waterways or the other waterways portion of the study, looking at those things that might be able to be cycled out that somebody might fall into an existing authority for an implementation or a state agency might be able to do under their own authorities, again trying to go ahead and do that process is the following. Again, emphasizing we're looking at the aquatic pathways that exit between the Great Lakes and the Mississippi River basins and we focused it in the two different areas and we'll have a couple slides that talk to that a little more. One of the key elements is inventorying what's out there right now. There's just some examples of some of the type of organisms to be considered in the study. Asian carp being of course being the species right now that's getting the most attention because of the urgency and the need to go ahead and address that right off the bat and then have to say that there are a number of of efforts being done. There's been a lot of fishing down below the electric barrier and pulling out thousands of pounds of Asian carp that they are working through their agreements that the government -- the

1 governor has to ship those fish to china and other
2 areas and then Mr. Bredin mentioned that a little bit
3 about looking at these commercial market. A lot of
4 work is being done in partnership. We are looking at
5 what is there that we got to address and what
6 potentially be out there on the horizon. The primary
7 focus because again it's that pathway that exists in
8 it's always there, it doesn't rely on additional flood
9 waters or anything else to make it a pathway, is the
10 Chicago Area Waterway System and for this slide I'm
11 going to have Dave Wethington who is the project
12 manager for this portion talk to you a little bit about
13 this slide and what you're seeing.
14 DAVE WETHINGTON: Again, my name is Dave
15 Wethington. I'm the Project Manager with the Chicago
16 district of the US Army Corps of Engineers. The
17 Chicago Waterway System is a specific interest because
18 it does represent the highest risk potential. You
19 could see on the map on the right there are five
20 potential locations that. It can empty into Lake
21 Michigan. Three of those points are within the State
22 of Illinois and two are in the State of Indiana. They

all kind of funnel into a single point, a choke point we call it. Where that number seven is, that represents where our current electrical burial dispersal system which is geared toward preventing the movement of Asian carp. All those points will feed into a single waterway effectively used to reduce the potential for transfer between the two basins. What you see on the left is basically an outline of the Corps of Engineer's planning process. Where we are now are covering those first couple of steps. Part is specifying our problems and opportunities is what we're here doing today, listening to the public, listening to what's the significance to you and maybe what parts of the study are not as significant. We're also beginning a lot of the inventory to collect baseline data. What may be I guess the common knowledge of use for the Chicago Area Waterway System is for commercial navigation. When we are looking at inventory and forecasting conditions, we have to identify what other uses are within the Chicago Waterway Systems. Those would include recreation, water supply, water discharge, flood risk management for the entire Chicago

Waterway Area. When we're evaluating alternatives on how to prevent, for example, looking at hydrologic separation, you have to look at how the waterway users whether they're people on the waterway, recreators or the City of Chicago, those those impacts affect the waterway users. ' Also for any control technologies have to mitigate or provide alternatives for adverse impacts toward these waterway uses, so this -- that kind of what's outlined in the steps that we take before we could select a recommended plan for the recommendation to Congress. As Colonel Berczek mentioned earlier, we are lab rating with a wide variety of stakeholders including our state agencies, federal agencies, native American trades and non-governmental and industry organizations. Thank you.

DAVID BERCZEK: Next we're going to have John Zimmerman talk to you a little bit about this slide and the work that is being done in that area.

JOHN ZIMMERMAN: Thank you, sir. As the Colonel mentioned, my name is John Zimmerman. I'm with the regional command office down in Cincinnati. An associate of mine, Mike Saffran, who unfortunately is

being held up some problems and complications of air traffic today, is actually the Project Manager for this effort, but I'll attempt to cover it to some degree. We separated the other pathways away from the cause because of the complexity issues and the desire on our part to move forward and to examine the other potential sites in which a transfer from the Great Lakes or from the Mississippi River to occur for other aquatic invasive species through that exercise we had developed a conceptual document in coordination with state, other agencies and with local concerns that as identified approximately thirty-six other locations across about a fifteen hundred mile boundary that I think is depicted here in the light brown and gray areas up here and from those thirty-six areas we have further relined the list to identify eighteen possible locations which we believe have the potential to transfer aquatic invasive species. The characterization is based on two things. Number one, a likelihood of a hydrologic connection occurring, ie, the frequency of flooding events that may occur and a characterization of what those flooding events look like, what type of flows, the velocity of

