

GREAT LAKES AND MISSISSIPPI RIVER
INTERBASIN STUDY PUBLIC MEETING

The Hagerty Conference Center
Northern Michigan College, Great Lakes Campus
715 East Front Street
Traverse City, Michigan

Thursday, January 23, 2014 - 4:00 p.m.

MODERATOR: MR. KENDALL ZABOROWSKI
Planner
U.S. Army Corps of Engineers

PANEL: MR. DAVE WETHINGTON
Project Manager
GLMRIS, Chicago Area Waterway System

COL. FREDERIC A DRUMMOND, JR.
Commander, Chicago District
U.S. Army Corps of Engineers

MR. JAMES BREDIN
Asian Carp Deputy Director
White House Council on Environmental
Quality

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1	TABLE OF CONTENTS	
2		PAG
3	Opening Statement by Mr. Kendall Zaborowski	
	Opening Statement by Mr. Jim Bredin	
4	Opening Statement by Col. Frederic Drummond	
	Opening Statement by Mr. Dave Wethington	
5		
	Public Comment by Sen. Debbie Stabenow	
6	Public Comment by Mayor Michael Estes	
	Public Comment by Mr. Mark Breederland	
7	Public Comment by Capt. Eril Andersen	
	Public Comment by Mr. John Briggs	
8	Public Comment by Mr. Gary Keyes	
	Public Comment by Mr. Brian Price	
9	Public Comment by Mr. Daniel DeGood	
	Public Comment by	
10	Public Comment by [REDACTED]	
	Public Comment by [REDACTED]	
11	Public Comment by Ms. Jennifer McKay	
	Public Comment by Sen. Carl Levin	
12	Public Comment by Ms. Jamie Cross	
	Public Comment by Ms. Cheryl Kallio	
13	Public Comment by Mr. Steve Baase	
	Public Comment by Ms. Mary Lee Orr	
14	Public Comment by Ms. Allison Voglesong	
	Public Comment by Mr. Ryan Matuzak	
15	Public Comment by Mr.	
	Public Comment by Mr. [REDACTED]	
16	Public Comment by Mr. [REDACTED]	
	Public Comment by Mr. Dave Schichtel	
17	Public Comment by	
	Public Comment by [REDACTED]	
18	Public Comment by	
	Public Comment by Mr. John Stinson	
19	Public Comment by Capt [REDACTED] n	
	Public Comment by Mr. [REDACTED]	
20	Public Comment by Mr. [REDACTED] nd	
	Public Comment by Mr. John O'Neill	
21	Public Comment by Mr. David Petrove	
	Public Comment by Mr. Dan DeGood	
22	Public Comment by Mr. Steve Baase	
	Public Comment by	
23	Public Comment by [REDACTED]	
24	Closing Statement by Col. Drummond	
	Closing Statement by Mr. Zaborowski	
25		

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

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3 MODERATOR: I'd like to welcome all of you tonight
4 to tonight's Great Lakes and Mississippi River Interbasin
5 Study, or GLMRIS, public meeting. My name is Kendall
6 Zaborowski. I'm from the U.S. Army Corp of Engineers,
7 Chicago District, and I will be moderating this evening's
8 meeting. Before beginning our meeting, I'd like to let
9 know if you need to use the restroom, you can go back out
10 this door, hang a left, and it's at the end of the hallway
11 on your left. Also, in the event of an emergency there
12 emergency exits located immediately behind us, or one
13 directly out the main entrance.

14 When you arrived tonight, there were several
15 materials available at the front desk. The first green
16 sheet is the agenda of tonight's meeting. Please note
17 at 6:00 o'clock we have scheduled a five-minute break.
18 We'll evaluate how we are doing on time when we get to
19 And then if we feel that the panel needs to take a break,
20 use the restroom, we'll take a quick break and get back to
21 public commentary.

22 Next is the yellow comment registration form.
23 has instructions on how to submit a comment, either
24 at our meeting or you can write a comment and leave it at
25 our front desk, or instructions on how to submit a

1 comment on our --

2 (Off the record interruption)

3 MR. BREDIN: Front desk. Front desk, sir. I'll
4 personally go get you one.

5 MODERATOR: Sir, if you signed up to make a
6 comment, then you probably would have been -- it would
7 been kept at the time.

8 MR. BREDIN: You've got one coming.

9 MODERATOR: Don't worry about it if you don't
10 it. If you signed up to make a comment, then it should be
11 up front. It's for our records.

12 The next is a blue set of sheets of paper that
13 "frequently asked questions" about GLMRIS and other
14 nuisance species efforts by the Corps of Engineers.

15 And then the last handout that you would have
16 received is this summary report of -- and it's the summary
17 of the GLMRIS report. And it contains detailed
18 that we will be presenting here later.

19 (Off the record interruption)

20 MODERATOR: So I'd like to now take a moment to
21 introduce tonight's panel. The gentleman that is running
22 grab the comment registration forms and now entering the
23 meeting space again is Mr. Jim Bredin. He's with the
24 House Council on Environmental Quality. Next to Mr.
25 is Col. Frederic Drummond, who is the commander of the

1 Chicago District, U.S. Army Corps of Engineers. And then
2 nearest to me is Mr. Dave Wethington, who is the GLMRIS
3 project manager, and he's also with the Chicago District
4 the U.S. Army Corps of Engineers.

5 So for those of you wishing to speak tonight at
6 our meeting, if you pre-registered on our project website
7 and did not check in at the welcome table, please do so
8 Additionally, if you did not register on our website and
9 think you'd like to make a comment tonight, we'd ask that
10 you go back to the welcome table and fill out one of those
11 yellow forms.

12 The Corps of Engineers is hosting several public
13 meetings throughout the study area in an effort to provide
14 opportunities for those of you within the study area to
15 learn about the GLMRIS report and to offer us comments on
16 the contents of the GLMRIS report. This is our fifth
17 meeting, and I'd like to thank you all for coming out
18 tonight.

19 The GLMRIS report in its entirety can be
20 downloaded from the GLMRIS project website, which is
21 <http://glmris.anl.gov>.

22 Our GLMRIS team has organized this public
23 to accomplish two goals. Again, the first goal is to
24 present information in the GLMRIS report and also to --
25 second goal is to solicit input -- your input on the

1 information that is presented in the report. So the Army
2 Corps of Engineers will be collecting comments through
3 3rd of this year. The comments will then be compiled and
4 posted to the GLMRIS project website. For comments to be
5 formally included in our comment period, they need to be
6 given during an oral comment period of one of our
7 such as tonight; submitted as a web comment through our
8 project website; or submitted as a written comment. And
9 written comments can filled out and dropped off here
10 tonight, or they can mailed to our office. So if you have
11 any questions or concerns during the presentation or
12 the meeting itself, find somebody with a red lanyard;
13 try and help you out the best we can.

14 And I'd just also like to mention that comments
15 are weighted equally in terms of how they're submitted.
16 don't give extra weight to comments that are given at a
17 public meeting versus comments that are submitted on the
18 website. So if we're running long and you don't have the
19 opportunity to speak in front of us tonight, don't worry;
20 your voice can still be heard just as much as it would
21 been otherwise.

22 As I mentioned previously, the public comment
23 period is going to end on March 3rd of this year. Now, if
24 you'll take a look at your agendas, you'll notice that
25 public meeting is going to begin with a few speakers, a

1 presentation on the GLMRIS report, and then we'll have a
2 open public comment period. Right now we're scheduled to
3 end that public comment period at 7:00 p.m. Now I'd like
4 turn it over to Mr. Jim Bredin, who's going to speak a few
5 minutes.

6 MR. BREDIN: Thank you, Kendall. As was just
7 mentioned, I'm Jim Bredin. I'm with the White House
8 on Environmental Quality. But just to give you some
9 perspective as to why I'm here, I've actually worked for
10 Michigan Office of the Great Lakes, Michigan DNR, DEQ, for
11 30 years on Great Lakes issues. I have a home in Grand
12 Haven, in the Spring Lake area. I grew up in the Muskegon
13 area; my wife grew up in Traverse City.

14 And so if you know anything about the area where
15 specifically live, which is Spring Lake, it would be
16 habitat for Asian carp. So this whole issue is not just a
17 job for me, it's personal. And so that's what I'd like to
18 do today, is this study is very important. It's a key
19 in moving forward in not just dealing with Asian carp, but
20 all invasive species that can move between the Great Lakes
21 and the Mississippi River.

22 I'm going to give you a quick overview of what
23 we're doing for Asian carp, but then we're more
24 going to get into the whole GLMRIS study. And we need to
25 hear from all of you. It's critically important. The

1 administration has asked us to be here. My boss, John
2 he couldn't make it today, but we are attending all of
3 meetings to hear from you, because your voice is critical.
4 And I can see in the audience there are also some
5 Congressional offices representation here. It's important
6 for them to hear, also, what your feelings are on how we
7 should move forward with this important issue. So with
8 that, --

9 (Off the record interruption)

10 MR. BREDIN: So, like I said, let me give you a
11 quick rundown of what we're doing with Asian carp. And I
12 see a lot of you here were at a briefing that I gave about
13 month and a half, two months ago, right here in this same
14 venue. I want to make sure everybody understands that
15 not starting from ground zero, specifically with Asian
16 We have, as you see here, a Regional Asian Carp
17 Committee. It includes all the Federal agencies, all of
18 Great Lakes states, the Canadian provinces and all the
19 municipalities in the Chicago area, like the City of
20 and others that are going to have to deal with this issue
21 and are dealing with the Asian carp.

22 And as you can see here, we have a four-pronged
23 approach to how we're addressing specifically Asian carp.
24 We have what we feel is an effective electrical barrier
25 will keep the Asian carp from coming up the Mississippi

1 River. They're not there yet. They're not anywhere the
2 electrical barrier. But we're still working on that
3 to make sure that it is as effective as it can be in
4 Asian carp from entering the Great Lakes. We also are
5 extensive monitoring both above the barrier and below the
6 barrier so that we can keep track of where Asian carp are
7 now. Like I said, we know that there are no Asian carp
8 the barrier. We're doing extensive monitoring above the
9 barrier; we're not seeing any signs of live Asian carp.
10 are also doing extensive monitoring in all areas of the
11 Great Lakes. Lake Michigan, we have some in Lake
12 hitting Lake Huron hard, especially Lake Erie because we
13 know we found in the past a small amount of Asian carp in
14 Lake Erie. So we're monitoring that and also Lake
15 So we have a very strong monitoring program going on right
16 now.

17 And then what we're doing also is at the same
18 time, we're trying to find ways to control specifically
19 Asian carp. We're looking at toxicants, we're looking at
20 ways that we can keep them out of certain areas. We're
21 working on a thing called a "hydrogun" that might be able
22 herd them and then we can remove them. And we also have a
23 very active commercial removal program down farther south
24 where you find the larger populations of Asian carp.
25 trying to keep that population from moving northward. And

1 so we're doing everything we can at this point in time to
2 try to find controls and also control the population.

3 And then we're also moving forward with
4 strategies. And we'll be -- we just found out what our
5 Congressional appropriation will be this year, and we're
6 going to be moving forward with those same controls and
7 looking at the types of controls that are identified here
8 the GLMRIS process to make sure that we move out as fast
9 we can on these issues.

10 And we do have a number of accomplishments that
11 we've seen over the last couple of years. We're making
12 electrical barriers stronger. We're field-testing
13 technologies. As I mentioned, we're getting them out into
14 the system to see if they can actually work. This coming
15 year we're hoping to work on a fish toxicant where we can
16 in and it would be specific to Asian carp, where we could
17 put it in the river and only the Asian carp would be able
18 take up this toxicant, and hopefully it would kill them.

19 We're also looking at other ways that we can
20 like, carbon dioxide, chlorine, those types of things, in
21 lock situation where we might be able to control Asian
22 from moving up into system. And as I mentioned,
23 harvesting. We've taken out a very large number of fish
24 the area; most of those are now going to a commercial
25 processor. But what we're trying to do is just keep those

1 fish from moving up -- from having to move up because of
2 population constraints.

3 This -- the GLMRIS study was actually -- they'll
4 talk to you a little bit more about this, but there's two
5 phases to it. I just want to touch on the first phase
6 we did, which is actually considered to be Phase 2, but
7 looking at areas outside the Chicago Area Waterway System.
8 And these 18 spots here that you can see across the
9 the yellow there is the Great Lakes side -- if I can see
10 right -- I'm sorry; no, the brown is the Great Lakes and
11 green is the Ohio River, the Illinois River and the
12 Mississippi River. So you can see that there are areas
13 have been identified where water actually moves across --
14 not necessarily all the time, but sometimes.

15 We are working with all the state agencies to
16 evaluate these. In some cases, like in Eagle Marsh, which
17 is the star up there in Indiana to where we're actually
18 closing that pathway, we're going to be making sure that
19 specifically Asian carp cannot get from one side to the
20 other. And so all the state agencies are actively
21 in these sites to make sure that invasive species cannot
22 move between the Great Lakes and the Mississippi River in
23 these areas.

24 Also, you should probably know that there is a
25 national carp plan. We don't have sufficient funding for

1 at this point in time, but we are working with a lot of
2 states that are outside of the Great Lakes to take what
3 we're learning here in the Great Lakes and help them in
4 dealing with Asian carp in their areas.

5 And probably most importantly, what we need is
6 strong support from everyone to move this -- this whole
7 program forward. And as you can see, we're doing a lot of
8 these meetings in the Great Lakes; we'll also be having
9 meetings outside of the Great Lakes. We're -- next week
10 we'll be going to Minneapolis, which is actually outside
11 the basin. We're also looking at St. Louis and New
12 because it's not just a problem in the Great Lakes. In
13 order to keep Asian carp out of the Great Lakes, at least
14 it's my opinion we have to have a strong program in the
15 southern portions of the country and the areas there that
16 you can see in green and I think it's in purple. We have
17 make sure that we're dealing with this from a national
18 perspective, not just trying to keep them out of the Great
19 Lakes. So we're working with all of those states that you
20 can see there in trying to make sure that we have a strong
21 program.

22 And then also, just -- you know, we feel very
23 strongly about this. We think that there are some good
24 examples out there that demonstrate that we can work
25 together, especially from a GLMRIS perspective. This is

1 going to have to be "all hands on deck"; everybody dealing
2 with this, not just people in Chicago. And so, you know,
3 have some examples. We've been dealing with the sea
4 program. We have a very effective program; not as
5 as we would like, but it's an effective program to keep
6 lamprey down, both in the U.S. and Canada. We also have a
7 Great Lakes Water Quality Initiative dealing with water
8 quality parameters across the Great Lakes. We also have
9 Great Lakes Compact, which regulates water users
10 the Great Lakes.

11 We also have the Great Lakes Restoration
12 Initiative. And I need to point out that a lot of the
13 efforts that you're seeing that I just demonstrated to you
14 here, they were funded by the Great Lakes Restoration
15 Initiative and we're hoping that we can continue those
16 efforts in the future. And then the last one is just
17 the Asian Carp Control Program. We think we have a very
18 effective program. We've been working very good with all
19 the states and Federal agencies, and hope to continue this
20 process.

21 So, thank you. And once again, I would just
22 to stress that your voice is important. We need you to
23 us. That's why I was very insistent, when you said you
24 didn't have the yellow forms, I would like to hear
25 here -- I would like for everyone here to give us your

1 opinion; to let us know what you think we should do. And
2 you see one of these alternatives that you think are
3 critical, let us know because we need your voice in this
4 whole thing. So with that, I will turn it over to Col.
5 Drummond.

6 COL. DRUMMOND: Good afternoon, everybody. I
7 appreciate you being here. As mentioned, my name's Col.
8 Fred Drummond, commander of the Chicago District. I'm
9 they call the 63rd commander. We have had gentlemen like
10 in Chicago since 1833, and, in fact, our program manager,
11 Jack Drolet, was the 61st commander. So as Jim had
12 mentioned, there's quite a bit of passion. I mean, the
13 individuals that work on this project in Chicago are no
14 different than many of you out there; they are very
15 passionate about the Great Lakes, and protecting the Great
16 Lakes from aquatic nuisance species.

17 I'd like to thank Mayor Estes for being in
18 attendance tonight. And in a few moments I think Senator
19 Stabenow will be here. I've done two of these in the
20 of Michigan and she is definitely there and she is keeping
21 me on my toes every step of the way. I would also like to
22 thank other Congressional members and representatives that
23 may be in the audience tonight.

24 So the Corps is excited to achieve another
25 milestone in preventing the movement of aquatic nuisance

1 species, or as we call it, "ANS." This achievement is the
2 submission of the Great Lakes and Mississippi River
3 Interbasin Study Report to Congress. This report is very
4 complex. As you will hear, for the last 18 months we've
5 been working intently on this report, with not only state,
6 Federal, but also some public in attendance in providing
7 some input. The GLMRIS report you will hear tonight
8 outlines a variety of potential prevention methods and
9 prevents (sic) an evaluation criteria to help you, the
10 public, distinguish among the alternatives.

11 The purpose of the GLMRIS report is to paint an
12 objective picture of several alternatives to offer
13 decision-makers, stakeholders, and you, the public,
14 information about those alternatives. The GLMRIS report
15 does not make recommendations nor does it put any priority
16 on each one of the plans. Our GLMRIS team spreads across
17 the country, I'll mention this is a minute. They have
18 worked painstakingly on this report in close coordination
19 with Federal, state and local, non-governmental and tribal
20 stakeholders in the region. We strove to ensure
21 decision-makers and the public can be well informed on
22 various ways to prevent the transfer of ANS through
23 area waterways network.

24 Apart from GLMRIS, as you just heard from Jim,
25 Corps will continue to address the issues of invasive

1 species by participating in the Asian Carp Regional
2 Coordination Committee, operating the existing barriers,
3 which I'm in charge of and very passionate about, it is an
4 electronic marvel and you'll hear a little bit about its
5 effectiveness tonight. To continue -- we're going to
6 continue research on various options and extensive
7 monitoring, as Jim had just mentioned, of the waterways
8 our various partners. So you'll hear a little bit tonight
9 that we consider all this a shared responsibility among
10 Federal, state, local agencies, as well as the public.

11 So I want to give you just a quick, few moments
12 what I call GLMRIS by the numbers. Since the 6th of
13 January, roughly about 7,000 news media outlets have
14 talking about this topic. That's significant, and that's
15 exactly what we want. This needs to be an open
16 We need to hear from you. Tonight when you came in, you
17 should have received -- if you didn't please get one -- an
18 executive summary, 25 pages. It's a good primer. If you
19 like to read, if this is not good enough, we have another
20 book, 232 pages; it digs into it a little bit deeper, it
21 gives you some more options. And if you're, like, a
22 novel reader, then you can go to roughly about 10,000
23 of data. Many of the folks that you see walking around
24 the red lanyard are the ones that put this information
25 together.

1 I'll also add, you know, the Corps of Engineers
2 a large organization; 19 different districts stretching
3 Jacksonville, Florida, who deals intensively on aquatic --
4 on invasive species, all the way up to Seattle, who deals
5 with large locks, dams and lamprey type of issues have
6 involved in this. But at the end of the day, it's the
7 that live in the Great Lakes that are putting this report
8 together. They're the ones writing it. And I would ask
9 at the end of the night if you see them in red lanyards,
10 feel free to ask them a question.

11 Last but not least, and you'll hear this all
12 long, your voice is important. Please take your time.
13 thin-skinned. I am here to listen. I'm here to document,
14 and, you know, try to understand more thoroughly on
15 what your expectations and thought are -- is on this exact
16 topic. So without further adieu, what I'd like to do is
17 turn it over to Dave Wethington, who will go through a
18 18-page -- or, 18-slide presentation that will give you a
19 quick synopsis and prime you so you can ask the questions
20 that you feel is important for us to know. Thank you very
21 much.

22 MR. WETHINGTON: Thank you, sir. And thank you
23 all for coming this evening. My name, again, is Dave
24 Wethington. I'm a project manager with the U.S. Army
25 of Engineers in charge of putting together the information

1 that you see here today. I hope that all of you had the
2 opportunity to come in, check in and maybe take a look at
3 some of these slides on some of these banners. If you
4 haven't had the opportunity, at the end of the meeting,
5 please feel free to stick around. I've got a number of
6 different slides I'm going to go through today, it
7 a lot of information. I won't spend a whole lot of time
8 it because, really, the important part of why we're here
9 to listen to your comments and listen to your input. But
10 before we get there, I want to make sure that we all at
11 least have a common baseline, a common understanding of
12 where we're going and what we've done in this excellent
13 report.

14 The scope of this study, for the Great Lakes
15 Mississippi River Interbasin Study, was to evaluate the
16 range of potential optioned technologies that were
17 to control or prevent the species -- aquatic nuisance
18 species -- from transferring between the Great Lakes and
19 Mississippi River basins. Our goals for our study were
20 two-fold: Number one, they were to look at different type
21 of optioned technologies that could potentially prevent
22 transfer of these species, as well as look at mitigation
23 measures. So when you implement a potential aquatic
24 nuisance species control like a technology or like a
25 physical barrier, you may have some kind of impact on the

1 existing uses and users of that waterway system. We
2 to look at identifying what those impacts are, and then
3 provide mitigation to offset those adverse impacts by
4 implementing some kind of project. State/Corps engagement
5 has been a very important piece of this study. We
6 an executive steering committee back at the inception of
7 study and have been having regular quarterly, sometimes
8 bi-annual public meetings to inform our stakeholders,
9 members of the public just as yourselves, on the status of
10 what's been provided.

11 In July of 2012, we received legislation that
12 helped kind of shape of the study even further. It asked
13 to do several different things. Number one, it asked us
14 complete the report within 18 months. We were issued this
15 legislation on July 6 of 2012. And 18 months later, on
16 January 6 of 2014, we completed the report and issued it
17 Congress. It also asked us to focus our efforts on the
18 Chicago Area wWterway System. I know, why is the Chicago
19 Waterway System important to you? Well, I think that most
20 of you would understand that it serves as the primary
21 pathway for aquatic nuisance species to transfer between
22 basins. This is why we're focused on it and why I'm going
23 to be speaking to you a bit about some of the variety of
24 options available for the Chicago Waterway System.

25 Jim Bredin, a little bit earlier, talked about

1 other potential pathways that exist between the Great
2 and the Mississippi River basin. We've done a lot of
3 work out there. We've identified 18 potential pathways.
4 And the majority of them are what we call episodic, so
5 only form maybe once every year or once every five years
6 when you've had significant precipitation events,
7 significant rainfalls, that cause the headwaters of the
8 streams to merge together. A few of them are perennial,
9 they exist all the time, but they're primarily like a
10 farmer's ditch or something that is very small and easy to
11 kind of compensate, to take care of, with regard to a
12 physical connection. So our focus, with the GLMRIS
13 is on the Chicago Waterway System, because it's a very
14 complex waterway. And I'll speak to that in a moment.

15 The legislation in 2012 also told us to evaluate
16 hydrologic separation, or physical separation, that
17 barrier that could be implemented to prevent aquatic
18 invasive species transfer. We have actually implemented
19 different scenarios that include hydrologic separation.

20 I want to spend a moment talking about the
21 Area Waterway System. I know that we're up here in
22 Michigan, pretty far away from the CAWS, as we call it.
23 it is important. It's important because it's a very
24 and multi-use system. I'm sure we've all heard about
25 navigation which takes place: Commercial cargo

1 recreational boating; those are certainly important uses.
2 Some of the other maybe less known uses include water
3 and water conveyance. I bet most of you probably didn't
4 know that on average between 65 and 85 percent of the
5 volume of the Chicago Waterway System is comprised of
6 municipal wastewater discharge; so treated wastewater that
7 enters the river and flows downstream. In addition, it
8 serves as a very important tool in flood risk management
9 the nearly 9.2 million residents of Chicago and the
10 surrounding suburbs.

11 As you can imagine, the third largest city in
12 nation has grown up with the infrastructure as it has been
13 since 1900 when this canal was created. And the waterways
14 act as a -- is a method to offset that flood risk. We
15 the ability to flow water as well as downstream as it
16 usually does normally, but also back out toward Lake
17 Michigan to alleviate that significant flood pressure
18 may exist within the Chicago area, as well as the adjacent
19 suburbs. Now, as we all know it is the primary aquatic
20 connection between the Great Lakes and Mississippi River
21 basins which is why it is of particular focus in the
22 report.

23 The contents of the report, if you've not had
24 opportunity to review them, include a conceptual level of
25 design of a range of alternatives. We had a conceptual

1 level of design with regard to the actual alternatives as
2 well as those mitigation measures which would be necessary
3 to offset adverse impacts that may be initiated by the
4 construction of one of those alternatives.

5 We also have a range of cost estimates that are
6 presented. And the range -- there's a cost estimate for
7 each one of the particular alternatives. Now, these cost
8 estimates, there is some variability. We used traditional
9 Corps of Engineers cost estimating procedures to put them
10 together. However, they're best used to compare the
11 relative plans amongst each other to give you an idea of
12 order of magnitude of how much they may cost to implement,
13 as well as the time lines that may be necessary to
14 these plans.

15 Now, for any single one of these alternatives,
16 there would certainly need to be additional analysis,
17 additional design, refinement of the costs, additional
18 documentation with regard to environmental compliance to
19 support the Federal decision-making process that would
20 to be completed before construction could begin.

21 When you look at how we implemented GLMRIS, it
22 actually fairly simple. Although it's a very complex
23 process, it could be broken down into -- a fairly simple
24 way. We did three things. We had -- we identified the
25 connections between the basins, we looked at the valuation

1 of the species. We looked at over 200 different species
2 begin with which could be potentially invasive from one
3 basin to the other, and identified 35 which are of
4 particular concern. We used a risk-based process to
5 identify, of those 35, which are the most concern -- which
6 are those high and medium risk. We identified 13 out of
7 those 35 which were of high and medium risk, and those are
8 really the focus of our study.

9 We also looked at controls. What kind of
10 can be implemented? Physical barriers, electroshock,
11 herbicides, algaecides; what kind of things could be
12 implemented to control those species of concern? We went
13 out to the public to get ideas. We heard things, you
14 which would seem a little bit out of the box, like heating
15 the canal, boiling the canal, freezing the canal, but we
16 concluded all of them as potential ways to try and prevent
17 the transfer of aquatic nuisance species. So we took this
18 information. We took information about the species
19 themselves, about the waterways, about the potential
20 controls, and put them all together. And this is the
21 information that we provide to you in the GLMRIS report.
22 really describes eight different alternatives that is a
23 result of a very -- kind of a dedicated process toward
24 identifying this range.

25 Before I get into the alternatives themselves, I

1 want to spend a couple moments talking to you about the
2 technology so that we all kind of have at least a basic
3 understanding of what I mean when I say GLMRIS lock, or a
4 physical barrier. So over on the far righthand side, you
5 see the image of a physical barrier. It's fairly simple.
6 It's the implementation of some kind of dam in a waterway
7 that prevents surface waters -- untreated surface waters
8 from moving back and forth.

9 (Off the record interruption)

10 MR. WETHINGTON: So a physical barrier, fairly
11 simple. Something like on the lower lefthand corner, the
12 electric barrier, I'm sure some of us have probably heard
13 electric barrier and are familiar with the way it works.
14 But what we've done in GLMRIS is take it and kind of crank
15 it up a notch. We've included an engineered channel along
16 with the electric barrier. So the electric barrier as
17 currently being implemented in the Chicago area waterways
18 just placed in the existing waterway. In this particular
19 scenario, we would construct a purpose-built channel that
20 would help facilitate navigation, as well as help us, you
21 know, contribute from lessons learned with regard to the
22 existing implementation of the electric barriers. We have
23 ways to optimize the design to address the full range of
24 potential swimming species.

25 We also, in this study, came up with the idea of

1 GLMRIS lock. It's a novel concept that uses existing kind
2 of information. We use a lock structure, much as you
3 see in a traditional navigation river where barges use it
4 go up and down the river essentially, but we use -- we
5 insert a pumping mechanism that helps flush the lock of
6 aquatic nuisance species. We get fresh water -- ANS-
7 water from aquatic invasive species treatment plants, or
8 that ANS treatment plant you see there in the middle.
9 all uses information and concepts that are widely accepted
10 in different types of scenarios, but are kind of applied
11 a novel sense with regard to specifically addressing
12 nuisance species.

13 So I'm going to spend maybe just another five,
14 minutes talking about each one of these alternatives. You
15 can follow along. The lower lefthand corner tells you
16 alternative I'm on. If you have one of those books,
17 also additional important information that you can read
18 about each one of those alternatives that outlines a
19 more detail and the costs. And then, again, as Col.
20 Drummond mentioned, you can go online and find each one of
21 these alternatives discussed in much greater detail within
22 the actual report itself.

23 So Alternative Plan 1 is what we call the
24 alternative, the no new Federal action. But I prefer to
25 call it the sustained activities alternative. Why it's

1 important is because there's a lot of good activity that
2 currently going on with regard to trying to address and
3 control and manage aquatic nuisance species. We use this
4 alternative as a baseline; as a measuring stick to
5 the additional risk reduction that we would get by
6 implementing any one of these subsequent alternatives. So
7 before we start coming up with new ideas and new ways to
8 potentially control species, we need to identify what
9 currently doing today. And that's what this alternative
10 discusses. This alternative looks into the future and
11 thinks about what are we going to be doing in five years,
12 ten years, with regard to species control as well as other
13 activities that are directly related to the waterways.
14 example, Corps of Engineers activities would include
15 construction of new barriers and implementation, operation
16 and maintenance of existing barrier systems.

17 Alternative number 2 is what we call the
18 non-structural technologies alternative. And this one is
19 unique because it has aquatic nuisance species controls
20 don't need a physical structure in order to be
21 The rest of the controls I'll be discussing, the rest of
22 alternatives, require a physical construction of some kind
23 of technology or some kind of alternative. But this one
24 unique because it can be implemented very quickly. It
25 includes things like active management -- what is active

1 management? It includes maybe going down and fishing down
2 carp populations like Jim mentioned earlier, or going out
3 identify where you'd find potential species that may
4 transfer, like aquatic invasive plants and applying, like
5 you can see in that picture up there, aquatic herbicides
6 control those plants in place before they transfer across
7 that basin divide.

8 It also includes ideas like education and
9 outreach; identifying why it's a good idea to stop aquatic
10 invasive hitchhikers; why it's a good idea to clean your
11 boat when you pull it out of one waterway and put it in
12 another, or not to dump your bait bucket from one body of
13 water into another. These are all good ideas, and so we
14 include them as best management practices. Now, I'm not
15 going to stand here and tell you today that laws and
16 regulations and education and outreach are going to
17 certainly control all species. That's not the case by any
18 means. However because they are best management
19 because they are good ideas, we include them in each one
20 these subsequent alternatives. They really are most
21 effective in helping buy down some of that risk to, at
22 at the very minimum, delay potential species from
23 transferring between the two basins.

24 The implementation of these non-structural
25 alternatives as well as many of the other alternatives

1 we'll see this afternoon and this evening, really are a
2 shared responsibility. The Corps of Engineers, in my
3 opinion, did an excellent job in providing a leadership
4 with helping identify this and other alternatives. But,
5 example, things like stopping aquatic invasive hitchhikers
6 and doing educational programs may be better implemented
7 other Federal agencies, state agencies or other resource
8 providers. So we wanted to include this information as
9 as these estimated costs for -- to help continue this
10 conversation, which is why we're here talking to you

11 Alternative Plan 3, is the first of our two
12 technology alternatives. Very simply, it uses single
13 points -- two single within the Chicago Area Waterway
14 as checkpoints, or control points, to stop the
15 flow; so flow in either direction, movement in either
16 direction, of aquatic nuisance species. Essentially the
17 volume of the waterway at those two points you see in red
18 the slide on the map on the lefthand side are routed
19 an aquatic nuisance species treatment plant. Again, this
20 ANS treatment plant will remove aquatic nuisance species
21 from that water stream and discharge ANS-treated water on
22 the opposite side. So on a normal basis, the volume of
23 Chicago River will be run through at those two points --
24 those waterways, will be run through that aquatic nuisance
25 species treatment plant.

1 Now, in this particular alternative, we've also
2 tried to maintain the existing use of the system for
3 navigation. To this effect we've included that concept of
4 GLMRIS lock, which is bookended on either side by electric
5 barriers which -- in that specific navigational waterway,
6 these more efficient types of application of the barriers
7 and the GLMRIS lock together to try and prevent those
8 species that swim or float through the system from moving
9 through.

10 Now, if you can imagine, if you're routing the
11 entire volume of a waterway through a treatment plant,
12 will probably be fairly effective on a regular daily basis
13 during what we call "dry-weather flow." However, if you
14 a significant rainstorm, it would be very easy for that
15 treatment process to be overwhelmed; very easy for it to
16 swamped. You know, there are some times we have storms in
17 the Chicagoland area that are very significant, and so you
18 have flows that are orders of magnitude greater than what
19 they are on a normal basis.

20 So in order to not bypass this and move species
21 overwhelming the system or not to flood out the entire
22 surrounding where these potential controls are, the report
23 has included the construction of mitigation measures. And
24 those are tunnels and reservoirs that can be used to
25 that rainfall. So the construction of those significant

1 tunnels and reservoirs to capture that rainfall is really
2 primary driver for the estimated time to completion and
3 total cost of that alternative. As you can see in front
4 you, the estimated time of completion for this is about 25
5 years with a total cost of about \$15.5 billion.

6 Alternative Plan 4, is the second of our two
7 technology alternatives. It takes this concept of
8 aquatic nuisance species from transfer between the basins
9 and takes a little bit of a different take on it. As
10 opposed to having single points that act as that two-way
11 transfer, that two-way control point, it means they
12 the width of the system. And you can see that there are
13 about four or five points along or adjacent to Lake
14 on that slide on the left again, and then one single point
15 on the lower lefthand corner, which is on the river
16 So what each of these points do is they act as one-way
17 control points to address the transfer of species into the
18 system -- into the Chicago Area Waterways.

19 So that area that you see outlined in white that
20 wasn't outlined in white that wasn't outlined in white
21 before is what we call our "buffer zone." And this is the
22 zone that is controlled for aquatic nuisance species. So
23 you try to keep species at the bottom end from coming up
24 into that zone and keep species on the top end from Lake
25 Michigan from coming down into that zone; to control that

1 zone as a monitoring zone so you can evaluate and have
2 warning, early detection, if there are any species that
3 it through as well as continue to operate the CAWS for
4 important uses -- that water conveyance and that flood
5 management -- very similarly as we do today.

