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GREAT LAKES and MISSISSIPPI RIVER

INTERBASIN STUDY

PUBLIC MEETING

Monday, January 13, 2014 4:00 p.m.

at

Milwaukee Area Technical College 700 West State Street Milwaukee, Wisconsin

## SCHEDULED SPEAKERS:

Mr. Kendall Zaborowski Planner Mr. John Goss Council on Environmental Quality Mr. Dave Wethington GLMRIS CAWS Project Manager Colonel Frederic A. Drummond, Jr. Commander, Chicago District

Reported by Debbie A. Harnen, R.P.R.

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1	TRANSCRIPT OF PROCEEDINGS	
2	MR. ZABOROWSKI: Good afternoon,	
3	ladies and gentlemen. I would like to ask if	
4	everyone could please be quiet, silence your	
5	cell phones, and we're going to go ahead and get	
6	started with tonight's meeting.	
7	First, I would like to welcome	
8	everybody to tonight's Great Lakes and	
9	Mississippi River Interbasin Study or GLMRIS.	
10	My name is Kendall Zaborowski. I'm from the	
11	United States Army Corps of Engineers, Chicago	
12	District, and I'm going to be your moderator	
13	this evening.	
14	Before beginning the meeting, I	
15	would like to let everyone know that if you need	
16	to use the bathroom, please go back out this	
17	main hall, past the welcome table, turn right	
18	down the hall, and then the bathrooms are down	
19	that hall.	
20	Also, in the event of an	
21	emergency, exits are located at the top of the	
22	stairs to the left and the right, the bottom of	
23	the stairs to the left and right or down the	
24	center aisle.	
25	When you arrived today, the	

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1	following materials were available at the front	
2	desk. The first is the green meeting agenda,	
3	and that's going to be speaking to our schedule	
4	for tonight. The next is the yellow comment	
5	registration form. If you would like to ask a	
6	question or make a comment here this evening or	
7	if you'd like to submit a written comment,	
8	please fill out the yellow form and return it to	
9	the welcome desk where you arrived. The next	
10	sheet is this blue paper that includes some	
11	frequently asked questions about GLMRIS and	
12	other aquatic nuisance species efforts by the	
13	Corps of Engineers; and the last thing or	
14	handout we have here tonight is a summary of the	
15	GLMRIS report, and that contains detailed	
16	information that we are going to be presenting	
17	to you shortly.	
18	Now, I'd like to take a moment to	
19	introduce tonight's panel. From the far left	
20	and moving closest to me, first, we have	
21	Mr. John Goss, who works for the White House	
22	Council on Environmental Quality. To his right	
23	is Colonel Frederic Drummond, the Chicago	
24	District Commander of the U.S. Army Corps of	
25	Engineers. And then nearest to me is Dave	
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1	Wethington, also the Chicago District U.S. Army	
2	Corps of Engineers, and he is the GLMRIS Focus	
3	Area 1 project manager.	
4	For those of you wishing to speak	
5	at our meeting, please note if you have	
6	preregistered on the project website to give an	
7	oral comment and have not checked into the	
8	welcome table near the entrance, please do so	
9	now. Also, if you've not registered and wish to	
10	make a comment, please also go out and register	
11	now.	
12	The Corps of Engineers is hosting	
13	seven public meetings throughout the study area	
14	in an effort to provide opportunities for those	
15	within the study area to provide comments on and	
16	to learn about the GLMRIS report. This is our	
17	second meeting of seven, and we're glad to have	
18	you all with us.	
19	The GLMRIS report in its entirety	
20	can be viewed and downloaded from the GLMRIS	
21	website, which is http://glmris.anl.gov. Our	
22	GLMRIS team has organized this public meeting to	
23	accomplish two goals. The first goal is to	
24	present the information that is contained in the	
25	GLMRIS report, and the second goal is to allow	

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1	you the opportunity to comment on the	
2	information that is presented.	
3	The Army Corps of Engineers will	
4	be collecting comments through March 3rd of this	
5	year. Comments will then be compiled and posted	
6	on the GLMRIS website. For comments to be	
7	formally included in this comment period, they	
8	need to be given during an oral comment period	
9	at one of these meetings, submitted as a written	
10	comment to the U.S. Army Corps of Engineers or	
11	submitted as a web comment through our project	
12	website.	
13	If you have any questions or	
14	concerns during the meeting or during the	
15	presentation, please find someone with a red	
16	lanyard, myself or the two out front, and we'll	
17	try to help you out with anything that you have.	
18	As mentioned previously, the	
19	public comment period will run until	
20	March 3rd of this year. As indicated on the	
21	green agenda, the public meeting will begin with	
22	a few speakers, a presentation about the GLMRIS	
23	report, and then a public comment period. The	
24	public comment period is scheduled to end at	
25	7:00 p.m.	

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1	I am now going to turn it over to	
2	Mr. John Goss, who is going to update you on	
3	some of the Asian carp efforts.	
4	MR. GOSS: Thank you. And it's good	
5	to be in Wisconsin. I think as Kendall said,	
6	this is the second week of four weeks of	
7	traveling around the Great Lakes of we're	
8	still relatively fresh, and I think this is	
9	going to be good for all of us.	
10	Thank you for coming on a Monday.	
11	Certainly just by your presence, you indicate	
12	that you really do care about protecting the	
13	Great Lakes, and we're all here to work on the	
14	strategy.	
15	I am John Goss. I report to the	
16	White House Council on Environmental Quality,	
17	which is their environmental policy office; and	
18	for the past three years I've coordinated the	
19	federal, state, local agency projects to try to	
20	make sure that we are keeping Asian carp out of	
21	the Great Lakes, and certainly this GLMRIS	
22	report is the major milestone that we're here to	
23	talk about today.	
24	This report is really complex,	
25	and you'll see in the details in the next hour,	
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1	and I want to just mention a few things about	
2	the process. This really is not the end. This	
3	is more around the middle of the discussion.	
4	We are giving the public and	
5	everyone interested a chance to help us make the	
6	decisions to narrow down the alternatives. The	
7	Corps team has done an admirable job of laying	
8	out the choices, and now we need to eliminate	
9	some of those choices and prioritize hopefully	
10	one, maybe two that we can really focus in on	
11	and develop a long-term strategy.	
12	Also, I want to comment, in your	
13	book as you look at the Alternatives 1 through	
14	8, I'm going to talk about 1 and 2 very quickly	
15	here. Alternative 1 is an assumption that we	
16	continue the Asian carp control projects that	
17	are currently funded and being affected, and	
18	that includes the electric barrier and the rest	
19	of our strategy, which I'll run through real	
20	quick in a minute.	
21	And then Alternative 2 is	
22	important, also. I ask you to please take a	
23	look at it. Because of the long timelines	
24	projected for the other strategies, these are	
25	additional things that we can do that are not	

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	1	structural, things that we can, in a coordinated	
	2	way in the Great Lakes states, do to slow the	
	3	advance of the invasive species that we're	
	4	concerned about. So keep those in mind as we	
	5	look at the other structural items.	
	6	The coordinated effort certainly	
	7	has been working, and we want to continue it.	
	8	We have a four-part strategy, which is an	
	9	effective electric barrier system on the Chicago	
	10	Area Waterway, the extensive monitoring and	
	11	response if needed if we find any fish that need	
	12	to be responded to. We have a number of other	
	13	control strategies that are being researched	
	14	that I'll speak to in a second and also the	
	15	GLMRIS report.	
	16	The key things that we are	
	17	involved in are improving that electric barrier.	
	18	The Corps of Engineers is building a new version	
	19	that is going to be even more effective. It	
	20	will be operational soon.	
	21	We are also field testing a	
	22	number of technologies for directly dealing with	
	23	the fish, a possible use of a toxicant that we	
	24	call a micro matrix that only would would be	
	25	toxic for Asian carp and not other fish.	
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1	We're also looking at carbon	
2	dioxide, chlorine, ozone and a number of other	
3	possible ways that we could work with the GLMRIS	
4	lock treatment system that you're going to hear	
5	about today.	
6	Also, commercial harvesting of	
7	fish continues in the Illinois River, and I	
8	think over 200,000 fish were removed this past	
9	year in that stretch about 50 miles below the	
10	electric barrier. That's going to continue.	
11	The netting of fish, fish	
12	sampling above and below the barrier continues.	
13	No Asian carp have been found above the barrier	
14	except one fish three years ago, and Illinois	
15	DNR and Fish and Wildlife Service and the Corps	
16	have biologists out there constantly sampling	
17	I think over 50,000 fish were netted and	
18	identified this past year in 2013. Also,	
19	environmental DNA testing will continue both in	
20	the Chicago area and all around the Great Lakes.	
21	Also, I want to comment on a	
22	project that is nearing completion, reported a	
23	preliminary risk assessment on the 18 other	
24	sites across the Continental Divide from	
25	New York to Minnesota where we have possible	
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1	water connections from head waters of streams in	
2	both water basins. And on the left, you can see	
3	that one was rated as high risk, and that is	
4	Eagle Marsh in Fort Wayne, Indiana; seven were	
5	rated medium risk, and we are following up with	
6	the states to develop a strategy to deal with	
7	each of those; and ten sites are rated low and	
8	probably will not have follow-up projects.	
9	On Eagle Marsh, if you're not	
10	very familiar with, in Indiana we do have a	
11	construction project being designed that would	
12	give us a separation there to protect Lake Erie	
13	and the Maumee from a connection with Wabash	
14	River, and also we're pursuing sites in Ohio and	
15	Indiana and Wisconsin to finish up those others.	
16	There is a national strategy to	
17	deal with the fish all over the Mississippi and	
18	Ohio Basin; however, it's had very little	
19	funding. Only about a half million dollars to	
20	date has been put into working on the Asian carp	
21	problem outside the Great Lakes. So I just want	
22	you to know there is a plan. Fish and Wildlife	
23	Service has a plan. It's still waiting for	
24	funding.	
25	And certainly, as we think about	
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1	today, how do we move forward. We're going to	
2	need communication and support not just with the	
3	eight Great Lakes states and the Canadian	
4	provinces, but with the rest of the states that	
5	are impacted and the Ohio River Basin, Upper	
6	Mississippi, Lower Mississippi, Missouri River	
7	Basin. All have a lot at stake with these	
8	invasive species.	
9	So through your networks, I would	
10	suggest that you communicate with people you	
11	know that are outside the immediate Great Lakes	
12	area and help them understand the impact.	
13	The Great Lakes have had a lot of	
14	success when they work together, when the states	
15	pull together, starting with the first big	
16	invasive species project in the 1950s was sea	
17	lamprey, and moving on to the Great Lakes Water	
18	Quality Agreement, Great Lakes Compact, the	
19	Great Lakes Restoration Initiative that is	
20	showing tremendous progress right now; and now	
21	we're charged with coming up with a joint effort	
22	to complete the project on Asian carp.	
23	I just want to say, I think that	
24	it could only happen with a lot of	
25	collaboration, certainly from the administration	
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1	that I report to in Washington, they want to	
2	hear from the region and what are the priorities	
3	for moving forward. Members of Congress have	
4	said they want to hear from their constituents	
5	on what should be the priorities to move	
6	forward. We need to work on a consensus on this	
7	as soon as possible so that we can move forward	
8	with what we do agree on.	
9	Thank you for participating. We	
10	look forward to your comments, and we've got	
11	quite a bit of work to do, but this is an	
12	important development, and I think you'll see	
13	that the Corps has done a good job on bringing	
14	the choices forward.	
15	Colonel?	
16	COLONEL DRUMMOND: Thank you very	
17	much, John, and good evening to everybody. I	
18	appreciate you coming out. This is a key moment	
19	for the Great Lakes.	
20	My name is Colonel Fred Drummond.	
21	I'm the current Chicago District Commander, not	
22	too far down the road, so, you know, we are very	
23	passionate about our sister cities within the	
24	Great Lakes, and I know this is a near and dear	
25	topic to all of you.	