flows, the depth of flows, et cetera, and then that was cross referenced and evaluated in addition against the compiled list of the probable invasive species that we would be dealing with. I believe there's close to a hundred and sixty species that we're looking at. Once again, as the colonel says, floaters, swimmers and crawlers that exist in the aquatic environment. Based on that, we have further paired down the eighteen lists while we believe they all need some attention done, we nominated one as the most urgent and that is the connection that we mentioned the most earlier and that is locally known as Eagle Marsh and it's located in Northeastern Indiana near Fort Wayne. The State of Indiana stepped up to the plate and has already completed an interim fix that will prevent that connection from occurring during certain flooding events. We will be pursuing a potential permanent fix in the near future. I think that's all I have to say about the other pathways.

DAVID BERCZEK: Thanks, John. Where are we today? We haven't just been sitting here today. I mentioned that the authorization was received in 2007

to conduct this study. The appropriation of the funding for the study arrived in June, '09. Here are some of the things that it accomplished in the meantime. On the left-hand side is the law that identifies into our planning process and identifies and on the right-hand side we've seen been doing some activities in executing things, literature review. John mentioned about the number of species you see in the white paper about aquatic nuisance species, a hundred and fifty-four species identified that could be species of concern, could be considered to be eligible to transfer between the two basins. We talked a little bit about the other pathways about the risk characterization and an action that was taken and completed to go and address one pathway. The project schedule here depicted is the best case scenario that things fall in place, funding arrives as needed and we could continue going down the pathway of gathering the information, working together, employing together all the information needed to go ahead and start doing the right analysis and making sure that as we overturn rocks we're overturning the right rocks and then

something doesn't pop out there totally unexpected and drive us in a different direction. That's one of the things I mentioned too about being adaptive in there. You see the pathway down in the Chicago Area Waterway System going across that green bar coming out with a public review and a final report out for public review and a comment period roughly in the fall of 2014. The other pathways focused you see on this line down here a little bit where we have the opportunity perhaps to spin out types of projects such as what was done with Eagle Marsh or there might be something that is addressed or the department of natural resources might have the authority and the funding to go ahead and do the project and in that way work to reduce the work of transfer because it's addressing some of these other alternative pathways and you see some of the time lines on there. These interim products we're looking at perhaps -- in here they're just looking at some rough timelines on releasing information and data as it's gathered, things like that, but if there's nothing yet analyzed and put together in a report and at least provide updates to the public on where we stand with

the study and what measures have been taken and where we are with the progress. Here's an example hereof some of the products and updates that we're talking about, inventory of the nuisance species and the transport mechanisms, control technologies that might be looked at and their potential for application, some of the navigation surveys, the value of the commercial cargo, passenger, recreational boating as well as fisheries surveys in the Great Lakes and Mississippi River, what are the values of those studies or those industries and those commodities. There are a number of surveys and studies that have been conducted over the years and looking to see how current it is and bringing that forward to today's values and understanding the impacts. One of the key on all of this -- like I mentioned, there is a lot of information out there, a lot of data necessary to go out and inform a recommended solution as a result of this study is meetings like this today, how could we help, how do we get input, how do we get the direction and some additional guidance to help shape and you see how the -- what we're after, the inputs to help the GLMRIS copy

and down below you see some examples of inputs we're looking at for from our partners, cultures resources survey, inventory water supply and discharges, things like that, ballast water issues, fisheries and other types of efforts that are out there and biological expertise from Fish and Wildlife and others. Kendall mentioned at the beginning about the number of public meetings that we are holding and I'll have to tell you that we are trying to make the effort as much as possible to have as much contact with everybody as needed to get this information and help people understand what the survey is, what we're after, what it is we're after and help get your inputs. The last one in Chicago had two less cities on it. We've adjusted and added a couple of additional cities that we're going to go out and try to solicit public input. We're trying to make sure we reach out as much as possible in allowing you and other organizations, the general public to reach in, reach in to the process and help mold it and shape it. Other ways to provide your input Kendall mentioned about writing down comments on pieces of paper and submitting it. That's a great way.