6 Now, you'll notice if you're looking closely,
7 there are a couple of physical barriers which are included
8 in this system. If you look at the bottom part of the
9 slides along the Grand Cal and Little Cal Rivers and then
10 you can follow along closer in your books, there are two
11 physical barriers there because those two waterways are
12 primarily non-navigable. You can get a canoe through
13 maybe; a little Jon boat if you're lucky if the water
14 conditions are right. But primarily they're not used for
15 commercial cargo or recreational navigation. And so it
16 simpler and more efficient, or more effective, to place
17 physical barriers on those areas and then mitigate or
18 provide that relief for the potential flooding that those
19 two physical barriers may cause when the waterways cannot
20 continue to run openly as they do today.

21 So on that slide on the right, you see that
22 are a couple smaller -- they're still large; one, I
23 is around four and a half or so billion gallons, but those
24 are significantly smaller than the reservoirs needed for
25 flood risk management in the previous scenario. So, you

1 a significantly smaller time to completion -- only about
2 years -- as well as a significantly smaller cost -- about
3 half that, at about \$7.8 billion.

4 Now, I do want to call out this particular
5 scenario very quickly before I move on as one of the ways
6 can utilize adaptive management. Based on a lot of
7 conversation I've heard over the past couple weeks, a lot
8 the public and a lot of our Congressional and a lot of our
9 state resource agencies are very concerned about Asian
10 Well, Asian carp are the species that are coming up from
11 Mississippi River basin.

12 If you look at this particular scenario, there's
13 one control point that would control those species from
14 coming up. Now, we're most interested -- or, I guess,
15 not saying most interested, but we've been asked to look
16 the two-way prevention of species. So that's what this
17 alternative looks at. But if, for example, you're
18 interested in early risk reduction -- achieving early risk
19 reduction, you could certainly go out and start to refine
20 the design and build that particular one-way control point
21 down at Brandon Road Lock and Dam; that lower lefthand
22 corner point earlier and perhaps achieve that early risk
23 reduction.

24 I'm going to spend a couple minutes to talk
25 the two different hydrologic separation alternatives that

1 are laid out in this report. The first one is the
2 lakefront. And basically lakefront means where it's
3 basically attributable to where we have placed -- or
4 approximately where we have placed the physical barriers
5 this scenario. There are four barrier locations and
6 important to note is that you cannot achieve the risk
7 reduction; you don't see the benefit of these barriers
8 they are complete.

9 Now, what happens when you put these barriers at
10 these specific points? You have significant impacts in
11 way water moves in the system during significant flooding
12 events in the City of Chicago. Therefore before you can
13 finish those barriers, before you dump that cement in the
14 channel and close off those barriers, you need to ensure
15 that the 9.2 million residents of Chicago are not
16 significantly adversely impacted by flooding. Therefore
17 must be able to construct a significant amount of flood
18 mitigation. And that, again, is what drives that
19 significant time to completion. That 25 years is really
20 tied to the construction of the appropriate tunnels and
21 reservoirs to control -- to hold the large volumes of
22 that may fall anywhere within the Chicagoland area.

23 There are additional pieces of mitigation for
24 particular scenario because currently water is brought in
25 from Lake Michigan to keep the river flowing and to keep

1 water quality going. There are some -- aquatic nuisance
2 species treatment plants are used to bring that fresh
3 into the system which will still serve a very important
4 purpose in maintaining that water quality and making sure
5 that there is sufficient water for navigation downstream.

6 The second of the two mid-system hydrologic
7 separation alternatives was created to look at -- okay, so
8 the first one, we had significant cost with regard to
9 risk mitigation. How can we offset that? How can we
10 alleviate that? Where could we put physical barriers in
11 system such that you don't have that huge cost for flood
12 risk? So the team looked at it; we did some modeling and
13 came up with these two points that we call mid-system
14 separation. There are two single points you can see on
15 map on the left, and they actually do a very good job in
16 alleviating that potential flood risk issue. Water can
17 still flow pretty much as it does during significant
18 precipitation events in either direction.

19 However, by placing those barriers downstream
20 from Lake Michigan, you essentially open up the majority
21 the remainder of the Chicago River as well as the Calumet
22 River, open it to Lake Michigan. It is currently not open
23 to Lake Michigan. Currently water flows from the lake
24 the river. Now, in this particular scenario, water would
25 allowed to flow anywhere from those points toward the lake

1 or anywhere from those points down toward the river.

2 Now, there's significant water reclamation
3 planning of the structure within this area. I mentioned
4 the outset of my presentation that anywhere from 65 to 85
5 percent of that volume of the water in the river is
6 municipal wastewater discharge. So where does that come
7 from? On the map on the righthand side, you see two brown
8 dots. And those brown dots are two relatively large water
9 reclamation plants, or you can call them wastewater
10 treatment plants, within the Chicago area. Just each one,
11 on average, maybe 300- or so -- 300 million gallons per
12 of water flows out of those water reclamation plants. So
13 you put a physical barrier downstream where the effluent
14 where the discharge from those water reclamation plants
15 all of a sudden this water now flows into Lake Michigan.

16 Well, no big deal, right? Other cities
17 water into Lake Michigan, no problem; Milwaukee, Detroit,
18 I remember correctly, among others. However, you know,
19 Chicago might have a bad rap for having dirty water, and
20 the past that was certainly the case. I'd say to date
21 there's been significant steps made toward making that
22 a lot cleaner. And in the future we've also considered,
23 part of this study, further efforts that are currently
24 implemented to disinfect the water and reduce important
25 nutrients like phosphorous and nitrogen.

1 So let's for a moment imagine that this water is
2 just as clean as anybody else's water that's going to Lake
3 Michigan. Because of that significant volume -- you're
4 talking 300 million gallons a day for each one, so a
5 combined -- a combination of about 600 million gallons a
6 of water that is now going into Lake Michigan that does
7 have, no matter how clean it is, some trace pollutants in
8 there. You have things -- you have some amount of
9 nutrients, you have some amount of, you know,
10 bio-accumulative compounds like mercury and PCB's; and you
11 have things in that water that wastewater treatment plants
12 don't even take care of today. Pharmaceuticals -- I'm
13 you've heard -- I've seen commercials when I'm here in
14 Michigan about pharmaceuticals going through our
15 So since Lake Michigan has a very long residence time --
16 about 99 years it takes a drop of water to circulate out
17 the lake -- even cleaning up the water to what we would
18 call "acceptable discharge" standards would add a
19 significant load of pollutants to Lake Michigan.

20 So in order to alleviate this particular
21 we've chosen to use those green lines as pipes to reroute
22 that discharge to a point downstream, those barriers, so
23 that water continues to flow in the way it does today.
24 Another important piece of that -- I mentioned the large
25 percentage of that volume of water that provides a

1 significant amount of water for navigation downstream in
2 Illinois waterway, down in the Mississippi River. So
3 having -- you know, being a part of the Corps of Engineers
4 and having one of our primary missions being navigation,
5 this was also an important piece to rerouting that water
6 wastewater treatment plant effluent to points downstream
7 the barrier.

8 We also include a couple of other elements in
9 mitigation. One is for combined sewer overflows where we
10 include pipes and tunnels to capture any potential
11 that may be released during significant storm events, as
12 well as conduct sediment remediation. Again, same kind of
13 scenario with regard to -- as it was with regard to the
14 water reclamation plant discharge, anything to the
15 of those barriers, any sediments, become open to Lake
16 Michigan. And so if there are any residual chemicals that
17 have been there from past years of potential pollution,
18 would now be open to Lake Michigan and they -- there may
19 new regulatory impositions based on that availability to
20 that significant natural resource.

21 Again, so while we try to eliminate that flood
22 risk management infrastructure, there is significant work
23 that needs to be done to ensure that there was not adverse
24 environmental impact to a significant natural resource of
25 the Great Lakes. Again, this adds to that total time for

1 completion of about 25 years, and the significant costs of
2 about \$15.5 billion.

3 The last of our two -- the last our scenarios
4 what we call our "hybrid" scenarios. And these very
5 take physical separation and technologies and implement
6 together. If you haven't noticed, the Chicago Waterway
7 System can be split up into a north part of the system and
8 south part; an upper and a lower. So basically very
9 what these two different scenarios do is place a physical
10 barrier on one part of the system, while leaving the other
11 part open for navigation, using the technologies similar
12 what we did in those previous technology-only
13 As the name states, Cal-Sag open -- the lower channel is
14 the Cal-Sag channel, so you place a physical barrier on
15 upper part, on the Chicago Sanitary and Ship Canal, the
16 CSSC, and leave the lower part open to navigation and
17 uses.

18 Again, because of some amount of mitigation
19 would be necessary for water quality, for flood risk,
20 would be a significant time to completion for these, as
21 as a significant cost of about \$15 billion. The kind of
22 switch of this one, placing the physical barrier on the
23 lower part leaving the upper part, the Chicago Sanitary
24 Ship Canal open, has a similar effect, but a much lower
25 because of the necessary mitigation for those potential

1 alternatives.

2 I mentioned at the outset that the GLMRIS report
3 is really an important tool for decision-makers. How does
4 that work? What kind of information is in the report?
5 really, what we've tried to do is give evaluation
6 And what are "evaluation criteria"? Well, these are
7 different elements that could be associated with each one
8 the alternatives that will help decision-makers, members
9 the public such as yourselves, state officials, Federal
10 officials, elected officials, look at the different plans
11 and look at the trade-offs. Some plans will certainly be
12 more effective than others; some plans will certainly cost
13 more than others. Some will take much longer to implement
14 than others. But they all vary. And where are the
15 environmental impacts? Where are the economic impacts?
16 how do you -- we weigh these and have the conversation
17 we're here to have today? That's what these evaluation
18 criteria help identify.

19 Before I conclude today, I want to hit on a
20 of things. I want to make sure that we all understand
21 before I open it up to your comments, if you hadn't picked
22 up on it, mitigation is really an important part of what
23 drives the time and the cost for these alternatives. I'm
24 not going to stand here today and tell you it's going to
25 take me or anyone else 25 years to build a dam in the

1 Chicago Area Waterway System. What I will tell you is it
2 will take approximately that amount of time to ensure that
3 the third largest city in the nation, nearly 9.2 million
4 residents of Chicago, do not suffer from adverse impacts
5 because of building that dam in the waterway through
6 flooding, or we don't cause significant environmental
7 to a precious resource by contaminating it with the water
8 that flows into it.

9 No matter what, there will always be residual
10 risks with regard to any one of these scenarios. There
11 ways that aquatic nuisance species can transfer between
12 basins that are outside of the aquatic pathway, and that's
13 why it's so important -- I'm so happy to see everyone here
14 today -- is because you are part of that mission to
15 transfer. Human mediated transport -- transport, I
16 mentioned, of bait buckets or not cleaning your boats the
17 correct way, is how these species can transfer to a new
18 basin. So you guys can help all of us act as stewards of
19 the environment to prevent those residual risks.

20 There is, obviously, some concern about the
21 duration for potential implementation of any of these. We
22 saw a lot of these scenarios that will say "25 years to
23 complete." And I can -- I can put on my fortune-telling
24 and say -- and I can bet a lot of you say "25 years is too
25 long." Well, there are ways to buy down that risk. We

1 nonstructural measures that look at immediate potential
2 buying down of that risk. We have technology alternatives
3 that look at maybe ten years or maybe less if we're only
4 trying to target certain species. So we need to continue
5 this conversation amongst all of us to discuss what is the
6 best way to move forward?

7 I guess I'll hit on that last piece. If I leave
8 you with nothing else today, it is a fact that aquatic
9 nuisance species control is a shared responsibility. I've
10 already touched on it, but implementation of any one of
11 these is going to involve everyone's kind of collaborative
12 path forward -- consensus on a collaborative path forward.

13 We've taken this show to a couple of different
14 cities already. We've been to Chicago; we've been to
15 Milwaukee; a couple of cities in Michigan; and then
16 Cleveland as well. And we're going to several more. And
17 the reason we're doing this, again, is to make sure that
18 provide information to the public and listen to what you
19 have to say. So I'm going to wrap up my comments today
20 because I think I might have gone a little bit longer than
21 was supposed to -- I was getting so excited about the
22 report.

23 But I just want to let you know that we do have
24 comment period which is open until March 3rd. All this
25 information is on our website, glmris.anl.gov; it's right

1 the slide in front of you and that, you know, your input
2 your engagement in this process is critically important.
3 Please do stay in touch with us. If -- we're going to
4 a couple hours for comments tonight, so hopefully we'll
5 the ability to hear everyone who wants to make a comment.
6 If we don't get to something or if you think of something
7 after the meeting today, please send us an e-mail. Find
8 on Facebook, friend us, you know, or find us on Twitter;
9 send us an e-mail and with that, thank you so much for
10 time this evening and I will turn it back over to Kendall
11 begin the public comments. Thank you.

12 MODERATOR: Thanks, Dave. So before beginning
13 oral comment period tonight I'd like to reiterate what
14 just said. The GLMRIS website is a great source of
15 information. The GLMRIS report in its entirety can be
16 viewed and downloaded for your convenience. So now I'd
17 to move into our oral comment period. So for those of you
18 that registered on our website before or registered at our
19 table today indicating that you'd like to make a comment
20 our meeting, you'll now have the opportunity to do so.

21 So if you'd like to ask a question instead of
22 a comment, I'd just like to let you know that we request
23 manage your time. We're going to give everybody three
24 minutes. As you can see, there's a lot of people here
25 tonight and so we're trying to be respectful; get as many

1 people up here as we can to give an opportunity to let
2 voices be heard. So if you'd like to ask a question
3 of make a comment, please allow for those three minutes to
4 have your comment, any questions you're going to ask, and
5 then a response by the panel.

6 So after everybody has had the opportunity to
7 address the panel and if time permits, we'll allow people
8 come back up and ask any additional questions or make
9 additional comments. So I'd like to note that we have a
10 stenographer here with us tonight. So we're going to ask
11 that when you do come up to make a comment or question
12 you come to this center microphone. When you come to the
13 microphone, please, before you begin your comment, give
14 name -- please spell your name -- your last name, if you
15 don't mind -- any organization that you represent, and
16 zip code. If you don't give us this information,
17 unfortunately, we will not be able to include it in our
18 formal comment period.

19 So I also have a visual set of slides that I'm
20 going to pull up and walk through right now. That's going
21 to help us manage our time here this evening. So after
22 give your name and zip code, I'm going to start the slide
23 show. And as you can see, it's going to start out green.
24 After two minutes it's going to change to a yellow box and
25 so this just kind of helps us all keep on track. So --

1 then every 15 seconds after that, it's going to update
2 time. At 30 seconds, I'll give you a brief reminder that
3 your time is coming to a close, and then at the end of
4 minutes a big red box appears and I'm going to ask you to
5 make a complete statement and close your comments out.

6 (Off the record interruption)

7 MODERATOR: Again, we're trying to record
8 everything; that's why we have a stenographer. So I'd ask
9 that everybody refrain from you know, asking questions out
10 of the audience; you know, please come to the microphone
11 you have something that you'd like to say.

12 So I'm going to call about three names in order
13 we can kind of line up and try and make sure that we move
14 through these things quickly. I'm going to start with the
15 people that registered on our website beforehand to make a
16 comment and then I'll move to the people that registered
17 here today. As they said, hopefully we can get you all in
18 tonight. If we can't, I'd like to remind you that, you
19 know, you can still submit a comment on our website. You
20 can mail written comments to us, or you can write
21 out and drop it off with any of us up here or at the front
22 desk. And, again, that's -- our comment period is going
23 run through March 3rd.

24 So I'd like to now start with calling of names
25 people that pre-registered. First we have Senator Debbie

1 Stabenow. And then following her, I'd like Mayor Michael
2 Estes, and then Mr. Mark Breederland.

3 (Off the record interruption)

4 SEN. STABENOW: 48917. And I think my name is
5 pretty easy to spell, so, okay. Let me say, first,
6 John Goss, for your leadership. And Col. Drummond and
7 Wethington, let me say that it not only is important that
8 you're here, but it is important to note -- I don't know
9 you indicated that yesterday we did spend time in Lansing
10 with State officials and with State government and
11 and so on talking about next steps.

12 I would just briefly reiterate and then say
13 something about next steps. 25 years is too long. 10
14 is too long. We're on borrowed time right now. And I
15 realize that in these eight options there are a number of
16 ways to configure that. But we've got to all work
17 to figure out what this next step is that is much, much,
18 much shorter than that.

19 Secondly, I hope -- I asked you yesterday about
20 the GLMRIS lock. I know that there's still more work
21 done in terms of the technology, and as we're working
22 through how to get it down to one option, I hope you will
23 continue to be working on the technology so that we can
24 confident that if, in fact, we pick a technology like the
25 lock, that we can feel confident that it actually works

1 the Asian carp as well as other kinds of things. And
2 you already feel that confidence, but as I've been
3 I still have some questions about whether or not that is
4 true.

5 And let me finally just say that I think for all
6 of us -- and I'm going to just speak to everybody now for
7 minute, because as you know Congressman Camp and I led an
8 effort to get us to this point more quickly than was
9 originally anticipated in terms of this report. We have
10 now -- I wish we had one recommendation but if there
11 I understand the reason for that looking at different
12 things, but we've got to all work together to get that
13 to one so we can move. The Great Lakes Commission is
14 a lot of work and the governors in the region are part of
15 the Great Lakes Commission. We need their buy-in. We
16 the buy-in of all of us, everyone that's affected. That's
17 really part of what I view as next steps. We need the
18 buy-in of Chicago, who's most directly affected.

19 So as we go forward with this, we will be
20 to figure out the mechanism through which we can get by
21 get this down to one plan. Once we have one plan, then we
22 can proceed to ask for the funding. And in Congress, we
23 can't do that until we have one plan so we know what we're
24 doing. So that's really the next step.

25 And I would just close by asking that you

1 to work with us, the Army Corps will be incredibly
2 if not directly doing this project, partnering with
3 else to do this project and will be absolutely essential
4 get this done. You have many projects across the country,
5 can't imagine one more important than protecting 20
6 of the world's freshwater, \$16 billion boating industry,
7 billion fishing industry and really, our whole way of life
8 in the region.

9 So, thank you and we need you to make sure that
10 you have the same sense of urgency that we do.

11 MODERATOR: Thank you. So, next, Mr. Michael
12 Estes, the mayor, and following him, Mr. Mark Breederland
13 and then Mr. Eric Andersen. I apologize in advance if I
14 mispronounce any of your names.

15 MAYOR ESTES: Michael Estes, E-s-t-e-s, Mayor of
16 Traverse City and also Lake Michigan advisor from the
17 of Michigan for the Great Lakes Fisheries Commission.

18 MODERATOR: Can I get a zip code? I'm sorry.

19 MAYOR ESTES: 49686.

20 MODERATOR: Thank you, sir.

21 MAYOR ESTES: Thank you. I applaud your efforts
22 for the constructive approach you're taking to these
23 efforts, however I will say that long before any of you
24 on board or even any white people were in this country, we
25 had a solution to the problem. We had bio-diversity that

1 allowed for a stoppage of water to be flowing into Lake
2 Michigan from the Mississippi River. The real solution to
3 this problem is to put that system back in place that
4 it.

5 The solution isn't going to be something that
6 develop ultimately; it's going to be something that
7 politicians in Washington figure out how to fund and what
8 they have the political courage to do. Right now the
9 President of the United States, by executive order, could
10 close a Chicago canal. At least that would be a first
11 Ultimately it wouldn't alleviate all of the issues that
12 you've addressed under this vast, multi-billion dollar,
13 25-year scenario, but that would stop the spread of carp.
14 Okay? After that, if the President doesn't have the
15 willpower to close the canal, Congress has the power to
16 funding to the Corps of Engineers so they can't operate
17 locks. The locks don't operate, they remain permanently
18 closed, no issue with passage of these fish.

19 Now, neither of those solutions are long-term
20 issues, or long-term scenarios to what we should do, but
21 they will stop the problem. And it will force Congress
22 the President to come up with some money and some funding
23 address the issue seriously. Because until then, you're
24 going to go any place with your plans; you'll study it to
25 death as government does -- we do it in the City of

1 City. We study everything to death. But it takes courage
2 by politicians to implement these things and I hope
3 the message gets to the President and to Congress that you
4 have to come up with the funds and make the tough
5 Thank you.

6 MODERATOR: Thank you, sir.

7 MR. WETHINGTON: Mayor Estes, I just want to
8 a quick moment -- thank you so much for your passion on
9 subject. I just want to make sure that we all understand
10 we were -- if anyone was to -- if Congress were to close
11 physical structures within the Chicago area, there's still
12 two waterways that flow openly to the lake that do not
13 any physical structures in them. So closing the
14 closing the locks on the Chicago waterway, while it could
15 something Congress could do, would not necessarily prevent
16 the passage of Asian carp. Thank you.

17 MODERATOR: Sir, your name, zip code?

18 MR. BREEDERLAND: Yup; Mark Breederland, B-r-two
19 e's-de-r-l-a-n-d, 49684. I'm employed with the Michigan
20 Grant Extension Program and I have over 23 years of
21 experience educating and working on Great Lakes issues,
22 of them with invasive species. The following are my
23 personal and professional comments, not official policy of
24 Michigan Sea Grant.

25 First, I'm really glad that the Corps has

1 the GLMRIS report and I'm very glad for the comprehensive
2 work that was done. In this very room in January 2011, I
3 testified at the kick-off set for the meetings of GLMRIS.
4 know that the report details a lot of comprehensive
5 information looking at all the invasive species and all
6 pathways between the Great Lakes and the Mississippi.

7 Second, I would be supportive of some type of
8 ecological separation alternative, perhaps number 5 or 6,
9 the best long-term solution. However, the approximate 25
10 year time frame almost seems absurd with respect to the
11 of stopping AIS between the basin, let alone the \$15
12 cost estimates. How many spawning cycles in 25 years for
13 various species does that account for? And how does the
14 timing of maybe implementing doing lots of other stuff
15 regarding flood control and then lastly, separating the
16 basin? How does that meet a goal of stopping AIS?

17 Third, I'm just disappointed in a little bit of
18 lack of action for funding some low-hanging fruit items
19 which were discovered during the study. For instance, the
20 Corps completed in 2010 a multi-mile berm and barrier and
21 special fence along the Des Plaines River and it did
22 the Eagle Marsh in Fort Wayne as a second key pathway. I
23 know that there was a 1500-foot chain link fence
24 yet what about a more permanent barrier? Why isn't one
25 already built? That's real low-hanging fruit.

1 Fourth, I guess, through the Federal and state
2 governments they acted very slowly in the 90's and the
3 2000's on the Asian carp and other issues. I do remain
4 optimistic we can battle these things; there's still a
5 chance to slow them down. We still need to do what Jim
6 Bredin had said about us slowing down and keeping the fish
7 numbers low below the barriers as we are right now.

8 So, again, the greater Chicago area has this old
9 infrastructure and has very complex storm water issues
10 the canal system as it is. The purpose of getting
11 additional funding needs to be targeted at AIS. There
12 to be some cost-sharing, not fixing just the Chicago old
13 infrastructure using AIS as an excuse, I guess.

14 And, last, I just feel like there needs to be a
15 more effective --

16 MODERATOR: Thirty seconds.

17 MR. BREEDERLAND: -- and efficient, expeditious
18 way to get Congressional appropriations to the responsible
19 Federal agencies. So -- not just waiting for multi-year
20 WRDA bills, not just authorizing instruments, but we've
21 to get some action here. So let's work together with the
22 local and the state governments, find ways to deal with
23 urgent threat, and build and maintain this ecological
24 separation that's vitally needed to protect the Great
25 economy and ecology. Thank you very much.

1 MODERATOR: Thank you, Mr. Breederland. Next I
2 have Eric Andersen, followed by John Briggs and then Gary
3 Keyes. So your name and zip code when you're ready.

4 CAPT. ANDERSEN: Yes. My name is Captain Eric
5 Andersen, that's A-n-d-e-r-s-e-n; 49645. I'm vice
6 of the Michigan Charter Boat Association.

7 (Off the record interruption)

8 CAPT. ANDERSEN: I'm vice president of the
9 Michigan Charter Boat Association. And we are an
10 organization that is approximately 400 licensed charter
11 operations here throughout Michigan. And I'm here kind of
12 on a fact-finding mission. This GLMRIS report is
13 new. I'm going to report back to our board of directors
14 this Sunday and let them know what the findings are here
15 that we've -- and we're extremely interested. And we
16 support Governor -- or, Senator Debbie Stabenow 100
17 in what she just said here. We've been following this
18 close. Very glad to see this report out and I'm very glad
19 to see you people up here in the Traverse City area. And
20 that's about all I got to say at the moment. But we will
21 respond with a written report here shortly. Thank you.

22 MODERATOR: Thank you, Capt. Andersen.

23 MR. WETHINGTON: Capt. Andersen, thank you for
24 your comments. I just want to let you know to grab an
25 couple books on your way out if you want to bring them to

1 your folks. Thanks.

2 MODERATOR: So the next I have is John Briggs,
3 followed by Gary Keyes and then Brian Price. So name and
4 zip code when you're ready, sir.

5 MR. BRIGGS: John Briggs, B-r-i-g-g-s, 49- --

6 (Off the record interruption)

7 MR. BRIGGS: -- B-r-i-g-g-s, 49684. I represent
8 the Michigan Boating Industries Association.

9 (Off the record interruption)

10 MR. BRIGGS: Thank you for the opportunity to --
11 for me to speak today. My name is John Briggs, and I am a
12 member of the Michigan Boating Industries Association, and
13 I'm here on behalf of the 300 members and the \$7.4 billion
14 recreational boating industry here in Michigan.

15 Knowing there will be tremendous damage to the
16 health of our Great Lakes and ecosystem and the
17 area if Asian carp enter the Great Lakes, we have again
18 again asked our leaders to do whatever is necessary to
19 prohibit the carp from entering the Great Lakes. And for
20 years we have inquired, "What is being done to ensure that
21 the Asian carp will not invade our ecosystem?" We were
22 the answer would be coming in a study being conducted by
23 U.S. Army Corps of Engineers. This study was just
24 released, and our concern continues. We compliment the
25 Corps on the thoroughness of the study.

1 But this study fails to include a call for
2 immediate action to protect the Great Lakes from the
3 of Asian carp. 25 years is too long to wait. So today we
4 join with leaders such as U.S. Representative Candice
5 and U.S. Senator Debbie Stabenow and many other
6 declaring there must be an immediate plan for action. We
7 must immediately implement a plan which protects the Great
8 Lakes for years and decades to come.

9 After reviewing the alternatives presented by
10 Corps' study, the only real solution that will truly
11 the Great Lakes is the complete separation of the Great
12 Lakes and the Mississippi River basin. Asian carp will
13 destroy our fisheries. The Great Lakes has some of the
14 world's best sport fisheries and Asian carp are voracious
15 eaters and will strip the food web of the key source of
16 for our native fish. Without our game fish, we will lose
17 our \$7 billion fishing industry here in Michigan, and our
18 billion recreational boating industry in Michigan.

19 In addition to causing direct ecological harm,
20 silver variety of the Asian carp has caused direct harm to
21 people. The silver carp is skittish and easily startled
22 the sound of a boat motor. They land in boats, damage
23 property, and they make boating less desirable and many
24 people will leave boating forever. Communities will
25 with job loss and declining tourist income.

1 The time has come to put a plan into action
2 it is too late. Thank you.

3 MR. WETHINGTON: Thank you.

4 MODERATOR: Thank you, Mr. Briggs. Next I have
5 Gary Keyes, then Brian Price and Daniel DeGood.

6 MR. KEYES: Gary Keyes, K-e-y-e-s, GLMRIS, RPT
7 50004. I've already spoken in January of 2011, I tried to
8 represent the fishermen of the State of Michigan. I think
9 the Corps of Engineers needs to think about addressing the
10 Native Americans and the Native American nations. I think
11 you've left them out of the picture.

12 Originally the river we talk about, or the
13 connection between the Great Lakes and Chicago and the
14 Mississippi wasn't there. It was dredged to allow the
15 sewage to flow into the Chicago River. You're admitting
16 that 600 million gallons a day goes into the Chicago River
17 from the Great Lakes, not even counting the amount of
18 that flows out of the Great Lakes into the Mississippi
19 through your industrial canal and some of the other ways
20 goes in there.

21 When I went to the University of Michigan under
22 Joseph Sax, we went and talked about how terrible it was
23 dredge the St. Clair River and how now today it's eroding
24 away the whole basin there and now billions of gallons a
25 are going down the St. Clair River and it brought in the

1 invasive species that we're talking about today that are
2 the Great Lakes. And we need to build a lock system
3 If you're going to talk about separating one area from
4 another and talking about the problem we have with the
5 height in the Great Lakes, we have to build a lock system
6 the St. Clair River and we have to steam all the ballast
7 every boat coming into the Great Lakes to stop these
8 invasive species. You've never even addressed that.

9 I also spoke in 2011 and a nice gentleman here,
10 was a master sergeant, a black individual, said he would
11 underwater noise -- different frequencies and large
12 of noise to stop the fish. And I believe you are now
13 that; I thank you very much for at least implementing that
14 one idea that I tried to bring forward at that time.
15 you very much. But you need to use different frequencies,
16 louder cannons and you also need to use a "bubbler" that
17 they use over here to make the fish go upside down and
18 them act dead for awhile. You know, there's all kinds of
19 gases and stuff that don't hurt anything, they just bubble
20 away.

21 And I will read you what I wrote and since the
22 Governor of the State of Illinois about a year ago said,
23 see an alternative to building an industrial canal in
24 areas to keep the bighead Asian fish out of the Great
25 Lakes. Why are you being so stupid and arrogant in not

1 implementing this device?" It says, "You're paid to be
2 stupid or what is your problem. I think you're some of
3 dumbest people on earth who know nothing but to go to work
4 and collect your government paycheck and keep from being
5 positive and getting anything done at all. You redefine
6 word arrogant, and since you're unwilling to listen, I
7 fire all of you if I had the power."

8 MODERATOR: 30 seconds.

9 MR. KEYES: "Please fill in all the ditches and
10 stop the carp from coming to the Great Lakes. Try to
11 up for the fisherman and not President Obama and his
12 friends. Please listen to the Governor of Illinois and
13 in the ditches. You've proven that patterns of barge
14 traffic create swirls that will allow the carp through the
15 barriers, so in poor layman's terms, if you do not
16 hydrologically separate the Great Lakes totally from the
17 Mississippi River, we're all doomed." Thank you.

18 MODERATOR: Thank you, Mr. Keyes.

19 MR. PRICE: My name is Brian Price. I'm
20 director of the Leelanau Conservancy. My perspective on
21 this and my viewpoint comes from about two and a half
22 decades of land conservation work.

23 MODERATOR: Sir, --

24 MR. PRICE: Brian Price, P-r-i-c-e, 49664.
25 me.

1 MODERATOR: Thank you.

2 MR. PRICE: And also I was a commercial
3 on Lake Michigan and Lake Superior for about 15 years. So
4 the Conservancy and all of us should applaud the study for
5 taking a comprehensive approach, looking at the flow of
6 invasive species in both directions, and I want to applaud
7 the study for doing that. I'm not an engineer, and I'm
8 an aquatic ecologist. My reaction to the GLMRIS report is
9 pretty simple: It is find the right people with the
10 appropriate professional experience, narrow down these
11 alternatives, and commit to an approach and stick with it
12 and get it funded.

13 Time's not on our side. Everybody's pointed
14 out. No amount of sophisticated analysis will stop the
15 Asian carp once breeding populations are established in
16 Great Lakes. A perfect solution, if it takes 25 years to
17 deploy, it's going to be perfectly worthless. So I
18 encourage you to start by doing some of the things that
19 were talking about, and I would applaud that our -- that
20 that will reduce the threat level in the immediate future
21 and first, as a former commercial fisherman, I know that
22 can reduce ovulations in these limited waterways.

23 It may take -- we may have to step out of our
24 comfort zone if market forces are not good enough to
25 incentives; we may have to get out of the way if some of

1 regulations are causing problems. But we need to make
2 that even if we have to establish a bounty system like we
3 have on squawfish in the Columbia River basin, that we get
4 the populations of these fish down so that the risk is
5 reduced immediately.

6 Secondly, whatever it takes to improve the
7 electric barriers and to stick with that program in the
8 immediate future, let's do that. Let's get to a final
9 recommendation, what kind of ecologic separation is
10 approved, I understand the complexities, but let's commit
11 it.

12 Finally, I want to thank Senator Stabenow and
13 Representative Camp for leading the charge on this; making
14 sure that everybody sticks on task because I think that --
15 and we should applaud them. They're going to have to make
16 sure that their colleagues take this seriously, and that
17 whatever we do, we can get it funded and we can get going
18 it soon. So I want to thank you especially.

19 MR. WETHINGTON: Thank you.

20 MODERATOR: Thank you, sir. Next I have Daniel
21 DeGood, followed by Eric Johnson and then Fred Sitkins.
22 name and zip code when you're ready, sir.

23 MR. DeGOOD: Daniel DeGood, 49640. D-e-G-o-o-d.
24 I represent absolutely nobody this time; myself, my family
25 and the fellow fishermen that I fish with. I grew up and

1 was born on the Kalamazoo River. I now live on the Platte
2 River in sight of Sleeping Bear Dunes. I fish the Platte
3 River, East Platte Bay and Lake Michigan. I fish the
4 Sucker River system in Lake Superior. I fish Saginaw Bay
5 for walleye, and I fish in Ontario on Rice Lake, which is
6 connected on the canal system between Lake Huron and the
7 Lawrence. So I fish the Great Lake river system -- the
8 Great Lakes system.

9 I want to talk not to the Corps of Engineers,
10 to the White House, Senator Stabenow, and to the
11 representatives who are here. I'm kind of a half-full
12 guy, glass half full, but I come here tonight with an
13 glass. And I come here not because of your plan, but
14 because of history. Sixty years ago, the alewife. Thirty
15 years ago, the zebra mussels. Fifteen years ago, the
16 gobies. And we still can't take care of ships coming into
17 the Great Lakes to stop this?

18 The electric barrier you talked about, the
19 original plan was for three. You have only one. When the
20 power goes down, we have trouble. If you really want our
21 support, if it's truly what you want, then the plans are
22 the important thing; it's making us believe that your
23 risk reduction or your down-by-down risk factor is real
24 supportive and it can be done. Otherwise you're never
25 to get the support for the 25 years. That's way too long

1 everybody has said. You have to make us believe that what
2 you're going to do right now will make a difference until
3 these grand plans can be put in place. Thank you.

4 MODERATOR: Thank you, sir.

5 MR. WETHINGTON: Thank you, sir. I appreciate
6 your passion and your comments. I just wanted to make
7 that for the record we have a couple clarifications. The
8 first one with regard to the barrier system, we do
9 have two permanent barriers that are in operation plus a
10 demonstration barrier, which we're currently building a
11 third -- actually a fourth now, for a permanent barrier
12 there. So there are actually three barriers currently
13 running today if you include our demonstration barrier.