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1	On behalf of Brigadier General	10
2	Margaret Burcham, she's my division commander,	
3	unfortunately she had other commitments, but she	
4	will be in other meetings throughout the Great	
5	Lakes to help convey the message that we're	
6	trying to send here.	
7	I would also like to thank	
8	senatorial staff members that are in attendance	
9	from Senator Baldwin, as well as Senator	
10	Johnson. I appreciate your attendance tonight	
11	and your forward dialogue on such a complex	
12	topic as GLMRIS.	
13	As you've heard, GLMRIS is a	
14	complex study that examines opportunities to	
15	prevent aquatic transfer of many ANS, not just	
16	the fish like Asian carp, but other species	
17	along the Great Lakes and Mississippi River	
18	Divide.	
19	In GLMRIS, Congress asks the	
20	Corps to study a range of options and technology	
21	available to prevent ANS movement between the	
22	Great Lakes Mississippi River Basin through	
23	aquatic connections. That's key, aquatic	
24	connections. You will hear that throughout the	
25	evening.	
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1	The GLMRIS report outlines a	
2	variety of potential prevention models and	
3	presents an evaluation criteria to help all	
4	readers distinguish among the alternatives. The	
5	purpose of the GLMRIS report is to paint an	
6	objective picture of several alternatives and	
7	offer decision makers, stakeholders and, more	
8	importantly, the public, information about those	
9	alternatives. The GLMRIS report does not make	
10	recommendations nor does it prioritize the	
11	plans.	
12	Our GLMRIS team is one that	
13	spreads across the country, has worked	
14	painstakingly on this report in close	
15	coordination with federal, state and local,	
16	nongovernment and tribal stakeholders. We	
17	strove to ensure decision makers and the public	
18	can be well-informed on the various ways to	
19	prevent the transfer of ANS through the Chicago	
20	Area Waterway System.	
21	As Mr. Wethington will describe	
22	further in a few moments, the GLMRIS report	
23	identifies eight potential alternatives. These	
24	alternatives range from the continuation of	
25	current efforts, as John just mentioned, to the	
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1	complete and hydraulic separation of watershed.	
2	This report is unique in	
3	comparison to most Corps of Engineers reports in	
4	that it identifies a range of options and is	
5	adaptable for the incorporation of future	
6	technologies.	
7	For example, many of the	
8	nonstructural measures, as you see outlined over	
9	here, in the GLMRIS report can be implemented	
10	immediately by various federal, state or local	
11	agencies subject to applicable authorities and	
12	availability of resources.	
13	Apart from GLMRIS, the Corps will	
14	continue to address the issues of invasive	
15	species by participating in the Asian Carp	
16	Regional Coordination Committee, operating the	
17	existing barriers which is near Romeoville,	
18	Illinois, and participating in research and	
19	extensive monitoring of the waterways with our	
20	state and federal partners.	
21	Prevention of the spread of	
22	aquatic nuisance species is and you'll hear	
23	this several times a shared responsibility	
24	among federal, state and local agencies as well	
25	as the public. The Corps remains dedicated,	

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1	working alongside our partners and moving	
2	forward as our authorities allow. We must	
3	reduce the risk to the maximum extent possible.	
4	I sincerely appreciate your	
5	continued interest and involvement in GLMRIS. I	
6	look forward to hearing your comments tonight	
7	about the alternatives presented in the report	
8	and continuing the conversation towards shaping	
9	our future decisions on long-term ANS.	
10	Now, I just want to leave you	
11	with a few points. You heard earlier eight	
12	potential alternatives which we'll lay out	
13	tonight. You're going to hear a term 13 Aquatic	
14	Nuisance Species; you're also going to hear 90	
15	different technologies. You have the book.	
16	It's a summary; 25 pages, sort of a small	
17	primer.	
18	I think it will ramp you up	
19	like a Danielle Steel book, it's going to ramp	
20	you up to read the 232 pages; and then as Dave	
21	mentioned, there's a whole host of appendices	
22	out there that range up to probably in excess of	
23	about 10,000.	
24	I mentioned earlier there's over	
25	a hundred different Corps of Engineers personnel	

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1	involved from 19 different Corps agencies, all	
2	the way from Jacksonville up to Seattle. So	
3	this has been a very holistic and very complex	
4	undertaking. In anything like this, the Corps	
5	of Engineers has always had a dedicated PM, and	
6	now it's with my great pleasure to turn the	
7	floor over you'll hear about 18 different	
8	slides to Dave Wethington. Dave.	
9	MR. WETHINGTON: Thank you. Well,	
10	thank you, sir, and thank you all for coming out	
11	this afternoon, this evening.	
12	My name, again, Dave Wethington.	
13	I am the project manager for the U.S. Army Corps	
14	and GLMRIS, and I'm very happy to be speaking	
15	with you here today. I'm going to spend about	
16	maybe 15, 20 minutes going over some of the	
17	background information with regard to the study,	
18	as well as spend a few minutes talking about	
19	each one of the alternatives.	
20	Now, I'm much more relaxed today,	
21	I think, than I was at the Chicago meeting.	
22	I've got a smaller audience, so it's kind of	
23	like family; keep things a little more informal	
24	perhaps.	
25	We have some of the banners that	
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1	discuss each of the individual alternatives up	
2	front here. So after perhaps after the	
3	comment period, I'd encourage anyone to kind of	
4	step up and take a look at some of the ideas,	
5	some of concepts that are in the report.	
6	As Colonel Drummond mentioned,	
7	also, I hope everyone has one of these books.	
8	My discussion this afternoon is really going to	
9	kind of follow the synopsis within the GLMRIS	
10	summary report. It's a product that we felt was	
11	very important to make sure that we could get	
12	this information to our public and try and make	
13	it something that's at least reasonable. At	
14	least for myself I'm pouring through 200 and	
15	some pages sometimes.	
16	All right. So the scope of	
17	GLMRIS really asks us to the congressional	
18	authorization for GLMRIS asked us to do a couple	
19	things; asked us to look at the prevention of	
20	transfer of aquatic nuisance species between the	
21	Great Lakes and Mississippi River Basins through	
22	aquatic pathways.	
23	And so along this slide here, you	
24	see this brown line. The brown line is that	
25	basin divide between the Great Lakes and	
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1	Mississippi River Basin. That is the focus of	
2	our study. As John mentioned previously, there	
3	has been a lot of great work that has been done	
4	in what we call Focus Area 2, so all along that	
5	basin divide, trying to identify where the	
6	potential pathways are.	
7	In July of 2012, we received	
8	legislation that really helped us kind of focus	
9	the study within the GLMRIS report itself and	
10	which asked us to look at the Chicago Area	
11	Waterway System.	
12	The majority of my presentation	
13	today will speak to the CAWS, as we call it, the	
14	Chicago Area Waterway System, and the focus is	
15	on the CAWS. It does speak a little bit one	
16	of the 14 appendices that Colonel Drummond	
17	mentioned does speak to Focus Area 2, as well as	
18	there's a wealth of information on the project	
19	website that speaks to each of the pathway	
20	assessments. So I encourage you to visit that	
21	website, glmris.anl.gov, to find out more.	
22	The Chicago Area Waterway System	
23	itself is very complex, and I'll spend just a	
24	couple minutes on this map just to help	
25	everyone, make sure they're familiarized with	
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	1	the complexities of the waterways.	
	2	The Chicago Area Waterway System	
	3	is a series it's a compilation of both	
	4	natural and artificial aquatic pathways. So the	
	5	Chicago Sanitary and Ship Canal, which is kind	
	6	of the main connection that started the	
	7	intersection of the two basins, which can be	
	8	seen right in the middle of the map there, was	
	9	completed in about 1900. That served to connect	
1	0	the two waterways and served to really bridge	
1	1	the gap for what now we call the kind of the	
1	2	invasive species, the aquatic nuisance species	
1	3	highway.	
1	4	The waterways themselves	
1	5	currently are used for three main things that we	
1	6	identify within the GLMRIS report; primarily	
1	7	navigation, water quality and water conveyance.	
1	8	For example, the total volume in	
1	9	the Chicago River on a daily basis can range	
2	0	from 65 to 85 percent municipal treated	
2	1	wastewater. So when you're looking, then, at	
2	2	volumetric flow, it serves as a huge conduit for	
2	3	treated wastewater to leave the Chicagoland	
2	4	region.	
2	5	It also serves as a tool for	

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1	flood risk management. The same pathways allow	
2	rainwater to be channeled away from different	
3	buildings, different residences within the	
4	Chicagoland area, and allow water to move	
5	efficiently.	
6	I mentioned it was 1900 when the	
7	first channel was completed, the Chicago	
8	Sanitary and Ship Canal, and so the city has	
9	grown up for the past over hundred years with	
10	water flowing essentially away from Lake	
11	Michigan. So these complexities, these multiple	
12	uses of the Chicago Area Waterway System really	
13	make it a challenge when looking at ways to	
14	prevent the transfer of Aquatic Nuisance	
15	Species.	
16	The GLMRIS report itself is	
17	really a tool for decision makers. It presents	
18	a range of alternatives, and I'll spend a moment	
19	in speaking to each one of them, but primarily	
20	it provides what we call evaluation criteria.	
21	So basically, elements of each different	
22	alternative, whether they be costs, relative	
23	effectiveness or potential impacts to the	
24	environment or economic uses of the system to	
25	help decision makers really compare the	

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1	trade-offs between one alternative and the	
2	other.	
3	There would be for any further	
4	decision making to occur, there would be	
5	additional analysis that would be necessary	
6	prior to moving to construction with any one of	
7	these alternatives presented by this report. We	
8	have presented a very conceptual level of design	
9	and a conceptual level of costs that are kind of	
10	commensurate with that design level.	
11	So additional analyses would	
12	include additional detailed design or perhaps	
13	compliance on the National Environmental Policy	
14	Act, compliance documentation under NEPA. So	
15	there would be this work would be required	
16	for each one of the potential alternatives if	
17	you were to move forward to a construction	
18	phase.	
19	However, what we found in the	
20	report is that the costs and the designs really	
21	help, again, add to that evaluation criteria,	
22	help add to the ability to discern among the	
23	different alternatives and really look at the	
24	pros and cons depending on what your specific	
25	point of view may be.	

