Minutes Inland Waterways Users Board Meeting No. 63 April 13, 2010 The Waterford at Springfield Springfield, Virginia

[Note: The following minutes of the Inland Waterways Users Board meeting No. 63 were approved and adopted at Inland Waterways Users Board meeting No 64 held on October 20, 2010 in Bettendorf, Iowa.]

The following proceedings are of the Inland Waterways Users Board meeting held on the 13th day of April 2010, at the Waterford at Springfield, Springfield, Virginia. Mr. Stephen D. Little, Chairman of the Inland Waterways Users Board presiding. Inland Waterways Users Board (Board) members present:

MR. RICHARD R. CALHOUN, Cargill Marine and Terminal, Inc.;

MR. LARRY R. DAILY, Alter Barge Line, Inc.;

MR. MICHAEL W. HENNESSEY, Brownsville Marine Products, LLC;

MR. MARK K. KNOY, American Electric Power (AEP) River Operations;

MR. STEPHEN D. LITTLE, Crounse Corp.;

MR. DANIEL T. MARTIN, Ingram Barge Co.;

MR. TIMOTHY M. PARKER, Parker Towing Company;

MR. JOHN PIGOTT, Tidewater Barge Lines;

MR. MICHAEL P. RYAN, American Commercial Lines, LLC;

MR. WILLIAM M. WOODRUFF, Kirby Corp.;

Also present at the meeting were the following Federal observers, designated by their respective agencies as representatives:

MS. JO-ELLEN DARCY, Assistant Secretary of the Army (Civil Works)

MR. ROBERT G. GOODWIN, JR., U.S. Department of Transportation, Maritime Administration;

MR. NICHOLAS MARATHON, U.S. Department of Agriculture, Agricultural Marketing Service;

MR. HOWARD DANLEY, U.S. Department of Commerce, National Oceanic and Atmospheric Administration.

Official representatives of the Federal government responsible for the conduct of the meeting and administrative support of the Inland Waterways Users Board from the U.S. Army Corps of Engineers as follows:

MAJOR GENERAL WILLIAM T. GRISOLI, Executive Director, Inland Waterways Users Board and Deputy Commanding General for Civil Works and Emergency Operations;

MR. MARK R. POINTON, Executive Secretary, Inland Waterways Users Board;

MR. KENNETH E. LICHTMAN, Executive Assistant, Inland Waterways Users Board;

Staff support provided by the U.S. Army Corps of Engineers was as follows:

MR. DAVID V. GRIER, U.S. Army Corps of Engineers, Institute for Water Resources;

MS. MARY ANNE SCHMID, U.S. Army Corps of Engineers, Headquarters, Programs Integration Division;

MR. MICHAEL F. KIDBY, U.S. Army Corps of Engineers, Headquarters, Operations and Regulatory Division, Navigation Branch.

Program speakers in scheduled order of appearance were as follows:

MR. GARY A. LOEW, U.S. Army Corps of Engineers, Headquarters, Chief, Programs Integration Division;

MS. JEANINE HOEY, U.S. Army Corps of Engineers, Pittsburgh District;

MR. WILLIAM R. CHAPMAN, Chief, Operations Division, Great Lakes and Ohio River Division, U.S. Army Corps of Engineers

Other individuals called on to provide additional information in response to questions raised by Board members during the meeting included the following:

MR. MICHAEL G. ENSCH, Chief of Operations Division, Headquarters, U.S. Army Corps of Engineers

The individual who provided public statements during the public comment period at the end of the meeting was:

MR. CORNEL J. MARTIN, President and Chief Executive Officer, Waterways Council, Inc.

MR. MARK R. POINTON: Can we all take our seats please, although it looks like most of you have already.

I'd like to welcome everyone to the 63rd meeting of the Inland Waterways Users Board, here in what was beautiful, sunny Washington D.C. yesterday, it's not quite that nice out today. My name is Mark Pointon. I am the Executive Secretary and the Designated Federal Officer for the Inland Waterways Users Board.

Before we start the meeting, we are obligated to read for the record the following. "The Users Board was created pursuant to Section 302 of the Water Resources Development Act of 1986. It provides the Secretary of the Army and the Congress with recommendations on funding levels and priorities for modernization of the inland waterways system. The Board is subject to the rules and regulations of the Federal Advisory Committee Act as amended. This is a "Sunshine in Government" meeting and as such it's open to the public. The U.S. Army Corps of Engineers is the sponsor of the Board and provides for all the normal activities of the Board."

If anyone wishes to make a public comment or provide a statement for the record, please see me during the meeting. Thank you.

These proceedings are being recorded and a transcript of the meeting will be made available shortly after the meeting is over. Anyone wishing to speak, could you please pull the mic to you and state your name for the record as you speak. Thank you.

Mr. Chairman.

CHAIRMAN STEPHEN D. LITTLE: Thank you, Mark.

Thank you for that opening, Mark. Why don't I go ahead and turn it over to General Grisoli for his opening comments right at this point.