14 Also there was a gentleman earlier, Mr.
15 Breederland, who spoke to Eagle Marsh. And that is an
16 important point we've identified as a place outside of the
17 Chicago Area Waterway System that serves as the potential
18 greatest pathway for Asian carp to transfer. And there's
19 actually been a lot of work that's been done on Eagle
20 in partnership with state agencies, natural resources
21 conservation services and the Corps of Engineers that put
22 together actually a plan for physical separation of that
23 potential location. So it's much more than just a
24 chain-link fence. As was mentioned earlier, there's
25 actually plans to put that physical separation at that

1 in the ground within hopefully the next year or two.

2 (Off the record interruption)

3 COL. DRUMMOND: I appreciate your comments the
4 glass half full is something that we all take near and
5 If you could, sir, I don't know where -- where did you go?
6 Raise your hand. I got a card for you. Come up -- if
7 you -- sir, give him this card, will you? That is a free
8 invite the next time you're in Chicago, come out and see
9 and I will personally take you to the barrier and show you
10 what's going on out there.

11 MODERATOR: Thank you, sir. Next I have Mr.
12 Johnson, followed by Fred Sitkins, and the Jennifer McKay.
13 So when you're ready, sir, name and zip code.

14 MR. JOHNSON: Erik Johnson, 49643. I'm an
15 environmental engineer; have been for 30 years. I've been
16 following the Asian carp ever since I heard about it, but
17 must say, I'm pretty disgusted with how long it's taken
18 government to come up with a solution to close the Chicago
19 canals. The Corps of Engineers has been conducting
20 for -- what? -- three years now, or more, to conclude that
21 likely solution is hydrologic separation of the
22 This same conclusion is what the general public has been
23 howling for since the onset. It seems like it's a waste
24 time, all these three years. It's kind of a no-brainer.
25 The solutions offered by the current GLMRIS

1 do offer some good ideas for hydrologic separation, but
2 are all unacceptable. The report says it will take 25
3 to close the Chicago canals. In 25 years, we'll have
4 carp out here in the Bay and in Boardman Lake. So why
5 bother, if it's going to take that long? Now, I'm sure
6 there are some interim things that can be done, but 25
7 is absurd.

8 For the record, I'm in favor of the lakefront
9 hydrologic separation option. But, again, the timing
10 schedule is unacceptable. The current study uses -- or
11 offers use of tunnels and reservoirs for flood risk
12 mitigation and includes schedules and budgets for
13 of these. But are these not part of the tunnel and
14 reservoir plan -- the TARP plan -- that Chicago has
15 been working on -- already has budgets for and is already
16 partially completed? You include these budgets in your
17 budgets. So it seems like you're double-dipping here and
18 its deceptive of you guys to put a price tag of an
19 project on the Asian carp hydrologic separation project to
20 make the price seem higher.

21 I think your concepts are good, but the
22 implementation schedule is not suitably responsive to the
23 urgency of this environmental emergency. It seems like
24 government has forgotten that this is an emergency. You
25 need to come up with a solution that will close the

1 canals this year, not 25 years from now.

2 Now, it's pretty obvious that the Corps of
3 Engineers is subject to political influences that have
4 resulted in these weird schedules and budgets. But,
5 this is an emergency. To stop these carp, it's evident
6 it will have to take an executive order from the President
7 to provide the funding we need and the --

8 MODERATOR: 30 seconds.

9 MR. JOHNSON: -- incentive to make it happen.
10 if President Obama will do the right thing for our Great
11 Lakes economy, then maybe hydrologic separation could
12 this year. But if he wants to continue to kick the can
13 the road, then the next president will have to issue the
14 executive order. And that could happen in a couple years,
15 which is a lot better than 25 years. Thank you.

16 MODERATOR: Thank you, sir. Next I have --

17 MR. WETHINGTON: Sorry; I just wanted to address
18 your comment with regard to, again, the 25 years. I hope
19 was able to convey this during my presentation; I'm sorry
20 it was not clear in the communication. But it doesn't
21 25 years to put the barrier in the canal. What does take
22 the 25 years is to ensure that there is not adverse
23 caused by this specific action.

24 And the double-dipping that you referred to is
25 certainly not the case. Yes, there are other projects

1 are currently going on with regard to cleaning up water
2 treatment, making flood risk better in the Chicago area,
3 those were considered as part of the baseline. Those are
4 already constructed if we were to look at putting in a
5 physical barrier. So any infrastructure that is outlined
6 any of these banners, any of the maps, any of the
7 information I provided today, is specifically to address
8 adverse impacts by the implementation of technologies, or
9 the implementation of a physical barrier. It's
10 attributable to this action. So I just want to make sure
11 that everyone understands. And I'm sorry if I was not
12 in my communication.

13 AUDIENCE MEMBER: Point of clarification?

14 MODERATOR: Sir, --

15 COL. DRUMMOND: Let him come up and ask a
16 question.

17 MODERATOR: Would you please approach the
18 microphone?

19 COL. DRUMMOND: Sir, come up, state your name,
20 code.

21 [REDACTED]: I'll also speak later, but real
22 quick, --

23 COL. DRUMMOND: This is not an open door; I'm
24 doing it for you.

25 [REDACTED]: My name is [REDACTED], common

1 spelling, zip code 49621. You talk about the 25 years in
2 all these plans. Every single one of these plans has a
3 check box that says "25 years" for the Asian carp control.
4 Clarify that.

5 MR. WETHINGTON: Yes, sir. The check box that
6 you're referring to are the risk reduction boxes. And so
7 that is communicating some information which is outlined
8 much more detail in the report. That has nothing to do
9 the 25 years for implementation of some of these
10 alternatives. So that particular risk reduction box looks
11 at what time step would a particular aquatic nuisance
12 species control -- a technology, a physical barrier --
13 achieve risk reduction for that specific species. We did
14 dedicated risk assessment for a full range of species.
15 Asian carp, silver carp, bighead carp, were two of those
16 species. And what we evaluated was when does that risk
17 become medium or high for passage and establishment in the
18 other basins?

19 So we evaluated that certain technologies are
20 available to address that. For specifically the Asian
21 it becomes a medium or high in year 25. So those boxes
22 speaking to snapshots in time. They look at time zero,
23 ten, time 25 and time 50, and at what point will that
24 specific technology or control reduce that risk. So for
25 those specific technologies that are implemented in 25

1 years, at year 25 it will reduce that risk. We believe,
2 based on our risk assessment, there is certainly
3 associated with that, and it's spelled out in great detail
4 in the report in Appendix C, and that's what those charts
5 specifically speak to.

6 MODERATOR: Thank you. Next I had Mr. Fred
7 Sitkins followed by Jennifer McKay. And then after those
8 two speakers, I want to plug in one that just came in.
9 Senator Levin was registered with us earlier and just now
10 arrived. So, when you're ready, sir, name and zip code.

11 MR. SITKINS: Fred Sitkins, zip code 49682.
12 name is S-i-t-k-i-n-s. I work with Inland Seas Education
13 Association as the executive director, however these
14 comments are my personal comments, not on behalf of Inland
15 Seas.

16 First off, I do want to thank you. I've had the
17 opportunity to hear a couple different times now. You
18 definitely seem passionate; you seem like you -- you know,
19 you understand and you feel the need for this. So we
20 certainly appreciate that.

21 Inland Seas has been collecting data on the
22 Lakes for 25 years now. I think we've done a great job of
23 not only monitoring the health of the Great Lakes, but our
24 mission is to communicate that information to the public.
25 We are dedicated to protecting the Great Lakes through

1 education; that's what we do. Unfortunately, over that
2 25-year period, our message has become bleaker each year.
3 And unfortunately, that's primarily as a result of
4 species.

5 We have a tremendous amount of data that points
6 to -- I can't even emphasize how significant this issue is
7 when we look at it in data format. Invasive species have
8 decimated this -- these Great Lakes. It's terrifying to
9 think that we're looking at a 25-year solution to this.
10 I know you've heard it a hundred times, it sounds as
11 there are a lot of things that can happen. The issue of
12 years I get is that it's a construction project and there
13 are mitigation issues to consider.

14 However, there are so many other things that
15 you've alluded to but we haven't spent a lot of time
16 about that can be done in the meantime. I would just
17 that we do everything we possibly can and not let the big
18 ticket of the 25-year solution get in the way of all of
19 small things that we can do, like supporting organizations
20 that are represented in this room that do the outreach and
21 do the education. This is incredibly important.

22 I would also just emphasize, looking at the
23 options, 1 and 2, to me, don't seem like options, those
24 like requirements. Those -- both of those two things are
25 things that should be done no matter what happens, and so

1 I'm disenchanted that they're actually considered as an
2 option. That seems like excess (inaudible) to me. So,
3 please, make sure those are done, along with all the other
4 mitigations.

5 And lastly, you guys are the professionals here.
6 I appreciate the input, but whatever you can do to look at
7 all of the options to say which one's going to bring the
8 fastest resolution -- I know a lot of folks have said
9 25 years, it's a waste of time. I get that, but --

10 MODERATOR: 30 seconds.

11 MR. SITKINS: -- let's keep trying to find that
12 permanent, 25-year solution. Put that in place, but don't
13 take the money away from all the things that we can do
14 between today and the 25 years. Please act as soon as
15 possible.

16 My last comment would be it sounds to me like
17 Congress wants a recommendation. And I would just look to
18 the professionals to make that recommendation to Congress
19 they can take action. Thank you.

20 MR. WETHINGTON: Thank you.

21 MODERATOR: Thank you, Mr. Sitkins. Next
22 McKay, then Senator Levin, if you're ready, and then
23 followed by Jamie Cross.

24 MS. MCKAY: Jennifer McKay, M-c-K-a-y. I'm here
25 representing Tip of the Mitt Watershed Council, and the

1 code is 49770. First, thank you for the opportunity to
2 provide comments on the GLMRIS report. And I'd like to
3 commend the U.S. Army Corps of Engineers on the work and
4 effort put in to completion of the report.

5 The report is an essential step in preventing
6 interbasin transfer of invasive species between the Great
7 Lakes and the Mississippi River. The GLMRIS report
8 reaffirms that solutions exist to achieve permanent
9 ecological separation while maintaining management of
10 waters, water supply and conveyance, navigation and
11 recreation. Now we must implement hydrologic separation.
12 And we must do so quickly. Everyone has said it, we
13 afford to wait 25 years, even 10 years.

14 The Great Lakes and Mississippi River basins
15 provide drinking water, jobs, income, subsistence,
16 recreational activities to millions of people. The threat
17 of Asian carp is far too great to wait that long to
18 implement solutions. And the costs of what happens if
19 aquatic invasive species get into the Great Lakes because
20 didn't take strong enough prevention methods would be many
21 times higher than the cost of implementing physical
22 separation.

23 The water-borne invaders we have today are
24 causing hundreds of millions of dollars in damage each
25 We now have a once in a lifetime opportunity to

1 solve the problem of Asian carp and other aquatic nuisance
2 species moving between the Mississippi River and the Great
3 Lakes. We must work rapidly and collaboratively to select
4 and implement measures to restore the ecological barrier.

5 In addition to expediting the permanent solution
6 of restoring ecological barrier, we must also maintain and
7 take interim steps immediately to provide more protection
8 for the Great Lakes in a part of a long term plan for
9 physical separation. We know from experience the
10 devastating effects of invasive species on our Great
11 Too rarely do we actually have the opportunity to prevent
12 the damage of the invasion before it begins. Yet the
13 opportunity is now at our doorstep, but there are no
14 chances.

15 The actions by the Corps and all of us here
16 are crucial to the health of the Great Lakes ecosystem and
17 our economy. We cannot miss this opportunity to protect
18 lakes from Asian carp, other invasives, and their
19 devastating legacy.

20 Again, on behalf of the Tip of the Mitt
21 Council, thank you for the opportunity to provide

22 MR. WETHINGTON: Thank you.

23 MODERATOR: Thank you, ma'am. Senator Levin, if
24 you're ready. I'm going to ask the same of you that I've
25 asked of everybody, if I could get your name and zip code

1 and then --

2 SEN. LEVIN: Carl Levin, want me to spell it?

3 Happy to; C-a-r-l, L-e-v-i-n. At least that's the way it

4 was on the ballot a few years ago. I'm 48207, Detroit.

5 welcome to the Corps. We're glad to have you in Michigan;

6 we're glad that you're holding these hearings for public

7 comment.

8 The report, of course, that we've waited for a

9 long time, that was our -- I guess it was 2007 Act which

10 required you to come up with this report. We know that

11 time was truncated a bit. Last year, I guess, we wanted

12 this report. And perhaps that's the reason why the

13 are not analyzed in this report, but it's absolutely

14 essential that we not only look at costs, but that we look

15 at benefits, and those are missing. And it's essential

16 we have you now quickly weigh the benefits because it's a

17 cost/benefit analysis which ultimately is going to move

18 needle hopefully much faster and to a much better result

19 than some of the ones that are (inaudible).

20 The good news in this report, I think is that

21 total separation of these two basins is feasible and it's

22 the best protection. That's your conclusion and that's

23 should be obvious; at least that it's the best protection.

24 But the fact that it is feasible is also critically

25 important. As your conclusion, we welcome that

1 Now, some of the costs according to the Great
2 Lakes Commission and to the St. Lawrence Cities group,
3 are exaggerated; they're excessive. If you look at zero,
4 for instance, discharge, that is something which you've
5 required in other projects; you've looked at total removal
6 of contaminated sediments. That's something which has not
7 been required in other projects. And there's other
8 of your costs that go with the total separation which,
9 according to the Great Lakes Commission and to the Cities
10 report, are excessive.

11 And so when you combine the two of those
12 the fact that there is no assessment of benefits which are
13 so critical to us and the fact that there are some
14 exaggerated costs in this report, we believe that there is
15 distortion; part of which is understandable because you
16 didn't get to the benefits, and a part of which could be
17 corrected.

18 I am co-chair of the Senate Great Lakes Task
19 and Mark Kirk, my Republican co-chair and I, along with
20 House of Representatives co-chairs will be getting
21 in the next few weeks to send you our recommendation. And
22 our recommendation will --

23 MODERATOR: 30 seconds.

24 SEN. LEVIN: Thank you. Our recommendation will
25 be to move immediately to the short-term actions which can

1 be taken while you are refining the long-term costs and
2 long-term option, which is the best option, but also
3 shortening the period for us to get to the total

4 I know -- even though I wasn't here -- from my
5 staff that you have felt the passion in this room. The
6 passion for the Great Lakes, which I hope and believe that
7 you share, is something which is real, it's palpable. We
8 feel, in Michigan, we are the stewards of the Great Lakes.

9 So I hope you take that as a positive; that this
10 is something which we feel so keenly, and that this will
11 energize you to move towards the total separation
12 but in the meantime to take those short-term steps which
13 also will help protect these pleasant lakes. Thank you so
14 much.

15 MR. WETHINGTON: Thank you.

16 MODERATOR: Thank you, Senator. Next I have
17 Cross, followed by Cheryl Kallio and then Steve Baase.
18 Again, I apologize if I mispronounce any names. When
19 ready, ma'am, name and zip code.

20 MS. CROSS: Jamie Cross, J-a-m-i-e, Cross with
21 "C"; 49417. And tonight I'm representing the Alliance for
22 the Great Lakes. Thank you for the opportunity to speak
23 behalf of the Great Lakes tonight.

24 I'm the Adopt-a-Beach manager for the Alliance
25 the Great Lakes. My office is in Grand Haven, and we're

1 headquartered in Chicago, kind of "ground zero" there,
2 staff in Wisconsin, Michigan, Southeast Michigan, Ohio,
3 New York. Like Jim and many of the people here in the
4 tonight, I'm really fortunate to work for a job that
5 protects the Great Lakes, but it's also personal. I grew
6 in West Michigan fishing in the lakes, swimming in the
7 lakes, family camping along the shores of the Great Lakes.
8 The Great Lakes are a fabric of my life and my family's
9 life.

10 The Alliance for the Great Lakes draws it
11 as an organization in Michigan and throughout the region
12 through the many collaborations and partnerships that we
13 have. We align ourselves with not only those who care,
14 those in the room tonight, and all of our 10,000-plus
15 volunteers that work on stewardship programs throughout
16 region, but those that want to keep learning more and
17 better, and improving their work for the benefits of the
18 lakes, the beaches, the people and the wildlife and some
19 our partners, like the Watershed Center of Grand Traverse
20 Bay, Friends of Sleeping Bear Dunes, Freshwater Future,
21 Michigan Department of Environmental Quality, NOAA and

22 My points on GLMRIS are very simple. We don't
23 have time to waste. The time is now. Recent studies
24 confirmed that the electric barrier, currently the last
25 of defense to keep Asian carp out of the Great Lakes, may

1 not be a barrier at all as it allows small fish to pass
2 through. The status quo is not acceptable and we need
3 action on separation. The cost of what happens if new
4 aquatic invasive species get into the Great Lakes because
5 didn't take strong enough prevention measures would be
6 times higher than the cost of implementing physical
7 separation of the basins. These water-borne invaders are
8 already causing hundreds of millions of dollars of damage
9 health, commerce, recreation and the environment.

10 Lastly, the health of the Great Lakes as well as
11 our communities and the jobs they support are worth it.
12 cannot put a price tag on our region's quality of life.
13 cannot afford to undermine the investments we are making
14 in the protection and restoration of the Great Lakes.

15 Thank you for the opportunity to talk on this
16 urgent matter for the Great Lakes.

17 MR. WETHINGTON: Thank you.

18 MODERATOR: Thank you, Ms. Cross. When you're
19 ready, ma'am, name and zip code, please.

20 MS. KALLIO: Hi. My name is Cheryl Kallio, K-a-
21 l-i-o, and my zip code is 49456, and I represent an
22 organization --

23 REPORTER: Spell "Cheryl."

24 MS. KALLIO: C-h-e-r-y-l.

25 MODERATOR: Ma'am, would you move a little

1 to the microphone, please?

2 MS. KALLIO: And I represent --

3 (Off the record interruption)

4 MS. KALLIO: -- Freshwater Future.

5 (Off the record interruption)

6 MODERATOR: Sorry; thank you.

7 MS. KALLIO: Did you get my organization,
8 Freshwater Future?

9 MODERATOR: Yes.

10 MS. KALLIO: Okay. Well, we're pleased to see
11 that you've identified separation as the strongest option,
12 and we couldn't agree more. I'm actually going to not be
13 duplicative as to repeat how important separation is here
14 tonight, but we definitely agree with many of the comments
15 that we have in the room, so I really want to focus my
16 comments on how important the economy of the Great Lakes
17 to our region, and how it's been articulated in your
18 and how I think we might need to do better so that our
19 members of Congress can actually sell this to other
20 of Congress so we can secure that funding.

21 We feel how -- how it's being valued right now,
22 it's being undervalued how it's articulated in the report.
23 And let me explain that. We recognize that the reasons
24 you are using economic value, which is merely to measure
25 value of one thing compared to another, but we would

1 encourage you to look at expressing just what that
2 impact is or the total economy is on our Great Lakes
3 those are the numbers that are so important to the
4 livelihood of about every single person that lives here.

5 For example, I am avid kayaker, and I have twin
6 6-year-old boys. And recently we took a trip on the
7 Manistique River through Seney National Wildlife Refuge.
8 The economic value wouldn't just measure and present to
9 other people in a report what I might pay to kayak on that
10 river with my boys, but I did pay Northland Outfitters to
11 transport us; I purchased bug spray and food from them.
12 After a day on the river we locally went to Lake Superior
13 Brewing Company for dinner and the hardware store for ice
14 cream afterward. And that day on the river generated
15 economic activity that's part of our recreational economy
16 that is overlooked in your economic assessment. But if
17 Asian carp were in that Manistique River, I likely would
18 have been kayaking there with my young boys, along with
19 others, and that economic activity would not have been
20 generated, and it's lost to those business owners.

21 Now, that is just a kayak. Think about the
22 fishermen that are spending so much money on equipment and
23 things like that. Those are the figures that make up our
24 billion fishing economy and our \$16 billion boating
25 And the numbers reflected in the report we believe

1 undervalue that. And our members of Congress need those
2 numbers to be able to justify securing these dollars to
3 people who might not be as passionate about the Great
4 So, thank you.

5 MR. WETHINGTON: Thank you.

6 MODERATOR: Thank you. Next on my list I have
7 Steve Baase, followed by Mary Lee Orr and then Fred
8 Overdier. So when you're ready, sir, name and zip code
9 please.

10 MR. BAASE: My name is Steve Baase, B-a-a-s-e;
11 49621. I'm a Traverse City native and a recently retired
12 trout fisherman, a recreational user and a passionate
13 of clean, freshwater everywhere. And my clear choice is
14 for the total and complete and immediate hydrological
15 separation method.

16 I would hope that the evaluation criteria places
17 its heaviest priority on the total stoppage of invasive
18 species wherever it's needed and not on monetary costs,
19 politics, or burdensome regulations. We seem -- we have
20 our disposal the best technology and the best minds
21 available in this country and I really hope we use them
22 in a hurry. Thank you.

23 MR. WETHINGTON: Thank you, sir.

24 MODERATOR: Thank you, sir. Next, Mary Lee Orr,
25 and then I'll call on Fred Overdier and then Allison

1 Voglesong. Ma'am, when you're ready if I could get your
2 name and zip code, please.

3 MS. ORR: Good evening. My name is Mary Lee
4 O-r-r. My zip code is 49635. And I represent the Lake
5 Michigan League of Women Voters, which is a four-state
6 organization, regional focusing on issues related to Lake
7 Michigan.

8 In 1914, my grandfather bought a cottage
9 overlooking Lake Michigan between the Frankfort and Point
10 Betsie lighthouses. And it was here that my family spent
11 every summer vacation. Recognizing the charm and beauty
12 this location, in 1962 my husband bought our summer home,
13 just north of Point Betsie with a view of Sleeping Bear,
14 where we now live in retirement.

15 It is an acknowledged fact that the most likely
16 conduit, as has been stated before, for these fish to get
17 into the lakes is at the connection between Lake Michigan
18 and the Chicago Sanitary Canal, an artificially engineered
19 contrivance designed to deal with Chicago wastewater and
20 that has outgrown its usefulness. People who care about
21 this impending threat to the Great Lakes know that the
22 effective solution is to cut off that connection between
23 Lake Michigan and the canal, and ultimately the
24 River.

25 Already the carp are bumping their noses against

1 the electric barriers, which are in themselves inadequate.
2 As you know, these barriers do not prevent fingerlings
3 passing through. For the past three years, numerous
4 of carp DNA have been taken from Lake Michigan and waters
5 that lead into the lake. Carp have been sighted and
6 in Minnesota, Wisconsin, Illinois, and Indiana. And as
7 recently as four days ago, a truck carrying live carp into
8 the states was intercepted by Customs officials.

9 A related issue, as has been referred to this
10 evening to the problem of the carp is the inadequacy of
11 sewage treatment in the water in the Chicago area.
12 sewage overflow has occurred there all too frequently.
13 Climate change predictions of coming storms will only
14 added stress to treatment facilities. Plans are available
15 to upgrade the plants, as there are acknowledged ways to
16 reroute commercial traffic on the canal.

17 Granted, the projected cost for this double
18 challenge of upgrading wastewater facilities together with
19 separating the Great Lakes and Mississippi basins are,
20 indeed, mind boggling. Costs must be shared by all
21 that are directly and indirectly affected. Both local and
22 Federal dollars should be allocated. Meetings such as
23 one should encourage all of us who are greatly concerned
24 urge stakeholders and community and government leaders to
25 gather immediately to devise options and to adopt a work

1 plan.

2 MODERATOR: 30 seconds.

3 MS. ORR: To quote Senator Stabenow, it is time
4 move past reports and get moving on actual projects that
5 will stop the Asian carp, to which I add, the costs of
6 ignoring this threat go far beyond the cost of remedy
7 implementation.

8 MODERATOR: Thank you very much, ma'am. Next I
9 have Fred Overdier, and then Allison Voglesong. Is Mr.
10 Overdier -- going once, going twice -- is Ms. Voglesong
11 available?

12 MS. VOGLESONG: Allison Voglesong, A-l-l-i-s-o-
13 V as in Victor-o-g-l-e-s-o-n-g, 49684. I'm representing
14 FLOW, "For Love Of Water," a Traverse City-based Great
15 policy and education center dedicated to advancing
16 that use the principles of the public trust and the
17 to protect our water resources. Thank you very much for
18 this opportunity today.

19 We need strong policies that protect our water
20 quality and quantity and ensure that invasive species
21 overrun our common waters of the Great Lakes. Invasive
22 species and climate change arguably present the two
23 threats to the Great Lakes in this 21st century.

24 To address the complex ecological and
25 multi-jurisdictional problem there must be a complete

1 hydrologic separation between the Great Lakes basin and
2 Mississippi River basin through the CAWS.

3 From an economic standpoint, the Great Lakes
4 support a \$7 billion fishery and a \$62 billion overall
5 economy. There is too much at risk and the cost of
6 will be far greater than the investments considered here
7 today.

8 On behalf of FLOW, I present three statements
9 about the GLMRIS plan. The 25-year implementation time
10 frame is too long and we urge research into a realistic
11 shorter time frame. The research in the GLMRIS study is
12 thorough, but the public and our decision-makers need
13 guidance from the agency, and we do suggest prioritizing
14 possible solutions. And we are proponents for plans that
15 establish complete hydrological separation for all five
16 possible pathways considered and prioritized in a plan.

17 Not to be addressed immediately, but for your
18 consideration I have four questions:

19 -- Is it economically and logistically feasible
20 scale back portions of these plans that are outside
21 the scope of managing invasives, such as the water
22 treatment, sediment remediation and flood mitigation
23 measures?

24 -- Second, are there risks eliminating these
25 components?

1 -- Third, could other plans for complete
2 separation, like those released by the Great Lakes
3 Commission and Great Lakes Cities Initiative be
4 substituted or reconciled with your complete
5 plans to find an economically viable middle ground?

6 -- And fourth, what is the role of climate
7 in considering the precipitation events when
8 flood risks and recommending flood mitigation
9 which have substantial costs involved in those plans?
10 Doubtless, there are incomparable and difficult tradeoffs
11 involved in solving this problem. The bottom line,
12 is that we must protect the delicate ecological balance of
13 the Great Lakes and protect them from invasive species
14 because the waters of our Great Lakes basin are a shared
15 commons in our legacy for generations to come. Thank you.

16 And stepping out of my representative role, I
17 a few comments to make, which is that I do encourage plans
18 and 6 since -- to be more to the point. And in my
19 observations, I think there are two considerations that
20 haven't been looked at, possibly because of the "ick"
21 that could be involved. One is utilizing wastewater for
22 drinking supplies therefore reducing flows that will go
23 the natural system; and promoting the commercial providing
24 of Asian carp for consumption. Thank you very much for
25 time.

1 MODERATOR: Thank you.

2 MR. WETHINGTON: Thank you, Allison. And I'd
3 take a quick moment to try and summarize a quick response
4 with regard to some of the questions you laid out.
5 Obviously we will give it further thought.

6 With regard to scaling back plans, you know,
7 we wanted to do was provide something that was feasible
8 implementable with regard to the specific challenge at
9 There are certainly efficiencies to be gained in looking
10 any of these projects. They are at a conceptual level of
11 design and so if there is kind of a common voice like
12 heard tonight toward moving toward one of these particular
13 alternatives, that additional design, additional kind of
14 investigation would help us find efficiencies. We did
15 very closely with environmental regulatory agencies, state
16 agencies, to help make sure that these plans are as
17 regulatorily implementable as possible. So that was one
18 the key things.

19 I guess in speaking, too, you mentioned the
20 Lakes Commission study and another gentleman did that
21 as well. With regard to how the two different studies
22 relate to each other, I'm -- the Great Lakes Commission
23 St. Lawrence Cities Initiative study have done an
24 job in beginning this conversation, putting out the idea
25 that physical separation is possible, but it will also be

1 expensive and it will take a certain amount of time. If I
2 remember correctly the range of costs that the Great Lakes
3 Commission put out was between \$5 to \$10 billion.

4 They also included language within that report
5 that said these costs could be up to 50 percent less or up
6 to 100 percent more than that, giving an actual cost range
7 of hydrologic separation between \$2.5 and \$20 billion. So
8 the costs that we've come up with doing detailed design
9 detailed study are really pretty much on track with those
10 costs that the Great Lakes Commission came up with.

11 And with regard to climate change, obviously
12 that's a very -- that's a tricky situation. We're trying
13 to, as an organization, as the Corps of Engineers, try to
14 incorporate the concepts with regard to global climate
15 change and how it may affect our water resources projects.
16 Since we are primarily a water resource organization, it's
17 something that we're conscious of and continually try to
18 evolve our environmental operating principles to address
19 climate change.

20 So thank you for your comments and we'll
21 look forward to further consideration of these plans.

22 MODERATOR: Thank you. And right now it is
23 Panel, do you want to waive your break or do you -- we
24 have a lot of people signed up.

25 MR. WETHINGTON: Let's keep going.

1 COL. DRUMMOND: Keep going.

2 MODERATOR: All right.

3 (Off the record interruption)

4 MODERATOR: By chance, did Mr. Overdier -- Fred
5 Overdier come back? I don't want to skip you if --

6 ALL: (No response)

7 MODERATOR: All right. I have [REDACTED].

8 No? [REDACTED] maybe? And then following

9 [REDACTED], I have Ryan Matuzak and then Rob Wylie.

10 (Off the record interruption)

11 MODERATOR: All right. After Ryan Matuzak, I
12 Jim Carruthers and then [REDACTED].

13 MR. MATUZAK: Hi. Ryan Matuzak, M-a-t-u-z-a-k;
14 49637. I want to thank you for coming up here and talking
15 to us today. I represent the Grand Traverse Area
16 Sportfishing Association, and a great group of fishermen
17 this area.

18 My first thought is I'm disappointed in the
19 results. I think I was looking for a little bit more
20 information as Senator Levin has alluded to. Our members
21 are a group of people who look at things for what they
22 really are, like the rest of the group in this room here.
23 We want action. And all the money trucks in the world
24 to everybody to study this is great, but at the end of the
25 day when there's not going to be action in a reasonable

1 amount of time, it -- it makes an alarming situation
2 So I would like to advocate for the full hydrological
3 separation. That's something that we need to make this
4 correct.

5 Another thing I wanted to touch on is there's a
6 few comments about the comfort of the folks in this
7 Chicago region and how we want to make sure that we're not
8 making anybody uncomfortable for too long while they go
9 through this process. Well, I know there's millions of
10 people in that Chicago area, but what about the millions
11 millions of people who touch the water that flows through
12 there; every river, every town, every community, every
13 little village that could be affected here. That group of
14 people on that small chunk of real estate that is
15 encompassing this whole Great Lakes system is nothing and
16 for them to look at us as if we're nothing is not right.

17 We're asking for things to be put back to the
18 it should be, which is the way it was originally. And I
19 know it's a really daunting task, but ultimately, let's
20 take a look at this and think it's going to be something
21 "comfortable." Because surely if these carp make a home
22 outside of where they already are, we're going to be the
23 ones who are uncomfortable and it's going to last forever,
24 not just 25 years. So thanks for your time. I appreciate
25 it.

1 MR. WETHINGTON: Thanks for your comments.

2 MODERATOR: Thank you, sir. Mr. Jim Carruthers,
3 and then following him, [REDACTED] and then Charles
4 Weaver.

5 MR. CARRUTHERS: Jim Carruthers, C-a-r-r-u-t-h-
6 r-s, 49684. I'm City Commissioner and Mayor pro-tem for
7 City of Traverse City.

8 Tourism, recreation and the fishing industry are
9 major economies for us up north, while the environmental
10 protection is a core value for many people who live within
11 Traverse City and the region. That said, anything that
12 be done to stop invasives, particularly Asian, carp coming
13 into our Great Lakes system is extremely important to us
14 the people that live and recreate here. And I encourage
15 to do whatever possible you can to make these things
16 not 25 years, not 10 years, but now. We need that to
17 for Traverse City because these waters are what make us
18 thrive. And we all love it and we all want to be here and
19 we all want to stay here long and keep them fresh and safe
20 and clean for everybody without the effects of what's
21 our way. So please take that in mind and do whatever it
22 takes. I would like to thank you for your time.

23 MR. WETHINGTON: Thank you.

24 MODERATOR: Thank you, Mr. Carruthers.

25 [REDACTED]: My name is [REDACTED], [REDACTED]

1 [REDACTED]; 49684. I'm a Traverse City resident who's
2 very concerned about the invasion of Asian carp. We must
3 cut off the access to the Great Lakes from all sources of
4 current carp infiltration, including water access from
5 Indiana and Illinois. The states and provinces
6 the Great Lakes cannot afford to have Federal government
7 institutions dawdle any longer. We must have separation
8 soon as possible, not 25 years from now.

9 Michigan Senators Levin and Stabenow and our
10 congressmen are in favor of immediate division. We are
11 drawing support from the current administration or much
12 interest from either political party. I suggest the Asian
13 carp become a political issue in our upcoming elections.
14 Thank you.

15 MR. WETHINGTON: Thank you.

16 MODERATOR: Thank you, sir. So after -- I have
17 next Mr. Charles Weaver and then David Schichtel and then
18 Donald Ramisdert -- I apologize on that name if I got it
19 wrong. So, sir, when you're ready, name and zip code.

20 MR. WEAVER: My name is Charles Weaver, W-e-a-v-
21 r. My zip code is 49646. I'm a river guide here in
22 northern Michigan. I assist people fly fishing on these
23 rivers for trout and other salmonoid species. And I'm
24 disappointed in what I have read and to some degree have
25 heard today.

1 These fish are terrorists. They don't wear ski
2 masks and they don't carry AK-47's, but they have just as
3 much potential to disrupt our society, our culture,
4 et cetera. When you have terrorists on the radar, you
5 study it for 18 months, and you don't look at 25-year
6 You take care of the problem now. And now is when it
7 to happen. And that is -- in the words of the Corps of
8 Engineers is "hydrologic separation," but now. Thank you.

9 MR. WETHINGTON: Thank you.

10 MODERATOR: Thank you, sir. Let's see. David
11 Schichtel? Sir, name and zip code when you're ready,
12 please.

13 MR. SCHICHTEL: Hello, I'm Dave Schichtel, like
14 the electric razor, Schichtel, S-c-h-i-c-h-t-e-l, 49684.
15 am going to yield most of my time here because so much has
16 been said but I'm a local person here and we talk about a
17 glass being half full. Well, I'm an old man and my glass
18 almost ready to run over. But I've got a lot of
19 relatives -- literally hundreds of them here. I've been
20 here all my life, and my grandparents and a lot of friends
21 and relatives I made and so my concern -- and we talked a
22 lot about this is, you know, over the years when this was
23 coming up -- I do a lot of fishing as well; my
24 and great-grandchildren are doing it. And so I'm just
25 concerned and I'm glad that you all are here and that

1 putting your effort into because I think everyone here is
2 really concerned.