Coming up and mentioning your comments at the microphone, going to the web site that is highlighted right there or if you go to the Chicago web page you'll see a button that looks like this. It will also give you the opportunity to submit a comment online. I know sharing today might be a little too much to ask, so you get the time to go ahead and think about it and there are plenty of opportunities to go ahead and submit that. We've also -- you see there's this join the conversation. We've also taken advantage of technology. The GLMRIS study has a Facebook page and also on Twitter to allow to exchange ideas between us and you. Thank you very much for your time. Thank you for being here tonight.

KENDALL ZABOROWSKI: The study website is a good source of information. Interested persons can subscribe to the study's e-Mail list through the web site. We use the GLMRIS e-Mail list to distribute such things as documents added to be web site, opportunities for public involvement and other public news and events related to GLMRIS. It could be found on the brochures, your comment forms or these business cards. These

business cards also have the information for Facebook and Twitter if you choose to take advantage of those social media. Now moving into the oral comment period of the meeting. Those who indicated on their registration form that they wanted to make a belief three minute formal statement or ask a question will have an opportunity to do so. If a person wants to ask a question in addition to making a comment, we request that you manage your three minutes to allow for your comment, question and response. The Corps of Engineers will answer questions that are answerable. Again, in order for everyone to have the opportunity to speak, we ask that everyone abides to the three minute limit. After everyone has had an opportunity to address the panel and if time permits, those who have additional comments or questions will be given the opportunity to do so. If time is not allowed, those who wish to address the panel a second time employees note you could enter remaining comments on a written comment form or lap-tops we have provided in that room or you could go follow the directions and mail them in or your comments on the web site at your own discretion. All

forms of comments received during the scoping period will be weighted equally. I just want to make sure that's clear. I have a visual set of slides that we will use to help manage our time while you are speaking. When you begin your statement, the time on the projector will throw the green box for the first two minutes. After two minutes, the box will change to a yellow color and every fifteen seconds it will update the remaining time. I will also announce to you that there are thirty seconds left so that you may conclude your statement. At the end of your three minutes, the box will turn to a red color and I will ask you to conclude your statement. We feel that this procedure is the most fair and gives everyone an equal opportunity to be heard. I would like to mention we have a stenographer with us tonight. We ask when you come to the microphone that you please first state your name and the organization you may be representing and then your zip code, speaking into the microphone and speak slowly. We'll now hear from those who reregistered to speak on the project web site and those who indicated on the registration form that they want to make an oral

comment. For those I ask that you come to the blue microphone any time that you're ready to speak. For those this have not pre-registered on the web site, I ask that you go to the microphone color coded yellow. I will be calling that number and your last name to the microphone. I will recognize you and alternate as needed to accommodate pre registered persons as they arrive. At this point in time any person with a blue card is free to come to the microphone. I please ask that you show your index card first. This is Jennifer Nalbone?

JENNIFER NALBONE: My name is Jennifer Nalbone. I'm the Invasive Species and Navigation Diretor for Great Lakes. My zip code is 14222. Thank you for having me hearing this comments. I will be asking for questions during round two. I just want to get my statement on right now. Great Lakes United has worked for more than a decade supporting both Congressional funding for the electric barrier in the Chicago area waterway system to stop the spread of Asian carp and the wharf 2007 directed to GLMRIS. In 2009, 2010 when the DNA and the live fish were found