MAJOR GENERAL WILLIAM T. GRISOLI: Thank you, Mr. Chairman, and welcome to the Inland Waterways Users Board. I'm Major-General Bill Grisoli. I'm with the Corps of Engineers, and this is actually my first session, so I'm excited about it. And I want to welcome the members of the Board, our guests, and everyone that has a great interest in our inland waters, which are so important to all of us.

I want to thank the team that set this up, Mark and Ken, for their hard work as they brought all of us together, because it takes good folks to bring these things together so that we can have good governance as far as working with the Board and working with the public.

I want to take a moment before we get started and welcome three other federal members that are observing today. First of all, Mr. Nick Marathon, Agricultural Marketing Service from the Department of Agriculture; Mr. Robert Goodwin, Director of MARAD, St. Louis Gateway

Office, Department of Transportation; and one of my many bosses; the Assistant Secretary of the Army of Civil Works, Ms. Jo-Ellen Darcy.

I'll invite them, after I say a few words, to make a couple comments before we actually start the Board meeting with Chairman Little.

Now, since the last time we met in December, when General Temple led the discussion, as far as the opening as the Executive Director, we've done a couple things. And the most important part of those, one, is continue to work on this report that we're going to take a look at today; and second is we submitted the budget, the FY11 budget. That particular budget will be discussed today. We'll talk about where we are in the budget for '11, and also we'll talk a little bit about the stimulus package, which truly assisted and enhanced our capability as far as inland waterways infrastructure this year and last year. So we're very, very grateful for those assets that we were able to receive from the Administration.

But one part that I'd like to talk about a little bit before I speak a little bit about the report itself, the main objective today, is to talk a little bit about why we're talking about that. Well, some of it's because of our challenges with aging infrastructure, some of it's because of our challenges with a flat budget, less than inflation, and some of those issues are things we have to look at in the future that will cost resources, and that's, for example, climate change.

So all those things need to be addressed over time - aging infrastructure. We're going to talk a little bit today about the 50-year old locks, some of the challenge that they have at Markland. We're going to take a look at Greenup, all those things that are directly related to the reason why this Board, which I'm very proud to say took a problem, looked at a problem, worked with industry among themselves and are going to offer solutions.

So I was very glad to hear that as a result of what happened in December to what we're going to talk about today, that we have a unanimous report as far as the desires and the effects and the concepts of what we'd like to see that will be turned in today, so that then we can then take a look at that report and continue moving forward on the ideas and concepts. So I'm very excited about that, and I'm really looking forward to that portion of the discussion today.

With that, what I'd like to do is provide an opportunity now for our other federal observers to have a time for some opening comments, if they'd like.

Mr. Marathon?

MR. NICHOLAS MARATHON: Right here. Thank you, General.

As a representative of the transportation staff of USDA's Agricultural Marketing Service, I'd like to thank the Board for the opportunity to be here today. As I mentioned in previous meetings, USDA has been busy working on a study of rural transportation issues regarding the movement of agricultural products and economic development in rural areas. I'm pleased to

announce that the report has been cleared and will be presented to Congress later this month or possibly early May.

The report looks at each of the transportation modes that affect U.S. agriculture, including trucking, rail, barge and ocean shipping. After the release of the report, I'll gladly share the report with the group, and would appreciate any comments from the Board on the report. Again, thanks for the opportunity to be here and look forward to the rest of today's meeting. Thank you.

MAJOR GENERAL GRISOLI: Thank you. I've just been informed that Howard Danley from NOAA is here now.

Would you like to make any opening comments, Howard?

MR. HOWARD DANLEY: Thank you.

MR. POINTON: Excuse me. Could you please speak into the mic for the court reporting? Thank you so much.

MR. DANLEY. Thank you General. Sorry we're a couple minutes late. Just to introduce myself, I'm Howard Danley. I'm filling in for Captain Lowell today who --

MAJOR GENERAL GRISOLI: Still needs to be a little bit closer.

MR. DANLEY: Okay, I'm Howard Danley. I'm filling in for Captain Lowell today who took over from Captain Barnum as director, Office of Coast Survey in January. And he's sorry that he cannot be here today. There's other pressing business he had to attend to today.

Just a few remarks; one, that the Gulf Coast Hurricane Task Force will be meeting the end of next month in New Orleans. This is our pre-hurricane meeting where we get together with our partners, Corps of Engineers and Coast Guard, to prepare for the hurricane season. And on May 21st, the Southwest Texas Waterway Advisory Committee will be observing National Maritime Day with a dedication ceremony of the Sabine Physical Oceanographic Real-Time System, or PORTS, which is our ports system, the tides and currents real-time. And that's already been in use a bit for a recent oil spill down there.

Thank you sir.

MAJOR GENERAL GRISOLI: Thank you. Thank you Howard.

Mr. Robert Goodwin, from the Department of Transportation?

MR. ROBERT G. GOODWIN: Thank you, General.

The Maritime Administration really appreciates the opportunity to participate in the Board meetings, especially this one, which should be most historic. With me today is Chris Moore from our headquarters office. Chris is the director of the Gateway offices.