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1	When you look at GLMRIS, we try	
2	to do three things. We looked at identifying	
3	connections. We looked at identifying species.	
4	Colonel Drummond spoke to 13 Aquatic Nuisance	
5	Species of concern. Those came from a list of	
6	over 200 that we initially identified as	
7	potentially invasive in the two basins.	
8	We also identified Aquatic	
9	Nuisance Species controls. Colonel Drummond,	
10	again, mentioned about 90 different controls	
11	that we initially identified as potentially	
12	useful in the study. We went through a plan and	
13	formulation process where we looked at those	
14	connections, again, the Chicago Area Waterway	
15	System; the species that had transferred between	
16	the basins and those controls, and used that	
17	information along with background, baseline	
18	information about economies, about the	
19	environment, to formulate the alternatives and	
20	all the information that's contained within the	
21	GLMRIS report and its appendices.	
22	A couple of technologies that I'd	
23	like to highlight this afternoon, as I speak to	
24	them, at least introduce them a little bit,	
25	our the list we have up on the slide. We	

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1	start off with various simple concepts such as	
2	physical separation or concepts you may have	
3	heard of before such as electric barriers. We	
4	use specifically electric barriers to address	
5	those species that swim in the water.	
6	So when we're looking to evaluate	
7	and identify different aquatic nuisance species	
8	controls, we looked at the way that species move	
9	through the aquatic pathway. Essentially, you	
10	either swim, you float or you hitchhike. You're	
11	assisted by transferring through the aquatic	
12	pathway on the hull of a barge or the hull of a	
13	recreational boat. So we looked at identifying	
14	controls that would essentially target each of	
15	those paths of movement.	
16	One of the more novel concepts	
17	that has come out of the GLMRIS report is the	
18	concept of the GLMRIS lock. Essentially, it is	
19	very similar to a lock structure, as you might	
20	be familiar with, where instead of being fed by	
21	gravity, we now introduce pumps at both ends of	
22	the system that allow water to flush through the	
23	lock; thereby removing those Aquatic Nuisance	
24	Species that float within the lock.	
25	Water for that ANS-treated	

		25
1	water is supplied by the Aquatic Nuisance	
2	Species treatment plants. So in many of the	
3	scenarios, you'll see GLMRIS locks partnered	
4	with aquatic nuisance species treatment plants	
5	and then, for example, electric barriers. So	
6	you can hit several different modes of transfer.	
7	You hit the swimmers and you hit the floaters,	
8	and you try and control those species that are	
9	passed between the basins.	
10	So now, I'll begin to go through	
11	each one of these alternatives. You can kind of	
12	follow along in your book if you'd like. On the	
13	lower left-hand corner of the slide are the	
14	alternative plans listed.	
15	So the first alternative, as John	
16	and Colonel Drummond mentioned, is our baseline	
17	alternative. We call it the "No New Federal	
18	Action" plan. I kind of prefer to call it	
19	sustained activities.	
20	The reason for that is that we	
21	won't cease activities, and there's a lot of	
22	important work that has been going on as the	
23	previous speakers highlighted, and that will	
24	continue on into the future; activities from	
25	local resource agencies like states, trying to	

		26
1	combat aquatic nuisance species, such as those	
2	you see up on the slide, as well as Corps	
3	specific activities like operation and	
4	maintenance of the electric barriers, as well as	
5	continued optimization and construction of those	
6	systems.	
7	The second alternative that we	
8	focus on within the GLMRIS report and each	
9	one of these alternatives certainly builds upon	
10	the next. The first, as you probably made note,	
11	was basically our baseline. It was an	
12	alternative to compare future alternatives	
13	the remainder of the alternatives against to see	
14	what kind of additional risk reduction we might	
15	see with the implementation of control	
16	technologies.	
17	So alternative two is	
18	nonstructural controls, and essentially, these	
19	are any type of controls that can be implemented	
20	without building a physical structure. Some	
21	examples include active management, public	
22	education for our new laws and regulations.	
23	So, for example, active	
24	management. If we were to identify a species of	
25	concern like a plant that was located in a	

		27
1	specific area, could we potentially go and use	_ ′
2	aquatic herbicides through management techniques	
3	to essentially prevent the transfer of this	
4	plant. And that's kind of the scenario that we	
5	anticipated with regard to active management.	
6	The same goes for, you know, new	
7	laws and regulations or public education. We	
8	see each of these as best management practices.	
9	So we've included elements of this	
10	nonstructural measures in each of these	
11	subsequent alternatives.	
12	Is it, for example, a good idea	
13	to ensure that the public is aware that bait	
14	bucket transfer is a significant route of	
15	aquatic nuisance species transfer between the	
16	basins. And so we've estimated, at a very	
17	general level, the amount of costs that	
18	potentially we could include to implement a wide	
19	array of nonstructural measures across that	
20	watershed divide.	
21	The estimated cost is about	
22	\$68 million, but it's a very I believe it's a	
23	very conservative cost in that it could	
24	certainly be optimized to try and target those	
25	species that are perhaps best controlled through	

		28
1	these nonstructural measures. The unique part	
2	about nonstructural measures is they also can be	
3	implemented tomorrow, given that a particular	
4	resource agency has the appropriate authorities	
5	and resources to go.	
6	Our third alternative is the	
7	first of two technology alternatives that we	
8	include within the report. I won't spend a	
9	whole lot of time going through the details of	
10	each of these alternatives because, again, we	
11	have the banners up here, as well as I think	
12	everyone in the room has the summary books which	
13	speak to them in detail.	
14	But I just want to spend a couple	
15	minutes talking about some of the pros and cons	
16	for each these. The flow bypass alternative, as	
17	we call it, provides two two-way control points	
18	for aquatic nuisance species.	
19	So there are points within the	
20	Chicago Area Waterway System where we attempt to	
21	control the bidirectional transfer of Aquatic	
22	Nuisance Species. To that effect, we use a	
23	GLMRIS lock paired or bookended with a pair of	
24	electric barriers to allow navigation to	
25	continue through the system, but we run the	

		29
1	majority of the flow of the Chicago Area	
2	Waterway System through a dedicated Aquatic	
3	Nuisance Species treatment plant.	
4	So essentially, we've rerouted	
5	the flow of the entire river at two points	
6	through a plant. It's similar to a wastewater	
7	treatment plant, but this one treats just for	
8	aquatic nuisance species. So we run the entire	
9	volume, and therefore, remove a great volume of	
10	aquatic nuisance species through this process.	
11	There are some challenges with	
12	regard to this because, as you can imagine, the	
13	size of the plant needs to be pretty large to	
14	deal with the primary focus, and then when you	
15	have significant precipitation, such as we do	
16	sometimes in the Chicagoland area, you can see	
17	flows which are 10 or 20 times order of	
18	magnitude as you see in dry weather flows.	
19	So instead of building a plant	
20	that may be 10 or 20 or 50 times the size it	
21	needs to be to treat those occurrences which	
22	happen maybe once every year, every five years,	
23	every 50 years, we instead include mitigation of	
24	the structure for flood risk. So it's a series	
25	of tunnels and reservoirs that will capture and	

		30
1	hold any additional precipitation, additional	
2	flood waters within the system.	
3	These flood risk mitigation	
4	measures are what contribute a significant	
5	amount to the cost of this system the cost of	
6	this alternative, as well as the estimated time	
7	of completion. As is noted on the bottom of the	
8	slide, we looked at about 25 years with a total	
9	cost of about \$15.5 billion.	
10	The second technology alternative	
11	is what we call the CAWS buffer zone. So as	
12	opposed to having two single bidirectional	
13	control points, what we do is instead separate	
14	the system and bookend the system with one-way	
15	check points.	
16	We have a series of one-way	
17	controls along the around the shores of Lake	
18	Michigan, as well as those entrance canals from	
19	Lake Michigan, as well as another single control	
20	point down at the bottom of the system. So	
21	we've created what we call a buffer zone or an	
22	aquatic nuisance species control zone in between	
23	these two one-way check points.	
24	What you see in white is operated	
25	as an aquatic nuisance species control zone, and	

		31
1	so we imagine that there aren't any elements of	
2	those aquatic nuisance species of concern free	
3	in that system. Some of the advantages to this	
4	is that it allows us to maintain waterways as we	
5	do today. It also allows us to monitor and use	
6	that buffer zone as a zone where we can try and	
7	detect early movement of species between basins.	
8	Because only a small amount of	
9	flood risk management infrastructure needed to	
10	be constructed, and that would be for two	
11	barriers that we include as part of this	
12	scenario, the total time to complete is	
13	significantly reduced in this technology	
14	alternative with a total cost of about	
15	\$7.8 billion over a span of about ten years.	
16	Alternative plans 5 and 6 are the	
17	two physical separation alternatives, and they	
18	basically have a different take on where you put	
19	the barriers and what kind of impacts you may	
20	have on the system and on the existing uses and	
21	users of the CAWS.	
22	Alternative plan 5 puts physical	
23	barriers near the lakefront as you can see on	
24	the slide behind me. In this sense, you've	
25	essentially limited the ability for water to	