here and above the electrical barrier, we worked in close could order nation with partners to develop recommendations to the state and federal agencies working to stop the carp and promote the goal of hydrologic separation and just recently we've within appointed to the advisory panel for the twenty first century. We'll be submitting comments in writing, but I would like to convey three important points during this public hearing. First of all, I'm sure you heard it before, we do believe hydrologic separation is prevention. Hydrologic separation of the Great Lakes watershed from the Mississippi watershed is the most effective way to prevent aquatic I can vase I have movement through waterways. If waterway doesn't flow, the aquatic species can't swim or float in the water. It's as simple as that. Examination of control measure that as added in your Project Manager Plan should not be prioritized. I am very confident that the Corps can develop large scale engineering and infrastructure proposals. In this case, these engineering and infrastructure alternatives should both separate the Mississippi from the Great Lakes waters in the Chicago

area and propose ways for commercial and recreation navigation to continue if not improve through the area. It's a challenge, but the Corps thinks big when it comes to navigation plan and this is a chance for you guys to shine. The second recommendation is to examine options around the Chicago area first as you are. Thank you very much.

KENDALL ZABOROWSKI: Thirty seconds.

JENNIFER NALBONE: And perform more extensive work. We recommend eighteen month time line as you heard probably in Chicago as the Asian carp is most imminent in the Chicago area. I do want to thank you for your quick work at Eagle Creek. Obviously that area will have to be addressed permanently and very soon. I've got this much right here. Is that okay?

KENDALL ZABOROWSKI: Please.

JENNIFER NALBONE: Thank you. Lastly, our last recommendation is to strongly encourage coordination with specific partners. One is to work closely are the Great Lakes cities and ensure their that data is generated from that study is appropriately to the work and two is to work with the federal

government of Canada to ensure that a meeting is held in Canada concerned with this issue. A petition has been sent to the Department of State of Canadian NGOs, but they have not received a response yet as to whether or not a hearing will be heard north of the border. Thanks for the opportunity to speak and I look forward to more discussion this evening.

KENDALL ZABOROWSKI: Thank you very much. Next, number two, is Mr. Brian Smith.

BRIAN SMITH: Brian Smith, 14223. I want to thank you for coming to Buffalo and for the opportunity to provide comments today. I'm going to submit more written comments, but I'll touch on some priority issues today. In general, CCE believes that the current site plan is inadequate and will fail to protect our lakes from the certain did he have station that would be caused from breeding populations of Asian carp reaching our Great Lakes. Furthermore, the proposed plan does not adhere to the intent of the directive in the 2007 development plan specifically focused. The timeline is too slow. As they say, an ounce of prevention is worth a pound of cure. Once a

new species establishes itself, it is almost impossible to remove and incredible difficult to detain. It is estimated the damage control costs of ANS in the Great Lakes totals approximately five billion dollars annually. Asian carp would only bolster these tremendous costs. Due to their large size, ravenous appetites and rapid rate of reproduction, these populations of Asian carp will be difficult to control and difficult if not possible to eradicate once they have reached lakes. The only chance we have to stop the Asian carp from devastating our Great Lakes ecosystem is to prevent a prevention strategy as soon as possible. Waiting five years to do a study and take action would be too late is unacceptable. We strongly recommend it be done in eighteen months or sooner. We need a permanent solution. Every solution must be on the table to prevent Asian carp from invading the lakes in the short-term including chemical treatments and other things that have been done. We need a permanent solution that will solve the problem. Restoring the original hydrologic separation of the Great Lakes in the Mississippi River basins is the most effective

permanent method of achieving this goal.

KENDALL ZABOROWSKI: Thirty seconds.

BRIAN SMITH: The Congressional mandate does not ask for a study to reduce the risk of any spreading between the basins. Multiple entities have done risk assessments including US Fish and Wildlife. Let's not reinvent the wheel, waste time.

KENDALL ZABOROWSKI: Time out.

BRIAN SMITH: One sentence. Let's focus on prevention and remove references to the prevention of risk. Thank you for your time.

KENDALL ZABOROWSKI: Thank you, sir. Third, Mr. Thomas Marks, I believe.