There are just three things I'd like to bring to the Board's attention today. The America's Marine Highways program that you've heard from me about in previous meetings. We're finally to the point where the final rule is being reviewed and will be published in the very near future, so we're very close to the fruition or at least the initiation of this program.

We will be announcing awards for small shipyard grants within the next few days. So those of you all who have submitted applications for shipyard grants, you should know something in the very near future. And I've been advised that the second round of the TIGER grants, \$600 million, which are part of the ARRA (American Recovery and Reinvestment Act of 2009) funding, will be announced in the very near future. So there again, hopefully this is going to be some monies that will be put into the economy that will benefit all of us in the transportation industries.

Thank you, General.

MAJOR GENERAL GRISOLI: Thanks Robert.

Now, let me introduce our Assistant Secretary for Civil Works, Ms. Jo-Ellen Darcy.

MS. JO-ELLEN DARCY: Thank you General Grisoli.

Thank you. This is my second Inland Waterways Users Board meeting since taking up this position. And the last time we met in New Orleans, and this time I'm hoping that the results of this meeting -- everyone's been anticipating this report, and I think it's going to be something that all of us can look toward. I'd also like to thank Mark and folks from the Corps who've worked so hard on having this report come forward. We anticipate some lively discussion about it, both here and other places within Washington, and I think that's going to be a tribute to all of you here because you stepped up to a challenge that everyone's been talking about for a long time but nobody really sort of took it on. So I congratulate you for that.

I also congratulate you for having the foresight to have the meeting out here as opposed to downtown Washington today because we were able to make it here without any traffic violations. But I look forward to hearing from all of you. So thank you.

MAJOR GENERAL GRISOLI: Thank you, ma'am. Now I'd like to turn the meeting over to the chairman, Chairman Little. Steve.

CHAIRMAN LITTLE: All right.

Thank you, General Grisoli, and Secretary Darcy, and Board members and federal observers for being here today, and members of the public who are attending the meeting today.

This is a historic session, I think, of the Users Board. One of the things on the agenda today of course is the IMTS report, which takes a long view to how we can rebuild the infrastructure in this country, looking at a 20 year view. This report culminates the work of about a year and a half of a lot of folks who have spent many hours in meetings face to face and over the telephone. It must be hundreds of hours that have been spent.

This has been no small feat, and there's a lot of pride that comes with completing a work like this, and deservedly so. So we look forward to that part of the agenda today, where we can have a briefing on that report and present it to the public today.

General Grisoli, we welcome you to your first Users Board Meeting. General Grisoli has been a pleasure to work with so far. We've met on two or three different occasions and he brings a great deal of enthusiasm to this area. And we can look forward to working with him in the coming months and years on this project, and appreciate you being here and the level of interest you've shown already.

Having said that, let's go ahead and move into the agenda. The first item is the approval of the minutes from the last board meeting, Board Meeting Number 62. Board members, those minutes are in your package, and at this point, I would entertain a motion to approve the minutes from the last meeting.

Mr. Calhoun so moves, Mr. Parker's second. All in favor say aye?

[Chorus of ayes.]

CHAIRMAN LITTLE: Opposed?

[No response.]

CHAIRMAN LITTLE: Those minutes are approved.

Next on the agenda is the financial report and the status of major project investments, and Ms. Schmid will lead that part of the report.

MS. MARY ANNE SCHMID: Thank you Mr. Chairman. General Grisoli, Ms. Darcy. The project listing at Tab 4 in your notebooks has been updated to include the FY11 budget numbers. I think we also made a few updates to the ARRA amounts as well. The fact sheets for the ongoing projects were updated and were placed next to your notebooks this morning. I didn't get them out ahead of time. I'm sorry.

The only other thing I want to say today is just a little report on the revenues. They continue to be a little bit lower this year, and as of the first deposit in April, we are at about \$35 million.

Pending your questions, that concludes my report.

CHAIRMAN LITTLE: Has everyone found that in their package and had a chance to review that? Any questions for Ms. Schmid at this point?

Okay. No questions? All right.

Thank you Ms. Schmid.

All right, next on the agenda is a presentation by Gary Loew concerning the status of Recovery Act funding and projects. Gary?

MR. GARY A. LOEW: Thank you, Mr. Chairman, members of the Board, Ms. Darcy, General Grisoli. I'd like to accomplish two things during my presentation today. First to summarize some of the information Ms. Schmid just presented and show you how we used our funds in fiscal year '09 and '10, plus the ARRA funds.

Then I'll briefly discuss our plan for the future and introduce Ms. Jeanine Hoey, who will then describe the report that's on your table in more detail.

This is just a reminder of where we are today. We generally are budgeting about \$85 million a year in Trust Fund revenues with matching funds making it about \$170 million a year available to us for basically rehabilitation and new work projects. And as Ms. Schmid just commented, we're running a little bit low with revenues this year.

This is a pretty good news chart. It shows how we applied the revenues both for our Fiscal Year '09 program and the ARRA funds. And and as indicated there, you can see that the ARRA funds, which by law did not have to be matching funds, allowed us to approximately double the amount of funds we could put into inland waterways projects. And our execution is on schedule, so you will see by the end of the year we will have executed almost \$740 million worth of work. So we were able to do a lot of catch-up there, and I'll show you what those accomplishments look like just a few slides down the road.