3 And, again, I'm glad we got some politicians
4 and this to me is more important than just about anything
5 that I see the rest of my life. The national debt and
6 fish that can affect this area is going to be the two
7 biggest things that I see that I'm going to be leaving my
8 great-grandchildren and my friends to.

9 So thank you for being here and doing what you
10 can. Thank you very much.

11 MR. WETHINGTON: Thank you.

12 MODERATOR: Thank you, Mr. Schichtel. Donald
13 Ramisdert? I apologize if that is nowhere near correct.
14 there a Donald --

15 ALL: (No verbal response)

16 MODERATOR: Okay. So I will move on. Next I
17 John O'Neill, then [REDACTED], and then Tony Gourlay.
18 And when you're ready, sir, name and zip code, please.

19 MR. O'NEILL: I'm John O'Neill, John with an
20 O'Neill, O-apostrophe-capital N-e-i-l-l.

21 First of all, I'm -- thank you for your work,
22 I'm disappointed; there seems to be a lack of urgency in
23 report. There's already DNA in the lakes, and we don't
24 10 years, let alone 25 years. I think it's important to
25 a cost/benefit analysis; the value of shipping versus the

1 value of a healthy lake system. And that value is far
2 exceeded by just the value of the boating industry and the
3 fishing industry. Tourism is our number 2 or number 3
4 industry in this state and if you take -- and the value of
5 second homes is very contingent upon the value and the
6 enjoyability of the lakes. If you take that away, all
7 property values around a thousand-mile coastline, are
8 to drop. That's very important to look at. Look at the
9 cost of what it took -- that industry -- and we take it in
10 its entirety in the multiplier effect, and it's value
11 actually to the entire nation has got to be far in excess
12 economic activity of GM, and look how much we spent to
13 rescue GM and the benefits of that.

14 Hydrologic separation is the only long-term
15 solution. And we need to put that in place as quickly as
16 possible. And I would suggest we close the locks. If
17 there's an unusual rainstorm or something then we could
18 them up and we are where we are now. But for most of the
19 time they could be closed. So the valuable of that
20 shipping -- lost shipping is inconsequential compared to
21 value of the lakes.

22 It took one year to build the Empire State
23 Building, three years to build the Mackinac Bridge, eight
24 years to go to the moon and 25 years to build most of the
25 interstate highway system. We can do this much, much

1 faster. I also -- if you look at a 25-year time period,
2 that -- that's an excuse for not doing anything. Because
3 into the fifth year, you're going to find that the fish
4 in the lakes and then that's going to be dropped. It
5 have any effect whatsoever after that.

6 Finally, I want to say that ballast control is
7 issue that may exceed your purview, but it's very
8 to be done and it's really an inexpensive thing that needs
9 to be done, compared to the cost of the two lakes. Thank
10 you very much.

11 MR. WETHINGTON: Thank you, sir.

12 MODERATOR: Thank you, sir. Welcome back, sir.
13 Name and zip code, please, and then when you're ready.

14 [REDACTED]: My name is [REDACTED] and the
15 code is 49621. Somebody earlier said that we're in an
16 emergency. And I can -- I can only echo that. And I
17 thought about, well, what defines an emergency? When Carl
18 Levin, Debbie Stabenow, Dave Camp, Captain Eric, me and my
19 neighbor, Steve, all are here for the same thing, we're
20 agreeing on the same thing, we're in an emergency. I
21 think these many people have agreed on anything since

22 Honestly, we're in an emergency. Captain Eric,
23 know you know how important this is. This -- time is of
24 essence. So all of the above, as much as we can do is so
25 important. So all the little stuff is -- like you say, 1

1 and 2, yeah, we got to do that. Well, we got to do that
2 anyway. We've got to take care of our bait and we've got
3 take care of all the right things the right time, all the
4 time.

5 So all of the above is important. But inaction
6 going to kill us. And we cannot -- I mean, I'm a Navy
7 you're an Army guy, you know, I'm not going to pitch that
8 whole thing, but it's time for action. It's time for
9 action, and Senator, I mean, I sure hope you bring that
10 to Washington. We cannot sit on this. This is critical.
11 mean, five years is too much. So when I look at those
12 check marks and said, "Well, you know the efficiency of
13 these things are going to actually kick in 25 years from
14 now"? That's way late. I thought I had a couple
15 but I might have got them there.

16 Significant water events, I have a question on
17 that. Even with all these best-placed practices in an
18 event, which one won't be effective? You know, which one
19 these plans? In other words, is hydrological separation
20 only one that even still doesn't get affected by a
21 significant water event? A big flood, you know, like when
22 this stuff happens in Indiana. Thank you, folks.

23 MODERATOR: Thank you.

24 MR. WETHINGTON: And, [REDACTED], I believe you
25 speak -- your question is to the effectiveness of the

1 controls. And so we looked at planning for the
2 effectiveness of physical separation. We -- Col. Drummond
3 was just talking a little bit ago, we were talking about
4 significant precipitation events that happen within the
5 Chicago area. And in the past five years, we've had
6 maybe four, significant rainfall events at or greater than
7 a, quote, "100-year storm." And so when we look at
8 designing these different features, the control
9 technologies, the physical barriers, we wanted to ensure
10 that they would not be swamped in storms we've seen in
11 recent history. So if we had a recent -- if we had a
12 significant storm, like 100-year storm, it's designed to
13 at that engineering level it would simply over top.

14 So what we did is we, instead, designed ours to
15 500-year level. And the reason we did that is to kind of
16 account for that control, that preventiveness because we
17 not see a 500-year storm. But will we see a couple 100-
18 storms stack up right after each other with the whole idea
19 of global climate change? It's becoming more and more of
20 realistic possibility. So that's -- that 500-year level
21 analysis is what we used within the study.

22 MODERATOR: Thank you. Next, Mr. Tony Gourlay,
23 and then following him I have John Stinson. And when
24 ready, name and zip code, please.

25 MR. GOURLAY: Tony Gourlay, 49685.

1 MODERATOR: Would you mind spelling your last
2 name? I happen to know it's unique, so --

3 MR. GOURLEY: Tony Gourlay, G-o-u-r-l-a-y.

4 MODERATOR: Thank you. When you're ready.

5 MR. GOURLAY: I am speaking for Greenpeace. And
6 believe through the conclusion of what we have all been
7 talking about here in my perspective is that it has to
8 with economics and education of a full circle of
9 that's been taking place as in both sides. I am for the
10 project, I am not for the project, so I -- to me it
11 bother me. I live in Traverse City, I enjoy Traverse City
12 area, it does not affect me. But for the Chicago area and
13 for many other homes and families it does affect, and so
14 what I understood from this convention -- setting --
15 gathering, which is very nice, thank you very much for
16 coming in. We all appreciate it, I believe, and Traverse
17 City appreciates it, if I can speak for my city. I was
18 and raised here so I don't care. But I do believe that it
19 kind of falls into the education and academics.

20 I think that everyone may agree or may not
21 but I think everyone may be looking for what it entails.
22 And on the dollar bill, it kind of says -- it does say on
23 the dollar bill -- on the United States of America which I
24 don't believe we've touched a dollar bill, it says, "In
25 we trust." And when you're dealing with engineering

1 projects, you're dealing with nature and God's creation.
2 And having those academics within that area of nature and
3 how to regulate nature and how nature flows is a big area.
4 So I believe that if we can, as a people, learn more about
5 the academics and education of the project, then I think
6 we'd all have a better understanding. So that's my
7 and I thank you.

8 MODERATOR: Thank you very much, Mr. Gourlay.
9 Sir, name and zip code.

10 (Off the record interruption)

11 MR. STINSON: John Stinson, S-t-i-n-s-o-n,

12 MODERATOR: When you're ready, sir.

13 MR. STINSON: Okay. I just wanted to say I'm
14 encouraged about what I'm hearing tonight, and I thank you
15 people for coming. And it looks like you're on top of it
16 and there are people on top of you who are on top of it,
17 I know you have a tough job, considering not only the
18 engineering, but all the many strings that are attached to
19 your positions. But I want to thank you very much for
20 you're doing.

21 I think for myself, I suppose, you know,
22 ecological -- the separation is obviously the no-brainer
23 everybody has said. I'd like to also thank our senators
24 have been so much on top of it as well. I knew there was
25 reason I keep voting for you.

1 I would like just a couple of clarifications.
2 seems to that even back in the 80's, Governor Milliken's
3 time, they were talking about invasive species and that
4 vast majority of them come up the St. Lawrence rather than
5 through Chicago, and that that is -- the fact that the
6 are coming from Chicago, that's maybe the biggest one of
7 all, but one could easily come up the St. Lawrence; it's
8 even bigger, I assume. So if you would, clarify for me
9 the Corps is doing or will do to -- for the big picture,
10 rather than just the Chicago. And I hope our senators
11 consider that as well, that we need a total picture,
12 than just Chicago.

13 And also clarify for me -- I'm sorry, I did not
14 read the report, but clarify for me if someone told you to
15 go now to do what you can do to take the one or two most
16 effec- -- what are the -- I guess what are the one or two
17 most effective steps that you can take this year that
18 hurt the people of Chicago? If you can clarify that for
19 Thank you.

20 MODERATOR: Thank you, sir.

21 MR. WETHINGTON: John, thank you for your
22 comments. I want to answer your two questions you had.
23 With regard to the big picture, we certainly looked at the
24 big picture, heard the legislation that was given to us.
25 Our congressional authority, that's how we operate. So

1 we're given authorities. When we get the appropriations,
2 the authority that we conducted this study under asked us
3 look at that basin divide between the Great Lakes and the
4 Mississippi River basin. You are absolutely correct, that
5 the St. Lawrence Seaway, the waterway there, is a
6 significant source, especially in the past, for aquatic
7 nuisance species coming via ships and et cetera. And we
8 not examine that, because it was strictly outside of our
9 authority and ability to study with regard to this
10 project.

11 The second, you asked about which would be the
12 most effective, and we have rankings and ratings of
13 effectiveness of different controls. But I think what
14 you're speaking to and what many other folks here in the
15 room have alluded to is looking for something that could
16 implemented more quickly. I mean, we've tried to provide
17 some of that information within the report, looking at
18 things like best management practices and those
19 non-structural alternatives; things like going down and if
20 we're really concerned about, specifically the Asian carp
21 population -- that's what I hear today is the Asian carp
22 the primary concern -- that there are potentially
23 efficiencies to be gained by addressing that issue -- that
24 species, in itself by continuing the work that's being
25 being led by the Asian Carp Regional Coordinating

1 fishing down populations, monitoring where they are,
2 to develop tools, poisons, that would address specifically
3 Asian carp, those are all things that could happen fairly
4 quickly. With regard to fishing, that's something that's
5 something that's happening right now, bringing down the
6 population.

7 So I think there's a lot of existing work and a
8 lot of future work that could be certainly focused on
9 redoubling efforts to controlling those Asian carp
10 populations. Thank you.

11 MODERATOR: That is all I have for names that
12 been submitted. I'm going to review a couple that did not
13 come when I called, just to see if they've come back into
14 the room. Mr. Fred Overdier?

15 ALL: (No verbal response)

16 MODERATOR: [REDACTED] ?

17 ALL: (No verbal response)

18 MODERATOR: Mr. Wylie, would you like to --
19 At this point in time is there anybody that registered on
20 our project website or registered at the table whose name
21 have not called yet?

22 ALL: (No verbal response)

23 MODERATOR: No? It's 6:28 right now, so we
24 have about half an hour left on our program schedule. Is
25 there anyone that would like to come back up? Sir, --

1 AUDIENCE MEMBER: I have one question.

2 MODERATOR: Would you -- I'm sorry -- could you
3 please come to the microphone? And name and zip code
4 too, please. I know it's tedious, but --

5 CAPT. ANDERSEN: Capt. Eric Andersen, vice
6 president, Michigan Charter Boat Association. Zip code is
7 49645. Last name is Andersen, A-n-d-e-r-s-e-n.

8 A question I have for you fellows up there is
9 did you base your 25-year assessment on construction --
10 of these -- something that I'm -- we've been hearing the
11 25-year --

12 MR. WETHINGTON: Right. So the 25 years is an
13 estimate. Obviously this is, you know, we came out front
14 and said this is a conceptual kind of level of design.
15 There may be efficiencies to be gained by further studying
16 one or more of these alternatives to really nail down
17 time lines. So by looking specifically at the things
18 would need to be constructed to mitigate or provide -- and
19 alleviate those adverse impacts to either flooding or
20 quality impacts to Lake Michigan, we looked at how long it
21 would take to construct those tunnels and those
22 We have a lot of experience in the Chicago area because
23 there are similar projects that are currently being
24 constructed or currently being completed. So we have a
25 of really good information with regard to how long it

1 to build deep tunnels and large reservoirs. So we used
2 information to help drive those time lines for these.

3 CAPT. ANDERSEN: That was my question, because I
4 was wondering whether you were relying on construction
5 companies or personnel or something that's got expertise
6 that, who would give you an estimated time of building
7 that --

8 MR. WETHINGTON: Correct; and we have, you
9 know, --

10 CAPT. ANDERSEN: -- that infrastructure.

11 MR. WETHINGTON: -- on the ground -- yeah;
12 infrastructure experience on building large tunnels and
13 reservoirs. Now, again, we make certain assumptions in
14 report; commensurate funding with the kind of demand for
15 construction schedule. There -- again, there may be
16 efficiencies to be gained. If there is excess capacity in
17 existing reservoirs, things that we could certainly look
18 in more detail, but given the time line and given the
19 of alternatives we came up with, we didn't have the
20 opportunity to dive deeply beyond that conceptual level of
21 design.

22 CAPT. ANDERSEN: Another question I have is do
23 have some type of estimated time that you've built into
24 going to Congressional approval on this? Is there any
25 standards on that?

1 MR. WETHINGTON: Yes. All of the construction
2 time frames have started or I imagine to begin at 2017,
3 given the time between now and that approximate date to
4 finalize designs, get approvals, et cetera.

5 CAPT. ANDERSEN: Okay. Those are the couple
6 I had.

7 MR. WETHINGTON: Thank you.

8 MODERATOR: Sir, if you'll come back up to the
9 microphone, we'll go one and then two. And then, again,
10 going to ask name and zip code, please.

11 [REDACTED]: [REDACTED]
12 [REDACTED], 49684. The last time you all were here, you also had
13 representative from the Coast Guard explaining some of the
14 dangers of the electrical barriers. And my question is,
15 there any reason for lowering the electrical current or
16 turning it off for -- say, for instance, for combustible
17 materials passing through that area?

18 COL. DRUMMOND: I'll go ahead and touch on that.
19 You know, we're close partners with the 9th Coast Guard.
20 I've worked with them often and almost on an every other
21 basis. I also know that they're closely aligned with
22 Traverse City here. So to answer your question
23 specifically, I mean, we have it -- I have it within my
24 means to shut it off any time on life safety issues.
25 a given. If there's somebody in the water and life safety

1 is present, we shut it off.

2 As far as the operating parameters, right now we
3 currently operate it at 2.3 volts per inch at 30
4 We know through scientific studies through ERDC (phonetic)
5 that that has a direct effect on a wide range of the Asian
6 carp. We know that. Recently we released a Corps report
7 that talked about -- and a couple had mentioned it -- on
8 small little fish potentially getting through the barrier.
9 You know, because it was scientific testing through ERDC,
10 wanted to ensure real life, that we were taking a look at
11 what was happening in the waterway.

12 So we dropped these cameras down, and we did a
13 series of about 70 tests and these are not Asian carp
14 whatsoever. These are fish that are commonly found in the
15 area. And the reason I know that is we net the area all
16 time; thousands of hours of netting. And what we found is
17 it's a type of fish, a shad that -- you know, they're
18 together in groups. It is a phenomena to see what's going
19 on, and they're pushing through one part of this long
20 electric barrier; just one little part of it. That is
21 enough for me to say that, "Hey, look, I want to test
22 I want to look at this a little bit closer."

23 So we're extracting these fish, we're getting
24 same type of fish, taking them down to the lab and we're
25 going to put some electrical volts on -- volts on them and

1 sort of test it out. Because I can and I do have some
2 that I can turn this thing up and I can sort of -- for
3 of a better word -- "fine tune" it.

4 But when I fine tune that barrier, it also has
5 other effects. And as Dave had mentioned earlier about
6 electrical barrier that he was talking about, that is a
7 barrier to where we can fine tune it to exactly what we
8 want. Chicago Sanitary Ship Canal, you know, it's a long
9 canal, 37 miles long, and we're in one area of that. So
10 answer your question, there is ranges that I can fine tune
11 that.

12 I might add that we have about 3.6 million
13 detections, over 260 fish tagged. These are non-Asian
14 fish. These are fish that have the same similarities as
15 Asian carp and these fish have been put into the water
16 no upward passes of the barrier. We can see the detection
17 go up to the barrier and then all of a sudden they start
18 floating back downstream. But my job is to prevent and
19 that's what I'm after. So that's why we're going to work
20 closely with ERDC as well as the Coast Guard on looking at
21 a range of things that we can do potentially with
22 reconfiguring the barges and a whole host of others. I
23 that answered your question.

24 (Off the record interruption)

25 COL. DRUMMOND: I'm sorry, I can't hear you.

1 MODERATOR: The gentleman asked do you need to
2 lower the voltage at any time?

3 COL. DRUMMOND: I mean, I can but I'm not. I
4 mean, right now I have it within my capability to do that,
5 but right now we have it set at 2.3 volts and that's where
6 we're going to maintain it for the near term.

7 MR. WETHINGTON: And, to clarify, barges with
8 combustible materials, we don't need to lower the voltages
9 when those pass through; those can pass through at
10 operating parameters.

11 COL. DRUMMOND: Yeah.

12 MODERATOR: Thank you. Is there anyone that
13 like to come up? Sir -- yeah; just approach the
14 please and then name and zip code.

15 MR. BREEDERLAND: Yeah; Mark Breederland, B-r-
16 e's-d-e-r-l-a-n-d, 49684. Just a question. You guys are
17 doing a great series of public meetings in Milwaukee,
18 Chicago, Cleveland, Buffalo, Erie; I think tomorrow at Ann
19 Arbor, et cetera, public comment is open until March 3rd.
20 What are the next steps? What happens to specifically the
21 GLMRIS study in March, April, May, June, July, August,
22 even the close of the fiscal year this year? It's already
23 been presented at Congress is my understanding so I was
24 curious what actually happens during the next basically
25 months? Thank you.

1 MR. WETHINGTON: Sure. Sure. Absolutely; great
2 question. You know, our number one goal was to take
3 After completing the report, we would complete the report
4 time and because the control of aquatic nuisance species
5 a whole is a shared responsibility, we wanted to have not
6 only conversations with the public, but we've also had a
7 series of state-agency meetings. You mentioned a lot of
8 cities we've had public meetings. We've been to
9 Indianapolis. We've been to Columbus, Ohio. We've been
10 East Lansing. And -- I don't know if it was in Lansing or
11 East Lansing; I don't know.

12 But, you know, we've been talking to many of the
13 states. We had a telecon with our friends in the State of
14 New York to talk about what those next steps are. And I
15 think really the idea right now is working with folks like
16 Jim Bredin and John Goss from the Asian Carp Regional
17 Coordinating Committee and continuing this conversation
18 trying to formulate what is the consensus for the path
19 forward. You know, when we have this range of
20 it's very difficult for us as the Corps of Engineers with
21 specific missions, specific authorities, to identify
22 necessarily the best path forward.

23 There are many trade-offs among these various
24 alternatives that need to be appropriately discussed,
25 analyzed among those agencies and those responsible

1 stakeholders. And so this is part of that process. So
2 very difficult for me to tell you exactly three months now
3 we'll have a decision, we'll move forward. I think what
4 we're trying to do is capture this urgency. We hear the
5 urgency. Trust me; we hear you. And try to capture this
6 urgency and take that and move it forward how we can in
7 working with other partners and working with other
8 to identify that path forward; identify those species of
9 most concern and, really, refine our options to try and
10 there toward that strategic control of aquatic nuisance
11 species.

12 MODERATOR: Sir, name and zip code.

13 MR. O'NEILL: Again, John O'Neill, with an "h";
14 apostrophe-capital N-e-i-l-l; 49621. Very briefly I'd
15 to know what you've heard from areas that may not have
16 so close to the Great Lakes. But I don't think I heard a
17 single person -- unless they didn't speak to the issue --
18 say they were not in favor of hydrologic separation. And
19 those are 25-year lag periods. I don't have any
20 that we have 25 years. What combination of steps can you
21 see to either accelerate that or to give us that 25 years?
22 What alternatives are there? Can you close the shipping
23 canal and only open it when it floods? Or can you -- you
24 know, what is it that you can do? What practical ways you
25 can do -- if someone says to you, "This has to be done in

1 three years," you know, what is there out there?

2 MR. WETHINGTON: Excellent questions. I want to
3 hit on a couple of them for you. I'll hit your first one
4 last because I want to kind of get on this -- this

5 There are a combination of steps; we are
6 implementing a lot of them. We are building a new
7 barrier, one to replace the demonstration barrier so that
8 there are three electric barriers of full, kind of design
9 strength that are optimized to the greatest efficiencies
10 that we know today toward combating Asian carp from
11 transferring up through the system.

12 We are continuing to monitor where the locations
13 of Asian carp are. Currently they are 55 miles -- adult
14 populations are 55 miles downstream of the shores of Lake
15 Michigan. Our barrier is 34 miles downstream, so we have
16 least 20 miles and two lock and dams in between the
17 and the most forward adult Asian carp. We have 130 miles
18 right? -- 130 miles or so -- 133 -- oh, 143, sorry -- 143
19 miles between Lake Michigan and where reproducing
20 populations are. So we are educating ourselves and
21 that we stay on top of where those populations are.

22 What other things can we do? We, again, in this
23 report present a range of non-structural alternatives that
24 we can enhance what we're currently doing today. I mean,
25 we're spending "x" amount of dollars, "x" amount of time

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1 addressing fishing down species of Asian carp. If that's
2 I mean, if that's the biggest concern, we could spend more
3 money. We -- and I'm sorry if I'm using "we" as the --
4 not necessarily the Corps of Engineers, but the
5 agencies where the authorities lie could spend additional
6 time and resources trying to address those populations of
7 Asian carp. That would certainly buy us more time, and
8 us more time to implement other potential measures.

9 We in our report have outlined other
10 that could be implemented in 10 years or potentially less
11 we're looking at specifically addressing Asian carp
12 populations or populations of species that are swimming up
13 from the Mississippi River basin; that buffer zone
14 technology I highlighted a little bit during my
15 presentation. There's the concept of putting in the
16 navigation channel with a GLMRIS lock at that Brandon Road
17 checkpoint, which could be implemented potentially five to
18 seven years, if we had that authority to go out and
19 construct it. At this point in time the Corps of
20 does not have that authority. We receive authorities and
21 appropriations from Congress.

22 The -- oh, you wanted to hear about what was
23 happening at other cities that are not so, maybe, involved
24 with the Great Lakes. We have been to date, Chicago,
25 Milwaukee, Cleveland, Ann Arbor, Traverse City. In

1 there was certainly a more balanced perspective. I guess
2 there was not -- we had folks whose livelihoods are made,
3 you know, driving barges up and down the river and so they
4 came and spoke and testified to the importance of
5 maintaining navigation in Chicago, so we had a little bit
6 more of a variety. But, very honestly, in Cleveland, Ann
7 Arbor and Traverse City, the voice we heard, the urgency,
8 the dedication toward preventing Asian carp from coming
9 the lakes is certainly a common theme.

10 We have not yet been to New Orleans or
11 or St. Louis, but all this information will be summarized
12 a report that we're going to put together, put up on our
13 website. The transcripts that you hear today, every
14 word that is spoken in a microphone will be recorded and
15 will be up for public viewing, as well as viewing by our
16 Congressional -- our elected officials. So I hope that
17 provides enough information for you. Thank you.

18 MODERATOR: It's 6:43. Sir, if you will
19 the microphone and name and zip code.

20 (Off the record interruption)

21 MR. PETROVE: Yes; I'm David Petrove, that's P-
22 t-r-o-v-e, and it's 49643. Given the likelihood that --
23 that many unwanted invasives will migrate through the
24 Lakes, should we not begin defensive measures to prevent
25 them from moving up rivers and streams and into our inland

1 lakes? Given that dams increase the difficulty of fish
2 moving upstream, is it a bad time to be removing dams?
3 this the 9th alternative: The problem is coming and we
4 should be planning the best means of diminishing further
5 impact. I'm saying this because we're tearing down dams
6 down here in Traverse City right now and maybe we should
7 looking at, okay, protecting all of our other little lakes
8 if we're -- you know, we may not be able to do anything
9 the Great Lakes. Thank you.

10 MR. WETHINGTON: Thank you.

11 MODERATOR: Thank you, sir. Yes, sir, please
12 approach the microphone and then name and zip code, if you
13 don't mind.

14 MR. DeGOOD: Dan DeGood, D-e-G-o-o-d; 49640.
15 Drummond, thank you for the business card; I will take you
16 up on that.

17 COL. DRUMMOND: Yup, come on down.

18 MR. DeGOOD: You'll get a letter from me and I
19 intend --

20 COL. DRUMMOND: Give me a little notice.

21 MR. DeGOOD: -- to come to Chicago. But to you,
22 sir, everybody says 25 is not a -- is too long. Right now
23 you seem to be, for lack of a better term, the man with
24 finger on the button. If you were a betting man, how do
25 feel about the Asian carp and where they are and what

1 got to fight them with at this very moment? The gentleman
2 next to you says it's going to take 25 years or 19 years
3 18 years or 27 years or whatever it's going to take;
4 too long. You've got to fight it right now. What's your
5 feeling?

6 COL. DRUMMOND: Well, I think you heard early on
7 in this, you know, the Chicago Area Waterways is very
8 complex. I think you also heard, you know, the statement,
9 155 miles downstream is where the larva and eggs and that
10 kind of stuff, the spawning, is generally going on. Now,
11 about -- or, 143 miles down. And then you've got the 55
12 miles; that's the leading edge. We put things in
13 characterization of risk. And so especially down at the
14 mile range, where there is known silver carp, the
15 characterization of risk, if -- there has not been any
16 substantial movement of that front line since 2006, none.
17 We've got scientists looking at it; we've got biologists
18 looking at it. We've got our labs looking at it. We're
19 trying to understand why is it, because there was two
20 that they got to get up. Is it because the Sanitary Ship
21 Canal was a man-made canal that is not conducive to
22 spawning, is that the reason? I don't know.

23 My charter from Congress is to prevent. So, you
24 know, I'm focused on "prevent." You know, I realize that
25 they're down there. I've heard statements tonight that it

1 is a critical urgency, and I've got it that it's critical.
2 But, you know, for a lack of a better word, we have some
3 time. Time is not a good thing. Nobody here wants to
4 that, but these are very, very tough, complex issues that
5 are going to require -- you often hear the Corps of
6 Engineers as the "nation's engineers." And I take quite
7 a lot of pride in that.

8 And I think what you have seen tonight is an --
9 very elaborate eight options that was laid out that's
10 to -- sort of buy that risk down, as David had talked
11 It is a -- it's the most complex issues I have dealt with
12 34 years. I heard a gentleman that wrote the Great Lakes
13 Commission book, Restoring the Natural Divide. 43 years
14 the business, he stood up there -- his name is Dave
15 and he said, "In 43 years I've never seen something so
16 complex." So it is a very complex undertaking, and I'll
17 on my closing comments tonight by just adding right now,
18 you're -- it -- I appreciate sitting here, listening to
19 everybody; the fisherman that live here, the commercial
20 folks that live on the lake, because it does -- your voice
21 does count as we move through this process. I hope that
22 answered the question.

23 MR. BREDIN: And if I might add also to that
24 because I know a lot of stuff has come up tonight about
25 Asian carp, first of all, I'm not a betting man. I don't

1 bet. And so on this issue, what we're doing is we have
2 Asian Carp Regional Coordinating Committee. We have --
3 every state we have one technical person, a fisheries
4 biologist, and one policy person. We have all of the
5 Federal agencies that should be involved, they are
6 We have the City of Chicago, the utility for the City of
7 Chicago, the Municipal Water Reclamation District. And so
8 we -- we are looking at this issues; not necessarily from
9 all-encompassing, all invasive species issue, we're
10 at it from an Asian carp issue.

11 We are meeting next month. We are going to get
12 together -- we're going to tear this report apart. We're
13 going to find out what's in it that can deal with Asian
14 carp, and try to look at it and see if we can't implement
15 some of things much faster than what we're seeing tonight,
16 because this -- this is looking at all invasive species,
17 what is it going to take to stop all invasive species and
18 know Asian carp is a serious priority. And we're going to
19 be trying to address that. And hopefully whatever we come
20 up with -- well, you know, we're looking at technologies
21 to try to -- to beat back the fish and to keep them out of
22 areas. So we're looking at that now. We're not saying
23 we're going to be satisfied with 25 years; we're looking
24 it as if we can try to do something in the near future,
25 that's how we're going to move on this issue.

1 COL. DRUMMOND: Let me just add a couple more
2 comments. I might add that, you know, my time in this
3 this is probably the flattest organization that I've seen;
4 working with the ACRCC, John Goss and Jim Bredin, I mean,
5 meet routinely. It's open and it's very transparent.
6 There's a lot of discussion that goes on. The Great Lakes
7 Commission report that you heard about earlier, that
8 we listened to them, we brought the engineers in. It was
9 open and transparent. As a matter of fact, one of the
10 guys on that report, Tim Eder, sat on our executive
11 group for this. That, to me, is an extremely flat
12 organization to where, you know, we got everybody talking
13 the right direction.

14 Back to the 25-year point, and Dave talked about
15 this a little bit more, in Chicago we have two large
16 reservoirs. There's many large reservoirs, but there's
17 one's called McCook, about 10 billion gallons, and the
18 one is called Thornton, which is a little less than that,
19 about 7 billion gallons. Both of these are absolutely
20 critical to the Chicago Waterway System. And so when Dave
21 says we have pretty good calculation on how long it takes,
22 he's accurate. We know how long it takes to build these
23 tunnels. Could it be accelerated? Well, as Dave said,
24 the right appropriations and the right authorization, it
25 certainly could. But these are very -- very complex time.

1 MR. WETHINGTON: Thank you, sir.

2 MODERATOR: We still have a few minutes before
3 7:00 o'clock, if anyone else has --

4 MR. WETHINGTON: We've got someone that hasn't
5 been up yet, so you can be second. Name and zip code,
6 please.

7 MR. BAASE: Steve Baase, --

8 (Off the record interruption)

9 MR. BAASE: -- B-a-a-s-e; 49621. The Army Corps
10 of Engineers has got a long and storied history with
11 engineering and you've got a lot of successes under your
12 belt, and a lot of your projects come to a conclusion;
13 of them go on forever and ever. And you're our white
14 for this, you know. We're really going to put ourself in
15 your hands, and we expect results. This, you agree, is
16 of the biggest projects you've encountered, and it
17 would make me nervous if I has to answer all that you have
18 to answer. Because of its complexity, it's got a weak --
19 weakness somewhere. What, in your estimation, is its
20 weakness? Thank you.

21 (Off the record interruption)

22 MR. WETHINGTON: I think the greatest weakness
23 any type of infrastructure project or any project toward
24 trying to prevent aquatic nuisance species transfer is,
25 honestly, us. And I mean you and me. There are other

1 for aquatic nuisance species to transfer that are strictly
2 outside of the aquatic pathway. And I think that's what
3 makes me, personally, most nervous. Because we could
4 certainly spend 25 years and several billions of dollars
5 infrastructure, on creating a new waterway -- a new
6 of a waterway -- changing the way infrastructure moves and
7 wastewater moves and all that, but that could all be
8 by something that you or I or our kids or our grandkids or
9 somebody does. And that's what makes me most nervous.

10 (Off the record interruption)

11 MR. WETHINGTON: The gentleman said the Asian
12 came all the way across the Pacific Ocean, didn't swim
13 by itself.

14 MODERATOR: [REDACTED], and then -- or, sir --
15 [REDACTED] deferred. Name and zip code, please.

16 MR. ALENT: My name is Lance Alent, A-l-e-n-t;
17 zip code is 49635. And I'd like to ask you guys, how
18 is the political will to get this done?

19 COL. DRUMMOND: Well, I think it was pretty
20 obvious tonight, you know, I will admit they have very --
21 very busy schedules. Senator Stabenow is at every one of
22 the meetings. We were in Ohio, Congresswoman Kaptur
23 the entire night; was the last one that left. As you
24 earlier, there was 16 Congressional representatives that
25 signed on, I think, with Senator Levin here a few months

1 back. The Great Lakes, I think, you know, they're all
2 starting to talk. I can tell you I deal with staffers a
3 lot, my team deals with the staffers all the time. One of
4 the first visits we did on January 6 was with 53 different
5 representatives' staffs in a room like this, explaining
6 report, very deliberately.

7 Our door is always open to our Congressional
8 representatives. The minute they call, we stop what we're
9 doing and we're answering questions because, you know, we
10 want you to be informed, but we also want the
11 decision-makers to be informed so they can help this
12 along. I routinely do staff visits -- Congressional and
13 Senatorial staff visits and GLMRIS is always one of the
14 number one topics. Specific to that is Asian carp.

15 MODERATOR: We have about -- time for one more
16 question or comment if somebody would like to --

17 COL. DRUMMOND: Yes, sir. Come on up.

18 (Off the record interruption)

19 [REDACTED]: I'm [REDACTED] again and you
20 probably know my zip code, 49621. Just two things. I
21 wasn't here at the beginning, so I work for a living and I
22 had to drive a ways to get here. So I think -- I don't
23 your group here, sir, on the far left. I don't know your
24 group. Are you the gentleman that was here a few years
25 and are an avid fisherman?

121

1 MR. BREDIN: As -- well, I'm Jim Bredin with the
2 White House Council on Environmental Quality. And I --

3 [REDACTED]: How do I follow your group? So I
4 know to follow GLMRIS, I've been following GLMRIS on
5 Facebook and all over. So I follow you guys all the time
6 I know what you're doing and when your reports come out.
7 And as a matter of fact I messaged you the other day and
8 said, "Put it on here so we know it's out" so I could
9 it.