THOMAS MARKS: Thomas Marks, 14047. So far what I've heard from your presentation I don't have a high degree of confidence in the plan. Congress works slow. Obviously they give you the authorization in 2007 and it took until 2009 to get the funding and you started your work in 2010. This study could take longer than 2015. It could be 2016, 2017. When I looked at page -- the sheet here, number fourteen, the tasks, when I look at the tasks, it's just inventoried,

identify, analyze, analyze and recommend, there's really no action. We need action to prevent the Asian carp and other aquatic invasive species from transferring from one ecosystem to the next. We've already done the studies. If you decide on the separation and everybody seems to agree that's the way to go, I hope it is, who decides to act on your recommendation if that's what it should be? Congress? How long before implementation is it going to take Congress and who ever else is going to debate whether we have the funding or not to implement it? How long is this going to take? Ten years, twenty years? I would be surprised and I wish I could long enough to sound it, but 2050 sounds like a good date for separation. If we look back at the electric barrier, we acted too late. We actually started the barrier before -- they were already past that location. Now we have Asian carp. Asian carp are already past the electric barriers. We don't know how many. We don't know if it's enough to have a population that's sustain abdominal breed. Like I said earlier, you could probably ask Adam and Eve how many do you need before

you have a sustain abdominal breeding population. If you had a perfect solution this year or next year in your study before you completed it, would you implement it? I think that should be something that we should know. I don't have anything more to add. Just that I don't have a high level of confidence in the ability of this study. Thank you.

KENDALL ZABOROWSKI: Thank you, sir. Is there anybody with a numbered index card that I have not called that wishes to speak at this point? I would like to again thank everyone for their statements and let me refined you if you have any prepared statements or documents be sure to turn them in at the registration table and fill out the blue document submittal form. If you wish to mail in a written statement, it must be post marked by March 31st, 2011. That is the end of the NEPA scoping comment period. At this time it is 6:31 and we are going to open up the blue microphone so that if anybody would like to come up and make any additional comments or have any questions for our panel we would ask that they do so. We would ask that you give your name and zip code

before you start. Is there anyone that would like to make another comment or ask another question at this time?

DON ZALAZNY: Don Zalazny. I'd like to join others and thanking all of you for showing up this evening, making sure that Buffalo and New York State was included in your round of public meetings for the study. We certainly feel that this is an extremely important study, needs to get done and it needs to get done as quickly as possible. I just have two questions related specifically to the study that I was hoping that you could clarify for me. The first is I guess -- I'm not sure who exactly to direct this to. Regards project funding. Lieutenant Colonel, you mentioned that in a best scenario the project schedule right now would be completed by 2014, 2015, that time frame depending on funding. Would you explain how the funding is currently set up or what funding is available so that we know where there may be some vulnerabilities so that we can work with our elected officials here in New York to help support those efforts?

David Berczek: I'm going to let our Project Manager

talk a little bit specifically, but then we could talk broader for the rest of your question.

DAVE WETHINGTON: With regard to funding, as the gentleman before you pointed out, we need two things. We need authority, appropriatIONS. We received funding for this 2009 and we have gone through to being a project manager plan and begin the scoping process, put together teams. The way the funding comes is through appropriation of Congress. We have an anticipated capability to complete this study within that time frame of approximately fifteen million dollars for the Chicago area waterway focused portion of the study. To complete the entire GLMRIS estimated we've estimated to be up to about twenty-five million dollars. In the fiscal year 10 we received four hundred thousand dollars from Congress to implement the study. We have been fortunate, however, to receive additional funding through the Great Lakes restoration initiative. To date we received approximately close to two million dollars or so and do anticipate additional funding yet in 2011 for this project.

DON ZALAZNY: Thank you very much. My second

question, and I guess this -- if I may direct this to Mr. Zimmerman regarding The Other's Pathways preliminary report. You identified one potential pathway here in New York State. Do you have any specific information available with you this evening that you could share with us on that? How does the public go about accessing that information?