This moves on to Fiscal Years '10 and '11. You can see in Fiscal Year '10, via the conference report, our total inland waterways program is about \$134 million, so you can see we're coming back down to reality as we have to deal with our limited funds, and budgeted for next year is \$158 million. That budget is before the Congress now.

This slide shows how we've applied the available funds for Fiscal Year '10. And as we have discussed in the past, we are focusing our funds on projects to try to fund them as efficiently as we can, to move them through to completion. So we are concentrating, as you can see here on Olmsted and on Emsworth with smaller funds applied to other projects as we seek to complete those and move them forward.

In Fiscal Year '11, you see the same essential information. You can see all the construction projects there again, but with most of the funding being focused on Olmsted and

Emsworth again in Fiscal Year '11. This slide also shows the MR&T funds that are being applied to the inland waterways.

This is a list of accomplishments. It has been one of our budgeting priorities to seek to fund efficiently and complete projects. You can see that roughly in Fiscal Years '09 through '12, we have completed or will complete about 11 projects, mostly rehabilitation projects on the list. So we're feeling good that for those projects that we can fund efficiently, we are moving them through to completion and executing them for approximately what we have budgeted. So we are pleased about that progress, and as we've discussed in the past, plan to continue these trends into the future.

Now, to move on to the future, we do have a plan. That plan is on your table today, and it is a product of both the Corps of Engineers and the Inland Waterway Users teams. All of you who have spoken already today have mentioned that we've completed that, and basically it will set the blueprint for how we plan to work forward together into the future.

So in developing the plan, the team basically took the lessons from the case study report and came up with some fundamental relooks and rethinking of how we manage our inland waterways and how we manage the funding for the inland waterways and apply them. And they took a systems view, basically a capital planning approach to what do we need to do to rehabilitate the waterways and keep them functioning efficiently over the next 20 years, and to right size the revenues to enable us to do that.

It was an outstanding partnership, I think we all feel that way, and believe that it's important that we continue this process and this partnership into the future, which implicitly for the Corps of Engineers requires that we be a little more collaborative and more transparent as we worked with the Users Board and the industry out into the future.

Just a couple of slides I won't say too much about because Ms. Hoey will speak in more detail following me, but there were a number of significant accomplishments of the study team. They included both -- or not both, but a business model, and implicit as part of that business model, a relook at how we do programming, our process for applying funds. And even more explicit than that, we have had to relook at our business model for design and construction and how we take a new look at things such as how we apply the funds, how we contract, how we accomplish the designs, something we will look at in the future.

It was incredibly important to applying funds efficiently that we find a way to prioritize much better than we have in the past and focus our funds on completing projects efficiently. So just some very outstanding, comprehensive package of recommendations that came about as a result of taking a long term systems view of the waterways and moving past just a project level view.

This is really the outcome. We are modifying our delivery process in terms of how we program funds. We will be modifying in a number of ways our project delivery process. These lessons learned, I guess, and I would say modifications, I would also add that we are rethinking how they apply to the rest of our Civil Works as well. I think there are a lot of lessons learned from this report, that we're just not going to stand on and implement it for the inland waterways alone, but we are also looking, with Ms. Darcy's approval -- and not only consent, but her sort of demanding that we move forward aggressively to take a look at these lessons learned and applying them to the balance of our program as well. So we have plans to do that, including plans on rethinking our partnership relationships with other elements of our program such as coastal navigation, inland navigation, hydropower, environmental projects, and as well. There's a lot of lessons learned here that have broad implications for us.

I'd be happy to take any questions you have before Ms. Hoey comes up or you might want to wait until after she's made her presentation, and then we would both be available for any questions you have.

CHAIRMAN LITTLE: Let me ask a question at this point, Gary, going back to one of your earlier sides with the ARRA funding. I think you indicated \$394 million?

MR. LOEW: Yes.

CHAIRMAN LITTLE: So is that a current number as of today? Correct me if I'm mistaken, but there's an obligation to -- there's a commitment to obligate funds by the end of this fiscal year, so is this a current number or is this a number that you expect to commit by the end of the fiscal year?

MR. LOEW: It is a current number that must be -- I'm sorry, that all of the ARRA funds must be obligated by the 30th of September.

CHAIRMAN LITTLE: Okay.

MR. LOEW: This is our estimate of what we will spend on inland waterways projects, and we have one more possible additional funding of one rehab that we are considering if additional funds become available through savings from other projects.

CHAIRMAN LITTLE: Okay.

MR. LOEW: So it will probably be this amount or higher.

CHAIRMAN LITTLE: Or higher, okay. And so as you're looking at additional funds that may become available, how do you factor in where you may want to put that? Do you look at other projects that can use those dollars and those dollars would advance the completion date of those other projects?