		32
1	flow back out into Lake Michigan, and you've	
2	limited the ability for water to be transferred	
3	as it currently can be today. So therefore,	
4	again, you have a significant cost in	
5	constructing infrastructure to help mitigate	
6	that additional flood risk that would come with	
7	creating these physical barriers in the system.	
8	Because we're building	
9	significant amounts of tunnels and reservoirs	
10	and associated infrastructure, the time to	
11	complete is significant at about 25 years with a	
12	cost of about \$18.4 billion.	
13	The second of the two hydrologic	
14	separation scenarios is the mid-system, and so	
15	as opposed to having individual points along	
16	Lake Michigan where we try and block the	
17	transfer, put up physical barriers, now we're	
18	going to institute two barriers in the	
19	mid-system orientation, very similar to that	
20	very first technology alternative I described.	
21	Here, you have the significant	
22	infrastructure which would be necessary to	
23	mitigate for environmental impacts to the	
24	Chicago Area Waterway System. Once you	
25	construct a physical barrier in the middle of	

			33
	1	the system, at these two points, you open up the	
	2	majority, the rest of the Chicago Area Waterway	
	3	System to Lake Michigan. There is significant	
	4	pollution that can result from the discharge of	
	5	combined sewer outfalls, as well as that large	
	6	volume of flow for existing wastewater treatment	
	7	infrastructure, which would need to be dealt	
	8	with.	
	9	So we thought of a couple ways to	
	10	deal with that. We could either put in really	
	11	good wastewater treatment plants that would	
	12	clean up the wastewater streams to kind of	
	13	down to the nth molecule or we could simply	
	14	reroute those wastewater streams as they are	
	15	routed currently today and have them continue	
	16	downstream, which is what we've chosen in this	
	17	particular scenario.	
	18	The reason why we haven't cleaned	
	19	up the water to perhaps Lake Michigan water	
	20	quality standards is because the initial cost	
	21	and the long-term operation and maintenance is	
	22	significant. There are some rules about	
	23	introducing new pollutants into significant	
	24	natural resources, which we partnered with our	
	25	state regulatory agencies and helped us make	
1			

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1	this decision to reroute those discharges to	
2	points downstream of the barriers.	
3	There's also significant	
4	pollution within the sediments, so the mud in	
5	the bottom of the Chicago Area Waterway System.	
6	So we include costs in the scenario to dredge up	
7	or to excavate all that mud and the contaminated	
8	sediments and dispose of them appropriately.	
9	Hence, you get, again, a significant time for	
10	completion, about 25 years at a significant	
11	cost, about \$15.5 billion.	
12	The last two scenarios are	
13	hybrids of the technologies and the physical	
14	separations. While I didn't spend a whole lot	
15	of time talking about it today, you could	
16	essentially split the Chicago Area Waterway	
17	System into two sections. There's an upper	
18	section and a lower section.	
19	So these two hybrids essentially	
20	place a physical barrier on either the upper or	
21	the lower, while allowing navigation and	
22	existing uses to continue along the opposite	
23	one.	
24	So for this one, hybrid with the	
25	Cal-Sag Channel. For those of you that are	

		35
1	probably familiar with the Cal-Sag, it's this	
2	lower channel of the two systems. In that	
3	system, we place the technologies and place a	
4	physical barrier on the upper part of the	
5	system.	
6	In the alternate one, you keep	
7	the top part of the system open, the Chicago	
8	Sanitary and Ship Canal, placing the physical	
9	barrier on the lower part of the system. So	
10	essentially it's splitting the difference	
11	between a full physical separation and a full	
12	technology scenario. So we included these two	
13	as comparable alternatives. You'll notice that	
14	they are a little bit unique in the fact that	
15	one is significantly more expensive to construct	
16	than the other, at almost twice the cost.	
17	And that's, again, due to all of	
18	the mitigation for water quality and flood risk	
19	that's necessary to be constructed as part of	
20	this specific scenario.	
21	I mentioned at the outset of the	
22	discussion today that the report is an excellent	
23	tool for decision makers, and the reason why is	
24	we have discussed a number of different	
25	evaluation criteria within the report; anything	
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1	from the effectiveness of the controls to the	
2	costs to the duration for implementation and how	
3	perhaps regulatory acceptable is a particular	
4	alternative.	
5	All this information can be used	
6	in a trade-off analysis by decision makers such	
7	as members of the public or your elected	
8	officials to try and come up with a kind of	
9	collaborative path forward on which one of these	
10	alternatives provide the best benefits and	
11	challenges to the multiple stakeholders that are	
12	part of this conversation.	
13	I'll wrap up my discussion today	
14	and move on to the important part, which is to	
15	listen to everyone here speak, by leaving you	
16	with a few thoughts.	
17	As I kind of discussed, each one	
18	of the costs and the significant times for	
19	duration for construction is really attributable	
20	to the mitigation necessary for each one of	
21	these alternatives. I'm not going to stand here	
22	and tell you that it's going to take me 25 years	
23	to put a dam in the water. That's certainly not	
24	the case.	
25	What I will tell you is it will	

		37
1	take 25 years to construct the infrastructure,	
2	any tunnels and the reservoirs that would be	
3	necessary to ensure that the residents of	
4	Chicago or the outlying suburbs don't have	
5	basements that are flooded or that we don't	
6	adversely impact the water quality in a	
7	significant natural resource like Lake Michigan.	
8	No matter what, with each one of	
9	these alternatives there will be some residual	
10	risks that remain. Some of the primary residual	
11	risks are the other modes of transport that I	
12	alluded to, like bait bucket transfer, human	
13	transfer, we call it, ways that a species can	
14	move between the basins even if we had a	
15	significant time and resource-intensive	
16	infrastructure solution.	
17	Each one of the controls each	
18	one of the alternatives that we described in the	
19	report have a different level that they can be	
20	adaptively managed, and we spent a little time	
21	in the report talking about that. It's an	
22	important kind of an important piece for each	
23	one of these that we do discuss and try and	
24	answer these couple questions that we have up on	
25	the slide.	

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1	Finally, and Colonel Drummond	
2	mentioned it, and I know Mr. Goss mentioned it,	
3	as well, is the aquatic nuisance species control	
4	is a shared responsibility, and that's why we're	
5	here speaking with you tonight and listening to	
6	your input.	
7	Any of the alternatives that	
8	we've presented today would likely, you know,	
9	take some infrastructure or take some resource	
10	contribution by a wide variety of stakeholders.	
11	So we're looking for your input, as well as	
12	input from stakeholders and decision makers on	
13	what we feel is the most appropriate path	
14	forward.	
15	As Kendall introduced, we are	
16	going to a number of different cities to kind of	
17	spread this message and to hear from our	
18	constituencies. We have a number of different	
19	meetings. We started the first two kind of	
20	focused in on the Lake Michigan basin within	
21	Chicago and Milwaukee. Then we'll be spreading	
22	out to hit different cities in the Great Lakes	
23	Basin, as well as on the Mississippi River.	
24	With that, I think I'm going to	
25	conclude and thank each one of you for your time	

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1	here today. I will turn the conversation back	
2	to our moderator, Kendall, and with that, I	
3	really look forward to hearing what each of you	
4	have to say and what you'd like to contribute as	
5	a path forward with regard to GLMRIS.	
6	Thank you for your time.	
7	MR. ZABOROWSKI: Thank you, Dave, and	
8	John and Colonel Drummond for your talks.	
9	Before we get into the formal	
10	oral comment period, I would like to thank	
11	Colonel Drummond for hosting us here tonight,	
12	and I would also, again, like to remind you that	
13	the study website shown here is a great source	
14	of information. Again, the GLMRIS report in its	
15	entirety can be viewed and downloaded from the	
16	website if you go there at your leisure.	
17	Now we're going to move into the	
18	comment period for tonight. Those who indicated	
19	on your yellow comment registration forms that	
20	you'd like to make a comment or ask a question	
21	will be given the opportunity to do so now.	
22	Normally, we have a more formal	
23	process where I have a timer that runs down	
24	three minutes. Currently, I have only six	
25	people registered to speak. So if all of you	
1		

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1	here are willing to be respectful of each	
2	other's time and not monopolize the microphones,	
3	would you be willing to waive that normal	
4	process? I'm just looking for a couple head	
5	nods. All right. I got a thumbs up in the	
6	back.	
7	So I'm going to run through	
8	five people registered on our website before the	
9	meeting tonight, so I'm going to call those	
10	people to the microphone in order first. I'll	
11	call the first name, and then I'll mention the	
12	next two behind them. Jim Bredin here in the	
13	front row, he's going to help you out with the	
14	microphone if you need assistance.	
15	So we'll just ask you to come	
16	down, step into this microphone, and then make	
17	your comments there. After that, I'll move to	
18	the persons that have registered here at the	
19	meeting that did not do so before the meeting.	
20	I'd like to mention that we have	
21	a stenographer with us tonight. She's sitting	
22	down here up front. She is going to be	
23	reporting any of your comments or questions. So	
24	I ask that when you come to the microphone to	
25	make an oral comment or to ask a question of the	

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1	panel, please first give your name, any	
2	organization that you're representing and then	
3	your zip code. We ask that you speak into the	
4	microphone and speak slowly so that she can	
5	record those vital pieces of data.	
6	If you do not give us your name	
7	and zip code, we will not be able to formally	
8	record your comment in the oral comment period.	
9	That's your desire if you wish.	
10	So moving on, we're going to now	
11	hear from people that preregistered to speak.	
12	So first at the microphone may I have Miss Mary	
13	Jean Huston. Then following her will be Joan	
14	Rothenberg, and then after her, Mr. Ken Fries.	
15	And I apologize if I'm mispronouncing any of	
16	your names. One of the reasons that we ask you	
17	to say your name is in case I did that.	
18	MS. HUSTON: I am Mary Jean Huston	
19	with The Nature Conservancy in Wisconsin, and my	
20	zip code is 53703.	
21	And first, I would like to thank	
22	you for the opportunity to speak today and also	
23	thank Army Corps of Engineers for all of the	
24	work that has gone into this issue.	
25	The cost of doing no new actions	
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1	is not zero. It could, in fact, be very	
2	expensive. There are real economic costs	
3	associated with the spread of Aquatic Invasive	
4	Species.	
5	Aquatic Invasive Species cost	
6	businesses and consumers in the Great Lakes	
7	Region hundreds of millions of dollars annually	
8	in direct costs and even more from indirect	
9	costs related to removal, maintenance, and	
10	management of those species. This is from a	
11	2012 report from the Anderson Economic Group.	
12	An example of just one component	
13	of these costs is that our sport and commercial	
14	fisheries, which could be devastated by the carp	
15	and other invasives, are valued at over	
16	\$7 billion annually. In this context, the costs	
17	of ecological separation don't seem as dramatic.	
18	The Chicago Area Waterway System	
19	is a two-way highway for Aquatic Invasive	
20	Species. The U.S. Army Corps' Interbasin study	
21	limited its assessment to 13 species of current	
22	concern, but the Great Lakes and Mississippi	
23	River Basins need a solution that considers the	
24	full range of potentially invasive species.	
25	Stopping all Aquatic Invasive Species moving in	

		43
1	both directions is vital to protecting two of	
2	the world's largest and most important	
3	freshwater resources.	
4	Any solution to the passage of	
5	Aquatic Invasive Species through the Chicago	
6	Area Waterway System must accomplish three	
7	things; stop invasive species from moving	
8	through the Chicago Area Waterway System in both	
9	directions, stop all invasives, not just Asian	
10	carp, and work must begin as soon as possible to	
11	reduce the risk of Aquatic Invasive Species	
12	movement through the Chicago Area Waterway.	
13	The timelines for options in the	
14	report are too long. 25 years is unacceptable.	
15	The economic risks are too high to wait that	
16	long. The Army Corps study shows that there are	
17	viable options that achieve long-term	
18	environmental separation while maintaining	
19	crucial transportation and economic activity.	
20	With the excellent information	
21	gathered by the Army Corps and others, we must	
22	develop practical interim measures now that can	
23	move us forward quickly to reduce the risk of	
24	Aquatic Invasive Species moving into or out of	
25	the Great Lakes. Thank you.	