JOHN ZIMMERMAN: We're in luck because my associate, Mike Saffran, who is the author of the initial document -- you may be referring to -- is it mud lake? I'm going to defer to Mike if that's okay because I think he probably can answer the detail questions that you may have.

MIKE SAFFRAN: The report itself is accessible on the Chicago district web site, the GLMRIS web site. The appendix matter which is what you need to get some of the details on mud lake I've got about a matter of ten CDs that I brought with me, so I will be happy to give you a CD. If I don't have enough, I'll call and have them mailed to you. The appendices were pretty large and there was no easy way to download off the Internet site, so we'll have to get you a CD for

that.

KENDALL ZABOROWSKI: Thank you, sir. At this point in time is there anybody else that would like to come up and make an additional comment or ask any question of our panel?

JENNIFER NALBONE: I read your posters out in the other room. One of your posters says you're considering weighing the maintenance of current recreational uses of the lakes and waterways in your study. Does this mean you will or will not consider alternatives that allow comparable or improved recreational uses because it's not currently being done? It was just a little confusing. Are you willing to actually look at ways, alternatives if it's improved or comparable?

JOHN ZIMMERMAN: I'll have to think about that a little bit. We certainly -- if I understand your question, if there is an alternative that's proposed and is approved for implementation that changes the way recreational is conducted that we've been looking at, we would expect that as a part of that proposal there would have to be an inclusion for

alternative ways to accomplish that same level of recreation. Now, improvements, that could be a difficult question for me to answer right now 'cause I'm not really sure how that might all play out. That's kind of a difficult question to ask. This is of course currently a hundred percent federal effort, obviously a lot of involvement from various and sundry agencies out there. That is not to stay that there might not be opportunities if a feature is proposed to be changed in some way, shape or form to some body with jurisdictional authority to enter into agreement to ask for an improvement and be willing to support that. Did I answer that?

JENNIFER NALBONE: Yes. I got a little confused with the poster because I wasn't certain if mitigation was con -- the idea of mitigating any changes was in conflict with that statement about trying to weigh the current recreational uses.

JOHN ZIMMERMAN: Okay. I think I answered your question.

JENNIFER NALBONE: I think you did too. The second question is you used the word technology many

times. Are you considering engineering and infrastructure options as part of that technology rubric or are you really just focusing on technology?

DAVID BERCZEK: Technology is to include structural components or other things to be done in engineering and design features.

JENNIFER NALBONE: Great. Thank you. The last question is as you outlined your process going forward have you identified opportunities for additional public comment? I noticed that there was interim reports. Will the public have an opportunity to respond to those interim reports?

DAVE WETHINGTON: Yeah. There will be a number of ways for the public to continue to be engaged with the interim basin study. What we are anticipating is having put on annual, biannual meetings where maybe we wouldn't be traveling all over the country because obviously this is pretty a large investment in time and resources, but we would maybe provide the opportunities for folks to call in on an adjoining conference line. We would give the opportunity to ask questions about it, et cetera. We do anticipate that throughout the

process as we release these interim products that there would be the opportunity for additional public comments in addition as part of the NEPA process when the draft feasibility study is released. That would go out for formal public review, review and comment type process.

JENNIFER NALBONE: Thank you. It's a very important initiative. Thank you very much for coming to Buffalo.

KENDALL ZABOROWSKI: Thank you again. At this point in time is there anyone else that would like to come up and make an additional comment or question? Please, sir.

RICHARD TACZKOWSKI: Richard Tazkowski, 14202. I'm new to all of this and I probably could have waited and asked the gentleman from the DEC, but this to this requests' question about when implementation will take place, when actions will take place, states of course right now are stretched economically, especially New York, so DEC has been cut and so on. I'm not sure exactly what the states -- if someone to speak to the state roles other than having a representative on the

panel and what they could do independently to start addressing the issue, are they constrained by federal law or are there things that an aggressive state's environmental department can do while the study is ongoing and while the action plan is implemented by the Corps and the Federal Government.