MR. LOEW: Yes, that's correct; we basically use pretty much the same criteria that we use to select projects at the beginning. So we look at the highest value in terms of economic benefit or environmental or social benefit. We also of course have to allocate them to a project where the funds can be obligated by the end of the year. And since we are -- I guess the one additional criterion would be since we are using funds as they become available, the amount available sort of has to match the project requirement. But other than that, they're pretty much essentially the same as the criteria we have used all along.

CHAIRMAN LITTLE: Okay. All right.

Any other questions for Mr. Loew at this point?

All right, thanks Gary.

MR. LOEW: Thank you.

CHAIRMAN LITTLE: Ms. Hoey?

MS. JEANINE HOEY: Good afternoon Chairman Little, General Grisoli, Secretary Darcy and members of the Board. I'm happy to be here this afternoon to present the final report of the Inland Marine Transportation System Capital Investment Strategy Team.

Most of the information that I'm going to give you this afternoon I presented in more detail at the December meeting. I'm not going to be quite as detailed this afternoon, but will really summarize what the team has been doing over the last year, starting with why we're doing it, going over what our recommendations for the capital investment strategy are, the process improvements that Gary has already shown you most of on his slide, the benefits of what we're doing, and the report, and then what the next steps are.

Starting with why. You've seen this slide before, where we show the current program with the current revenues, what the program might look like. It's a little hard to read on the screen there, but there are seven projects that are currently under construction, only three of which could be completed with efficient funding. The other four would have to be delayed and receive inefficient funding before they could be completed with the current revenues. And the current revenues that we're talking about are the \$170 million a year total, \$85 million from the Inland Waterway Trust Fund and \$85 million from the general treasury. And as we've heard this morning, our revenues have been even lower than that lately.

But you see with Chick Lock and Kentucky Lock, we would actually have to stop construction of those projects, and not start again until 2022 for Chick Lock and 2023 for Kentucky. We would not finish the IHNC project till beyond 2038, which is as far as I've gone in this slide, and there would be no new starts. Nothing else could be constructed with the current revenues that we have right now.

This is a summary of our strategy that we've developed. As Gary has mentioned, it was a collaborative team of Corps of Engineers experts and also waterway industry experts that worked together over the past year and a half. The three really main points of change within this report, and some of them have already started happening. One is the projects are funded efficiently. We do not start a project until we can fund it efficiently and complete it.

Emphasis on finishing projects. In the past we were emphasizing starting projects. So we could make sure that we could finish the projects with the funding that we have before we even started anything. And then a system evaluation. We're looking at the entire system and what is the highest priority of the system with the funds that we have and not looking at projects one at a time like we have done in the past, first come, first served. So we're looking at the system to see where the highest priority need is.

We started out with an unconstrained list and developed a 20 year program of what each district thought would be needed over the next 20 years. And we prioritized that list based on criteria that we developed, and then looked at what absolutely had to be done within the next 20 years to give ourselves a reliable system. And that's where we came up with a \$380 million a year target. And that target, as we looked at the list, it became apparent that we really needed two levels of investment, one for new construction and one for major rehab. The new construction level is about \$320 million a year and the major rehab is about \$60 million a year.

That line between those two is a little fuzzy and not meant to be a hard and fast line. Initially we had a lot of projects under new construction, a bottleneck of new construction. And so the initial part of the program, that \$320 million, is probably a little bit more for new construction than it is for major rehab at this point. So that line is meant to be a little fuzzy and focus, you know, where the real need is.

That \$380 million also includes \$30 million of management reserve each year that would not be allocated specifically to a project at the beginning of the year. So that as we go through the year, if funds are needed on a contract that's been fully funded and we have a modification and we need to apply those funds, we would have a management reserve and not have to stop any construction. At the end of the year, if those funds are still available they can be allocated to projects that would need them in the next fiscal year.

The program that we did put together does have some additional out year capability online; there's some capacity in there. We know what the condition of our facilities are. We know that we have very old structures and that even though we are looking at the condition of the facilities as we see them now, that emergencies are going to happen and something may happen that we're not aware of at this point. So we wanted to put some capacity in there so that if we had to move a project up in the priority order because of some condition, problem, that we could do that.

So with that, our new construction program is shown here. The ones in the very attractive green color on the slide there are the current projects that are under construction, and the very, very faint green that you can barely see on this screen are new construction projects that would start within the 20-year program. The last two, Lock and Dam 22 and 24 have a double arrow at the end. They would continue beyond the 20 year program.

This shows the major rehab program. Again, the top two are projects that are currently under construction and the remainder are those projects that would be new construction. I've shown four projects here that don't really have a bar in front of them, LaGrange, Greenup, Upper Miss Lock and Dam 24 and Upper Miss Lock and Dam 25. Those projects also have a new construction project, and the way we had outlined the program, the new construction and the major rehab would have occurred at the same time. So the question to the districts was what actually had to happen first. Did we need to rehab a facility before we could construct the new lock or would new construction be a priority over major rehab?