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1	MR. ZABOROWSKI: Thank you, ma'am.	
2	Next to the microphone, Miss Joan	
3	Rothenberg. And before the next comment this	
4	is a note. If you have prepared a written	
5	comment that you're reading from, if you	
6	wouldn't mind tonight leaving it with the	
7	stenographer at the end of the meeting. It will	
8	help us to make sure we ensure accuracy in the	
9	comments that are recorded.	
10	MS. ROTHENBERG: I've already	
11	submitted mine my written comment. I am Joan	
12	Rothenberg, so that was pretty close; and I	
13	really appreciate the opportunity to speak as a	
14	member of the public. I wish there were more of	
15	me here.	
16	I also have to say, having read	
17	the summary a couple of times, I am so impressed	
18	by the clarity and just the fineness with which	
19	it's done, and the painstaking work that	
20	Commander Drummond mentioned shows. I think it	
21	really shows.	
22	I am, as I said, Joan Rothenberg.	
23	I am from Evanston, Illinois 60201, and I'm here	
24	as a concerned citizen. All of my available	
25	time is spent by choice studying and exploring	

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	1	the Great Lakes. So I can say with a lay	10
	2	only a layperson's authority who has really paid	
	3	a lot of attention over half a decade; I spend	
	4	really all my time reading and exploring, that	
	5	we who live in the Great Lakes Basin are the	
	6	luckiest people on earth.	
	7	The experts I have come to	
	8	respect over the years for the most part promote	
	9	a permanent and complete hydrologic separation	
	10	as the only constructive, forward-looking way to	
	11	go. And the Army Corps report identifies	
	12	separation, at least in my reading, as the most	
	13	effective way to keep invasives from moving	
	14	between the two watersheds.	
:	15	None of the experts takes lightly	
:	16	the change this will require of individuals,	
	17	communities, cities, and industries that have	
	18	thrived as a result of CAWS. The more I know	
	19	about this treasure, the Great Lakes, the more	
,	20	it is clear that it is the more clear it is	
,	21	that 18 billion is a small price to pay to	
	22	protect a region whose dollar value is	
,	23	inestimable.	
	24	Or as people said on Friday,	
	25	which I listened to the webinar and it was	
1			

		46
1	also surprisingly well done, clear, I've	
2	attended a lot of webinars where you can't hear,	
3	and there's some kind of technical glitch. It	
4	was so well done.	
5	But as people said on Friday, if	
6	we let in more invasives, the 18 billion is	
7	going to look really small. Even the most	
8	expensive plan is cheap, and this was a	
9	stunningly clear picture.	
10	Indiana's Attorney General, Greg	
11	Zoeller, pointed out on Friday that no one water	
12	skis on the Wabash River anymore because of	
13	Asian carp, and that soon there will be no	
14	smallmouth bass.	
15	What about the fact, also,	
16	that and I think I I'm not sure which	
17	option it is now; I was clear a while ago. But	
18	at least one of the options stops our continuing	
19	to allow our effluent to go down the	
20	Mississippi. What about the fact that we are	
21	major contributors to the dead zone in the Gulf	
22	of Mexico? It's not right for now, and it's not	
23	right for the future.	
24	It must have made sense in the	
25	past, 100 years ago, but it is no longer the	

		47
1	responsible thing to do; and our Canadian	
2	friends aren't going to be thrilled with us if	
3	more damaging invasives get in via Chicago.	
4	They have to do their part, but so do we.	
5	The Great Lakes region has led	
6	the continent before in terms of development,	
7	even before Europeans got here. I have no doubt	
8	that with the truly exquisite natural resources	
9	we have, and with I'm not from the Midwest,	
10	but I have come to regard Midwest temperament	
11	very highly with Midwest temperament, we can	
12	lead the way for the continent and perhaps the	
13	world as a model for how to protect what we	
14	have, and therefore, thrive successfully,	
15	thoughtfully balancing resources as the world's	
16	resources become increasingly stressed.	
17	MR. ZABOROWSKI: Thank you, ma'am.	
18	Next, we would like to invite	
19	Mr. Ken Fries to the microphone. Then after him	
20	will be Miss Cheryl Nenn, and then Mr. Mark	
21	Pass.	
22	MR. FRIES: Good evening. My name is	
23	Ken Fries, you pronounced that right, F-r-i-e-s,	
24	and zip code is 53150.	
25	Just a little background on	

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1	myself, I'm president of the Little Muskego Lake	
2	Association. That's a lake that's approximately	
3	20 miles to the west of here. I've been and	
4	also as a private citizen as well.	
5	But my whole life just about	
6	my whole life I've been in this area in the	
7	southeast corner of the state, and I have seen	
8	horrific rains, storm events. I think within	
9	the last 15 years I think I've seen two 200-year	
10	storm events. So structures that have been	
11	built don't make it; they fail.	
12	There is a deep tunnel sewer	
13	system here. I don't know if you're familiar	
14	with that, but there's been overflows there,	
15	too, and that's been going on for I think	
16	that's probably 20 years, if not even longer	
17	than that.	
18	I've looked at your report, and,	
19	again, I compliment all the work that was put	
20	down on that, quite technical. I'm a civil	
21	engineer, so I can understand a good part of	
22	that. As far as what plan I'd choose at this	
23	point, I don't really know if I have an answer,	
24	but I can say that Plan No. 1 and Plan No. 2	
25	definitely should be implemented as soon as	

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1	possible.	
2	I've noticed on our lake, too, we	
3	have a carp population of common carp, and we've	
4	actually had carp shoots out there where we	
5	actually shoot those with bow and arrow. Now, I	
6	know we can't do that in the Great Lakes Basin,	
7	but I've learned a lot.	
8	What we are the fish that we	
9	have pulled out of the lake and by the way,	
10	those are recycled in the fertilizers. So what	
11	you take out of the Chicago River can be	
12	beneficially used. In some of these events that	
13	we've had, we're seeing larger fish, not small	
14	ones, so that means they're not propagating. In	
15	the discussions I've had with the DNR, the	
16	Wisconsin DNR said we have a high panfish count,	
17	and those fish are eating up the spawn of the	
18	carp.	
19	So I mean, I don't know if that's	
20	one thing that's been looked at as far as just,	
21	you know I'm not talking about other invasive	
22	species, but other common fish that might be	
23	able to help out on making sure there's not any	
24	eggs that are hatching.	
25	Another concern I have, too, is	

		50
1	for migratory water fowl. What happens when	
2	some goose lands in the Chicago River and then	
3	takes off our way? How are you ever going to	
4	get that? That's why I think that it's	
5	important that you look at some of these other	
6	methods.	
7	I heard earlier about a	
8	biological and maybe some genetic type	
9	exploration. I totally agree with that.	
10	There's got to be someone out there, some group,	
11	somebody that can say, "I think I gotta agree	
12	with you, do it."	
13	And you know, another thought,	
14	too, is what's going down in Mississippi. These	
15	carp have been down there for is it dead	
16	water, and is it I mean, are they doing	
17	anything down there? There's got to be	
18	something that can be shared.	
19	And I think, too, that the	
20	comment that was made about the sea lampreys,	
21	and I can remember that back in the '60s, when	
22	the Coho salmon and the Snook families were all	
23	introduced. That's what was mentioned with the	
24	last speaker. That's a tremendous fishing	
25	opportunity. And that sea lamprey problem and	

		51
1	the alewife problem went away, too. So I mean,	
2	that's something to look at.	
3	And then another question or	
4	comment I had here, too, is, you know, with all	
5	of the fish hockeying and everything, are any of	
6	these carp tagged, like electronically, so we	
7	can actually see where these things are going?	
8	I think that's critical, too, because I keep	
9	hearing, well, they're X amount of miles away	
10	from getting into Lake Michigan. Then I hear	
11	well, no, it's further back. Well, what is it?	
12	So I mean, those are some of my general	
13	comments.	
14	I also certainly support the idea	
15	of the electroshocking, but then I've read	
16	comments, too, that if the current's too strong,	
17	well, then with boats carrying flammable	
18	materials, there's a potential fire problem. So	
19	that's certainly an issue, but then if it's not	
20	strong enough, then I hear some of these fish,	
21	too, are being dragged in with the prop wash.	
22	Those are some technical issues to solve.	
23	So anyway, those are my thoughts	
24	that I had right now, but I definitely would	
25	support the Plan 1, Plan 2, at least get started	

		52
1	as soon as possible. And with our legislators	02
2	here, I hope they take that information back to	
3	D.C. Thank you.	
4	MR. WETHINGTON: Thanks for your time.	
5	Thanks for your comments.	
6	I just want to make a quick	
7	comment that we are doing we're partnering	
8	with a number of the different agencies, you	
9	know, folks like Mr. Goss having a federal as	
10	well as a state kind of partnership toward	
11	looking into the wide variety of things that can	
12	be done with regard to existing species like	
13	Asian carp, as well as looking into the future.	
14	So we very much appreciate your	
15	comments, and please note that there is a	
16	significant amount of effort that is currently	
17	ongoing and will likely continue to be evolving	
18	in the future.	
19	MR. FRIES: I appreciate the comments	
20	tonight, too, because I can see that. I was	
21	sort of skeptical ahead of that, but now being	
22	here and reading the report, I can see that	
23	there's been some massive work done.	
24	COLONEL DRUMMOND: Let me go ahead and	
25	just hit on a couple of things that you had	