DAVE WETHINGTON: You actually touched on a very important subject. Similar to example of what has happened on the State of Indiana through this other pathway study is because of the Corps study we uncovered a potential high risk aquatic pathway. The state was able to take that information and implement an interim solution. This kind of goes back to an earlier comment by Mr. Marks and asking when will the Corps of Engineers do something and it's very important to remember that the Corps needs two things for us to be able to do anything. We need authorization from Congress and we need the appropriations. We need the money. There are many opportunities for a state agencies and if there are other local agencies depending on what their jurisdictions are to work with the Corps of Engineers especially on this other pathway

study. For example, I don't know exactly the connection in New York looks like, but if it were something small maybe like an episodic type of ditch or stream or something like that where maybe there's a fairly simple fix, as easy as building a spoil berm or something like that, if it's within the ability of the state agency, that might be a much more effective route to approach the potential solution than waiting for federal implementation, but we do have the ability to partner with state agencies and provide our own resources through GLMRIS to provide the expertise. We can work between our agency and other federal agencies, state agencies and local resources.

RAYMOND VAUGHAN: I'm Ray Vaughan, home zip code 14075, work 14202. Could one of you outline the steps that you would see as necessary if -- I don't want to make this sound like a commitment on your part, but if hydrologic separation were to be the option what steps would you need, what authorizations and appropriations and possibly time lines by you? Can you quickly go through what steps would be needed if that were to be a chosen option?

JOHN ZIMMERMAN: It looks like I'm nominated to reply on that. The general process would that be that the Corps of Engineers will -- as we've said before, we will develop to a level sufficient in detail to make a reason recommendation as to what the best solution might be and looking at those range of opportunities that may be out there for us. Hypothetically if we come to a conclusion that the only viable solution is what you may define as hydrologic separation out there and there's a lot of ramifications, but whatever that detail would be that recommendation would be made for approval at the highest level and the Corps of Engineers, the secretary's level. The secretary then would take that action and if she so chooses to it's currently a madam, so I will refer to her as ma'am. If she chooses to approve that, it will then go to Congress and Congress then has the action, the collaborative body, both the house and the Senate, to determine if that is the course of action they want to pursue and if that is the case they would authorize it for construction presumably by the Corps of Engineers or by some other

federal agency and appropriate dollars in a separate action in order to make that happen. Van based on the general time frame, that might occur as early as 2015 in the best case scenario?

JOHN ZIMMERMAN: Well, I will refer back to what we said earlier. The best case scenario that may be true. However, as we said earlier, if there are implementable solutions which we could all agree to that would provide some level of hydrologic separation or any levels of additional prevention that are deemed appropriate to implement we would cycle those out in advance. I will give you just one example. I believe general Peabody talked about this in Chicago. There are audio, sound, light and bubble barriers that could be placed and create walls, curtains of walls so to speak.

RAYMOND VAUGHAN: I'm aware of that.

JOHN ZIMMERMAN: That's a technology that we have recommended.

RAYMOND VAUGHAN: And I understand fully that there's a range of options. I also understand there are considerable ramification to full-fledged

hydrologic separation, but what I'm asking I'm getting a partial answer so far is whether the answer you will provide to Congress and the rest of the nation at the completion of the study will provide sufficient detail if, and I want to emphasize that if again, will provide sufficient detail if your recommendation is for full classical hydrologic operation? . Would you look at the possible redirection of Chicago sewage and the engineering to carry that out?

JOHN ZIMMERMAN: I think the answer has to be yes to that. In order to consider hydrologic separation as people are defining it right now, you have to weigh the ramifications involved with altering the navigation system and the consequences for that, altering the flood damage reduction or the flood risk management system in Chicago. That's considerable also. You have to consider the enbironmental issues with regard to that also. You have to look at sewer affluence. You have to look at water quality issues in general across the board there. All of those major areas which includes not just the passenger navigation, recreational navigation work, but also includes fishing

and other activities that may occur on the water. All those things have to be weighed in conjunction to making a determination about the cost associated with that and viability of any solution that might be recommended.