In all four cases, the new construction was the priority. We kept those in the list of the major rehab program to preserve their priority order. As we go through this process, it would be a dynamic process where we reviewed the criteria and the priority on a yearly basis, and as those new construction projects happened, it's anticipated that the priority of the major rehab may move them down in priority order, or it may not. So we wanted to preserve that priority until the new construction happened and we could re-evaluate with the criteria that we have where they really fell within the program. So we left them in there but we don't anticipate that they'll be in that priority order by the time we get to them. All right.

We next looked at the cost sharing and revenue plan, and again the team's recommendations are that we change the cost share formula to remain 50 percent federal and 50 percent from the Inland Waterway Trust Fund for lock new construction and lock major rehabs that are above a \$100 million. And lock major rehabs that are less than a \$100 million and dams are a hundred percent federally funded through the General Treasury.

With the program that I outlined in the previous two slides, this works out to be about \$270 million a year from the General Treasury and about a \$110 million a year from the Inland Waterway Trust Fund.

With the current revenue plan, this would require a 30 to 45 percent increase in the fuel tax, so it would be an increase of between 6 and 9 cents per gallon. The 6 cents per gallon is based on the average of \$85 million a year in revenues and 9 cents per gallon is based on last year's revenues, which were a little bit lower, so it would have to fall somewhere in between there.

We're also proposing a cost sharing cap. One of the things that came out of the case studies was our cost estimates that have grown significantly on several of our projects, and in order to keep a level of control on the costs, in addition to some of our process changes -- I'll go

over on the next slide - we're also recommending a cost sharing cap, where that cap would be set at the originally authorized amount that was inflated to the start of construction. So we recognize that the start of construction may be much later than what is originally anticipated in some of our study documents.

So the cost would be inflated to that start of construction, and then if there are any other necessary costs that are agreed to by the team and the Board, they would also be cost shared. So if we've left something vital out that would not allow a lock to operate, those would obviously be cost shared, but if it's something that's nice to have that, you know, really makes it a great facility but isn't absolutely necessary, that that cost might not be agreed to be cost shared.

Gary discussed a little bit of our project delivery process improvements. I went through this list at the last meeting; I'm not going to go through these in detail. They are organized as to some that have already been implemented, such as risk based cost estimates. Others that are proposed improvements that we could implement at this point and time, they don't require any additional authorization or study, and then other recommendations that are forwarded for consideration that really would take a little bit more effort or study or authorization to make happen.

One that I will discuss briefly is adopting the applicable concepts of the military construction model. In that case, what we're looking at is three different things, is the outyear planning, which we've done with our 20-year capital investment plan; the funding commitment that once we start construction we will fund efficiently through completion of a project; and then also living within the budget. Once we set that budget, when the project begins construction that we live within that budget. And that may require that we position our contracts with some awardable options that we could not award if we get into an area where the costs increase, and things like that, so that we're always living within our budget.

With the way things are funded now, with the spoon feeding of funds, with the drawn out inefficient construction, it's very easy to pick the low - hanging fruit, and those are things that work opposite of what we're suggesting here. Those things that could be awardable options and put at the end of the contract are now the things that we do first, because they're the easiest ones to move forward with. And so that would kind of flip around how we do our planning and how we construct our projects.

A few of those others would require further study and consideration. Design review centers of expertise, that's not something that's immediately implementable; something that's going to take a little bit more time, a little bit more study to make sure that happens in the right way.

Based on the recommendations of the team, we've compared accumulative comparison of completed projects, based on the current program of \$170 million a year and the recommended program of \$380 million a year. And you see on this slide we get six projects completed under

the current system. One would end up still being under construction under that system. With the proposed program, we have 25 projects completed in 20 years. Two are still under construction at the end of that 20-year time frame.

Other benefits of the Capital Investment program, we talked a little bit about these at the last Users Board meeting. The cost efficiencies, that \$.5 billion to \$2.1 billion in avoided cost growth, that's based on the selected case study report, and that comes from both inefficient funding and other cost growth factors. And with the proposed program and the improvements in the processes that we've recommended, we expect to see some avoided cost growth based on that.

We would also avoid more than \$2.8 billion in additional benefits foregone. That \$2.8 billion is only looking at the current seven projects that are under construction. I haven't looked at those, but we haven't yet begun construction, and so that's a minimum amount; that's not a total amount in benefits foregone.

By completing the 25 projects that are in the recommended plan, we would be addressing five DSAC-1 rated dams, three DSAC-2 rated dams, one lock that has an F condition rating, and that's from the operational condition assessments that are being conducted, and six that are rated as a D condition.

At this point in time only the LRD locks and dams have gone through that consistent evaluation, and so the rest of the locks and dams have an estimate of what that would be. Those operational condition assessments are going to be completed at the end of this fiscal year, so we can confirm that. So those figures there, that one lock rated as condition F and six rated as condition D, those may actually increase, because I think some of our locks may have a worse condition than what we've estimated.

Then we have the additional benefits of achieving the improvements over a shorter time frame, the environmental, societal benefits, safety and energy improvements, just within the navigation mode of transportation.