		53
1	mentioned.	
2	First of all, the DNRs are taking	
3	a very aggressive step, especially in Illinois.	
4	I can tell you I've been out there firsthand out	
5	of uniform pulling nets off the water. They	
6	and I say this a lot the fishermen that are	
7	netting down there understand Asian carp to no	
8	end. They understand the dynamics, and they	
9	understand how they operate, they understand how	
10	to net them; and we've been doing that for the	
11	last couple years, and there is a change	
12	occurring.	
13	I would submit that if you go to	
14	the DNR website, there's a location there that	
15	talks about what they have netted over the last	
16	couple of years, and that will give you sort of	
17	a snapshot of what they're doing down there and	
18	what we're going to continue to do.	
19	We have also tagged non-Asian	
20	carp fish, and the tagging is in the thousand of	
21	detections with no passage through the barrier	
22	whatsoever in the last couple years.	
23	So there is a lot of different	
24	things. It's a very complex undertaking, as you	
25	had mentioned, and I would applaud you because I	

		54
1	think the DNRs need to continue to take an	
2	aggressive role on working with the ACRCC, as	
3	well as other agencies in dealing with the Asian	
4	carp. Thank you.	
5	MR. ZABOROWSKI: Thank you, Colonel	
6	Drummond. Next, Miss Cheryl Nenn.	
7	MS. NENN: Good afternoon, and thank	
8	you. My name is Cheryl Nenn. I'm here today on	
9	behalf of Milwaukee River Keeper. We're a	
10	nonprofit organization. We were started in	
11	1995, and our mission is to protect water	
12	quality, wildlife habitat in the Milwaukee River	
13	Basin.	
14	I'm also a member of the Healing	
15	Our Waters Coalition, and I guess personally,	
16	I'm a native Chicagoan. Our family also has a	
17	cottage, actually, on a tributary to the	
18	Illinois River near Henry, Illinois, and so	
19	unfortunately, I've been able to experience the	
20	issue firsthand.	
21	We'd like to start out by	
22	thanking the Corps for doing this really	
23	important work and providing us with this	
24	information and the range of alternatives to	
25	deal with Asian carp and other Aquatic Invasive	
I		

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1	Species in getting us further to a solution to	
2	this problem.	
3	We also think it's a very	
4	important tool for public policy that will	
5	hopefully guide Congress and also our regional	
6	and local stakeholders to better deal with the	
7	problems that we have.	
8	We believe that the physical	
9	separation of the waterways provides the most	
10	effective permanent solution to the invasive	
11	species transfer between the Great Lakes and the	
12	Mississippi River Basin. We also feel that	
13	interim steps should be taken immediately to	
14	begin this undertaking of separation.	
15	Doing nothing, as others have	
16	said, and sticking to the status quo is really	
17	not an option. It's also doing nothing is	
18	also not a zero cost as others have mentioned.	
19	Invasive species cost the U.S. more than	
20	\$120 billion annually, and we're spending around	
21	\$12 million annually right now, you know,	
22	operating the electric barriers. So there is	
23	cost to doing nothing and sticking with the	
24	status quo.	
25	We firmly believe that we must	

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1	prevent an ecological catastrophe that could	
2	inflict huge damage on the Great Lakes region	
3	and the Mississippi River Basin. The	
4	establishment of carp and other harmful nuisance	
5	species could be devastating to an already	
6	incredibly fragile Great Lakes fishery, which is	
7	estimated to be annually about a \$7 billion	
8	industry right now.	
9	There also could be huge impacts	
10	on an estimated \$16 billion boating industry in	
11	the Great Lakes, which also provides there's	
12	also estimates of one-and-a-half million jobs	
13	and overall \$62 billion in wages from people who	
14	work on the Great Lakes. So there's	
15	obviously if the invasive species like the	
16	Asian carp and others get into the Great Lakes,	
17	there could be a huge impact on the economy.	
18	In fact, in Wisconsin alone,	
19	water-based tourism is like an 8 to \$12 billion	
20	industry. We have these carp literally coming	
21	up our front and our back door right now. We're	
22	very concerned about them getting into the Great	
23	Lakes here and ending up in Milwaukee very	
24	quickly if they got into Lake Michigan. But	
25	clearly, they're already coming up on the back	

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1	side up the Mississippi River, which is a huge	
2	concern.	
3	We care about Lake Michigan and	
4	the Chicago Area Waterways, but we feel that	
5	physical separation is the best way to protect	
6	these waters from the introductions really in	
7	both directions. And that's important to	
8	remember. It's only the Asian carp that we're	
9	concerned about getting into the Great Lakes,	
10	but all of the invasive species that regularly	
11	are getting into the lakes that also are you	
12	know, potentially could get to the Mississippi	
13	River Basin and far beyond. In fact, zebra	
14	mussels have really expanded, you know,	
15	unbelievably to a good chunk of this country.	
16	They're causing huge economic damages.	
17	As we've recently heard, the	
18	electric barrier is significantly flawed.	
19	There's been some recent studies that have shown	
20	that fish are swimming through the barrier on,	
21	you know, maybe bubbles in that prop wash; and	
22	we're very concerned that that barrier was not	
23	really designed to and will not completely	
24	prevent the transfer of dozens of invasive	
25	species that are moving in both directions. We	

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1	really think that doing nothing is not an	
2	option. We must take prompt action.	
3	We also think the separation	
4	could be stages in phases. Like other major	
5	infrastructure projects, this clearly isn't	
6	going to happen right away, but we also think 25	
7	years is way too long to wait. We hope that	
8	interim measures could be implemented	
9	immediately in the way that it provides some	
10	immediate enhanced protection for the Great	
11	Lakes and the Mississippi River Basins, and then	
12	having a longer term separation plan, as well.	
13	We think that separation will	
14	obviously lead to benefits to both the Great	
15	Lakes and the Mississippi regions and also	
16	Chicago and, you know, result in cleaner water	
17	and better flood control and economic	
18	development in the process of innovating our	
19	infrastructure, which is quite old. And we also	
20	think dozens of states would benefit from this,	
21	and so it would make sense to share that cost,	
22	and that also can make the project more	
23	affordable.	
24	We call really on our state and	
25	federal leaders to work cooperatively and to	

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1	build off this report to really design a	
2	separation solution that could be better,	
3	cheaper and faster. Separation must be part of	
4	this broader vision that seeks to address the	
5	goals of flood control, improve water quality,	
6	efficient transportation, growth in recreation	
7	and tourism and protection and restoration of	
8	nature.	
9	Lake Michigan, the Chicago Area	
10	Waterways, as well as downstream waterways would	
11	all benefit. This would also obviously protect	
12	Lake Michigan, and Lake Michigan tributaries	
13	like the Milwaukee River here in Wisconsin.	
14	Clearly, if the carp get in the	
15	lake, they'll be in the Milwaukee River in no	
16	time, and we're very concerned about the impacts	
17	that could have on our fisheries here; and	
18	because, as we all know, these carp are	
19	voracious eaters that can eat up to like	
20	40 percent of their weight a day. We already	
21	had quite a significant grass carp problem, and	
22	we're very concerned about the impact that these	
23	fish would have on, you know, a lot of the	
24	shallower portions of Lake Michigan and the	
25	Great Lakes tributaries here in Wisconsin.	

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	1	The health of the Great Lakes and	
	2	Mississippi River, as well as the communities	
	3	and jobs that they support, are worth this	
	4	price; and our quality of life that we have	
	5	here, it's very hard to put a price tag on that	
	6	and the cost of losing that should we have Asian	
	7	carp and other invasives really affect our	
	8	ability to boat and to recreate in these	
	9	waterways and to fish.	
	10	We do think technology is	
	11	available to dramatically improve the water	
	12	quality. The Chicago Area Waterways right now	
	13	host only a tiny area of that region's commerce.	
	14	In fact, some recent studies coming out show	
	15	than less than 4 percent of goods being	
	16	transported in Chicago are currently going	
	17	through that waterway system. So we think, you	
	18	know, investment in transportation obviously	
	19	could and should happen with the separation and	
	20	could be part of the solution.	
	21	In closing, we feel that	
	22	separation is necessary to keep Lake Michigan	
	23	clean, and that we are able to lead this	
	24	challenging task in 2014. Although the costs to	
	25	act are obviously very high, we feel that the	
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1	costs of doing nothing are unimaginable.	
2	Thanks for your consideration.	
3	MR. ZABOROWSKI: Real quick, before	
4	you go, can I actually get you to say your zip	
5	code?	
6	MS. NENN: I wrote it down on the	
7	card. It's 53202.	
8	MR. ZABOROWSKI: Thank you. And then	
9	next to the microphone could we ask Mr. Mark	
10	Pass to come down, and then after Mark Pass	
11	speaks, that will be the conclusion of those	
12	that registered on our website. So after him,	
13	if Mr. David Kwasny would be prepared.	
14	All right. So when you're ready,	
15	just give your name and zip code.	
16	MR. PASS: Good evening. Hi. My name	
17	is Mark Pass. I'm from Waukesha, Wisconsin, zip	
18	code 53186. I'm a member of the Waukesha	
19	Environmental Action League. I'm here as a	
20	concerned citizen.	
21	Waukesha's about 20-odd miles	
22	west of Milwaukee. Part of us is on the	
23	Continental Divide that drains into Lake	
24	Michigan; part of us isn't. We have a unique	
25	problem with the municipal water supply in our	

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1	community that we're struggling with; and the	
2	point of being here and I think everybody's	
3	here because they're concerned. I want to say	
4	that.	
5	But I've heard a lot of	
6	description of what it's going to take in costs,	
7	but we don't talk or think about this in terms	
8	of we are stewards of this resource. 20 percent	
9	of the world's fresh water is in the Great Lakes	
10	Water Basin; no other place in the world like	
11	it. What's the investment worth, not the cost?	
12	What's the return, not for us and our	
13	generation, but for this little guy up here and	
14	the future to come?	
15	I know that's where our hearts	
16	are at. Our feelings are with our hearts, but	
17	what's the right technical solution is the key.	
18	I agree with what's been said. We can't delay.	
19	We need to implement what we can.	
20	I'm not a scientist. I'm not a	
21	civil engineer, but my heart tells me we can't	
22	wait. We already know the problem. We have	
23	solutions. We're bright people here. Thank God	
24	we've got individuals involved at the caliber	
25	that they are. We need to take action.	