RAYMOND VAUGHAN: You see that within the per view of what you're currently would provide?

JOHN ZIMMERMAN: The answer is yes. We are proposing not to screen that alternative out just because it may be exceedingly expensive. I think we all recognize that it could very well be expensive, but we have indicated that we will carry that through as one of the main drivers and the cost of this study because we have to develop that fully along with all the other alternatives that may in fact provide some levels of protection against the spread of aquatic species.

RAYMOND VAUGHAN: Do you foresee any interim reports that would look at different locations? For example, at the original water shed or perhaps within the existing City of Chicago?

JOHN ZIMMERMAN: I think we're open to that.

I don't think we're commiting to doing that right now.

RAYMOND VAUGHAN: I mean I've looked at the situation enough to know the ramifications considerably. Flooding might dictate one, navigation. You would probably choose different places, but --

JOHN ZIMMERMAN: I think you're right and you're hitting on part of the problem of trying to release partial analysis of different systems without releasing them in the context and texture of how they were weighed and balanced against all the other issues that might have to be addressed, so it's something that we're struggling with right now, how would could do that and make early release of those kind of documents and do so in such a way it's not going to be harmful. Am I answering your question?

RAYMOND VAUGHAN: Yes. I recognize that it's a difficult issue that we're all facing and I look forward to the interim results if those are going to be available.

JOHN ZIMMERMAN: We've committed to making as many interim releases as we can in terms of documents and survey analysis, inventories and the like that are

pertinent.

RAYMOND VAUGHAN: But the gist of my question which is I think it's important to have the information available to the ultimate decision makers as quickly as possible and complete as possible to support the decisions. Thank you.

JOHN ZIMMERMAN: I agree with that.

KENDALL ZABOROWSKI: Thank you, sir. Would anybody else like to come to the microphone and make a comment or ask a question of our panel?

THOMAS MARKS: I'll sum it up. My name is Thomas Marks, New York director for the Great Lakes Fishing Council, 14047. I'm very passionate about the Great Lakes. I feel like I own them. I probably do. We all own part of the Great Lakes. In your study and everything you do thinking about the -- how you're going to resolve this issue, the aquatic invasive species and the Asian carp, I hope you keep in mind that we're not trying to protect the Asian carp fishery that's now established in the Illinois river and possibly in the lower end of Lake Michigan in the near future that may happen, but we're not protecting that.

In your study, always keep in mind that it's not a seven billion dollar fishery that we're trying to protect. These are priceless ecosystems that we're trying to protect. They're unique in this world,. They're unique in this university. They're ear replace abdominal. Unfortunately I curse the people that dug that canal. It probably wouldn't be done today, but we have a canal that we have to resolve this issue. Again, please keep in mind these are priceless ecosystems. Thank you for listening to me.

KENDALL ZABOROWSKI: Thank you again, sir. The microphone is open if you would like to make a comment or ask a question of the panel. If there are no further questions or comments at this time, I would like to note that it is 6:55 p.m. and we will end this oral comment period. The meeting will be open until 8:00. We will not be taking any more oral comments, but we will leave our lap-tops open for anybody that wishes to submit comments. Also written comments that you might to make we have space provided out there. We will make our staff available for informal questions at this point in time. Please help us recycle our

materials. If you do not wish to keep any of the handouts, turn them back in. Again, I would like to thank everybody for coming tonight and offering your comments. We really appreciate it. It's going to help our study. Thanks again.

C E RT I F I C A T E OF N O T A R Y

STATE OF NEW YORK)
)SS:
COUNTY OF ERIE)

I, KATHLEEN COON, a Notary Public in and for the State of New York, County of Erie, DO HEREBY CERTIFY that the proceedings were taken down by me in a verbatim manner by means of Machine Shorthand, on January 11, 2011. That the proceedings were then reduced in writing under my direction. That the proceedings were taken to be used in the above-entitled action.

I further CERTIFY that the above-described transcript constitutes a true and accurate and complete transcript of the proceedings.

_____
KATHLEEN COON,
Notary Public.

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