10 MR. BREDIN: Right here. That's "asiancarp" --
11 www.asiancarp.us.

12 COL. DRUMMOND: And it's on the back of the
13 [REDACTED]: Yeah; I can grab that one. And,
14 know, I mean just to kind of reiterate, I drove by the DNR
15 truck today, and it said, "Fish are our future." They
16 "Coho in the Classroom" here in Manistee, so you know, if
17 could reiterate the urgency, you know, just -- we want to
18 give you -- gentlemen, we want to give you all the
19 ammunition you can to be able to go back to the higher-ups
20 and get what we need. Thank you very much. Thank you

21 MR. WETHINGTON: Thanks.

22 MODERATOR: Thank you very much. So, first I'd
23 like to thank again everybody, especially all of you that
24 stayed for the entire time for coming out tonight and
25 participating in this discussion with the Corps of

1 and the Asian Carp Regional Coordinating Committee. At
2 point I'd like to ask the panel if they have any closing
3 comments for the meeting.

4 COL. DRUMMOND: I'd like to thank everybody
5 still here with us, and obviously I appreciate both
6 Stabenow and Senator Levin and the various Congressional
7 well as the mayor that was in attendance tonight. It
8 highly of not only this location, but your pure dedication
9 to following GLMRIS and helping us through this very
10 and difficult topic.

11 It was quite evident to me, you know, the
12 resonated within this area. We hear it, we hear it in
13 Michigan. I deal with the Michigan DNR and a whole host
14 folks on the ACRCC. The other day when we were sitting
15 Senator Stabenow and a whole -- the whole staff of the DNR
16 in Lansing, Michigan, it was a two-way discussion; one of
17 the better discussions I've heard in many years. And it's
18 open and transparent. And they understand the complexity
19 this, and they want to help just as much as anybody else.

20 I had mentioned early on the folks in this room
21 that are wearing the red lanyard, they live in Chicago,
22 love the Great Lakes just as much as anybody else here. I
23 get reminded of that every day when I walk into my office.
24 If I'm saying something wrong, I'm getting reminded real
25 quick. So you can trust this -- I just -- I would ask

1 that -- and most of you care about this, just take the
2 25-page report, take that, go home, when you have a
3 chance -- don't take too long, we've got until the 3rd of
4 March. But, you know, take the time, look at the 232
5 and sort of ask yourself, what do you think is reasonable
6 implement? And I -- there's some things in there I think
7 that each and every one of you may -- may -- it may spark
8 fire and you'll start writing, and just send it to us. I
9 think that's going to help the process along.

10 When we're done here, we're going to be around
11 a little bit. By all means, please feel free to ask
12 of us any questions that perhaps you didn't want to bring
13 up, or you want to know something more about. But I
14 appreciate your time tonight. Thank you very much.

15 MODERATOR: We've had over 35 individual
16 today for an approximate total of 180 minutes of
17 I'd like to remind everybody that the public comment
18 runs through March 3rd of this year. And if you didn't
19 receive a copy of our meeting materials or want extra
20 copies, feel free to grab some on the way out.

21 So this concludes this meeting of the Great
22 and Mississippi River Interbasin Study. The time is now
23 7:01 p.m.

24

25 (Meeting concluded at 7:01 p.m.)

1 REPORTER'S CERTIFICATE

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5 I certify that this transcript, consisting of
6 123 pages, is a complete, true and correct record
7 of the testimony held in this case on January 23, 2014.

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Page 1

<u> \$ </u>	133 110:18	232 16:20 123:4	4:00 1:8
\$10 86:3	14 2:4	25 16:18 30:4	400 52:10
\$15 38:21 50:11	143 110:18 114:11	33:19 38:1 39:25	43 115:13,15
\$15.5 30:5 38:2	15 44:1 58:3	40:22,24 45:13	45 2:5
\$16 47:6 78:24	1500-foot 50:23	50:9,12 54:3	47 2:6
\$2.5 86:7	155 114:9	58:16 60:25	48207 72:4
\$20 86:7	16 119:24	63:2,3,6	48917 45:4
\$5 86:3	17 2:4	64:1,15,18,21,22	49 2:6 53:5
\$62 83:4	18 11:8 15:4	66:1,3,9,21,23,2	49417 74:21
\$7 47:6 54:17	19:14,15 20:3	5 67:1,22 68:11	49456 76:21
78:23 83:4	91:5 114:3	69:9,14 70:13	49610 98:11
\$7.4 53:13	180 123:16	88:24 89:16 90:8	49621 66:1 79:11
\$7.8 32:3	1833 14:10	92:24 93:24	94:15 109:14
<u> 1 </u>	18-page 17:18	95:13 102:12	118:9 120:20
1 25:23 68:23	18-slide 17:18	109:20,21	49635 80:4 119:17
94:25	19 17:2 114:2	113:22 114:2	49637 87:14
10 45:13 70:13	1900 21:13	116:23 119:4	49640 59:23
89:16 92:24	1914 80:8	25-page 123:2	113:14
111:10 117:17	1962 80:12	25-year 48:13	49643 62:14
10,000 16:22	<u> 2 </u>	68:2,9,18 69:12	112:22
10,000-plus 75:14	2 11:6 26:17 68:23	83:9 91:5 94:1	49645 52:5 102:7
100 52:16 86:6	93:3 95:1	102:9,11 109:19	49646 90:21
100-year	2.3 105:3 107:5	117:14	49664 57:24
96:7,12,17	20 47:5 110:16	260 106:13	49682 67:11
102 2:19	200 23:1	2629 1:21 124:17	49684 49:19 53:7
104 2:19	2000's 51:3	27 114:3	82:13 89:6 90:1
107 2:20	2006 114:16	<u> 3 </u>	91:14 104:12
109 2:20	2007 72:9	3 2:3 28:11 93:3	107:16
112 2:21	2010 50:20	3.6 106:12	49685 96:25
113 2:21	2011 50:2 55:7	30 7:11 44:2 57:8	49686 47:19
118 2:22	56:9	62:15 64:8 69:10	49770 70:1
119 2:22	2012 19:11,15	73:23 82:2 105:3	<u> 5 </u>
120 2:23	20:15	300 35:11 36:4	5 50:8 84:17
121 2:24	2014 1:8 19:16	53:13	50 66:23 86:5
122 2:24	124:7	34 110:15 115:12	50004 55:7
123 124:6	2017 104:2	35 23:3,5,7 123:15	500-year
13 23:6	21st 82:23	37 106:9	96:15,17,20
130 110:17,18	23 1:8 49:20 124:7	3rd 6:3,23 41:24	52 2:7
		44:23 107:19	
		123:3,18	
		<u> 4 </u>	
		4 30:6	

53 2:7 120:4	85 21:4 35:4	according 73:1,9	95:13 107:24
55 2:8 110:13,14 114:11,13	87 2:14	account 50:13 96:16	adaptive 32:6
57 2:8	89 2:15	accurate 117:22	add 17:1 36:18 82:5 106:12 115:23 117:1,2
59 2:9	<hr/> 9 <hr/>	achieve 14:24 32:22 33:6 66:13 70:8	added 81:14
<hr/> 6 <hr/>	9.2 21:9 33:15 40:3	achievement 15:1	adding 115:17
6 19:15,16 50:8 84:18 120:4	90 2:16	achieving 32:18	addition 21:7 54:19 71:5
6:00 3:17,18	90's 51:2	acknowledged 80:15 81:15	additional 10:3 22:16,17 25:17 26:5 33:23 43:8,9 51:11 85:13 111:5
6:04 86:22	91 2:16	ACRCC 117:4 122:14	Additionally 5:8
6:28 101:23	9-11 94:21	across 11:8,13 13:8 15:16 27:6 47:4 119:12	address 15:25 24:23 26:2 30:17 43:7 48:23 64:17 65:7 66:20 82:24 86:18 101:2 111:6 116:19
6:43 112:18	92 2:17	act 21:14 30:10,16 40:18 56:18 69:14 72:9	addressed 48:12 56:8 83:17
600 36:5 55:16	94 2:17	acted 51:2	addressing 8:23 25:11 55:9 100:23 111:1,11
61st 14:11	96 2:18	action 25:24 50:18 51:21 54:2,6 55:1 64:23 65:10 69:19 76:3 87:23,25 95:8,9	adds 37:25
62 2:9	98 2:18	actions 71:15 73:25	adieu 17:16
63rd 14:9	99 36:16	active 9:23 26:25	adjacent 21:18 30:13
65 2:10 21:4 35:4	9th 104:19 113:3	actively 11:20	administration 8:1 90:11
67 2:10	<hr/> A <hr/>	activities 25:25 26:13,14 70:16	admit 119:20
69 2:11	ability 21:15 42:5 100:9	activity 26:1 78:15,19 93:12	admitting 55:15
6th 16:12	able 9:21 10:17,21 33:17 43:17 64:19 79:2 113:8 121:19	actual 22:1 25:22 82:4 86:6	adopt 81:25
6-year-old 78:6	absolutely 47:3 59:24 72:13 100:4 108:1 117:19	actually 7:9 10:14 11:3,6,13,17 12:10 20:18 22:22 34:15 45:25 61:8,11,12,19,22 ,25 69:1 71:11 77:12,19 93:11	Adopt-a-Beach 74:24
<hr/> 7 <hr/>	absurd 50:10 63:7		adult 110:13,17
7 2:3 117:19	academics 97:19 98:2,5		advance 47:13
7,000 16:13	accelerate 109:21		advancing 82:15
7:00 7:3 118:3	accelerated 117:23		adverse 19:3 22:3 37:23 40:4 64:22
7:01 123:23,25	acceptable 36:18 76:2		
70 105:13	accepted 25:9		
715 1:5	access 90:3,4		
72 2:11	accomplish 5:23		
74 2:12	accomplishments 10:10		
76 2:12			
79 2:13			
<hr/> 8 <hr/>			
80 2:13			
80's 99:2			
82 2:14			

65:8 102:19 adversely 33:16 advisor 47:16 advocate 88:2 affect 86:15 92:6 97:12,13 affected 46:16,18 81:21 88:13 95:20 afford 70:13 76:13 90:6 afternoon 14:6 28:1 afterward 78:14 against 80:25 agencies 8:17 11:15,20 13:19 16:10 28:7 32:9 45:10 51:19 61:20 85:15,16 108:25 109:7 111:5 116:5 agency 83:13 agenda 3:16 agendas 6:24 ago 8:13 56:22 60:14,15 72:4 81:7 96:3 120:24 agreed 94:21 agreeing 94:20 ahead 104:18 AIS 50:11,16 51:11,13 AK-47's 91:2 alarming 88:1 Alent 119:16 A-l-e-n-t 119:16 ALENT 119:16 alewife 60:14 algaecides 23:11	align 75:13 aligned 104:21 all-encompassing 116:9 alleviate 21:17 34:10 36:20 48:11 102:19 alleviating 34:16 Alliance 74:21,24 75:10 Allison 2:14 79:25 82:9,12 85:2 A-l-l-i-s-o-n 82:12 allocated 81:22 allow 43:3,7 55:14 57:14 allowed 34:25 48:1 allows 76:1 alluded 68:15 87:20 100:15 alone 50:11 92:24 Alont 2:22 already 41:10,14 46:2 50:25 55:7 63:14,15 65:4 70:23 76:8 80:25 88:22 92:23 107:22 alternative 25:16,23,24,25 26:4,9,10,17,18, 23 28:11 29:1 30:3,6 32:17 50:8 56:23 113:3 alternatives 14:2 15:10,12,14 21:25 22:1,4,7,15 23:22,25 25:14,18,21 26:6,22 27:20,25 28:4,12 30:7 32:25 34:7 38:12 39:1,8,23 41:2	54:9 58:11 66:10 85:13 100:19 102:16 103:19 108:19,24 109:22 110:23 am 17:13 53:11 73:18 78:5 91:15 97:5,9,10 America 97:23 American 55:10 Americans 55:10 ammunition 121:19 among 15:10 16:9 35:18 108:23,25 amongst 22:11 41:5 amount 9:13 33:17 36:8,9 37:1 38:18 40:2 55:17 58:14 68:5 86:1 88:1 110:25 amounts 56:11 analysis 22:16 58:14 72:17 92:25 96:21 analyzed 72:13 108:25 Andersen 2:7,19 47:13 52:2,5,22,23 102:5,7 A-n-d-e-r-s-e-n 52:5 102:7 ANDERSEN 52:4,8 102:5 103:3,10,22 104:5 Ann 1:21 107:18 111:25 112:6 124:17 ANS 15:1,22 25:8 28:20 ANS-treated 25:6	28:21 answer 53:22 99:22 104:22 106:10 118:17,18 answered 106:23 115:22 answering 120:9 anticipated 46:9 anybody 36:2 88:8 101:19 122:19,22 anyone 39:25 49:10 101:25 107:12 118:3 123:11 anything 7:14 37:14 56:19 57:5 89:11 92:4 94:2,21 113:8 anyway 95:2 anywhere 9:1 33:22 34:25 35:1,4 apart 15:24 116:12 apologize 47:13 74:18 90:18 92:13 apostrophe- capital 109:14 appears 44:4 Appendix 67:4 applaud 47:21 58:4,6,19 59:15 application 29:6 applied 25:10 applying 27:4 appreciate 14:7 61:5 62:3 67:20 69:6 88:24 97:16 115:18 122:5 123:14
---	---	--	--

appreciates 97:17	49:11 51:8 52:19	110:10,13,17	81:14 82:11
approach 8:23	53:17 56:3 61:17	111:1,7,11 112:8	average 21:4
47:22 58:5,11	65:2 81:11	113:25 115:25	35:11
65:17 107:13	87:15,17 88:10	116:2,10,13,18	avid 78:5 120:25
112:18 113:12	92:6 96:5 97:12	119:11 120:14	away 20:22 34:19
appropriate 33:20	98:2,3 102:22	122:1	55:24 56:20
58:10 111:4	104:17 105:15	asiancarp 121:10	69:13 93:6
appropriately	106:9 114:7	aspects 73:7	awhile 56:18
108:24	122:12	assessment 66:14	
appropriation	areas 9:10,20	67:2 73:12 78:16	<hr/> B <hr/>
10:5	11:7,12,23	102:9	Baase 2:13,22
appropriations	12:4,15 31:17	assist 90:22	74:17 79:7,10
51:18 100:1	56:24 109:15	associated 39:7	118:7
111:21 117:24	116:22	67:3	B-a-a-s-e 79:10
approval 103:24	arguably 82:22	Association 52:6,9	118:9
approvals 104:4	Army 1:11,16 3:6	53:8,12 67:13	BAASE 79:10
approved 59:10	5:1,4 6:1 17:24	87:16 102:6	118:7,9
approximate 50:9	47:1 53:23 70:3	assume 99:8	bad 35:19 113:2
104:3 123:16	95:7 118:9	assumptions	bait 27:12 40:16
approximately	arrived 3:14 67:10	103:13	95:2
33:4 40:2 52:10	arrogant 56:25	attached 98:18	balance 84:12
April 107:21	57:6	attendance 14:18	balanced 112:1
aquatic 4:13	articulated	15:6 122:7	ballast 56:6 94:6
14:16,25 17:3	77:17,22	attending 8:2	ballot 72:4
18:17,23 19:21	artificially 80:18	attributable 33:3	banners 18:3 65:6
20:17 21:19	Asian 1:18	65:10	barge 57:13
23:17 25:6,7,11	7:16,19,23	audience 8:4 14:23	barges 25:3
26:3,19 27:4,5,9	8:11,15,16,21,23	44:10 65:13	106:22 107:7
28:5,16,19,20,24	,25	102:1	112:3
30:8,22 34:1	9:4,6,7,9,13,19,2	August 107:21	barrier 8:24
40:11,12 41:8	4 10:16,17,21	authorities 100:1	9:2,5,6,8,9 18:25
58:8 66:11 70:19	11:19 12:4,13	108:21 111:5,20	20:17
71:1 76:4 100:6	13:17 16:1	authority 99:25	24:4,5,10,12,13,
108:4 109:10	32:9,10 46:1	100:2,9	16 26:16 33:5
118:24 119:1,2	49:16 51:3	111:18,20	35:13 37:7
Arbor 107:19	53:17,21	authorization	38:10,14,22
111:25 112:7	54:3,12,14,20	117:24	50:20,24 60:18
area 1:14 5:13,14	56:24 58:15	authorizing 51:20	61:8,10,11,13
7:12,13,14 8:19	61:18 62:16	availability 37:19	62:9 64:21
10:24 11:7 15:23	63:3,19	available 3:15	65:5,9 66:12
19:18 20:21	66:3,15,20 70:17	18:16 19:24	71:4,6 75:24
21:18 24:17	71:1,18 75:25	66:20 79:21	76:1 105:8,20
28:13 29:17,21	78:17 82:5 84:24		106:4,6,7,16,17
30:18,19 33:22	89:12 90:2,12		
35:3,10 40:1	100:20,21,25		
	101:3,9 105:5,13		
	106:15 108:16		

<p>110:7,15,16</p> <p>barriers 10:12</p> <p>16:2 23:10 24:22</p> <p>26:15 29:5,6</p> <p>31:7,11,17,19</p> <p>33:4,7,9,13,14</p> <p>34:10,19 36:22</p> <p>37:15 51:7 57:15</p> <p>59:7 61:9,12</p> <p>81:1,2 96:9</p> <p>104:14 110:8</p> <p>base 102:9</p> <p>based 32:6 37:19</p> <p>67:2</p> <p>baseline 18:11</p> <p>25:23 26:4 65:3</p> <p>basic 24:2</p> <p>basically 33:2,3</p> <p>38:8 107:24</p> <p>basin 12:11 20:2</p> <p>23:3 27:7 32:11</p> <p>40:18 50:11,16</p> <p>54:12 55:24 59:3</p> <p>83:1,2 84:14</p> <p>100:3,4 111:13</p> <p>basins 18:19 19:22</p> <p>21:21 22:25</p> <p>27:23 30:8 40:12</p> <p>66:18 70:14</p> <p>72:21 76:7 81:19</p> <p>basis 28:22</p> <p>29:12,19 104:21</p> <p>battle 51:4</p> <p>Bay 60:3,4 63:4</p> <p>75:20</p> <p>beaches 75:18</p> <p>Bear 60:2 75:20</p> <p>80:13</p> <p>beat 116:21</p> <p>beauty 80:11</p> <p>become 37:15</p> <p>66:17 68:2 90:13</p> <p>becomes 66:21</p>	<p>becoming 96:19</p> <p>beforehand 44:15</p> <p>begin 6:25 22:20</p> <p>23:2 42:11 43:13</p> <p>104:2 112:24</p> <p>beginning 3:8</p> <p>42:12 85:24</p> <p>120:21</p> <p>begins 71:12</p> <p>behalf 53:13 67:14</p> <p>71:20 74:23 83:8</p> <p>behind 3:12</p> <p>believe 31:22</p> <p>56:12 60:22 61:1</p> <p>67:1 73:14 74:6</p> <p>78:25 95:24</p> <p>97:6,16,18,24</p> <p>98:4</p> <p>belt 118:12</p> <p>benefit 33:7</p> <p>benefits</p> <p>72:12,15,16</p> <p>73:12,16 75:17</p> <p>93:13</p> <p>berm 50:20</p> <p>best 6:13 22:10</p> <p>27:14,18 41:6</p> <p>50:9 54:14</p> <p>72:22,23 74:2</p> <p>79:20 100:18</p> <p>108:22 113:4</p> <p>best-placed 95:17</p> <p>bet 21:3 40:24</p> <p>116:1</p> <p>Betsie 80:10,13</p> <p>better 28:6 64:15</p> <p>65:2 72:18 75:17</p> <p>77:18 83:12 98:6</p> <p>106:3 113:23</p> <p>115:2 122:17</p> <p>betting 113:24</p> <p>115:25</p> <p>beyond 82:6</p>	<p>103:20</p> <p>bi-annual 19:8</p> <p>bidirectional</p> <p>28:14</p> <p>bigger 99:8</p> <p>biggest 92:7 99:6</p> <p>111:2 118:16</p> <p>bighead 56:24</p> <p>66:15</p> <p>bill 97:22,23,24</p> <p>billion 30:5 31:23</p> <p>32:3 38:2,21</p> <p>47:6,7 50:11</p> <p>53:13 54:17,18</p> <p>78:24 83:4</p> <p>86:3,7 117:17,19</p> <p>billions 55:24</p> <p>119:4</p> <p>bills 51:20</p> <p>bio-accumulative</p> <p>36:10</p> <p>bio-diversity</p> <p>47:25</p> <p>biologist 116:4</p> <p>biologists 114:17</p> <p>bit 11:4 14:12</p> <p>16:4,8,20</p> <p>19:23,25 23:14</p> <p>30:9 41:20 50:17</p> <p>72:11 87:19 96:3</p> <p>105:22 111:14</p> <p>112:5 117:15</p> <p>123:11</p> <p>black 56:10</p> <p>bleaker 68:2</p> <p>Blind 60:3</p> <p>blocks 48:3</p> <p>blue 4:12</p> <p>board 47:24 52:13</p> <p>Boardman 63:4</p> <p>boat 27:11 31:13</p> <p>52:6,9 54:22</p>	<p>56:7 102:6</p> <p>boating 21:1 47:6</p> <p>53:8,12,14</p> <p>54:18,23,24</p> <p>78:24 93:2</p> <p>boats 40:16 54:22</p> <p>body 27:12</p> <p>boggling 81:20</p> <p>boiling 23:15</p> <p>book 16:20 115:13</p> <p>121:12</p> <p>bookended 29:4</p> <p>books 25:16 31:10</p> <p>52:25</p> <p>born 60:1 97:17</p> <p>borrowed 45:14</p> <p>boss 8:1</p> <p>bother 63:5 97:11</p> <p>bottom 30:23 31:8</p> <p>84:11</p> <p>bought 80:8,12</p> <p>bounty 59:2</p> <p>box 23:14 43:24</p> <p>44:4 66:3,5,10</p> <p>boxes 66:6,21</p> <p>boys 78:6,10,18</p> <p>Brandon 32:21</p> <p>111:16</p> <p>break 3:17,19,20</p> <p>86:23</p> <p>Bredin 1:17 2:3</p> <p>4:3,8,23,24</p> <p>7:4,6,7 8:10</p> <p>19:25 51:6</p> <p>108:16 115:23</p> <p>117:4 121:1,10</p> <p>Breederland</p> <p>2:6,20 45:2</p> <p>47:12 49:18</p> <p>51:17 52:1 61:15</p> <p>107:15</p>
--	--	---	--

breeding 58:15	56:23 61:10	capability 107:4	106:13,15
Brewing 78:13	93:23 103:6,12	capacity 103:16	108:16
Brian 2:8 53:3	110:6	Capt 2:7,19	110:10,13,17
55:5 57:19,24	built 50:25 103:23	52:4,8,22,23	111:1,7,11 112:8
Bridge 93:23	bumping 80:25	102:5	113:25 114:14
brief 44:2	burdensome 79:19	103:3,10,22	115:25
briefing 8:12	business 78:20	104:5	116:2,10,14,18
briefly 45:12	113:15 115:14	Captain 52:4	119:11 120:14
109:14	busy 119:21	94:18,22	122:1
Briggs 2:7 52:2	button 113:24	capture 29:24 30:1	C-a-r-r-u-t-h-e
53:2,5,11 55:4	buy 27:21 40:25	37:10 109:4,5	89:5
B-r-i-g-g-s 53:5,7	111:7 115:10	carbon 10:20	Carruthers 2:15
BRIGGS	buy-in 46:15,16,18	card 62:6,7 113:15	87:12 89:2,5,24
53:5,7,10	buying 41:2	care 20:11 36:12	carry 91:2
bring 34:2 52:25	bypass 29:20	60:16 75:13	carrying 81:7
56:14 69:7 95:9		80:20 91:6	case 27:17 35:20
123:12		95:2,3 97:18	64:25 124:7
bringing 101:5	<hr/> C <hr/>	123:1	cases 11:16
broken 22:23	Cal 31:9	cargo 20:25 31:15	caught 81:5
brought 33:24	calculation 117:21	Carl 2:11 72:2	cause 20:7 31:19
55:25 117:8	Cal-Sag 38:13,14	94:17	40:6
brown 11:10	Calumet 34:21	C-a-r-l 72:3	caused 54:20
35:7,8	cameras 105:12	carp 1:18	64:23
B-r-two 49:18	Camp 46:7 59:13	7:16,19,23	causing 54:19 59:1
107:15	94:18	8:11,15,16,21,23	70:24 76:8
bubble 56:19	camping 75:7	,25	CAWS 20:22 31:3
bubbler 56:16	Campus 1:5	9:4,6,7,9,13,19,2	83:2
bucket 27:12	Canada 13:6	4 10:16,17,21	cement 33:13
buckets 40:16	Canadian 8:18	11:19,25 12:4,13	center 1:4 43:12
budgets	canal 21:13 23:15	13:17 16:1 27:2	75:19 82:15
63:12,15,16,17	38:15,24	32:9,10 46:1	century 82:23
64:4	48:10,15 51:10	48:13 49:16 51:3	CER 1:21 124:17
Buffalo 107:18	55:19 56:23 60:6	53:17,19,21	certain 9:20 41:4
buffer 30:21	64:21 80:18,23	54:3,12,14,20,21	66:19 86:1
111:13	81:16 106:8,9	57:10,14 58:15	103:13
bug 78:11	109:23 114:21	61:18 62:16	certainly 21:1
build 32:20 39:25	canals 62:19 63:3	63:4,19 64:5	22:16 27:17
51:23 56:2,5	64:1	66:3,15,20 70:17	32:19 35:20
93:22,23,24	Candice 54:4	71:1,18 75:25	39:11,12 64:25
103:1 117:22	cannons 56:16	78:17 80:25	67:2,20 85:9
building 40:5	canoe 31:12	81:4,5,7,10 82:5	86:20 99:23
		84:24 88:21	101:8 103:17
		89:12 90:2,4,13	111:7 112:1,9
		99:5	
		100:20,21,25	
		101:3,9 105:6,13	

117:25 119:4 CERTIFICATE 124:1 Certified 1:22 certify 124:5 cetera 91:4 100:7 104:4 107:19 chain 50:23 chain-link 61:24 challenge 81:18 85:8 chance 51:5 87:4 123:3 chances 71:14 change 43:24 81:13 82:22 84:6 86:11,15,19 96:19 changing 119:6 channel 24:15,19 33:14 38:13,14 111:16 characterization 114:13,15 charge 16:3 17:25 59:13 Charles 2:16 89:3 90:17,20 charm 80:11 charter 52:6,9,10 102:6 114:23 charts 67:4 check 5:7 18:2 66:3,5 95:12 checkpoint 111:17 checkpoints 28:14 chemicals 37:16 Cheryl 2:12 74:17 76:20,23 C-h-e-r-y-l 76:24 Chicago 1:14,16	3:7 5:1,3 8:19 11:7 13:2 14:8,10,13 15:22 19:18,24 20:13,20 21:5,9,18 24:17 28:13,23 30:18 33:12,15 34:21 35:10,19 38:6,15,23 40:1,4 41:14 46:18 48:10 49:11,14 51:8,12 55:13,15,16 61:17 62:8,18 63:3,14,25 65:2 75:1 80:18,19 81:11 88:7,10 96:5 97:12 99:5,6,10,12,18 102:22 106:8 107:18 111:24,25 112:5 113:21 114:7 116:6,7 117:15,20 122:21 Chicagoland 29:17 33:22 chlorine 10:20 choice 79:13 chosen 36:21 chunk 88:14 circle 97:8 circulate 36:16 cities 35:16 41:14,15 73:2,9 84:3 85:23 108:8 111:23 city 1:6 7:13 8:19 21:11 33:12 40:3 47:16 48:25 49:1 52:19 79:11 89:6,7,11,17 90:1 97:11,17 104:22 111:25 112:7 113:6	116:6 City-based 82:14 Clair 55:23,25 56:6 Clancy 16:21 clarification 65:13 clarifications 61:7 99:1 clarify 66:4 99:8,13,14,18 107:7 Classroom 121:16 clean 27:10 36:2,7 79:13 89:20 cleaner 35:22 cleaning 36:17 40:16 65:1 clear 64:20 65:11 79:13 Cleveland 41:16 107:18 111:25 112:6 climate 81:13 82:22 84:6 86:11,14,19 96:19 close 15:18 33:14 44:3,5 46:25 48:10,15 49:10 52:18 62:18 63:3,25 93:16 104:19 107:22 109:16,22 closed 48:18 93:19 closely 31:6 85:15 104:21 106:20 closer 31:10 76:25 105:22 closing 2:24 11:18 49:13,14 115:17 122:2 Coast 104:13,19 106:20	coastline 93:7 co-chair 73:18,19 co-chairs 73:20 code 43:16,22 47:18 49:17 52:3 53:4 59:22 62:13 65:20 66:1 67:10,11 70:1 71:25 74:19 76:19,21 79:8 80:2,4 90:19,21 91:11 92:18 94:13,15 96:24 98:9 102:3,6 104:10 107:14 109:12 112:19 113:12 118:5 119:15,17 120:20 Coho 121:16 Col 1:15 2:4,24 4:25 14:4,6,7 25:19 45:6 62:3 65:15,19,23 87:1 96:2 104:18 106:25 107:3,11 113:14,17,20 114:6 117:1 119:19 120:17 121:12 122:4 collaborations 75:12 collaborative 41:11,12 collaboratively 71:3 colleagues 59:16 collect 57:4 collecting 6:2 67:21 College 1:5 Columbia 59:3 Columbus 108:9 combating 110:10
--	---	---	---

combination 36:5 109:20 110:5 combine 73:11 combined 36:5 37:9 81:11 combustible 104:16 107:8 comes 57:21 comfort 58:24 88:6 comfortable 88:21 coming 4:8 5:17 8:25 10:14 17:23 26:7 30:23,25 32:10,14 44:3 53:22 56:7 57:10 60:16 81:13 87:14 89:12,20 91:23 97:16 98:15 99:6 100:7 105:17 112:8 113:3 121:24 commander 1:16 4:25 14:8,9,11 commend 70:3 commensurate 103:14 comment 2:5,6,7,8,9,10,11 ,12,13,14,15,16, 17,18,19,20,21,2 2,23 3:22,23,24 4:1,6,10,22 5:9 6:5,6,7,8,22 7:2,3 41:24 42:5,13,17,19,22 43:3,4,11,13,18 44:16,19,22 64:18 69:16 72:7 98:6 107:19 120:16 123:17 commentary 3:21 comments 5:15 6:2,3,4,9,14,16,1 7 18:9 39:21	41:19 42:4,11 43:9 44:5,20 49:23 52:24 61:6 62:3 67:14 70:2 71:21 77:14,16 84:17 86:20 88:6 89:1 99:22 115:17 117:2 122:3 123:15 commerce 76:9 commercial 9:23 10:22,24 20:25 31:15 58:2,21 81:16 84:23 115:19 commercials 36:13 Commission 46:13,15 47:17 73:2,9 84:3 85:20,22 86:3,10 115:13 117:7 Commissioner 89:6 commit 58:11 59:10 committee 8:17 16:2 19:6 100:25 108:17 116:2 122:1 common 18:11 65:25 82:21 85:11 112:9 commonly 105:14 commons 82:16 84:15 communicate 67:24 communicating 66:7 communication 64:20 65:12 communities 54:24 76:11 community 81:24	88:12 Compact 13:9 companies 103:5 Company 78:13 compare 22:10 compared 77:25 93:20 94:9 compensate 20:11 compiled 6:3 complete 19:14 33:8 40:23 44:5 54:11 79:14 82:25 83:15 84:1,4 108:3 124:6 completed 19:16 22:20 50:20 63:16 102:24 completing 108:3 completion 30:2,4 32:1 33:19 38:1,20 63:12 70:4 complex 15:4 20:14,23 22:22 51:9 82:24 114:8 115:4,11,16 117:25 122:9 complexities 59:10 complexity 118:18 122:18 compliance 22:18 compliment 53:24 components 83:25 compounds 36:10 comprehensive 50:1,4 58:5 comprised 21:5 concept 25:1 29:3 30:7 111:15 concepts 25:9 63:21 86:14	conceptual 21:24,25 85:10 102:14 103:20 concern 23:4,5,12 36:20 40:20 53:24 91:21 100:22 109:9 111:2 concerned 32:9 81:23 90:2 91:25 92:2 100:20 concerns 6:11 conclude 39:19 62:20 concluded 23:16 123:25 concludes 123:21 conclusion 62:22 72:22,25 97:6 118:12 conditions 31:14 conductive 114:21 conduct 37:12 conducted 53:22 100:2 conducting 62:19 conduit 80:16 Conference 1:4 confidence 46:2 109:19 confident 45:24,25 configure 45:16 confirmed 75:24 Congress 15:3 19:17 46:22 48:15,21 49:3,10,15 69:17,18 77:19,20 79:1 107:23 111:21 114:23 congressional 8:5 10:5 14:22 32:8
---	---	---	---

Capital Reporting Company
Great Lakes and Mississippi River Interbasin Study Public Meeting 01-23-2014

Page 9

51:18 99:25 103:24 112:16 119:24 120:7,12 122:6 Congressman 46:7 congressmen 90:10 Congresswoman 119:22 connected 60:6 connection 20:12 21:20 55:13 80:17,22 connections 22:25 conscious 86:17 consensus 41:12 108:18 Conservancy 57:20 58:4 conservation 57:22 61:21 consider 16:9 68:13 99:11 consideration 83:18 86:21 considerations 84:19 considered 11:6 35:22 65:3 69:1 83:6,16 considering 84:7 98:17 consisting 124:5 constraints 11:2 construct 24:19 33:17 102:21 111:19 constructed 65:4 102:18,24 construction 22:4,20 26:15,22 29:23,25 33:20 68:12 102:9	103:4,15 104:1 constructive 47:22 consumption 84:24 contains 4:17 contaminated 73:6 contaminating 40:7 contents 2:1 5:16 21:23 contingent 93:5 continually 86:17 continue 13:15,19 15:25 16:5,6 28:9 31:3,20 41:4 45:23 46:25 64:12 continues 36:23 53:24 continuing 100:24 108:17 110:12 contribute 24:21 contrivance 80:19 control 9:18 10:2,21 13:17 18:17,24 23:12 26:3,8,12 27:6,17 28:14 30:11,17,25 32:13,20 33:21 41:9 50:15 66:3,12,24 94:6 96:8,16 108:4 109:10 controlled 30:22 controlling 101:9 controls 10:2,6,7 23:9,20 26:19,21 29:22 96:1 100:13 convened 19:5 convenience 42:16	convention 97:14 conversation 28:10 32:7 39:16 41:5 85:24 108:17 conversations 108:6 convey 64:19 conveyance 21:3 31:4 70:10 Coordinating 8:16 100:25 108:17 116:2 122:1 coordination 15:18 16:2 copies 123:20 copy 123:19 core 89:10 corner 24:11 25:15 30:15 32:22 Corp 3:6 Corps 1:11,16 4:14 5:1,4,12 6:2 14:24 15:25 17:1,24 22:9 26:14 28:2 37:3 47:1 48:16 49:25 50:20 53:23,25 54:10 55:9 60:9 61:21 62:19 64:2 70:3 71:15 72:5 86:13 91:7 99:9 105:6 108:20 111:4,19 115:5 118:9 121:25 correct 40:17 88:4 92:13 100:4 103:8 124:6 corrected 73:17 correctly 35:18 86:2 cost 22:5,6,7,9,12 30:3,5 32:2	34:8,11 38:21,24 39:12,23 50:12 70:21 76:3,6 81:17 82:6 83:5 86:6 93:9 94:9 cost/benefit 72:17 92:25 costs 22:17 25:19 28:9 38:1 70:18 72:14 73:1,8,14 74:1 79:18 81:20 82:5 84:9 86:2,5,8,10 cost-sharing 51:12 cottage 80:8 Council 1:18 4:24 7:7 69:25 71:21 121:2 count 115:21 counting 55:17 country 12:15 15:17 47:4,24 79:21 couple 10:11 24:1 31:7,22 32:7,24 37:8 39:19 41:13,15 42:4 52:25 61:7 64:14 67:17 95:14 96:17 99:1 101:12 104:5 105:7 110:3 117:1 courage 48:8 49:1 course 72:8 crank 24:14 cream 78:14 create 57:14 81:13 created 21:13 34:7 creating 119:5 creation 98:1 criteria 15:9 39:5,6,18 79:16
---	---	---	--