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1	Now, what's the right course of	
2	action? It seems like, again, there's things	
3	that we can do, but this idea of cost and a	
4	length of time with what's being said, too long.	
5	I mean, put people together, how can we do it	
6	faster, better.	
7	Apollo 13 okay, I'm	
8	rambling but look what happened when they had	
9	to find a solution for something that couldn't	
10	be done.	
11	We can do things. We just have	
12	to and I know we have the will to do them,	
13	but as a human being, as a father, good Lord	
14	willing as a grandparent in the future, I look	
15	forward to sharing this resource. We should	
16	look forward to this, and I know we can do this.	
17	I'm going to have a lot of	
18	confidence that we can do this, and I appreciate	
19	the work and the struggles and the anxieties and	
20	the sleepless nights that everybody's going	
21	through to get it right. Thank you very much.	
22	MR. ZABOROWSKI: Thank you, Mr. Pass.	
23	Next, Mr. David Kwasny.	
24	MR. KWASNY: My name is David Kwasny,	
25	zip code 53005, Brookfield, Wisconsin.	
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1	I'm on the executive board for	
2	GLSF, Great Lakes Sport Fishermen. Most	
3	importantly, I wanted to say thank you. I come	
4	with grace and appreciation for your efforts,	
5	and what you're trying to accomplish is a	
6	monumental task. In the past few years I've had	
7	some opportunities to experience some things	
8	that have changed my life and built memories	
9	that I'll never forget.	
10	I'd like to introduce this boy	
11	here. This is the junior champion for 2011 for	
12	rainbow trout. He holds the largest rainbow	
13	trout for 17 years and under in 2005, magical	
14	moments on both full videos and pictures. He	
15	was 38 pounds when he caught the fish; the fish	
16	was 11 pounds. The smile that was on his face	
17	is priceless.	
18	I wanted to say that the national	
19	resource that we have here is magic; and when	
20	you think about it, if you've got salmon and	
21	trout and pike and bass, that's incredibly	
22	attractive. It's really quite incredible. If	
23	it was to be replaced with carp, I'm not so sure	
24	it'd be as attractive.	
25	So this young man here, Brayden,	

		65
1	is only seven years old at this point. In 2012,	
2	he was a third place winner for the snook	
3	salmon, and I just wanted to thank you for your	
4	efforts, and I hope that we're successful in	
5	where we're going with this so the next	
6	generation can enjoy this natural resource that	
7	we currently enjoy right now.	
8	COLONEL DRUMMOND: Great thing about	
9	being in the Army is that I'm always recruiting.	
10	And I'm not recruiting you; I'm recruiting him.	
11	So, you know, some day when you	
12	grow up here, young man, we need good engineers	
13	in the Corps of Engineers. Keep catching them	
14	fish. Thank you.	
15	(Colonel Drummond placed a pin on	
16	Brayden.)	
17	MR. ZABOROWSKI: Thank you, sir.	
18	At this point, we have	
19	everyone that had registered to speak today has	
20	been given the opportunity to do so. I would	
21	like to invite anyone that did not register at	
22	the table or on-line before to come to the	
23	microphone now.	
24	If you've not already spoken and	
25	you would like to make a comment or ask a	
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1	question of our panel, you know, just kind of	
2	raise your hand, come down to the microphone,	
3	and you can make a comment or a question.	
4	Anyone?	
5	Sir, would you like to come back	
6	down?	
7	MR. PASS: No. Again, I can speak	
8	I hope I can speak loud enough.	
9	Maybe it's been mentioned or	
10	outlined in the summary of the reports, but what	
11	effect does the Great Lakes Water compact have	
12	on the application of solutions, and do we have	
13	to solicit approval of the surrounding	
14	governmental agencies of both states and	
15	provinces?	
16	MR. WETHINGTON: Thanks for your	
17	question.	
18	With regard to any potential	
19	future solution, we obviously have to comply	
20	with all applicable federal laws, regulations,	
21	treaties, et cetera. So any type of solution	
22	would have to be complied with I'm sorry	
23	would have to meet with the necessary laws and	
24	regulations.	
25	So specifically with regard to	

	67	
1	the compact, I'm not certain, but we did give a	
2	full valuation to all pertinent laws and	
3	regulations.	
4	MR. PASS: Thank you.	
5	MR. ZABOROWSKI: Mr. Mark Pass kicked	
6	us off to questions and comments.	
7	Sir, would you like to come back	
8	down? Again, just for posterity's sake, if you	
9	could state your name again.	
10	MR. FRIES: Sure. Ken Fries,	
11	F-r-i-e-s, 53150.	
12	There was just one minor point I	
13	forgot to mention, but I think it's a very good	
14	point that was brought up. It was about	
15	cleaning of watercraft when we're pulling out of	
16	the water.	
17	We have a volunteer wash station	
18	on our lake, and some individuals, boat owners,	
19	are so good about washing their boat, making	
20	sure their trailer's empty; other people	
21	couldn't give you two seconds. They want to get	
22	that boat on that trailer, and they're out of	
23	there, and I see them dragging weeds along	
24	I'm sorry aquatic vegetation, and I see that	
25	being dragged across, and where they're going,	
1		

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1	who knows what lake they're going to after that.	
2	So my thought I just wanted to	
3	impress this thought, though, that boat washing	
4	stations are very good, but that's going to have	
5	to be mandatory, regulated; just a volunteer is	
6	not gonna do it. You're going to see	
7	material all this work and all the research	
8	and all the dollars, too, and then you got	
9	someone that's on the back end not being	
10	conscientious. So that's I just wanted to	
11	point that out. Thank you.	
12	MR. ZABOROWSKI: Thank you, sir.	
13	Yes, Mr. Goss?	
14	MR. GOSS: I think Minnesota has	
15	recently adopted a mandatory boat wash law for	
16	the whole state. So it is possible, and	
17	certainly the rest of our states need to take a	
18	look at it.	
19	MR. FRIES: I agree with that. Like I	
20	say, I'm not looking for more regulations and	
21	rules and laws, but this is one that I think we	
22	need to have that to enforce that for the	
23	boat wash stations.	
24	MR. GOSS: Thank you.	
25	MR. ZABOROWSKI: Thank you for coming	

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 1
         back down. We've got an open floor if anyone
         would like to come down to comment or ask a
 2
         question of the panel.
 3
                   MS. NENN: I'll try to talk loud.
 4
         with this --
 5
 6
                   MR. ZABOROWSKI: And I'm sorry.
 7
         Again, could you just --
                   MS. NENN: Oh, sorry. This is Cheryl
 8
 9
         Nenn.
10
                   MR. ZABOROWSKI:
                                     Thank you.
                   MS. NENN: So with the -- for example,
11
12
         the ecological separation option, can you just
13
         give us a sense of how much of the cost estimate
14
         is actually working on the barriers versus --
         like we know -- we've heard that there have to
15
16
         be major upgrades to the sewage treatment plants
17
         that discharge into the Chicago.
18
                        So can you give us a sense of
19
         kind of how much is work that would be needed to
         do the separation versus, you know, these kind
20
21
         of long over -- what's the word -- longly --
22
         these basically upgrades to the water treatment
23
         plants that have been needed for a very long
24
         time.
25
                   MR. WETHINGTON: Sure, sure.
                                                  Thanks
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1	for your question. I appreciate it.	
2	I don't know if you've had the	
3	opportunity to review one of these books. They	
4	are out at the front where you came in. But	
5	they have a lot of great information that	
6	summarizes and actually one of the kind of	
7	answers to your questions is in here. There are	
8	tables that discuss the relative costs for	
9	different parts of the plan.	
10	So your question was with regard	
11	to hydrologic separation, what percent of the	
12	cost was the infrastructure that would be	
13	necessary versus the actual barrier itself.	
14	And this is where we like to kind	
15	of draw the point that there are significant	
16	mitigation measures that are necessary in any of	
17	these. The actual cost of the measures	
18	themselves may be like the barrier could be	
19	approximately, let's say, \$500 million; whereas,	
20	the total cost is around 15 to \$18 billion.	
21	So we look specifically at in	
22	the case of the lakefront hydrologic separation,	
23	we've got about \$14-1/2 billion that is	
24	specifically related to flood risk management.	
25	So this isn't necessarily cleaning up wastewater	

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1	to a better level. This is making sure that	. –
2	there are the infrastructure leads, the	
3	resources available that will prevent homes and	
4	businesses and the entire Chicagoland area from	
5	flooding during significant precipitation	
6	events.	
7	So I earlier one of the	
8	commenters mentioned something about phasing	
9	and that might have been you phasing Aquatic	
10	Invasive Species, kind of a reduction, and we	
11	can do that potentially with nonstructural	
12	measures or other technology alternatives.	
13	There is opportunities to, by advanced risk	
14	reduction.	
15	With something like hydrologic	
16	separation, that's kind of one of the drawbacks,	
17	it's one of the trade-offs, is that a lot of	
18	this infrastructure must be constructed, and	
19	that's why it takes so long to achieve that risk	
20	reduction and to achieve that separation between	
21	the basins because before we can build a dam in	
22	the river, we have to make sure that that dam	
23	isn't going to prevent water from flooding out	
24	the many residents of not just Chicago, but the	
25	surrounding suburbs or that you won't be causing	

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1	significant environmental impact to Lake	
2	Michigan.	
3	So there are trade-offs with each	
4	one of these potential alternatives, and	
5	hopefully a lot of that is described better	
6	within the summary report or certainly described	
7	in more detail within the GLMRIS report itself.	
8	MS. NENN: Thank you.	
9	MR. ZABOROWSKI: Again, any other	
10	comments or questions? Yes, sir.	
11	Please come down to the	
12	microphone, and then please state your name and	
13	zip code before you begin your question.	
14	MR. BITOG: Sure. Mark Bitog, 53209.	
15	I came in after you started, but	
16	just interested in knowing what's the process	
17	you're taking now to gather input, and then who	
18	will make a decision? What's the time frame on	
19	that for what the next steps are?	
20	MR. WETHINGTON: Sure.	
21	MR. BITOG: Thank you.	
22	MR. WETHINGTON: Thanks for your	
23	question. This is the second in a series of	
24	seven public engagements. We're also meeting	
25	with a variety of state agencies. So, for	