What you have in front of you is the report that the team has completed. It's organized. There's an executive summary. Everybody had when they walked in -- the summary report is a copy of the executive summary. The full report, all the Users Board members have a copy of the full report, and I'll work with Mark and get a PDF file of the full report put on the Users Board website. The summaries were supposed to have a CD in them, and our communication wires got a little crossed, so you don't have a CD of the full report in the summary but we'll get that on to the website.

The report, the chapters are shown here. There's a background, just general information about the Trust Fund and the Users Board and how we got to where we are right now. The second chapter is the capital projects business model, how we've done it in the past and how

we're currently doing it. And then the next chapter is how we envision the future should be. Those two chapters are really a summary of the white paper that we completed in March last year that kind of laid out the road path of where we wanted to go with this effort.

The capital projects business model, the future, also includes all the process changes that the group is recommending with our project delivery process.

The next chapter, Chapter 4, goes through the capital investment strategy, the unconstrained project list, our criteria, how we developed the criteria and how we came up with the prioritized list, how we came up with the \$380 million investment with \$320 million for new construction and \$60 million for major rehab.

Then the next chapter is the cost sharing model and the revenue plan, and, finally, the implementation strategy. The implementation strategy really emphasizes that this is a dynamic process. This is not a one time effort that we'll come back in 20 years and do again. This is a dynamic process that is going to be reviewed and updated on a yearly basis. We've already had some improvements in asset management and dam safety as we've been doing this report that would probably get incorporated into the next round of things that we're doing.

The criteria that we've developed, we know that there's additional data that we might like to gather for some of the other projects and evolve our criteria and get better at establishing our priorities. So what we wanted to do with this was use what we had, what was readily available to come up with an investment strategy at this point in time, that we know we can make improvements -- it is a dynamic process and needs to remain a dynamic process. And then the last chapter is just a summary of all the recommendations within the entire report.

The next steps. Our full implementation timeline is really dependent on Congressional action, both in WRDA legislation and within the appropriations. The Corps is already doing what it can do within -- that doesn't require additional legislation or authorization for us to do as far as the process improvements. We're tackling those that we can at this point and time.

With a true government and industry collaboration, we've had 13 face-to-face meetings, 17 web meetings, and many, many hours from all the team members, and the team members are senior leaders from within the Corps of Engineers, and CEOs and executives from industry who - except for me -- all had other full time jobs to do at the same time, and they've spent many, many hours putting this together. This report is provided as a product that will set the course to assure reliable inland marine transportation system for the next 20 years and beyond.

Questions?

CHAIRMAN LITTLE: Thank you very much, Ms. Hoey. That's a very good summary of the report, a very sound presentation, and thank you for all of your remarkable work over the last year and a half. It's truly been a remarkable process, and a very productive one, and you've

been the leader of the project, and you've done a great job. So thank you again, not only for the presentation today, but all of your leadership and hard work over the last year and a half. You've done a truly remarkable job.

[Applause.]

MS. HOEY: Thank you. You're very welcome.

CHAIRMAN LITTLE: We'll open this up for questions now. I have a comment and then a question. On page 4, I think you emphasized this very well in your presentation but I think it bears further emphasis, and that's under premise that projects are funded efficiently. If there's one thing, I think the group can all see crystal clear, as a result of the selected case studies in large part pointed us in this direction, it is that we must have a program in place that provides the efficient funding of these projects so that we can execute them efficiently.

You have any further comment, I think you emphasized it in your presentation, but I just think it bears repeating for the entire group.

MS. HOEY: Absolutely I agree, and that is the premise of the entire program. If one project doesn't get funded efficiently, it's going to throw off the entire program.

CHAIRMAN LITTLE: Yes. Okay. Then elsewhere in the presentation you mentioned the cost sharing and the hundred percent federal for dams, so how is Olmsted treated in this?

MS. HOEY: Olmsted would be a dam, and at this point in time, Olmsted was authorized 50 percent federal, 50 percent under the trust fund. The cost share would have to be changed through authorizing language and the team's view was that that cost share for Olmsted would change to a hundred percent federal once that authorizing language is enacted.

CHAIRMAN LITTLE: Okay. All right. At this point let's open it up to the rest of the members for questions.

Mr. Woodruff?

MR. MATTHEW M. WOODRUFF: This is just a minor one that I think we failed to catch. I've noticed in the printout that we have draft in a few places. On the odd numbered pages from Roman numerals 7 through 65, this is the final version --

MS. HOEY: Yes.

MR. WOODRUFF: -- and that's just a typo, am I correct?

MS. HOEY: Yes. Yes, and there's one other thing I wanted to point out. In Appendix B, Appendix B is supposed to be the fact sheets for all the projects that are in the unconstrained list, and the projects are actually after page D-5. And they should be in Appendix B, so that's a little

bit out of order. And we are going to have a probably final final printing, and we'll get those little quirks taken care of.

CHAIRMAN LITTLE: All right. Thank you Mr. Woodruff.

Others? Comments? Questions? Anyone else?

At this point, and I know we're on the verge of receiving and approving the report, I wonder if this might be a good time to take a short break, maybe a 10-minute break, allow everyone a chance to take a break and then we'll come back, if you could resume your position there at the podium.