<p>critical 8:3 14:3 73:13 95:10 115:1 117:20 critically 7:25 42:2 72:24 Cross 2:12 69:23 74:17,20 76:18 crucial 71:16 CSSC 38:16 culture 91:3 curious 107:24 current 62:25 63:10 90:4,11 104:15 currently 24:17 26:2,9 33:24 34:22,23 35:23 61:10,12 65:1 75:24 102:23,24 105:3 110:5,13,24 Customs 81:8 cut 48:15 80:22 90:3 cycles 50:12</p> <hr/> <p style="text-align: center;">D</p> <hr/> <p>daily 29:12 dam 24:6 32:21 39:25 40:5 damage 40:6 53:15 54:22 70:24 71:12 76:8 dams 17:5 110:16 113:1,2,5 Dan 2:21 113:14 dangers 104:14 Daniel 2:9 55:5 59:20,23 data 16:23 67:21 68:5,7 date 35:20 104:3</p>	<p>111:24 daunting 88:19 Dave 1:13 2:4,16 5:2 17:17,23 42:12,13 45:6 91:13 94:18 106:5 115:14 117:14,20,23 David 2:21 90:17 91:10 112:21 115:10 dawdle 90:7 day 17:6 35:11 36:4,5 55:16,24 78:12,14 87:25 104:20 121:7 122:14,23 days 81:7 dead 56:18 deal 8:20 35:16 51:22 80:19 97:7 116:13 120:2 122:13 dealing 7:19 8:21 12:4,17 13:1,3,7 97:25 98:1 deals 17:3,4 120:3 dealt 115:11 dear 62:4 death 48:25 49:1 Debbie 2:5 44:25 52:16 54:5 94:18 debt 92:5 decades 54:8 57:22 deceptive 63:18 decimated 68:8 decision 109:3 decision-makers 15:13,21 39:3,8 83:12 120:11 decision-making</p>	<p>22:19 decisions 49:4 deck 13:1 declaring 54:6 declining 54:25 dedicated 23:23 66:14 67:25 82:15 dedication 112:8 122:8 deep 103:1 deeper 16:20 deeply 103:20 defense 75:25 defensive 112:24 deferred 119:15 defines 94:17 definitely 14:20 67:18 77:14 DeGood 2:9,21 55:5 59:21,23 113:14 D-e-G-o-o-d 59:23 113:14 DeGOOD 59:23 113:14,18,21 degree 90:24 delay 27:22 deliberately 120:6 delicate 84:12 demand 103:14 demonstrate 12:24 demonstrated 13:13 demonstration 61:10,13 110:7 Department 75:21 deploy 58:17 Deputy 1:18</p>	<p>DEQ 7:10 Des 50:21 describes 23:22 design 21:25 22:1,17 24:23 32:20 85:11,13 86:8 102:14 103:21 110:8 designed 80:19 96:12,14 designing 96:8 designs 104:4 desirable 54:23 desk 3:15,25 4:3 44:22 destroy 54:13 detail 25:19,21 66:8 67:3 103:18 detailed 4:17 86:8,9 details 50:4 detection 31:2 106:16 detections 106:13 Detroit 35:17 72:4 devastating 71:10,19 develop 48:6 101:2 device 57:1 devise 81:25 difference 61:2 different 14:14 17:2 18:6,20 19:13 20:19 23:1,22 25:10 30:9 32:25 38:9 39:7,10 41:13 46:11 56:11,15 67:17 85:21 96:8 100:13 120:4 difficult 84:10 108:20 109:2</p>
--	--	--	---

<p>122:10</p> <p>difficulty 113:1</p> <p>digs 16:20</p> <p>diminishing 113:4</p> <p>dinner 78:13</p> <p>dioxide 10:20</p> <p>direct 54:19,20 105:5</p> <p>direction 28:15,16 34:18 117:13</p> <p>directions 58:6</p> <p>directly 3:13 26:13 46:18 47:2 81:21</p> <p>director 1:18 57:20 67:13</p> <p>directors 52:13</p> <p>dirty 35:19</p> <p>disappointed 50:17 87:18 90:24 92:22</p> <p>discharge 21:6 28:21 35:6,14,16 36:18,22 37:14 73:4</p> <p>discovered 50:19</p> <p>discuss 41:5</p> <p>discussed 25:21 108:24</p> <p>discusses 26:10</p> <p>discussing 26:21</p> <p>discussion 16:15 117:6 121:25 122:16</p> <p>discussions 122:17</p> <p>disenchanted 69:1</p> <p>disgusted 62:17</p> <p>disinfect 35:24</p> <p>disposal 79:20</p> <p>disrupt 91:3</p> <p>distinguish 15:10</p>	<p>distortion 73:15</p> <p>District 1:16 3:7 5:1,3 14:8 116:7</p> <p>districts 17:2</p> <p>ditch 20:10</p> <p>ditches 57:9,13</p> <p>dive 103:20</p> <p>divide 11:8 27:7 100:3 115:13</p> <p>division 90:10</p> <p>DNA 81:4 92:23</p> <p>DNR 7:10 121:14 122:13,15</p> <p>document 17:13</p> <p>documentation 22:18</p> <p>dollar 48:12 97:22,23,24</p> <p>dollars 70:24 76:8 79:2 81:22 110:25 119:4</p> <p>Donald 90:18 92:12,14</p> <p>done 14:19 18:12 20:2 24:14 37:23 45:21 47:4 50:2 53:20 57:5 60:24 61:19 63:6 67:22 68:16,25 69:3 85:23 89:12 94:8,9 100:24 109:25 119:18 123:10</p> <p>doomed 57:17</p> <p>door 3:10 65:23 120:7</p> <p>doorstep 71:13</p> <p>dots 35:8</p> <p>double 81:17</p> <p>double-dipping 63:17 64:24</p> <p>Doubtless 84:10</p>	<p>down-by-down 60:23</p> <p>downloaded 5:20 42:16</p> <p>downstream 21:7,15 34:5,19 35:13 36:22 37:1,6 106:18 110:14,15 114:9</p> <p>drawing 90:11</p> <p>draws 75:10</p> <p>dredge 55:23</p> <p>dredged 55:14</p> <p>drinking 70:15 84:22</p> <p>drive 103:2 120:22</p> <p>driver 30:2</p> <p>drives 33:18 39:23</p> <p>driving 112:3</p> <p>Drolet 14:11</p> <p>drop 36:16 44:21 93:8</p> <p>dropped 6:9 94:4 105:12</p> <p>drove 121:14</p> <p>Drummond 1:15 2:4,24 4:25 14:5,6,8 25:20 45:6 62:3 65:15,19,23 87:1 96:2 104:18 106:25 107:3,11 113:15,17,20 114:6 117:1 119:19 120:17 121:12 122:4</p> <p>dry-weather 29:13</p> <p>dumbest 57:3</p> <p>dump 27:12 33:13</p> <p>Dunes 60:2 75:20</p> <p>duplicative 77:13</p> <p>duration 40:21</p>	<p>during 6:6,11 29:13 33:11 34:17 37:11 50:19 64:19 107:24 111:14</p> <hr/> <p style="text-align: center;">E</p> <hr/> <p>Eagle 11:16 50:22 61:15,19</p> <p>earlier 19:25 27:2 32:22 61:14,24 67:9 94:15 106:5 117:7 119:24</p> <p>early 31:1,2 32:18,22 60:22 114:6 122:20</p> <p>earth 57:3</p> <p>easily 54:21 99:7</p> <p>East 1:5 60:3 108:10,11</p> <p>easy 20:10 29:14,15 45:5</p> <p>eaters 54:15</p> <p>echo 94:16</p> <p>ecologic 59:9</p> <p>ecological 50:8 51:23 54:19 70:9 71:4,6 82:24 84:12 98:22</p> <p>ecologist 58:8</p> <p>ecology 51:25</p> <p>economic 39:15 77:24 78:1,8,15,16,19 83:3 93:12</p> <p>economically 83:19 84:5</p> <p>economics 97:8</p> <p>economies 89:9</p> <p>economy 51:25 64:11 71:17 77:16 78:2,15,24 83:5 91:3</p>
--	--	---	--

ecosystem 53:16,21 71:16	29:4 34:18 90:12 102:19 109:21	engagement 19:4 42:2	1:18 4:24 7:8 22:18 37:24
Eder 117:10	elaborate 115:9	engineer 58:7 62:15	39:15 40:6 62:15 63:23 75:21
edge 114:12	elected 39:10 112:16	engineered 24:15 80:18	85:15 86:18 89:9 121:2
educating 49:21 110:20	elections 90:13	engineering 96:13 97:25 98:18 118:11	EPA 75:21
education 27:8,16 67:12 68:1,21 82:15 97:8,19 98:5	electric 24:12,13,16,22 29:4 59:7 60:18 75:24 81:1 91:14 105:20 110:8	engineers 1:11,16 3:6 4:14 5:1,4,12 6:2 17:1,25 22:9 26:14 28:2 37:3 48:16 53:23 55:9 60:9 61:21 62:19 64:3 70:3 86:13 91:8 108:20 111:4,19 115:6 117:8 118:10 121:25	episodic 20:4
educational 28:6	electrical 8:24 9:2 10:12 104:14,15 105:25 106:6	enhance 110:24	equally 6:15
effec 99:16	electronic 1:22 16:4	enjoy 97:11	equipment 78:22
effect 29:3 38:24 93:10 94:5 105:5	electroshock 23:10	enjoyability 93:6	ERDC 105:4,9 106:20
effective 8:24 9:3 13:4,5,18 27:21 29:12 31:16 39:12 51:15 80:22 95:18 99:17 100:12	elements 37:8 39:7	ensure 15:20 33:14 37:23 40:2 53:20 64:22 82:20 96:9 105:10	Eric 2:9,19 47:13 52:2,4 59:21 94:18,22 102:5
effectiveness 16:5 95:25 96:2 100:13	eliminate 37:21	enter 53:17	Erie 9:12,14 107:18
effects 71:10 89:20 106:5	eliminating 83:24	entering 4:22 9:4 53:19	Erik 62:11,14
efficiencies 85:9,14 100:23 102:15 103:16 110:9	else 39:25 41:8 47:3 118:3 122:19,22	entire 29:11,21 93:11 119:23 121:24	Eril 2:7
efficiency 95:12	else's 36:2	entirety 5:19 42:15 93:10	eroding 55:23
efficient 29:6 31:16 51:17	e-mail 42:7,9	entrance 3:13	e's-de-r-l-a-n-d 49:19
effluent 35:13 37:6	emergency 3:11,12 63:23,24 64:5 94:16,17,20,22	environment 40:19 76:9	e's-d-e-r-l-a-n-d 107:16
effort 5:13 46:8 70:4 92:1	emphasize 68:6,22	environmental	especially 9:12 12:25 59:18 100:6 114:13 121:23
efforts 4:14 13:13,16 19:17 35:23 47:21,23 101:9	Empire 93:22		essence 94:24
eggs 114:9	employed 49:19		essential 47:3 70:5 72:14,15
eight 23:22 45:15 93:23 115:9	empty 60:12		essentially 25:4 28:16 34:20
either 3:23 28:15	encompassing 88:15		establish 59:2 83:15
	encountered 118:16		established 58:15
	encourage 58:18 78:1 81:23 84:17 89:14		establishment 66:17
	encouraged 98:14		estate 88:14
	energize 74:11		Estes 2:6 14:17 45:2 47:12,15 49:7

E-s-t-e-s 47:15 ESTES 47:15,19,21 estimate 22:6 102:13 estimated 28:9 30:2,4 103:6,23 estimates 22:5,8 50:12 estimating 22:9 estimation 118:19 et 91:4 100:7 104:4 107:19 evaluate 3:18 11:16 18:15 20:15 26:4 31:1 evaluated 66:16,19 evaluation 15:9 39:5,6,17 79:16 evening 17:23 28:1 42:10 43:21 80:3 81:10 evening's 3:7 event 3:11 95:18,21 events 20:6 33:12 34:18 37:11 84:7 95:16 96:4,6 everybody 8:14 13:1 14:6 42:23 43:6 44:9 46:6 59:14 61:1 71:25 87:24 89:20 98:23 113:22 115:19 117:12 121:23 122:4 123:17 Everybody's 58:13 everyone 12:6 13:24,25 40:13 42:5 46:16 65:11 70:12 92:1	97:20,21 everyone's 41:11 everything 10:1 44:8 49:1 68:17 97:8 everywhere 79:13 evident 64:5 122:11 evolve 86:18 exact 17:15 exactly 16:15 17:14 106:7 109:2 exaggerated 73:3,14 examine 100:8 example 26:14 28:5 32:17 78:5 examples 12:24 13:3 exceed 94:7 exceeded 93:2 excellent 18:12 28:3 85:23 110:2 excess 69:2 93:11 103:16 excessive 73:3,10 excited 14:24 41:21 excuse 51:13 57:24 94:2 executive 16:18 19:6 48:9 57:19 64:6,14 67:13 117:10 exist 20:1,9 21:18 70:8 existing 16:2 19:1 24:18,22 25:1 26:16 29:2 63:18 101:7 103:17 107:9	exits 3:12 expect 118:15 expectations 17:15 expediting 71:5 expeditious 51:17 expensive 86:1 experience 49:21 58:10 71:9 102:22 103:12 expertise 103:5 explain 77:23 explaining 104:13 120:5 expressing 78:1 Extension 49:20 extensive 9:5,8,10 16:6 extra 6:16 52:24 123:19 extracting 105:23 extremely 52:15 89:13 117:11 <hr/> F <hr/> fabric 75:8 Facebook 42:8 121:5 facilitate 24:20 facilities 81:14,18 fact 14:10 41:8 45:24 72:24 73:12,13 80:15 99:5 117:9 121:7 fact-finding 52:12 factor 60:23 84:20 factors 73:11 fails 54:1 fairly 22:22,23 24:5,10 29:12 101:3	fall 33:22 falls 97:19 familiar 24:13 families 97:13 family 59:24 75:7 80:10 family's 75:8 farmer's 20:10 farther 9:23 fast 10:8 faster 72:18 94:1 116:15 fastest 69:8 favor 63:8 90:10 109:18 feasible 72:21,24 83:19 85:7 features 96:8 Federal 8:17 13:19 15:6,19 16:10 22:19 25:24 28:7 39:9 51:1,19 81:22 90:6 116:5 feel 3:19 8:24 12:22 17:10,20 18:5 45:23,25 46:2 51:14 67:19 74:8,10 77:21 113:25 123:11,20 feeling 114:5 feelings 8:6 fellow 59:25 fellows 102:8 felt 74:5 fence 50:21,23 61:24 field-testing 10:12 Fifteen 60:15 fifth 5:16 94:3 fight 114:1,4
--	--	---	--

figure 45:17 46:20 48:7	fishery 83:4	101:8 114:24	Frankfort 80:9
figures 78:23	fishing 27:1 47:7 54:17 75:6 78:24 89:8 90:22 91:23 93:3 101:1,4 111:1	focusing 80:6	Fred 2:10 14:8 59:21 62:12 67:6,11 79:7,25 82:9 87:4 101:14
fill 5:10 57:9,12	five 20:5 25:13 26:11 30:13 83:15 95:11 96:5 111:17	folks 16:23 17:6 53:1 69:8 88:6 95:22 100:14 108:15 112:2 115:20 122:14,20	Frederic 1:15 2:4 4:25
filled 6:9	five-minute 3:17	food 54:15 78:11	free 17:10 18:5 62:7 123:11,20
final 59:8	fixing 51:12	force 48:21 73:18	freezing 23:15
finalize 104:4	flat 117:11	forces 58:24	frequencies 56:11,15
finally 46:5 59:12 94:6	flattest 117:3	forever 54:24 88:23 118:13	frequently 4:13 81:12
findings 52:14	float 29:8	forgotten 63:24	fresh 25:6 34:2 89:19
fine 106:3,4,7,10	floating 106:18	form 3:22 20:5 106:6	freshwater 47:6 75:20 77:4,8 79:13
finger 113:24	flood 21:8,14,17 29:21 31:4,25 33:17 34:8,11,16 37:21 38:19 50:15 63:11 65:2 70:9 83:22 84:8 95:21	format 68:7	friend 42:8
fingerlings 81:2	flooding 31:18 33:11,16 40:6 102:19	former 58:21	friends 57:12 75:20 91:20 92:8 108:13
finish 33:13	floods 109:23	forms 4:22 5:11 13:24	front 1:5 3:15,25 4:3,11 6:19 30:3 42:1 44:21 102:13 114:16
fire 57:7 123:8	Florida 17:3	formulate 108:18	fruit 50:18,25
first 3:15 5:23 11:5 28:11 33:1 34:8 44:25 45:5 48:10 49:25 58:21 61:8 67:16 70:1 87:18 92:21 110:3 115:25 120:4 121:22	flow 21:15 28:15 29:13 34:17,25 36:23 49:12 55:15 58:5 82:14 83:8	forth 24:8	full 24:23 60:12 62:4 66:14 88:2 91:17 97:8 110:8 ██████ 2:10,17,23 65:21,25 92:17 94:14 95:24 119:14,15 120:19 121:3,13
fiscal 107:22	flowing 33:25 48:1	fortunate 75:4	fund 48:7
fish 10:15,23 11:1 48:18 51:6 54:16 56:12,17,24 59:4,25 60:2,3,4,5,7 76:1 80:16 91:1 92:6 94:3 105:8,14,17,23,2 4 106:13,14,15 113:1 116:21 121:15	flows 21:7 29:18 34:23 35:12,15 40:8 55:18 84:22 88:11 98:3	fortune-telling 40:23	funded 13:14 58:12 59:17
fisheries 47:17 54:13,14 116:3	flush 25:5	forward 7:19 8:7 10:3,6 12:7 41:6,12 46:19 56:14 86:21 108:19,22 109:3,6,8 110:17	funding 11:25 46:22 48:16,22 50:18 51:11 64:7 77:20 103:14
fisherman 57:11 58:2,21 79:12 115:19 120:25	fly 90:22	four-pronged 8:22	
fishermen 55:8 59:25 78:22 87:16	focus 19:17 20:12 21:21 23:8 77:15	four-state 80:5	
	focused 19:22	fourth 51:1 61:11 84:6	
		frame 50:10 83:10,11	
		frames 104:2	

funds 49:4	giving 86:6	government 45:10	75:5,7,8,10,25
future 13:16 26:10	glad 49:25 50:1	48:25 57:4 62:18	76:4,10,14,16
35:22 58:20 59:8	52:18 72:5,6	63:24 81:24 90:6	77:16 78:2 79:3
75:20 77:4,8	91:25 92:3	governments	80:21 81:19
101:8 116:24	glass 60:12,13	51:2,22	82:14,21,23
121:15	62:4 91:17	Governor 52:16	83:1,3
<hr/>	GLMRIS 1:14 3:5	56:22 57:12 99:2	84:2,3,13,14
G	4:13,17	governors 46:14	85:19,22 86:2,10
gained 85:9	5:2,15,16,19,20,	grab 4:22 52:24	87:16,24 88:15
100:23 102:15	22,24 6:4 7:1,24	121:13 123:20	89:13 90:3,6
103:16	10:8 11:3 12:25	grand 7:11 31:9	100:3 107:17
gallons 31:23	15:7,11,14,16,24	61:3 74:25 75:19	108:1 109:16
35:11 36:4,5	16:12 20:12	87:15	111:24 112:23
55:16,24	21:21 22:21	grandchildren	113:9 115:12
117:17,19	23:21 24:3,14	91:23	117:6 120:1
game 54:16	25:1 29:4,7 39:2	grandfather 80:8	122:22 123:21
Gary 2:8 52:2 53:3	42:14,15 45:20	grandkids 119:8	greater 25:21
55:5,6	50:1,3 52:12	grandparents	29:18 51:8 83:6
gases 56:19	55:6 58:8 62:25	91:20	96:6
gather 81:25	70:2,7 75:22	Grant 49:20,24	greatest 61:18
gathering 97:15	83:9,11 107:21	Granted 81:17	82:22 110:9
general 62:22 88:6	111:16 120:13	great 1:1,5 3:4	118:22
generally 114:10	121:4 122:9	7:10,11,20 8:18	great-
generated	glmr.is.anl.gov	9:4,11	grandchildren
78:14,20	41:25	11:9,10,22	91:24 92:8
generations 84:15	global 86:14 96:19	12:2,3,8,9,12,13,	greatly 81:23
gentleman 4:21	GM 93:12,13	18	green 3:15 11:11
56:9 61:14 85:20	goal 5:23,25	13:7,8,9,10,11,1	12:16 36:21
107:1 114:1	50:10,16 108:2	4 14:15 15:2	43:23 95:11
115:12 119:11	goals 5:23 18:19	17:7 18:14,18	Greenpeace 97:5
120:24	gobies 60:16	20:1,2 21:20	grew 7:12,13
gentlemen 14:9	God 97:24	37:25 42:14	59:25 75:5
121:18	God's 98:1	46:13,15 47:17	ground 8:15 62:1
gets 49:3	gone 41:20	49:21 50:6 51:24	75:1 84:5 103:11
getting 10:13	Goss 8:1 45:6	53:16,17,19	group 73:2
41:21 51:10 57:5	108:16 117:4	54:2,7,11,13	87:16,21,22
73:20 105:8,23	Gourlay 2:18	55:13,17,18	88:13 117:11
122:24	92:17 96:22,25	56:2,5,7,24	120:23,24 121:3
given 6:6,16 99:24	97:3 98:8	57:10,16 58:16	groups 105:18
100:1 103:18	G-o-u-r-l-a-y 97:3	60:7,8,17 64:10	grown 21:12
104:3,25 112:22	GOURLAY 96:25	67:3,21,22,23,25	Guard 104:13,19
113:1	97:5	68:8	106:20
gives 16:21	GOURLEY 97:3	70:6,14,17,19	guess 32:14 41:7
		71:2,8,10,16	51:1,13 72:9,11
		73:1,9,18	85:19 99:16
		74:6,8,22,23,25	

<p>112:1</p> <p>guidance 83:13</p> <p>guide 90:21</p> <p>guy 60:12 95:6,7</p> <p>guys 40:18 63:18 69:5 107:16 117:10 119:17 121:5</p> <hr/> <p style="text-align: center;">H</p> <hr/> <p>habitat 7:16</p> <p>Hagerty 1:4</p> <p>half 8:13 31:23 32:3 57:21 60:12 62:4 91:17 101:24</p> <p>half-full 60:11</p> <p>hallway 3:10</p> <p>hand 62:6 85:8</p> <p>handout 4:15</p> <p>hands 13:1 118:15</p> <p>hang 3:10</p> <p>happen 64:9,11,14 68:11 89:15,16 91:7 96:4 97:2 101:3</p> <p>happens 33:9 68:25 70:18 76:3 95:22 107:20,24</p> <p>happy 40:13 72:3</p> <p>hard 9:12</p> <p>hardware 78:13</p> <p>harm 54:19,20</p> <p>harvesting 10:23</p> <p>hat 40:23</p> <p>Haven 7:12 74:25</p> <p>haven't 18:4 38:6 68:15 84:20</p> <p>having 11:1 12:8 19:7 30:10 35:19 37:3,4 98:2</p>	<p>head 117:9</p> <p>headquartered 75:1</p> <p>headwaters 20:7</p> <p>health 53:16 67:23 71:16 76:9,10</p> <p>healthy 93:1</p> <p>hear 7:25 8:3,6 13:24 15:4,7 16:4,8,16 17:11 42:5 67:17 100:21 106:25 109:4,5 111:22 112:13 115:3,5 122:12</p> <p>heard 6:20 15:24 20:24 23:13 24:12 32:7 36:13 43:2 62:16 68:10 85:12 90:25 99:24 109:15,16 112:7 114:6,8,25 115:12 117:7 119:23 122:17</p> <p>hearing 98:14 102:10</p> <p>hearings 72:6</p> <p>heating 23:14</p> <p>heaviest 79:17</p> <p>height 56:5</p> <p>held 124:7</p> <p>Hello 91:13</p> <p>help 6:13 12:3 15:9 24:20 28:9 39:8,18 40:18 43:21 74:13 85:14,16 103:2 120:11 122:19 123:9</p> <p>helped 19:12</p> <p>helping 27:21 28:4 122:9</p> <p>helps 25:5 43:25</p>	<p>herbicides 23:11 27:5</p> <p>herd 9:22</p> <p>he's 4:23 5:3 117:22</p> <p>Hey 105:21</p> <p>Hi 76:20 87:13</p> <p>high 23:6,7 66:17,21</p> <p>higher 63:20 70:21 76:6</p> <p>higher-ups 121:19</p> <p>highlighted 111:14</p> <p>highly 122:8</p> <p>highway 93:25</p> <p>history 60:14 96:11 118:10</p> <p>hit 39:19 41:7 110:3</p> <p>hitchhikers 27:10 28:5</p> <p>hitting 9:12</p> <p>hold 33:21</p> <p>holding 72:6</p> <p>Holmes 1:21</p> <p>home 7:11 80:12 88:21 123:2</p> <p>homes 93:5 97:13</p> <p>honestly 94:22 112:6 118:25</p> <p>hope 13:19 18:1 45:19,22 49:2 64:18 74:6,9 79:16,21 95:9 99:10 106:22 112:16 115:21</p> <p>hopefully 10:18 42:4 44:17 62:1 72:18 116:19</p>	<p>hoping 10:15 13:15</p> <p>host 106:22 122:13</p> <p>hosting 5:12</p> <p>hour 101:24</p> <p>hours 42:4 105:16</p> <p>House 1:18 4:24 7:7 60:10 73:20 121:2</p> <p>██████████ 87:7,9 101:16</p> <p>howling 62:23</p> <p>http:// glmr.is.anl.gov 5:21</p> <p>huge 34:11</p> <p>Human 40:15</p> <p>hundred 68:10</p> <p>hundreds 70:24 76:8 91:19</p> <p>Huron 9:12 60:6</p> <p>hurry 79:22</p> <p>hurt 56:19 99:18</p> <p>husband 80:12</p> <p>hybrid 38:4</p> <p>hydrogun 9:21</p> <p>hydrologic 20:16,19 32:25 34:6 62:21 63:1,9,19 64:11 70:11 83:1 86:7 91:8 93:14 109:18</p> <p>hydrological 79:14 83:15 88:2 95:19</p> <p>hydrologically 57:16</p> <hr/> <p style="text-align: center;">I</p> <hr/> <p>ice 78:13</p>
---	---	---	--

ick 84:20 I'd 3:3,8 4:20 5:17 6:14 7:3,17 14:17 17:16 35:20 42:13,16,22 43:9 44:8,18,24 45:1 70:2 85:2 98:23 109:14 119:17 121:22 122:2,4 123:17 idea 22:11 24:25 27:9,10 56:14 85:24 96:18 108:15 ideas 23:13 26:7 27:8,13,19 63:1 identified 10:7 11:13 20:3 22:24 23:3,6 61:16 77:11 identify 23:5 26:8 27:3 28:4 39:18 50:21 108:21 109:8 identifying 19:2 23:24 27:9 ignoring 82:6 I'll 4:3 15:17 17:1 20:14 26:21 41:7 44:2,16 65:21 79:25 104:18 110:3 115:16 Illinois 11:11 37:2 56:22 57:12 81:6 90:5 I'm 3:6 7:7,9,22 11:10 14:8 16:3 17:12,13,24 18:6 19:22 20:24 24:12 25:13,16 27:14 32:24 36:12,13 39:23 40:13 41:19 43:19,22 44:4,12,14 46:6	47:18 49:19,25 50:1,17 52:5,8,11,13,18 53:13 57:19 58:7 60:11 62:14,17 63:5,8 64:19 65:11,23 69:1,24 71:24 72:4 74:21,24 75:4 77:12 79:11 82:13 85:22 87:18 89:6 90:1,21,23 91:13,16,17,24,2 5 92:3,7,19,21,22 95:6,7 98:13,14 99:13 101:12 102:2,10 104:9 106:19,25 107:3 111:3 112:21 113:5 114:24 115:25 120:19 121:1 122:24 image 24:5 imagine 21:11 29:10 36:1 47:5 104:2 immediate 41:1 54:2,6 58:20 59:8 79:14 90:10 immediately 3:12 54:7 59:5 71:7 73:25 81:25 83:17 impact 18:25 37:24 78:2 113:5 impacted 33:16 impacts 19:2,3 22:3 33:10 39:15 40:4 64:22 65:8 102:19,20 impending 80:21 implement 18:23 22:12,13 38:5 39:13 49:2 54:7 70:11,18 71:4	111:8 116:14 123:6 implementable 85:8,17 implementation 24:6,22 26:15 27:24 40:21 41:10 63:22 65:8,9 66:9 82:7 83:9 implemented 20:17,18 22:21 23:10,12 24:17 26:20,24 28:6 35:24 66:25 100:16 111:10,17 implementing 19:4 26:6 50:14 56:13 57:1 70:21 76:6 110:6 importance 112:4 important 7:18,25 8:5,7 13:22 17:12,20 18:8 19:5,19 20:23 21:1,8 25:17 26:1 31:4 33:6 34:3 35:24 36:24 37:5 39:3,22 40:13 42:2 45:7,8 47:1,5 60:22 61:16 68:21 72:25 77:13,16 78:3 89:13 92:4,24 93:8 94:7,23,25 95:5 importantly 7:23 12:5 impositions 37:19 improve 59:6 improving 75:17 inaction 83:5 95:5 inadequacy 81:10	inadequate 81:1 inaudible 69:2 72:19 incentive 64:9 incentives 58:25 inception 19:6 inch 105:3 include 20:19 21:2,24 26:14 27:14,19 28:8 37:8,10 43:17 54:1 61:13 63:16 included 6:5 24:15 29:3,23 31:7 86:4 includes 8:17 26:25 27:1,8 63:12 including 90:4 income 54:25 70:15 incomparable 84:10 inconsequential 93:20 incorporate 86:14 increase 113:1 incredibly 47:1 68:21 indeed 81:20 Indiana 11:17 81:6 90:5 95:22 Indianapolis 108:9 indicated 45:9 indicating 42:19 indirectly 81:21 individual 56:10 123:15 individuals 14:13 industrial 55:19
---	---	---	--

<p>56:23</p> <p>Industries 53:8,12</p> <p>industry 47:6,7 53:14 54:17,18 89:8 93:2,3,4,9</p> <p>inexpensive 94:8</p> <p>infiltration 90:4</p> <p>influences 64:3</p> <p>inform 19:8</p> <p>information 4:17 5:24 6:1 15:14 16:24 17:25 18:7 23:18,21 25:2,9,17 28:8 39:4 41:18,25 42:15 43:16 50:5 65:7 66:7 67:24 87:20 100:17 102:25 103:2 112:11,17</p> <p>informed 15:21 120:10,11</p> <p>infrastructure 21:12 37:22 51:9,13 65:5 103:10,12 118:23 119:5,6</p> <p>initiated 22:3</p> <p>Initiative 13:7,12,15 84:3 85:23</p> <p>inland 67:12,14,21 112:25</p> <p>input 5:25 15:7 18:9 42:1 69:6 108:2</p> <p>inquired 53:20</p> <p>insert 25:5</p> <p>insistent 13:23</p> <p>installed 50:23</p> <p>instance 50:19 73:4 104:16</p> <p>instead 42:21 43:2</p>	<p>96:14</p> <p>institutions 90:7</p> <p>instructions 3:23,25</p> <p>instruments 51:20</p> <p>intend 113:19</p> <p>intensively 17:3</p> <p>intently 15:5</p> <p>interbasin 1:2 3:4 15:3 18:15 70:6 123:22</p> <p>intercepted 81:8</p> <p>interest 90:12</p> <p>interested 32:14,15,18 52:15</p> <p>interim 63:6 71:7</p> <p>interruption 4:2,19 8:9 24:9 44:6 45:3 52:7 53:6,9 62:2 77:3,5 87:3,10 98:10 106:24 112:20 118:8,21 119:10 120:18</p> <p>interstate 93:25</p> <p>introduce 4:21</p> <p>invade 53:21</p> <p>invaders 70:23 76:7</p> <p>invasion 71:12 90:2</p> <p>invasive 7:20 11:21 15:25 17:4 20:18 23:2 25:7 27:4,10 28:5 49:22 50:5 56:1,8 58:6 68:3,7 70:6,19 71:10 76:4 79:17 82:20,21 84:13 99:3 116:9,16,17</p> <p>invasives 71:18</p>	<p>83:21 89:12 112:23</p> <p>investigation 85:14</p> <p>investments 76:13 83:6</p> <p>invite 62:8</p> <p>involve 41:11</p> <p>involved 11:20 17:6 84:9,11,21 111:23 116:5</p> <p>isn't 48:5 50:24</p> <p>issue 7:16 8:7,20 34:16 48:18,23 64:13 68:6,11 81:9 90:13 94:7 100:23 109:17 116:1,9,10,25</p> <p>issued 19:14,16</p> <p>issues 7:11 10:9 15:25 17:5 48:11,20 49:21 51:3,9 68:13 80:6 104:24 115:4,11 116:8</p> <p>items 50:18</p> <p>it's 3:10 4:11,16 7:17,18,25 8:5 11:6 12:12,14,16 13:5 16:18 17:6 20:13,23 22:22 24:5,6,16 25:1,25 27:9,10 33:2 39:24 40:13 41:25 43:23,24 44:1 48:6 55:23 58:17 60:21,22 61:23 62:17,23,24 63:5 64:2,5 65:9 67:3 68:8,12 69:9 72:13,15,16,21,2 3 74:7 75:5 77:17,21,22 78:20 79:18 86:16</p>	<p>88:19,20,23 92:24 93:10 94:7,8 95:8 96:12,19 97:2 99:7 101:23 102:4 105:17 106:8 107:22 108:20 109:1 111:3 112:18,22 114:2,3 115:1,11 117:5 118:18 121:8,12 122:17</p> <p>I've 7:9 14:19 18:5 32:7 36:13 41:9 46:2 55:7 62:15 67:16 71:24 91:18,19 104:20 114:25 115:1,15 117:3 121:4 122:17</p> <hr/> <p style="text-align: center;">J</p> <hr/> <p>Jack 14:11</p> <p>Jacksonville 17:3</p> <p>JAMES 1:17</p> <p>Jamie 2:12 69:23 74:16,20</p> <p>J-a-m-i-e 74:20</p> <p>January 1:8 16:13 19:16 50:2 55:7 120:4 124:7</p> <p>Jay 2:15,19 87:12 89:3,25 104:11</p> <p>Jennifer 2:11 62:12 67:7 69:21,24</p> <p>Jim 2:3,15 4:23 7:4,7 14:11 15:24 16:7 19:25 27:2 51:5 75:3 87:12 89:2,5 108:16 117:4 121:1</p> <p>job 7:17 28:3 34:15 54:25 67:22 75:4 85:24</p>
---	---	---	--