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1	example, we are headed to Madison tomorrow to	
2	meet with some of the elected state officials	
3	and resource agency representatives to talk to	
4	them about the range of alternatives in the	
5	GLMRIS report.	
6	We're taking this information to	
7	summarize it and then, again, provide it, much	
8	like the information within the GLMRIS report	
9	itself is information of decision makers.	
10	We, as the Corps of Engineers,	
11	will likely not specifically use this	
12	information to make a specific recommendation or	
13	decision, but provide that to the public and to	
14	our elected officials to kind of be the voice or	
15	summary of the voices that we've heard in all	
16	these different public meetings and public	
17	engagements. So I hope that helps answer your	
18	question.	
19	MR. ZABOROWSKI: Thank you, sir. At	
20	this point, if no one is willing to make any	
21	more comments or questions of our panel	
22	MR. SADOWSKY: Excuse me.	
23	MR. ZABOROWSKI: Oh, yes. Sir, when	
24	you come to the microphone, just give us your	
25	name and the organization you may represent and	

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1	your zip code before you begin your comment.	
2	MR. SADOWSKY: Good evening. My name	
3	is Maurice Sadowsky. I am a resident of	
4	Overland Park, Kansas, and if anybody wants a	
5	copy of this, I've got plenty of copies.	
6	My company is MJSTI Corp. I want	
7	to thank the Army Corps of Engineers for their	
8	excellent work and report on the options and the	
9	possibilities to limit the possibility of	
10	alien nuisance species to migrate across the	
11	Great Lakes and the Mississippi Basin Divide.	
12	Although some people see the	
13	issue as simple, it is not. There are	
14	approximately 9.8 million people in the Chicago	
15	Metro area. A major source of employment is	
16	trade, including approximately 17 million tons	
17	of freight that crosses the CAWS annually.	
18	Northwest Indiana and the South Side of Chicago	
19	can be adversely affected by flooding if the	
20	CAWS are closed without taking precautions.	
21	The problem is complicated by the	
22	Divide itself. It is 1500 miles long, has short	
23	tributary rivers to the Great Lakes, and is a	
24	low-lying divide, often two sides of a marsh.	
25	Complicating the issue are	

		75
1	millions of recreational users of both water	
2	systems of both water systems such as	
3	swimmers, boaters, kayakers, fishermen and women	
4	that can unintentionally take or transfer alien	
5	nuisance species.	
6	The GLMRIS study identifies 18	
7	likely non-CAWS migration routes for alien	
8	nuisance species. The finding of Asian carp	
9	eDNA in Sturgeon Bay and the establishment of	
10	grass carp in the Maumee River are two examples	
11	of ANS migration that probably did not occur	
12	across the CAWS. It's pretty hard to understand	
13	that. To focus the effort, 7.8 to \$18 billion	
14	on the CAWS ignores the reality that the problem	
15	is much bigger.	
16	Of particular concern are the	
17	bighead and silver carp, which since their	
18	escape from Arkansas fish ponds in the '70s or	
19	'80s have invaded almost the entire Mississippi	
20	Basin. In the lower Illinois River, the fish	
21	represent an estimated 85-plus percent of the	
22	fish biomass, and they have changed the ecology	
23	of the Illinois River. These fish are or will	
24	have similar effects on other Midwest river	
25	systems including the Wabash and Wisconsin	
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1	Rivers. If the invasive carp population is not	
2	controlled, eventually the fish will cross the	
3	Divide. It's just a matter of time.	
4	MJSTI Corp., my company, has	
5	conceived, model tested, filed a provisional	
6	patent on formulations to control the bighead	
7	and silver carp. The formulations are selective	
8	and effective; significantly safer than current	
9	pesticides, in fact, one of the promising	
10	formulations is 100 percent food grade	
11	ingredients; and they are low cost.	
12	For the last year and a half, I	
13	have tried to raise capital for this project to	
14	prove the concepts and start the regulatory	
15	process. The issues preventing investment are	
16	the risk is too great and the market is limited.	
17	I am currently trying an	
18	Indiegogo campaign. My fundamental belief in	
19	putting together the formulations is that	
20	killing fish is easy. The challenge is	
21	obtaining EPA approval. As you know, that	
22	process is a minimum of 18 months from filing	
23	and a total cost of 1 to \$3 million.	
24	And to be blunt, formulations to	
25	control the Asian carp is a several million	
1		

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1	dollar market at best, even if it is a	
2	comparable program to the lamprey eel program,	
3	which is about \$30 million. If you take a	
4	fourth or a fifth of that for all materials, the	
5	rest of it is a to-do process.	
6	I need help. Without funding, I	
7	will end the project. I filed an ERDC grant,	
8	was turned down earlier this turned down ten	
9	months turned down in July of last year; and	
10	I'm asking the government to consider a minor	
11	grant. All I need is money to have the	
12	materials made and tested, and I do have a	
13	company that is talking to me.	
14	Alternatively, people here, if	
15	they're really interested, can pledge to my	
16	Indiegogo campaign. I have copies, and I'll be	
17	glad to answer any questions anybody has.	
18	MR. WETHINGTON: Thank you.	
19	MR. ZABOROWSKI: Thank you, sir. I	
20	believe you left the report with the	
21	stenographer. Any response from the panel?	
22	COLONEL DRUMMOND: No.	
23	MR. SADOWSKY: Thank you.	
24	MR. ZABOROWSKI: Thank you, sir.	
25	Now we're back to open comments	

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1	or questions if anybody would like to yes?	, 0
2	MEMBER OF THE PUBLIC: Does Indiegogo	
3	have a website or research?	
4	MR. SADOWSKY: I have cards, if	
5	anybody wants them, of how to get there.	
6	MEMBER OF THE PUBLIC: Thank you.	
7	MR. ZABOROWSKI: In the meantime,	
8	anyone, again, we're open to open comments or	
9	questions for the meeting.	
10	Seeing none, at this point, I	
11	would like to turn it back over to the panel if	
12	they would like to make any closing comments or	
13	statements, starting with Mr. Wethington.	
14	MR. WETHINGTON: Thank you, Kendall.	
15	And thanks again, everyone, for coming out this	
16	evening; very much appreciate your time and your	
17	interest in the study. We look forward to	
18	continuing to listen and to work with you as we	
19	continue working forward on GLMRIS. Thank you	
20	for coming out tonight.	
21	COLONEL DRUMMOND: I'd like to take	
22	the time just to reiterate what the Assistant	
23	Secretary of the Army said last week in Chicago,	
24	and I think it summarizes what I heard here this	
25	evening; and she summarized it by saying the	
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1	most important voice in the GLMRIS study is the	
2	individuals in this room, that's the public.	
3	And that public dialogue, I think as you have	
4	heard tonight, needs to continue, and it needs	
5	to be open and transparent because as many of	
6	you said, it's a very complex, complex	
7	undertaking.	
8	I would just add, I agree with	
9	the notation the notion that, you know,	
10	anything that we do we should have the same	
11	passion and effort to protect our kids. Many of	
12	the individuals, I might add, that work on this	
13	study day in and day out lives and lives	
14	along Lake Michigan, and is just as passionate	
15	about protecting the Great Lakes as anybody	
16	else.	
17	And so over the last two and a	
18	half years of being in this command, I can tell	
19	you, and I can attest, that the individuals	
20	writing this report are just as passionate about	
21	ensuring that we protect our nation's treasures,	
22	which is the Great Lakes.	
23	As mentioned before, we are the	
24	stewards of the environment, and I take that	
25	seriously. I think Chicago has done a great	

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1	job, in at least my time, of looking out and	
2	trying to protect those key treasures. And one	
3	individual mentioned earlier about the pathway	
4	for migration of our birds. It's enormous, and	
5	you know, our District takes a look at all these	
6	different things in protecting the environment,	
7	and this is just one additional step of many	
8	that's going to go on here in the future.	
9	So I do appreciate your	
10	attendance tonight. Our senatorial	
11	representatives here, I appreciate your	
12	attendance because this is, in fact, something	
13	that needs to continue on, and your voice needs	
14	to be heard. Thank you.	
15	MR. GOSS: Well said. Thanks.	
16	COLONEL DRUMMOND: Thank you very	
17	much.	
18	MR. ZABOROWSKI: Thank you, sir. So	
19	again, I'd like to reiterate the panel's	
20	comments. Thank you all very much for attending	
21	tonight, taking time out of your evening to come	
22	here and have a conversation with us.	
23	So at this point, we do have	
24	upwards of ten speakers today for an approximate	
25	total of 45 minutes of testimony from you all to	

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1	us. We are going to be having five more	
2	meetings that are going to have the same format	
3	as this one. It might be a little more formal	
4	if more people are in as far as the timing of	
5	comments.	
6	I would like to remind everyone	
7	here that our public comment period runs until	
8	March 3rd, and instructions on how to submit	
9	comments can be found on-line at the GLMRIS	
10	website shown here or on your yellow comment	
11	registration forms that were handed out to you.	
12	So if there is anything else that you think of	
13	that you didn't get to say tonight, you can get	
14	it to us by March 3rd.	
15	So I think everybody got a copy	
16	of today's meeting materials, but if you'd like	
17	extras, on your way out, you can just stop by	
18	the front desk and grab a couple extra copies.	
19	So this concludes this public	
20	meeting for the Great Lakes and Mississippi	
21	River Interbasin Study. The time is now	
22	5:40 p.m. Have a good night, everyone.	
23	(Proceedings concluded at 5:40 p.m.)	
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    STATE OF WISCONSIN
                            SS:
   COUNTY OF MILWAUKEE
 3
                 I, Debbie A. Harnen, a Registered
   Professional Reporter and Notary Public in and for
    the State of Wisconsin, do hereby certify that the
   proceedings were reported by me and reduced to
   writing under my personal direction.
 9
                 I further certify that said proceedings
   were taken at Milwaukee Area Technical College,
10
11
    700 West State Street, Milwaukee, Wisconsin, on the
12
    13th day of January, 2014.
13
                 I further certify that I am not a
14
    relative or employee or attorney or counsel of any of
15
    the parties, or a relative or employee of such
16
    attorney or counsel, or financially interested
17
    directly or indirectly in this action.
18
                 In witness whereof, I have hereunto set
19
   my hand and affixed my seal of office at Milwaukee,
20
   Wisconsin, this 20th day of January, 2014.
21
22
23
                        Debbie A. Harnen - Notary Public
                        In and for the State of Wisconsin
24
   My Commission Expires: July 27, 2014.
25
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