98:17 106:18 117:2 jobs 70:15 76:11 John 2:7,17,18,20 8:1 45:6 52:2 53:2,5,11 92:17,19 96:23 98:11 99:21 108:16 109:13 117:4 Johnson 2:9 59:21 62:12,14 64:9 join 54:4 Jon 31:13 Joseph 55:22 JR 1:15 July 19:11,15 107:21 June 107:21 justify 79:2 <hr/> <p style="text-align: center;">K</p> <hr/> K-a-l 76:20 Kalamazoo 60:1 Kallio 2:12 74:17 76:20,24 77:2,4,7,10 Kaptur 119:22 kayak 78:9,21 kayaker 78:5 kayaking 78:18 keenly 74:10 Kendall 1:10 2:3 3:5 7:6 42:10 key 7:18 50:22 54:15 85:18 Keyes 2:8 52:3 53:3 55:5,6 57:18 K-e-y-e-s 55:6 KEYES 55:6 57:9	kick 64:12 95:13 kick-off 50:3 kids 119:8 kill 10:18 95:6 kinds 46:1 56:18 Kirk 73:19 knew 98:24 knight 118:13 known 21:2 114:14 <hr/> <p style="text-align: center;">L</p> <hr/> lab 105:24 labs 114:18 lack 50:18 92:22 106:2 113:23 115:2 lag 109:19 laid 33:1 85:4 115:9 lake 7:12,15 9:11,12,14 21:16 30:13,24 33:25 34:20,22,23,25 35:15,17 36:2,6,15,17,19 37:15,18 47:16 48:1 49:12 58:3 60:3,4,5,6,7 63:4 78:12 80:4,6,9,17,23 81:4,5 93:1 102:20 110:14,19 115:20 lakefront 33:2 63:8 lakes 1:1,5 3:4 7:10,11,20 8:18 9:4,11 11:9,10,22 12:2,3,8,9,12,13, 19 13:7,8,9,10,11,1	4 14:15,16 15:2 17:7 18:14,18 20:1 21:20 37:25 46:13,15 47:17 49:21 50:6 51:24 53:16,17,19 54:2,8,11,12,13 55:13,17,18 56:2,5,7,25 57:10,16 58:16 60:8,17 64:11 67:22,23,25 68:8 70:7,14,19 71:3,8,10,16,18 73:2,9,18 74:6,8,13,22,23, 25 75:5,6,7,8,10,18, 25 76:4,10,14,16 77:16 78:2 79:3 80:17,21 81:19 82:14,21,23 83:1,3 84:2,3,13,14 85:20,22 86:2,10 88:15 89:13 90:3,6 92:23 93:6,21 94:4,9 100:3 109:16 111:24 112:9,24 113:1,7,9 115:12 117:6 120:1 122:22 123:21 lakeside 37:14 lamprey 13:3,6 17:5 Lance 2:22 119:16 land 54:22 57:22 language 86:4 Lansing 45:9 108:10,11 122:16 lanyard 6:12 16:24 122:21 lanyards 17:9 large 10:23 17:2,5 31:22 33:21 35:8	36:24 56:11 103:1,12 117:15,16 larger 9:24 largest 21:11 40:3 larva 114:9 last 4:15 10:11 13:16 15:4 17:11 38:3 41:7 43:14 51:14 67:11 69:16 72:11 75:24 88:23 97:1 102:7 104:12 110:4 119:23 lastly 50:15 69:5 76:10 late 55:2 95:14 later 4:18 19:15 65:21 Lawrence 60:7 73:2 85:23 99:4,7 100:5 laws 27:15 layman's 57:15 lead 81:5 leaders 53:18 54:4 81:24 leadership 28:3 45:6 leading 59:13 114:12 League 80:5 learn 5:15 98:4 learned 24:21 learning 12:3 75:16 least 12:13 17:11 18:11 24:2 27:21 48:10 56:13 72:3,23 110:16 leave 3:24 38:16 41:7 54:24
--	---	---	--

<p>leaving 38:10,23 92:7</p> <p>led 46:7 100:25</p> <p>Lee 2:13 79:7,24 80:3</p> <p>Leelanau 57:20</p> <p>lefthand 24:11 25:15 28:18 30:15 32:21</p> <p>legacy 71:19 84:15</p> <p>legislation 19:11,15 20:15 99:24</p> <p>less 21:2 41:3 54:23 86:5 111:10 117:18</p> <p>lessons 24:21</p> <p>let's 36:1 51:21 59:8,10 69:11 86:25 88:19 91:10</p> <p>letter 113:18</p> <p>level 21:24 22:1 58:20 85:10 96:13,15,20 102:14 103:20</p> <p>Levin 2:11 67:9 69:22 71:23 72:2 87:20 90:9 94:18 119:25 122:6</p> <p>L-e-v-i-n 72:3</p> <p>LEVIN 72:2 73:24</p> <p>licensed 52:10</p> <p>lie 111:5</p> <p>life 47:7 75:8,9 76:12 91:20 92:5 104:24,25 105:10</p> <p>lifetime 70:25</p> <p>lighthouses 80:10</p> <p>likelihood 112:22</p> <p>likely 62:21 78:17</p>	<p>80:15</p> <p>limited 58:22</p> <p>line 44:13 75:24 84:11 103:18 114:16</p> <p>lines 22:13 36:21 102:17 103:2</p> <p>link 50:23</p> <p>l-i-o 76:21</p> <p>list 79:6</p> <p>listen 17:13 18:9 41:18 57:6,12</p> <p>listened 117:8</p> <p>listening 115:18</p> <p>literally 91:19</p> <p>little 11:4 16:4,8,20 19:25 23:14 25:18 30:9 31:9,13 41:20 50:17 76:25 87:19 88:13 94:25 96:3 105:8,20,22 111:14 112:5 113:7,20 117:15,18 123:11</p> <p>live 7:15 9:9 17:7 60:1 80:14 81:7 89:10,14 97:11 115:19,20 122:21</p> <p>livelihood 78:4</p> <p>livelihoods 112:2</p> <p>lives 78:4</p> <p>living 120:21</p> <p>load 36:19</p> <p>local 8:18 15:19 16:10 51:22 81:21 91:16</p> <p>locally 78:12</p> <p>located 3:12</p>	<p>location 61:23 80:12 122:8</p> <p>locations 33:5 110:12</p> <p>lock 10:21 24:3 25:1,2,5 29:4,7 32:21 45:20,25 56:2,5 110:16 111:16</p> <p>locks 17:5 48:17 49:14 93:16 114:19</p> <p>logistically 83:19</p> <p>long 6:18 17:12 36:15 40:25 45:13,14 47:23 54:3 60:25 62:17 63:5 70:17 71:8 72:9 83:10 88:8 89:19 102:20,25 105:19 106:8,9 113:22 114:4 117:21,22 118:10 123:3</p> <p>longer 39:13 41:20 90:7</p> <p>long-term 48:19,20 50:9 74:1,2 93:14</p> <p>lose 54:16</p> <p>loss 54:25</p> <p>lost 78:20 93:20</p> <p>lot 8:12 12:1,7 13:12 18:7 20:2 26:1 32:6,7,8 35:22 40:22,24 42:24 46:14 50:4 61:19 64:15 68:11,15 69:8 86:24 91:18,20,22,23 101:7,8 102:22,24 108:7 110:6 115:7,24 117:6 118:11,12 120:3</p>	<p>lots 50:14</p> <p>louder 56:16</p> <p>Louis 12:11 112:11</p> <p>love 82:14 89:18 122:22</p> <p>lover 79:12</p> <p>low 51:7</p> <p>lower 24:11 25:15 30:15 32:21 38:8,13,16,23,24 107:2,8</p> <p>lowering 104:15</p> <p>low-hanging 50:18,25</p> <p>lucky 31:13</p> <hr/> <p style="text-align: center;">M</p> <hr/> <p>M.Holmes 124:17</p> <p>ma'am 71:23 74:19 76:19,25 80:1 82:8</p> <p>Mackinac 93:23</p> <p>magnitude 22:12 29:18</p> <p>mail 44:20</p> <p>mailed 6:10</p> <p>main 3:13</p> <p>maintain 29:2 51:23 71:6 107:6</p> <p>maintaining 34:4 70:9 112:5</p> <p>maintenance 26:16</p> <p>major 89:9</p> <p>majority 20:4 34:20 99:4</p> <p>man 91:17 113:23,24 115:25</p> <p>manage 26:3</p>
--	---	--	--

<p>42:23 43:21 management 21:8 26:25 27:1,14,18 31:5,25 32:6 37:22 70:9 100:18 manager 1:14 5:3 14:10 17:24 74:24 managing 83:21 Manistee 121:16 Manistique 78:7,17 man-made 114:21 map 28:18 34:15 35:7 maps 65:6 March 6:2,23 41:24 44:23 107:19,21 123:4,18 marine 118:10 Mark 2:6,20 45:2 47:12 49:18 73:19 107:15 market 58:24 marks 95:12 Marsh 11:16 50:22 61:15,19 marvel 16:4 Mary 2:13 79:7,24 80:3 masks 91:2 master 56:10 materials 3:15 104:17 107:8 123:19 matter 36:7 40:9 68:25 76:16 117:9 121:7 Matuzak 2:14 87:9,11,13</p>	<p>M-a-t-u-z-a-k 87:13 MATUZAK 87:13 may 14:23 18:25 21:18 22:3,12,13 27:3 28:6 31:19 33:22 37:11,18 58:23,25 75:25 86:15 94:7 96:16 97:20,21 102:15 103:15 107:21 109:15 113:8 123:7 maybe 18:2 20:5 21:2 25:13 27:1 31:13 35:11 41:3 46:1 50:14 64:11 87:8 96:6 99:6 107:21 111:23 113:6 mayor 2:6 14:17 45:1 47:12,15,19,21 49:7 89:6 122:7 McCook 117:17 McKay 2:11 62:12 67:7 69:22,24 M-c-K-a-y 69:24 McKAY 69:24 mean 14:12 24:3 95:6,9,11 100:16 104:23 107:3,4 110:24 111:2 117:4 118:25 121:14 means 27:18 30:11 33:2 104:24 113:4 123:11 meantime 68:16 74:12 measure 77:24 78:8 measures 18:23 22:2 29:23 41:1 71:4 76:5 83:23</p>	<p>84:8 111:8 112:24 measuring 26:4 84:7 mechanism 25:5 46:20 media 16:13 mediated 40:15 medium 23:6,7 66:17,21 meet 50:16 117:5 meeting 1:2 3:5,8,16,24 4:23 5:6,17,22 6:12,17,25 18:4 42:7,20 116:11 122:3 123:19,21,25 meetings 5:13 6:6 8:3 12:8,9 19:8 50:3 81:22 107:17 108:7,8 119:22 megahertz 105:3 member 53:12 65:13 102:1 members 14:22 19:9 39:8 53:13 77:19 79:1 87:20 mention 6:14 15:17 mentioned 6:22 7:7 10:13,22 14:7,12 16:7 25:20 27:2 35:3 36:24 39:2 40:16 61:24 85:19 105:7 106:5 108:7 122:20 mercury 36:10 merely 77:24 merge 20:8 message 49:3 68:2</p>	<p>messed 121:7 method 21:14 79:15 methods 15:8 70:20 Michael 2:6 45:1 47:11,15 Michigan 1:5,6 7:10 9:11 14:20 20:22 21:17 30:13,25 33:25 34:20,22,23 35:15,17 36:3,6,14,15,19 37:16,18 41:15 47:16,17 48:2 49:19,24 52:6,9,11 53:8,12,14 54:17,18 55:8,21 58:3 60:3 72:5 74:8 75:2,6,11,21 80:5,7,9,17,23 81:4 90:9,22 102:6,20 110:15,19 122:13,16 microphone 43:12,13 44:10 65:18 77:1 102:3 104:9 107:13 112:14,19 113:12 middle 25:8 84:5 mid-system 34:6,13 migrate 112:23 mile 114:14 miles 106:9 110:13,14,15,16, 17,18,19 114:9,11,12 milestone 14:25 Miller 54:4</p>
---	--	---	---

Milliken's 99:2	102:18	money 48:22	35:6 116:7
million 21:9 33:15	mitigation 18:22	69:13 78:22	municipalities
35:11 36:4,5	19:3 22:2 29:23	87:23 111:3	8:19
40:3 55:16	33:18,23 34:9	monitor 110:12	Muskegon 7:12
106:12	37:9 38:18,25	monitoring	mussels 60:15
millions 70:16,24	39:22 63:12	9:5,8,10,14,15	myself 59:24 98:21
76:8 88:9,10,11	68:13 83:22 84:8	16:7 31:1 67:23	
Milwaukee 35:17	mitigations 69:4	101:1	
41:15 107:17	Mitt 69:25 71:20	month 8:13 116:11	<hr/> N <hr/>
111:25	modeling 34:12	months 8:13 15:4	nail 102:16
mind 43:15 81:20	moderating 3:7	19:14,15 91:5	name's 14:7
89:21 97:1	MODERATOR	107:25 109:2	narrow 58:10
113:13	1:10 3:3 4:5,9,20	119:25	nation 21:12 40:3
minds 79:20	42:12 44:7	moon 93:24	93:11
minimum 27:22	47:11,18,20	motor 54:22	national 11:25
Minneapolis 12:10	49:6,17 51:16	move 7:20 8:7 10:8	12:17 78:7 92:5
112:10	52:1,22 53:2	11:1,22 12:6	nations 55:10
Minnesota 81:6	55:4 57:8,18,23	29:20 32:5 41:6	nation's 115:6
minute 15:17 46:7	58:1 59:20 61:4	42:17 44:13,16	native 54:16 55:10
120:8	62:11 64:8,16	46:13 72:17	79:11
minutes 7:5 25:14	65:14,17 67:6	73:25 74:11	natural 37:20,24
32:24 42:24	69:10,21 71:23	76:25 82:4 92:16	61:20 84:23
43:3,24 44:4	73:23 74:16	109:3,6 115:21	115:13
118:2 123:16	76:18,25 77:6,9	116:25	nature 98:1,2,3
mispronounce	79:6,24 82:2,8	movement 14:25	navigation 20:25
47:14 74:18	85:1 86:22	28:15 114:16	24:20 25:3 29:3
miss 71:17	87:2,4,7,11	moves 11:13 33:11	31:15 34:5
missing 72:15	89:2,24 90:16	119:6,7	37:1,4 38:11,16
mission 40:14	91:10 92:12,16	moving 7:19 9:25	70:10 111:16
52:12 67:24	94:12 95:23	10:3,6,22 11:1	112:5
missions 37:4	96:22 97:1,4	24:8 29:8 71:2	navigational 29:5
108:21	98:8,12 99:20	82:4 85:12	Navy 95:6
Mississippi 1:1 3:4	101:11,16,18,23	112:25 113:2	nearest 5:2
7:21 8:25	102:2 104:8	multi-billion	nearly 21:9 40:3
11:12,22 15:2	107:1,12 109:12	48:12	necessarily 11:14
18:15,19 20:2	112:18 113:11	multi-	49:15 108:22
21:20 32:11 37:2	118:2 119:14	jurisdictional	111:4 116:8
48:2 50:6 54:12	120:15 121:22	82:25	necessary 22:2,13
55:14,18 57:17	123:15	multi-mile 50:20	38:19,25 53:18
70:7,14 71:2	moment 4:20	multiplier 93:10	needle 72:18
80:23 81:19 83:2	20:14,20 36:1	multi-use 20:24	neighbor 94:19
100:4 111:13	49:8 52:20 85:3	multi-year 51:19	N-e-i-l-l 92:20
123:22	114:1	municipal 21:6	
mitigate 31:17	moments 14:18		
	16:11 24:1		
	monetary 79:18		

109:14 neither 48:19 nervous 118:17 119:3,9 net 105:15 netting 105:16 network 15:23 news 16:13 72:20 n-g-f-l-e-s-h 90:1 nice 56:9 97:15 night 17:9,11 119:23 nitrogen 35:25 NOAA 75:21 nobody 59:24 115:3 no-brainer 62:24 98:22 noise 56:11,12 non-Asian 106:13 none 114:16 non-governmental 15:19 non-navigable 31:12 nonstructural 41:1 non-structural 26:18 27:24 100:19 110:23 nor 15:15 normal 28:22 29:19 normally 21:16 north 38:7 80:13 89:9 northern 1:5 20:21 90:22 Northland 78:10 northward 9:25	noses 80:25 notch 24:15 note 3:16 33:6 43:9 45:8 nothing 41:8 57:3 66:8 88:15,16 notice 6:24 31:6 113:20 noticed 38:6 novel 16:22 25:1,11 nowhere 92:13 nuisance 4:14 14:16,25 18:17,24 19:21 23:17 25:6,12 26:3,19 28:16,19,20,24 30:8,22 34:1 40:11 41:9 66:11 71:1 100:7 108:4 109:10 118:24 119:1 numerous 81:3 nutrients 35:25 36:9 <hr/> O <hr/> O-apostrophe- capital 92:20 Obama 57:11 64:10 objective 15:12 observations 84:19 obvious 64:2 72:23 119:20 obviously 40:20 85:5 86:11 98:22 102:13 118:16 122:5 occurred 81:12 Ocean 119:12	o'clock 3:17 118:3 offer 5:15 15:12 63:1 offered 62:25 offers 63:11 office 6:10 7:10 74:25 122:23 offices 8:5 official 49:23 officials 39:9,10 45:10 81:8 112:16 offset 19:3 21:14 22:3 34:9 oh 110:18 111:22 Ohio 11:11 75:2 108:9 119:22 okay 34:7 45:5 48:14 77:10 92:16 98:13 101:18 104:5 113:7 old 51:8,12 91:17 O'Neill 2:17,20 92:17,19,20 109:13 ones 16:24 17:8 72:19 88:23 one's 69:7 117:17 one-way 30:16 32:20 ongoing 26:14 online 25:20 onset 62:23 Ontario 9:14 60:5 open 7:2 16:15 34:20,22 37:15,18 38:11,13,16,24 39:21 41:24 65:23 93:17 107:19 109:23	117:5,9 120:7 122:18 Opening 2:3,4 openly 31:20 49:12 operate 31:3 48:16,17 99:25 105:3 operating 16:2 86:18 105:2 107:10 operation 26:15 61:9 operations 52:11 opinion 12:14 14:1 28:3 opportunities 5:14 opportunity 6:19 18:2,4 21:24 42:20 43:1,6 53:10 67:17 70:1,25 71:11,13,17,21 74:22 76:15 82:18 103:20 opposed 30:10 opposite 28:22 optimistic 51:4 optimize 24:23 optimized 110:9 option 45:22 63:9 69:2 74:2 77:11 optioned 18:16,21 options 16:6,21 19:24 45:15 68:23 69:7 81:25 109:9 115:9 oral 6:6 42:13,17 order 12:13 22:12 26:20 29:20 36:20 44:12 48:9 64:6,14
---	---	---	---

orders 29:18 organization 17:2 43:15 52:10 75:11 76:22 77:7 80:6 86:13,16 117:3,12 organizations 68:19 organized 5:22 original 60:19 originally 46:9 55:12 88:18 Orleans 12:11 112:10 Orr 2:13 79:7,24 80:3 O-r-r 80:4 ORR 80:3 82:3 others 8:20 35:18 39:12,13,14 78:19 106:22 otherwise 6:21 60:24 ours 96:14 ourself 118:14 ourselves 75:13 110:20 Outfitters 78:10 outgrown 80:20 outlets 16:13 outlined 30:19,20 65:5 66:7 111:9 outlines 15:8 25:18 outreach 27:9,16 68:20 outset 35:4 39:2 outside 11:7 12:2,9,10 40:12 61:16 83:20 88:22 100:8 119:2	overall 83:4 Overdier 79:8,25 82:9,10 87:4,5 101:14 overflow 81:12 overflows 37:9,10 overlooked 78:16 overlooking 80:9 overrun 82:21 overview 7:22 overwhelmed 29:15 overwhelming 29:21 ovulations 58:22 owners 78:20 <hr/> <p style="text-align: center;">P</p> <hr/> p.m 1:8 7:3 123:23,25 Pacific 119:12 PAGE 2:2 pages 16:18,20,22 123:4 124:6 paid 57:1 painstakingly 15:18 paint 15:11 palpable 74:7 panel 1:13 3:19 4:21 43:5,7 86:23 122:2 paper 4:12 parameters 13:8 105:2 107:10 partially 63:16 participating 16:1 121:25 particular 21:21 22:7 23:4 24:18 29:1 32:4,12,20	33:24 34:24 36:20 66:10,11 85:12 particularly 89:12 partnering 47:2 partners 16:8 75:19 104:19 109:7 partnership 61:20 partnerships 75:12 party 90:12 pass 76:1 107:9 passage 48:18 49:16 66:17 passes 106:16 passing 81:3 104:17 passion 14:12 49:8 61:6 74:5,6 122:11 passionate 14:15 16:3 67:18 79:3,12 past 9:13 32:7 35:20 37:17 81:3 82:4 96:5 100:6 path 41:12 108:18,22 109:8 pathway 11:18 19:21 40:12 50:22 61:18 119:2 pathways 20:1,3 50:6 83:16 patterns 57:13 pay 78:9,10 paycheck 57:4 PCB's 36:10 P-e 112:21 people 13:2 42:24 43:1,7	44:15,16,25 47:24 52:19 54:21,24 57:3 58:9 70:16 75:3,18 78:9 79:3 80:20 86:24 87:21 88:10,11,14 89:10,14 90:22 94:21 98:4,15,16 99:18 per 35:11 105:3 percent 21:4 35:5 47:5 52:16 86:5,6 percentage 36:25 perennial 20:8 perfect 7:15 58:16 perfectly 58:17 perhaps 32:22 50:8 72:12 123:12 period 6:5,6,23 7:2,3 41:24 42:13,17 43:18 44:22 68:2 74:3 94:1 123:17 periods 109:19 permanent 50:24 61:9,11 69:12 70:8 71:5 110:6 permanently 48:17 70:25 permits 43:7 person 78:4 91:16 109:17 116:3,4 personal 7:17 49:23 67:14 75:5 personally 4:4 62:9 119:3 personnel 103:5 perspective 7:9 12:18,25 57:20
--	---	---	--

<p>97:7 112:1</p> <p>Petrove 2:21</p> <p>112:21</p> <p>pharmaceuticals</p> <p>36:12,14</p> <p>phase 11:5,6</p> <p>phases 11:5</p> <p>phenomena</p> <p>105:18</p> <p>phonetic 87:8</p> <p>105:4</p> <p>phosphorous</p> <p>35:25</p> <p>physical 18:25</p> <p>20:12,16 23:10</p> <p>24:4,5,10</p> <p>26:20,22</p> <p>31:7,11,17,19</p> <p>33:4 34:10 35:13</p> <p>38:5,9,14,22</p> <p>49:11,13</p> <p>61:22,25 65:5,9</p> <p>66:12 70:21 71:9</p> <p>76:6 85:25</p> <p>96:2,9</p> <p>pick 45:24</p> <p>picked 39:21</p> <p>picture 15:12 27:5</p> <p>55:11</p> <p>99:9,11,23,24</p> <p>piece 19:5 36:24</p> <p>37:5 41:7</p> <p>pieces 33:23</p> <p>pipes 36:21 37:10</p> <p>pitch 95:7</p> <p>placed 24:18</p> <p>33:3,4</p> <p>places 79:16</p> <p>placing 34:19</p> <p>38:22</p> <p>Plaines 50:21</p> <p>plan 11:25 25:23</p> <p>28:11 30:6</p>	<p>46:21,23 54:6,7</p> <p>55:1 60:13,19</p> <p>61:22 63:14 71:8</p> <p>82:1 83:9,16</p> <p>Planner 1:11</p> <p>planning 35:3 96:1</p> <p>113:4</p> <p>plans 15:16</p> <p>22:11,14</p> <p>39:10,11,12</p> <p>48:24 60:21</p> <p>61:3,25 66:2</p> <p>81:14 83:14,20</p> <p>84:1,5,9,17</p> <p>85:6,16 86:21</p> <p>91:5 95:19</p> <p>plant 25:8</p> <p>28:19,20,25</p> <p>29:11 37:6,14</p> <p>plants 25:7 27:4,6</p> <p>34:2</p> <p>35:9,10,12,14</p> <p>36:11 81:15</p> <p>Platte 60:1,2,3</p> <p>pleasant 74:13</p> <p>please 3:16 5:7</p> <p>16:17 17:12 18:5</p> <p>42:3,7</p> <p>43:3,13,14 44:10</p> <p>57:9,12 65:17</p> <p>69:3,14 76:19</p> <p>77:1 79:9 80:2</p> <p>89:21 91:12</p> <p>92:18 94:13</p> <p>96:24 102:3,4</p> <p>104:10 107:14</p> <p>113:11 118:6</p> <p>119:15 123:11</p> <p>pleased 77:10</p> <p>plug 67:8</p> <p>plus 61:9</p> <p>point 10:1 12:1</p> <p>13:12 30:11,14</p> <p>32:13,20,22</p> <p>36:22 46:8</p> <p>61:16,25 65:13</p>	<p>66:23 80:9,13</p> <p>84:18 101:19</p> <p>111:19 117:14</p> <p>122:2</p> <p>pointed 58:13</p> <p>points</p> <p>28:13,14,17,23</p> <p>30:10,13,16,17</p> <p>33:10</p> <p>34:13,14,25 35:1</p> <p>37:6 68:5 75:22</p> <p>poisons 101:2</p> <p>policies 82:19</p> <p>policy 49:23 82:15</p> <p>116:4</p> <p>political 48:8 64:3</p> <p>90:12,13 119:18</p> <p>politicians 48:7</p> <p>49:2 92:3</p> <p>politics 79:19</p> <p>pollutants 36:7,19</p> <p>pollution 37:17</p> <p>poor 57:15</p> <p>population 9:25</p> <p>10:2 11:2 100:21</p> <p>101:6</p> <p>populations 9:24</p> <p>27:2 58:15 59:4</p> <p>101:1,10</p> <p>110:14,20,21</p> <p>111:6,12</p> <p>portions 12:15</p> <p>83:20</p> <p>positions 98:19</p> <p>positive 57:5 74:9</p> <p>possibility 96:20</p> <p>possible 69:15</p> <p>83:14,16</p> <p>85:17,25 89:15</p> <p>90:8 93:16</p> <p>possibly 68:17</p> <p>84:20</p>	<p>posted 6:4</p> <p>potential 15:8</p> <p>18:16,23 20:1,3</p> <p>23:16,19 24:24</p> <p>27:3,22 29:22</p> <p>31:18 34:16</p> <p>37:10,17 38:25</p> <p>40:21 41:1</p> <p>61:17,23 91:3</p> <p>111:8</p> <p>potentially 18:21</p> <p>23:2 26:8 100:22</p> <p>105:8 106:21</p> <p>111:10,17</p> <p>power 48:15 57:7</p> <p>60:20</p> <p>practical 109:24</p> <p>practices 27:14,18</p> <p>95:17 100:18</p> <p>precious 40:7</p> <p>precipitation 20:6</p> <p>34:18 84:7 96:4</p> <p>predictions 81:13</p> <p>prefer 25:24</p> <p>pre-registered 5:6</p> <p>44:25</p> <p>present 5:24 78:8</p> <p>82:22 83:8 105:1</p> <p>110:23</p> <p>presentation 6:11</p> <p>7:1 17:18 35:4</p> <p>64:19 111:15</p> <p>presented 6:1 22:6</p> <p>54:9 107:23</p> <p>presenting 4:18</p> <p>president</p> <p>48:9,14,22 49:3</p> <p>52:5,8 57:11</p> <p>64:6,10,13 102:6</p> <p>pressure 21:17</p> <p>pretty 20:22 34:17</p> <p>45:5 58:9 62:17</p> <p>64:2 86:9 117:21</p>
--	---	---	--

<p>119:19</p> <p>prevent 15:22 18:17,21 20:17 23:16 29:7 40:14,19 49:15 71:11 81:2 106:18 112:24 114:23,24 118:24</p> <p>preventing 14:25 70:5 112:8</p> <p>prevention 15:8 32:16 70:20 76:5</p> <p>preventiveness 96:16</p> <p>prevents 15:9 24:7</p> <p>previous 31:25 38:12</p> <p>previously 6:22</p> <p>price 2:8 53:3 55:5 57:19,24 63:18,20 76:12</p> <p>P-r-i-c-e 57:24</p> <p>PRICE 57:19,24 58:2</p> <p>pride 115:7</p> <p>primarily 20:9 31:12,14 68:3 86:16</p> <p>primary 19:20 21:19 30:2 37:4 100:22</p> <p>prime 17:19</p> <p>primer 16:18</p> <p>principles 82:16 86:18</p> <p>prioritized 83:16</p> <p>prioritizing 83:13</p> <p>priority 15:15 79:17 116:18</p> <p>probably 4:6 11:24 12:5 21:3 24:12 29:12</p>	<p>117:3 120:20</p> <p>problem 12:12 35:17 47:25 48:3,21 56:4 57:2 71:1 81:10 82:25 84:11 91:6 113:3</p> <p>problems 59:1</p> <p>procedures 22:9</p> <p>proceed 46:22</p> <p>process 10:8 13:20 22:19,23 23:4,23 29:15 42:2 88:9 109:1 115:21 120:11 123:9</p> <p>processor 10:25</p> <p>professional 49:23 58:10</p> <p>professionals 69:5,18</p> <p>program 9:15,23 12:7,14,21 13:4,5,17,18 14:10 49:20 59:7 101:24</p> <p>programs 28:6 75:15</p> <p>prohibit 53:19</p> <p>project 1:14 5:3,6,20 6:4,8 14:13 17:24 19:4 47:2,3 63:19 68:12 97:10 98:5 100:10 101:20 118:23</p> <p>projected 81:17</p> <p>projects 47:4 64:25 73:5,7 82:4 85:10 86:15 98:1 102:23 118:12,16</p> <p>promoting 84:23</p> <p>property 54:23 93:7</p>	<p>proponents 83:14</p> <p>protect 51:24 54:2,10 71:17 74:13 82:17,19 84:12,13</p> <p>protecting 14:15 47:5 67:25 113:7</p> <p>protection 71:7 72:22,23 76:14 89:10</p> <p>protects 54:7 75:5</p> <p>pro-tem 89:6</p> <p>proven 57:13</p> <p>provide 5:13 19:3 23:21 31:18 41:18 58:24 64:7 70:2,15 71:7,21 85:7 100:16 102:18</p> <p>provided 19:10 65:7</p> <p>providers 28:8</p> <p>provides 18:6 36:25 112:17</p> <p>providing 15:6 28:3 84:23</p> <p>provinces 8:18 90:5</p> <p>pubic 42:11</p> <p>public 1:2 2:5,6,7,8,9,10,11 ,12,13,14,15,16, 17,18,19,20,21,2 2,23 3:5,21 5:12,22 6:17,22,25 7:2,3 15:6,10,13,21 16:10 19:8,9 23:13 32:8 39:9 41:18 62:22 67:24 72:6 82:16 83:12 107:17,19 108:6,8 112:15 123:17</p>	<p>pull 27:11 43:20</p> <p>pumping 25:5</p> <p>purchased 78:11</p> <p>pure 122:8</p> <p>purple 12:16</p> <p>purpose 15:11 34:4 51:10</p> <p>purpose-built 24:19</p> <p>purview 94:7</p> <p>pushing 105:19</p> <p>putting 17:7,25 65:4 85:24 92:1 111:15</p> <hr/> <p style="text-align: center;">Q</p> <hr/> <p>quality 1:19 4:24 7:8 13:7,8 34:1,4 38:19 75:21 76:12 82:20 102:20 121:2</p> <p>quantity 82:20</p> <p>quarterly 19:7</p> <p>question 17:10 42:21 43:2,11 65:16 95:16,25 102:1,8 103:3,22 104:14,22 106:10,23 107:16 108:2 115:22 120:16</p> <p>questions 4:13 6:11 17:19 43:4,8 44:9 46:3 83:18 85:4 95:14 99:22 110:2 120:9 123:12</p> <p>quick 3:20 7:22 8:11 16:11 17:19 49:8 65:22 76:2 85:3 122:25</p> <p>quickly 26:24 32:5 44:14 46:8 70:12 72:16 93:15</p>
--	---	--	---

<p>100:16 101:4 quite 14:12 52:17 115:6 122:11 quo 76:2 quote 82:3 96:7</p> <hr/> <p style="text-align: center;">R</p> <hr/> <p>radar 91:4 rainfall 29:25 30:1 96:6 rainfalls 20:7 rainstorm 29:14 93:17 Raise 62:6 raised 97:18 Ramisdert 90:18 92:13 range 18:16 21:25 22:5,6 23:24 24:23 66:14 86:2,6 103:18 105:5 106:1,21 108:19 110:23 114:14 ranges 106:10 rankings 100:12 rap 35:19 rapidly 71:3 rarely 71:11 rather 99:4,10,11 ratings 100:12 razor 91:14 reaction 58:8 reader 16:22 reading 46:2 ready 52:3 53:4 59:22 62:13 67:10 69:22 71:24 74:19 76:19 79:8 80:1 90:19 91:11,18 92:18 94:13</p>	<p>96:24 97:4 98:12 reaffirms 70:8 real 48:2 50:25 54:10 60:23 65:21 74:7 88:14 105:10 122:24 realistic 83:10 96:20 realize 45:15 114:24 really 18:8 23:8,22 27:20 28:1 30:1 33:19 39:3,5,22 46:17,24 47:7 49:25 60:20 75:4 77:15 79:21 86:9 87:22 88:19 92:2 94:8 100:20 102:16,25 108:15 109:9 118:14 reason 41:17 46:11 72:12 96:15 98:25 104:15 105:15 114:22 reasonable 87:25 123:5 reasons 77:23 rebirth 119:5 receive 111:20 123:19 received 4:16 16:17 19:11 recent 75:23 96:11 recently 53:23 78:6 79:11 81:7 105:6 reclamation 35:2,9,12,14 37:14 116:7 recognize 77:23 Recognizing 80:11 recommendation</p>	<p>46:10 59:9 69:17,18 73:21,22,24 recommendations 15:15 recommending 84:8 reconciled 84:4 reconfiguring 106:22 record 4:2,19 8:9 24:9 44:6,7 45:3 52:7 53:6,9 61:7 62:2 63:8 77:3,5 87:3,10 98:10 106:24 112:20 118:8,21 119:10 120:18 124:6 recorded 1:21 112:14 Recorder 1:22 records 4:11 recreate 89:14 recreation 70:11 76:9 89:8 recreational 21:1 31:15 53:14 54:18 70:16 78:15 79:12 red 6:12 16:24 17:9 28:17 44:4 122:21 redefine 57:5 redoubling 101:9 reduce 35:24 58:20,22 66:24 67:1 reduced 59:5 reducing 84:22 reduction 26:5 32:18,19,23 33:7 60:23 66:6,10,13 referred 64:24</p>	<p>81:9 referring 66:6 refine 32:19 109:9 refinement 22:17 refining 74:1 reflected 78:25 refrain 44:9 Refuge 78:7 regard 20:11 22:1,18 24:21 25:11 26:2,12 34:8 37:13 40:10 61:8 64:18 65:1 85:4,6,8,21 86:11,14 99:23 100:9 101:4 102:25 regarding 50:15 region 15:20 46:14 47:8 75:11,16 77:17 88:7 89:11 regional 8:16 16:1 80:6 100:25 108:16 116:2 122:1 regions 81:20 region's 76:12 register 5:8 registered 42:18 44:15,16 67:9 101:19,20 registration 3:22 4:22 regular 19:7 29:12 regulate 98:3 regulates 13:9 regulations 27:16 59:1 79:19 regulatorily 85:17 regulatory 37:19 85:15 reiterate 42:13</p>
--	--	--	--

<p>45:12 121:14,17 relate 85:22 related 26:13 80:6 81:9 relative 22:11 relatively 35:8 52:12 relatives 91:19,21 released 37:11 49:25 53:24 84:2 105:6 relief 31:18 relying 103:4 remain 48:17 51:3 remainder 34:21 remediation 37:12 83:22 remedy 82:6 remember 35:18 86:2 remind 44:18 123:17 reminded 122:23,24 reminder 44:2 removal 9:23 73:5 remove 9:22 28:20 removing 113:2 repeat 77:13 replace 110:7 report 4:16,17 5:15,16,19,24 6:1 7:1 15:3,5,7,11,14,1 8 17:7 18:13 19:14,16 21:22,23 23:21 25:22 29:22 33:1 39:2,4 41:22 42:15 46:9 50:1,4 52:12,13,18,21</p>	<p>58:8 63:2 66:8 67:4 70:2,4,5,7 72:8,10,12,13,20 73:10,14 77:17,22 78:9,25 86:4 92:23 99:14 100:17 103:14 105:6 108:3 110:23 111:9 112:12 116:12 117:7,10 120:6 123:2 REPORTER 76:23 REPORTER'S 124:1 reports 82:4 121:6 represent 43:15 53:7 55:8 59:24 76:21 77:2 80:4 87:15 representation 8:5 representative 54:4 59:13 84:16 104:13 representatives 14:22 60:11 73:20 119:24 120:5,8 represented 68:20 representing 69:25 74:21 82:13 reproducing 110:19 Republican 73:19 request 42:22 require 26:22 115:5 required 72:10 73:5,7 requirements 68:24 reroute 36:21</p>	<p>81:16 rerouting 37:5 rescue 93:13 research 16:6 83:10,11 reservoir 63:14 reservoirs 29:24 30:1 31:24 33:21 63:11 102:21 103:1,13,17 117:16 residence 36:15 resident 90:1 residents 21:9 33:15 40:4 residual 37:16 40:9,19 resolution 69:8 resonated 122:12 resource 28:7 32:9 37:20,24 40:7 86:16 resources 61:20 82:17 86:15 111:6 respect 50:10 respectful 42:25 respond 52:21 response 43:5 85:3 87:6 92:15 101:15,17,22 responsibility 16:9 28:2 41:9 108:5 responsible 51:18 108:25 responsive 63:22 rest 26:21 87:22 92:5 restoration 13:11,14 76:14 restore 71:4</p>	<p>restoring 71:6 115:13 restroom 3:9,20 result 23:23 68:3 72:18 resulted 64:4 results 87:19 118:15 retired 79:11 retirement 80:14 review 21:24 101:12 reviewing 54:9 Rice 60:5 righthand 24:4 35:7 risk 21:8,14 23:6,7 26:5 27:21 31:4,25 32:18,22 33:6,17 34:9,12,16 37:22 38:19 40:25 41:2 59:4 60:23 63:11 65:2 66:6,10,13,14,16 ,24 67:1,2 83:5 114:13,15 115:10 risk-based 23:4 risks 40:10,19 83:24 84:8 river 1:1 3:4 7:21 9:1 10:17 11:11,12,22 15:2 18:15,19 20:2 21:7,20 25:3,4 28:23 30:15 32:11 33:25 34:21,22,24 35:1,5 37:2 48:2 50:21 54:12 55:12,15,16,23,2 5 56:6 57:17 59:3 60:1,2,3,4,7 70:7,14 71:2</p>
--	--	---	---

78:7,10,12,14,17 80:24 83:2 88:12 90:21 100:4 111:13 112:3 123:22 rivers 31:9 90:23 112:25 road 32:21 64:13 111:16 Rob 87:9 Robert 87:7,8,9 101:16 role 28:3 84:6,16 room 50:2 68:20 74:5 75:3,14 77:15 87:22 100:15 101:14 120:5 122:20 roughly 16:13,22 routed 28:18 routinely 117:5 120:12 routing 29:10 RPT 55:6 r-s 89:6 run 28:23,24 31:20 44:23 91:18 rundown 8:11 running 4:21 6:18 61:13 runs 123:18 Ryan 2:14 87:9,11,13 <hr/> <div style="text-align: center;">S</div> <hr/> safe 89:19 safety 104:24,25 Saginaw 60:4 salmonoid 90:23 samples 81:3 Sanitary 38:15,23	80:18 106:8 114:20 sat 117:10 satisfied 116:23 saw 40:22 Sax 55:22 scale 83:20 scaling 85:6 scenario 24:19 31:25 32:5,12 33:5,24 34:24 37:13 48:13 scenarios 20:19 25:10 38:3,4,9 40:10,22 48:20 schedule 63:10,22 101:24 103:15 scheduled 3:17 7:2 schedules 63:12 64:4 119:21 Schichtel 2:16 90:17 91:11,13,14 92:12 S-c-h-i-c-h-t-e-l 91:14 SCHICHTEL 91:13 scientific 105:4,9 scientists 114:17 scope 18:14 83:21 sea 13:3,5 49:19,24 Seas 67:12,15,21 Seattle 17:4 Seaway 100:5 second 5:25 30:6 34:6 50:7,22 71:13 83:24 93:5 100:11 118:5 Secondly 45:19	59:6 seconds 44:1,2 51:16 57:8 64:8 69:10 73:23 82:2 secure 77:20 securing 79:2 sediment 37:12 83:22 sediments 37:15 73:6 seeing 9:9 13:13 116:15 seem 23:14 63:20 67:18 68:23 79:19 113:23 seems 50:10 62:23 63:17,23 69:2 92:22 99:2 seen 10:11 36:13 96:10 115:8,15 117:3 select 71:3 sell 77:19 Sen 2:5,11 45:4 72:2 73:24 Senate 73:18 Senator 14:18 44:25 52:16 54:5 59:12 60:10 67:9 69:22 71:23 74:16 82:3 87:20 95:9 119:21,25 122:5,6,15 Senatorial 120:13 senators 90:9 98:23 99:10 send 42:7,9 73:21 123:8 Seney 78:7 sense 25:11 47:10 separate 57:16 separating 50:15	56:3 81:19 separation 20:16,19 32:25 34:7,14 38:5 50:8 51:24 54:11 59:9 61:22,25 62:21 63:1,9,19 64:11 70:9,11,22 71:9 72:21 73:8 74:3,11 76:3,7 77:11,13 79:15 83:1,15 84:2,4 85:25 86:7 88:3 90:7 91:8 93:14 95:19 96:2 98:22 109:18 sergeant 56:10 series 105:13 107:17 108:7 serious 116:18 seriously 48:23 59:16 serve 34:3 serves 19:20 21:8 61:17 services 61:21 setting 97:14 seven 111:18 several 3:14 5:12 15:12 19:13 41:16 46:10 119:4 sewage 55:15 81:11,12 sewer 37:9 s-h 104:12 shad 105:17 shape 19:12 share 74:7 121:8 shared 16:9 28:2 41:9 81:20 84:14 108:5 sheet 3:16
---	--	---	---

sheets 4:12	75:22	Sleeping 60:2	111:3
Ship 38:15,24 106:8 114:20	simpler 31:16	75:20 80:13	sort 106:1,2 115:10 123:5
shipping 92:25 93:20 109:22	simply 13:16 28:12 38:4,8 96:13	slide 28:18 30:14 31:21 42:1 43:22	sound 54:22
ships 60:16 100:7	single 22:15 28:12,13 30:10,14 34:14 66:2 78:4 109:17 112:13	slides 18:3,6 31:9 43:19	sounds 68:10 69:16
shores 75:7 110:14	sir 4:3,5 17:22 47:20 49:6,17 53:4 57:23 59:20,22 61:4,5 62:5,7,11,13 64:16 65:14,19 66:5 67:10 79:8,23,24 89:2 90:16,19 91:10,11 92:18 94:11,12 98:9,12 99:20 101:25 104:8 107:13 109:12 112:18 113:11,22 118:1 119:14 120:17,23	slow 51:5	source 42:14 54:15 100:6
short 17:17		slowing 51:6	sources 90:3
shortening 74:3		slowly 51:2	south 9:23 38:8
shorter 45:18 83:11		small 9:13 20:10 68:19 76:1 88:14 105:8 123:1	Southeast 75:2
shortly 52:21		smaller 31:22,24 32:1,2	southern 12:15
short-term 73:25 74:12		snapshots 66:22	space 4:23
shut 104:24 105:1		society 91:3	spark 123:7
sic 15:9		solicit 5:25	spawning 50:12 114:10,22
sides 97:9		solution 47:25 48:2,5 50:9 54:10 58:16 62:18,21 63:25 68:9,18 69:12 71:5 74:11 80:22 93:15	speak 5:5 6:19 7:4 20:14 46:6 53:11 65:21 67:5 74:22 95:25 97:17 109:17
sight 60:2	sit 95:10	solutions 48:19 62:25 70:8,18 82:15 83:14	speakers 6:25 67:8
sighted 81:5	sites 11:21	solve 71:1	speaking 19:23 66:22 85:19 97:5 100:14
signed 4:5,10 86:24 119:25	Sitkins 2:10 59:21 62:12 67:7,11 69:21	solving 84:11	speaks 122:7
significant 16:14 20:6,7 21:17 29:14,17,25 33:10,11,17,19 34:8,17 35:2,21 36:3,19 37:1,11,20,22,24 38:1,20,21 40:6 68:6 95:16,21 96:4,6,12 100:6	S-i-t-k-i-n-s 67:12	somebody 6:12 94:15 104:25 119:9 120:16	special 50:21
significantly 31:24 32:1,2 33:16	SITKINS 67:11 69:11	somehow 49:2	species 4:14 7:20 11:21 14:16 15:1 16:1 17:4 18:17,18,22,24 19:21 20:18 23:1,12,17,18 24:24 25:6,7,12 26:3,8,12,19 27:3,17,22 28:16,19,20,25 29:8,20 30:8,17,22,23,24 31:2 32:10,13,16 34:2 40:11,17 41:4,9 49:22 50:5,13 56:1,8 58:6
signs 9:9	sitting 115:18 122:14	someone 47:2 99:14 109:25 118:4	
silver 54:20,21 66:15 114:14	situation 10:21 86:12 88:1	somewhere 118:19	
similar 38:11,24 102:23	six 107:24	sophisticated 58:14	
similarities 106:14	Sixty 60:14	sorry 11:10 47:18 64:17,19 65:11 77:6 99:13 102:2 106:25 110:18	
similarly 31:5	ski 91:1		
simple 22:22,23 24:5,11 58:9	skip 87:5		
	skittish 54:21		

66:12,13,14,16 68:4,7 70:6,19 71:2,10 76:4 79:18 82:20,22 84:13 90:23 99:3 100:7,24 108:4 109:8,11 111:1,12 116:9,16,17 118:24 119:1 specific 10:16 29:5 33:10 64:23 66:13,24,25 85:8 100:9 108:21 120:14 specifically 7:15 8:15,23 9:18 11:19 25:11 65:7,9 66:20 67:5 100:20 101:2 102:17 104:23 107:20 111:11 spell 43:14 45:5 72:2 76:23 spelled 67:3 spelling 66:1 97:1 spend 18:7 20:20 24:1 25:13 32:24 45:9 111:2,5 119:4 spending 78:22 110:25 spent 68:15 80:10 93:12 split 38:7 spoke 56:9 61:15 112:4 spoken 55:7 112:14 sport 54:14 Sportfishing 87:16 spots 11:8 spray 78:11	spread 48:13 spreads 15:16 Spring 7:12,15 squawfish 59:3 St 12:11 55:23,25 56:6 60:6 73:2 85:23 99:4,7 100:5 112:11 Stabenow 2:5 14:19 45:1,4 52:16 54:5 59:12 60:10 82:3 90:9 94:18 119:21 122:6,15 stack 96:18 staff 74:5 75:2 120:12,13 122:15 staffers 120:2,3 staffs 120:5 stakeholders 15:13,20 19:8 54:5 81:24 109:1 stand 27:15 39:24 57:10 standards 36:18 103:25 standpoint 83:3 star 11:17 start 26:7 32:19 43:22,23 44:14,24 58:18 106:17 123:8 started 16:13 104:2 starting 8:15 120:2 startled 54:21 state 11:15,20 14:19 15:5,19 16:10 28:7 32:9 39:9 45:10 47:16 51:1,22 55:8	56:22 61:20 65:19 85:15 93:4,22 108:13 116:3 State/Corps 19:4 state-agency 108:7 stated 80:16 statement 2:3,4,24 44:5 114:8 statements 83:8 114:25 states 8:18 12:2,19 13:19 38:13 48:9 81:8 90:5 97:23 108:13 status 19:9 76:2 stay 42:3 89:19 110:21 stayed 119:22 121:24 steam 56:6 steering 19:6 117:10 stenographer 43:10 44:8 step 14:21 45:17 46:24 48:10 58:23 66:11 70:5 stepping 84:16 steps 35:21 45:11,13 46:17 71:7 74:12 99:17 107:20 108:14 109:20 110:5 Steve 2:13,22 74:17 79:7,10 94:19 118:7 stewards 40:18 74:8 stewardship 75:15 stick 18:5 26:4 58:11 59:7	sticks 59:14 Stinson 2:18 96:23 98:11 S-t-i-n-s-o-n 98:11 STINSON 98:11,13 stood 115:14 stop 27:9 28:14 48:13,21 56:7,12 57:10 58:14 60:17 64:5 82:5 89:12 116:17 120:8 stoppage 48:1 79:17 stopping 28:5 30:7 50:11,16 store 78:13 storied 118:10 storm 37:11 51:9 96:7,12,17 storms 29:16 81:13 96:10,18 strategic 109:10 strategies 10:4 stream 28:21 streams 20:8 112:25 Street 1:5 strength 75:10 110:9 stress 13:22 68:16 81:14 stretch 30:11 stretching 17:2 strictly 100:8 119:1 strings 98:18 strip 54:15 strong 9:15 12:6,14,20 70:20
---	---	--	--

76:5 82:19 119:17 stronger 10:12 strongest 77:11 strongly 12:23 strove 15:20 structure 25:2 26:20 35:3 structures 49:11,13 studies 62:19 75:23 85:21 105:4 studying 102:15 stuff 50:14 56:19 94:25 95:22 114:10 115:24 stupid 56:25 57:2 subject 49:9 64:3 submission 15:2 submit 3:23,25 44:19 submitted 6:7,8,15,17 101:12 subsequent 26:6 27:20 subsistence 70:15 substantial 84:9 114:16 substituted 84:4 suburbs 21:10,19 successes 118:11 Sucker 60:4 sudden 35:15 106:17 suffer 40:4 54:24 sufficient 11:25 34:5 suggest 83:13 90:12 93:16	suitably 63:22 summarize 85:3 summarized 112:11 summary 4:16 16:18 summer 80:11,12 Sunday 52:14 Superior 9:11 58:3 60:4 78:12 supplies 84:22 supply 21:2 70:10 support 12:6 20:12 22:19 52:16 60:21,25 76:11 83:4 90:11 supporting 68:19 supportive 50:7 60:24 suppose 98:21 supposed 41:21 sure 8:14 9:3 10:8 11:18,21 12:17,20 18:10 20:24 24:12 34:4 36:12 39:20 41:17 44:13 47:9 49:9 59:1,14,16 61:6 63:5 65:10 69:3 85:16 88:7 95:9 108:1 surely 88:21 surface 24:7 surrounding 21:10 29:22 53:16 90:5 sustained 25:25 swamped 29:16 96:10 swim 29:8 119:12 swimming 24:24 75:6 111:12	swirls 57:14 switch 38:22 synopsis 17:19 system 1:14 10:14,22 11:7 19:1,18,19,24 20:13,21,24 21:5 28:13 29:2,8,21 30:12,15,18 31:8 33:11 34:3,11 38:7,10 40:1 48:3 51:10 56:2,5 59:2 60:4,6,7,8 61:8,17 84:23 88:15 89:13 93:1,25 110:11 117:20 systems 26:16 <hr/> <div style="text-align: center;">T</div> <hr/> table 2:1 5:7,10 42:19 101:20 tag 63:18 76:12 tagged 106:13 taking 47:22 58:5 97:9 105:10,24 talk 11:4 32:24 55:12 56:3 60:9 66:1 76:15 91:16 108:14 120:2 talked 19:25 55:22 60:18 91:21 105:7 115:10 117:14 talking 16:14 20:20 24:1 25:14 28:10 36:4 45:11 56:1,4 58:19 68:15 87:14 96:3 97:7 99:3 106:6 108:12 117:12 target 41:4 targeted 51:11 TARP 63:14	task 59:14 73:18 88:19 team 5:22 15:16 34:12 120:3 tear 116:12 tearing 113:5 technical 116:3 technologies 10:13 18:16,21 26:18 38:5,11 65:8 66:19,25 96:9 111:9 116:20 technology 18:24 24:2 26:23 28:12 30:7 41:2 45:21,23,24 66:12,24 79:20 111:14 technology-only 38:12 tedious 102:4 telecon 108:13 ten 25:13 26:12 32:1 41:3 66:23 term 71:8 107:6 113:23 terms 6:15 45:21 46:9 57:15 terrible 55:22 terrifying 68:8 terrorists 91:1,4 test 105:21 106:1 testified 50:3 112:4 testimony 123:16 124:7 testing 105:9 tests 105:13 thank 5:17 7:6 13:21 14:17,22 17:20,22 42:9,11 47:9,11,20,21
--	---	---	--

<p>49:5,6,8,16 51:25 52:1,21,22,23 53:10 55:2,3,4 56:13,14 57:17,18 58:1 59:12,18,19,20 61:3,4,5 62:11 64:15,16 67:6,16 69:19,20,21 70:1 71:21,22,23 73:24 74:13,15,16,22 76:15,17,18 77:6 79:4,5,6,22,23,2 4 82:8,17 84:15,24 85:1,2 86:20,22 87:14 89:2,22,23,24 90:14,15,16 91:8,9,10 92:9,10,11,12,21 94:9,11,12 95:22,23 96:22 97:4,15 98:7,8,14,19,23 99:19,20,21 101:10 104:7 107:12,25 112:17 113:9,10,11,15 118:1,20 121:20,22,23 122:4 123:14 thanks 42:12 45:5 53:1 88:24 89:1 121:21 that's 7:17 13:23 16:14 26:9 27:17 32:16 36:2 39:17 40:12 43:20 44:8,22 46:16,24 50:25 51:24 52:5,20 60:25 61:19 67:4 68:1,3 72:3,12,22 73:6 78:15 86:12 88:3 93:8 94:2,4</p>	<p>95:14 96:20 97:9 98:6 99:6,25 100:21,24 101:4,5 103:5 104:24 106:19 107:5 111:1,2 112:21 114:3,12 115:9 116:25 119:2,9 121:10 122:4 123:9 theme 112:9 themselves 23:19,25 81:1 therefore 33:12,16 84:22 there's 11:4 14:12 22:6 25:16 26:1 32:12 35:2,21 42:24 45:20 49:11 51:4 56:18 61:18,24 73:7 87:25 88:5,9 92:23 93:17 101:7 104:25 111:15 117:6,16 123:6 they'll 11:3 they're 6:15 9:1 17:8 20:9 22:10 31:14,22 59:15 69:1 73:3 104:21 105:17,19 114:25 120:1 they've 101:13 thin-skinned 17:13 third 21:11 40:3 50:17 61:11 84:1 Thirty 51:16 60:14 Thornton 117:18 thorough 83:12 thoroughly 17:14 thoroughness 53:25 thousand-mile</p>	<p>93:7 thousands 105:16 threat 51:23 54:2 58:20 70:16 80:21 82:6 threats 82:23 thrive 89:18 throughout 5:13 13:9 52:11 75:11,15 Thursday 1:8 ticket 68:18 tied 33:20 Tim 117:10 Time's 58:13 Tip 69:25 71:20 today 7:18 8:2 18:1,6 26:9 27:15 28:10 31:5,20 36:12,23 39:17,19,24 40:14 41:8,19 42:7,19 44:17 53:11 54:3 55:23 56:1 61:13 65:7 69:14 70:23 71:15 82:18 83:7 87:15 90:25 100:21 110:10,24 112:13 121:15 123:16 toes 14:21 tomorrow 107:18 tonight 3:3,14,23 5:5,9,18 6:7,10,19 14:18,23 15:7 16:5,8,16 42:4,13,25 43:10 44:18 60:12 74:21,23 75:4,14 77:14 85:12 98:14 114:25 115:8,17,24</p>	<p>116:15 119:20 121:24 122:7 123:14 tonight's 3:4,16 4:21 Tony 2:18 92:17 96:22,25 97:3 tool 21:8 39:3 tools 101:2 top 30:24 96:13 98:15,16,24 110:21 topic 16:14 17:16 122:10 topics 120:14 total 21:4 30:3,5 37:25 72:21 73:5,8 74:3,11 78:2 79:14,17 99:11 123:16 totally 57:16 touch 11:5 42:3 88:5,11 104:18 touched 41:10 97:24 tough 49:4 98:17 115:4 Tourism 89:8 93:3 tourist 54:25 toward 21:16 23:23 34:25 35:1,21 85:12 109:10 110:10 112:8 118:23 towards 74:11 town 88:12 toxicant 10:15,18 toxicants 9:19 trace 36:7 track 9:6 43:25 86:9 tradeoffs 84:10</p>
--	---	--	---

trade-offs 39:11 108:23 traditional 22:8 25:3 traffic 57:14 81:16 transcript 124:5 transcripts 112:13 transfer 15:22 18:22 19:21 20:18 23:17 27:4,6 30:8,11,17 40:11,15,17 61:18 70:6 118:24 119:1 transferring 18:18 27:23 110:11 transparent 117:5,9 122:18 transport 40:15 78:11 Traverse 1:6 7:13 47:16 48:25 52:19 75:19 79:11 82:14 87:15 89:7,11,17 90:1 97:11,16 104:22 111:25 112:7 113:6 treated 21:6 treatment 25:7,8 28:19,20,25 29:11,15 34:2 35:10 36:11 37:6 65:2 81:11,14 83:22 tremendous 53:15 68:5 tribal 15:19 tricky 86:12 tried 29:2 39:5 55:7 56:14 100:16 trip 78:6	trouble 60:20 trout 79:12 90:23 t-r-o-v-e 112:22 truck 81:7 121:15 trucks 87:23 true 46:4 124:6 truly 54:10 60:21 truncated 72:11 trust 82:16 97:25 109:5 122:25 try 6:13 10:2 17:14 23:16 29:7 30:23 37:21 44:13 57:10 85:3 86:13,17 109:5,9 116:14,21,24 trying 9:18,25 10:25 12:18,20 26:2 41:4 42:25 44:7 69:11 86:12 101:1 108:18 109:4 111:6 114:19 116:19 118:24 tune 106:3,4,7,10 tunnel 63:13 tunnels 29:24 30:1 33:20 37:10 63:11 102:21 103:1,12 117:23 turn 7:4 14:4 17:17 42:10 106:2 turning 104:16 twice 82:10 twin 78:5 Twitter 42:8 two-fold 18:20 two-way 30:10,11 32:16 122:16 type 17:5 18:20 50:7 60:11	103:23 105:17,24 118:23 types 10:7,20 25:10 29:6 <hr/> U <hr/> U.S 1:11,16 3:6 5:1,4 13:6 17:24 53:23 54:4,5 70:3 Ullrich 115:14 ultimately 48:6,11 72:17 80:23 88:19 unacceptable 63:2,10 uncertainty 67:2 uncomfortable 88:8,23 undermine 76:13 understand 17:14 19:20 39:20 46:11 49:9 59:10 67:19 114:19 122:18 understandable 73:15 understanding 18:11 24:3 98:6 107:23 understands 8:14 65:11 understood 97:14 undertaking 115:16 undervalue 79:1 undervalued 77:22 underwater 56:11 undone 119:7 unfortunately 43:17 68:1,3	unique 26:19,24 97:2 United 48:9 97:23 University 55:21 unless 109:17 untreated 24:7 unusual 93:17 unwanted 112:23 unwilling 57:6 upcoming 90:13 update 44:1 upgrade 81:15 upgrading 81:18 upon 93:5 upper 38:8,15,23 upside 56:17 upstream 113:2 upward 106:16 urge 81:24 83:10 urgency 47:10 63:23 92:22 109:4,5,6 112:7 115:1 121:17 urgent 51:23 76:16 usefulness 80:20 user 79:12 users 13:9 19:1 usually 21:16 utility 116:6 utilize 32:6 utilizing 84:21 <hr/> V <hr/> vacation 80:11 valuable 93:19 valuation 22:25 value 77:24,25 78:8 89:10 92:25
---	---	---	---

<p>93:1,2,4,5,10,21 valued 77:21 values 93:7 variability 22:8 variety 15:8 19:23 54:20 112:6 various 15:22 16:6,8 50:13 108:23 122:6 vary 39:14 vast 48:12 99:4 venue 8:14 verbal 92:15 101:15,17,22 versus 6:17 92:25 via 100:7 viable 84:5 93:14 vice 52:5,8 102:5 Victor-o-g-l-e-s-o-n-g 82:13 view 46:17 80:13 viewed 42:16 viewing 112:15 viewpoint 57:21 village 88:13 visits 120:4,12,13 visual 43:19 vitally 51:24 Voglesong 2:14 80:1 82:9,10,12 voice 6:20 8:3 13:22 14:3 17:12 85:11 112:7 115:20 voices 43:2 voltage 107:2 voltages 107:8 volts 105:3,25 107:5 volume 21:5</p>	<p>28:17,22 29:11 35:5 36:3,25 volumes 33:21 volunteers 75:15 voracious 54:14 Voters 80:5 voting 98:25</p> <hr/> <p style="text-align: center;">W</p> <hr/> <p>wait 54:3 70:13,17 waited 72:8 waiting 51:19 waive 86:23 walk 43:20 122:23 walking 16:23 walleye 60:5 warning 31:2 Warren 2:10,17,23 65:25 92:17 94:14 120:19 Washington 48:7 95:10 wasn't 30:20 55:14 74:4 120:21 waste 62:23 69:9 75:23 wastewater 21:6 35:6,9 36:11 37:6 80:19 81:18 84:21 119:7 water 11:13 13:7,9 21:2,3,15 25:6,7 27:13 28:21 31:4,13 33:11,21,24 34:1,2,4,5,16,23, 24 35:2,5,8,12,14,1 5,17,19,21,24 36:1,2,6,11,16,1 7,23,25 37:1,5,14 38:19</p>	<p>40:7 48:1 51:9 55:17 56:4 65:1 70:10,15 81:11 82:14,17,19 83:21 86:15,16 88:11 90:4 95:16,21 102:19 104:25 106:15 116:7 water-borne 70:23 76:7 waters 24:7 70:10 81:4 82:21 84:14 89:17 Watershed 69:25 71:20 75:19 watersheds 62:21 waterway 1:14 11:7 19:1,19,24 20:13,14,21 21:5 24:6,18 27:11 28:13,17 29:5,11 37:2 38:6 40:1,5 49:14 61:17 100:5 105:11 117:20 119:5,6 waterways 15:23 16:7 21:13 23:19 24:17 26:13 28:24 30:18 31:11,19 36:14 49:12 58:22 114:7 Wayne 50:22 ways 9:18,20 10:19 15:22 23:16 24:23 26:7 32:5 40:11,25 45:16 51:22 55:19 81:15 109:24 118:25 120:22 weak 118:18 weakness 118:19,20,22 wealthy 57:11</p>	<p>wear 91:1 wearing 122:21 W-e-a-v-e 90:20 Weaver 2:16 89:4 90:17,20 web 6:7 54:15 website 5:6,8,20 6:4,8,18 41:25 42:14,18 44:15,19 101:20 112:13 we'd 5:9 98:6 week 12:9 weeks 32:7 73:21 weigh 39:16 72:16 weight 6:16 weighted 6:15 weird 64:4 welcome 3:3 5:7,10 72:5,25 94:12 we'll 3:18,20 6:12 7:1 10:4 12:8,10 28:1 42:4 43:7 63:3 86:20 104:9 109:3 we're 6:18 7:2,23 8:11,14,23 9:2,8,9,14,17,18, 19,20,24 10:1,3,5,11,12,1 3,15,19,25 11:17,18 12:3,7,9,11,17,1 9 13:15 16:5 18:8,12 19:22 20:21 26:8 28:10 32:14 39:17 41:3,16,17 42:3,23,25 43:10 44:7 45:14,21 46:23 52:15 56:1 57:17 61:10 68:9 72:5,6 74:25</p>
---	--	--	---

77:10 86:12,17 88:7,16,17,22 94:15,19,20,22 100:1,20 104:19 105:23,24 106:9,19 107:6 109:4 110:24,25 111:11 112:12 113:5,8 114:18 116:1,9,12,15,18 ,20,22,23,25 118:14 120:8,9 123:10 West 75:6 Wethington 1:13 2:4 5:2 17:17,22,24 24:10 45:7 49:7 52:23 55:3 59:19 61:5 64:17 66:5 69:20 71:22 74:15 76:17 79:5,23 85:2 86:25 89:1,23 90:15 91:9 92:11 94:11 95:24 99:21 102:12 103:8,11 104:1,7 107:7 108:1 110:2 113:10 118:1,4,22 119:11 121:21 we've 10:11,23 13:3,18 15:4 18:12 20:2,3,24 24:14,15 29:1,3 32:15 35:22 36:21 39:5 41:13,14 45:16 46:12 51:20 52:15,17 61:16 67:22 72:8 85:11 86:8 95:2 96:5,10 97:24 100:16 102:10 108:6,8,9,12 114:17,18 118:4 123:3,15	whatever 53:18 59:6,17 69:6 89:15,21 114:3 116:19 whatsoever 94:5 105:14 wherever 79:18 whether 46:3 103:4 white 1:18 4:23 7:7 30:19,20 47:24 60:10 118:13 121:2 whole 7:16,24 12:6 14:4 18:7 47:7 55:24 88:15 95:8 96:18 106:22 108:5 122:13,15 who's 7:4 46:18 90:1 whose 101:20 112:2 wide 105:5 widely 25:9 width 30:12 wife 7:13 wildlife 75:18 78:7 willpower 48:15 Wisconsin 75:2 81:6 wish 46:10 wishing 5:5 Women 80:5 wondering 103:4 work 10:14,15 12:24 14:13 20:3 37:22 39:4 45:16,20 46:12,14 47:1 50:2 51:21 57:3,22 61:19 67:12 70:3 71:3 75:4,15,17 81:25	85:14 92:21 100:24 101:7,8 106:19 120:21 worked 7:9 15:18 104:20 working 9:2,21 11:15 12:1,19 13:18 15:5 45:21,23 46:19 49:21 63:15 108:15 109:7 117:4 works 24:13 45:25 world 87:23 world's 47:6 54:14 worry 4:9 6:19 worse 88:1 worth 76:11 worthless 58:17 wrap 41:19 WRDA 51:20 write 3:24 44:20 writing 17:8 123:8 written 6:8,9 44:20 52:21 wrong 90:19 122:24 wrote 56:21 115:12 wWterway 19:18 www.asiancarp.us 121:11 Wylie 87:9 101:18 <hr/> Y <hr/> yellow 3:22 5:11 11:9 13:24 43:24 yesterday 45:9,19 yet 9:1 50:24 71:12 101:21 112:10 118:5	yield 91:15 York 75:3 108:14 Y-o-u 89:25 you'll 6:24 16:4,8 17:11 31:6 42:20 48:24 104:8 113:18 123:8 young 78:18 [REDACTED] 104:11 [REDACTED] 2:15,19 89:3,25 104:11 [REDACTED] 87:12 yourself 123:5 yourselves 19:9 39:9 you've 4:8 20:6 21:23 36:13 48:12 55:11 56:8 57:13 68:10,15 73:4,5 77:11 103:23 109:15 113:25 114:4,11 118:11,16 Yup 49:18 113:17 <hr/> Z <hr/> Zaborowski 1:10 2:3,24 3:6 zebra 60:15 zero 8:15 66:22 73:3 75:1 zip 43:16,22 47:18 49:17 52:3 53:4 59:22 62:13 65:19 66:1 67:10,11 69:25 71:25 74:19 76:19,21 79:8 80:2,4 90:19,21 91:11 92:18 94:13,14 96:24 98:9 102:3,6 104:10 107:14
--	--	---	--

109:12 112:19 113:12 118:5 119:15,17 120:20 zone 30:21,22,24,25 31:1 58:24 111:13			
---	--	--	--