We're not going to go out and think up some hard questions to ask you.

[Laughter.]

MS. HOEY: Gary said he would answer all the hard questions.

CHAIRMAN LITTLE: Don't let Gary get away.

But let's go ahead and take a short break at this point and then we'll come back. All right?

MS. HOEY: All right.

CHAIRMAN LITTLE: About a 10-minute break. All right? Thank you.

(Whereupon, a recess was taken.)

MR. POINTON: If anyone wishes to make a comment at the end of the meeting during the public comment period, please see me. We have one individual, Mr. Cornel Martin, who wishes to make a public comment. Please let me know if anybody else wishes to make a public comment. Thank you.

I'd just like to remind everybody to speak into the mic so that we can get a proper recording of the proceedings today. Thank you very much.

CHAIRMAN LITTLE: Okay. All right.

Thank you, Mr. Pointon. Thank you Ms. Hoey, for still being there.

Are there further questions for Ms. Hoey or discussions about the plan at this point? If not, then I think Mr. Woodruff -- I'll recognize Mr. Woodruff.

MR. WOODRUFF: Mr. Chairman, I have a motion. It's a multi-part motion, so I'll try to set it out in several pieces.

First of all, I think that the report with the typographical corrections that we've discussed on the record this morning is very much consistent with the recommendations that were adopted by this Board at our last meeting in New Orleans in December. And my first part of my motion is that the Board adopt the finding as such, that this report is consistent with our recommendations.

I further move that we adopt this report as the position of the Inland Waterways Users Board. And I further move that we provide the report to the Assistant Secretary of the Army for Civil Works, with the Board's request that the Administration similarly adopt these recommendations and implement them as set out in the report.

And finally, I move that we provide copies of this report to the Congress, also, with our request that Congress consider and implement those portions of the report that require congressional action.

CHAIRMAN LITTLE: All right. Thank you Mr. Woodruff.

Do I hear a second?

MR. LARRY R. DAILY: Larry Daily would second those motions.

CHAIRMAN LITTLE: All right.

Discussion on the motion? If not then I'll call for a vote.

All in favor, please say aye?

[Chorus of ayes.]

CHAIRMAN LITTLE: Opposed?

[No response.]

CHAIRMAN LITTLE: Please let the record reflect the fact that it was a unanimous vote, that all Board members voted affirmatively, in support of Mr. Woodruff's motion.

Thank you, Mr. Woodruff.

At this point I'd also like to insert into the record a listing of over 150 companies, organizations, and associations that have expressed their support for the IMTS recommendations. And I'll so move that this be inserted into the record as part of the record.

I'll need a second.

MR. MICHAEL W. HENNESSEY: Second.

CHAIRMAN LITTLE: Mr. Hennessey.

All in favor of that, please signify by saying aye?

[Chorus of ayes.]

CHAIRMAN LITTLE: Okay. That becomes part of the record. Thank you very much.

General Grisoli?

MAJOR GENERAL GRISOLI: Mr. Chairman, I'd just like to see the list of companies real quick.

CHAIRMAN LITTLE: Oh, okay.

GENERAL GRISOLI: Thank you, Mr. Chairman.

CHAIRMAN LITTLE: Any other questions or comments concerning Ms. Hoey's presentation?

MR. WOODRUFF: Mr. Chairman?

CHAIRMAN LITTLE: Yes?

MR. WOODRUFF: The Users Board, we don't have any coins or medals or anything like that that we can hand out, but I think that the entire team that worked to put this report together is deserving of something. But especially yourself, Ms. Hoey, who above all others really put an amazing amount of time and effort into bringing this together. I think we owe you our thanks and gratitude, and I'd like to move that the Board offer its thanks and gratitude to you, Ms. Hoey and the rest of the people who put this together.

CHAIRMAN LITTLE: Thank you, Mr. Woodruff. Appreciate that very much. It's been a labor of love at times. So Ms. Hoey and the entire team's been great to work with.

Mr. Martin?

MR. DANIEL T. MARTIN: And if I may offer a second to that motion, Mr. Chairman.

CHAIRMAN LITTLE: All right. Are we going to pass that motion too? All in favor say aye.

[Chorus of ayes.

CHAIRMAN LITTLE: I notice there's no noes; appreciate that very much.

[Laughter.]

MAJOR GENERAL GRISOLI: Mr. Chairman, if I may, one thing I can do as the Executive Director, not being part of the Board, is to recognize the great work of both yourself,

since it was unanimous, and Ms. Hoey for the work that you've done with a coin from the Corps of Engineers, and say thank you for the work that you've done on this report before we move on to the next topic.

For everyone who's in the audience here, the Corps of Engineers and the Army in general have for commands, coins. And there're really two traditions. One is how we came about having coins and the other one is more a tradition of sharing coins and et cetera with others that do good work, but also in showing that you've been recognized once before and showing that person who gave it to you the coin so that you might have to reciprocate, and I'll explain both of those.

The first is the coin itself. The coin itself goes back to Roman times when the Roman legions had their medallions that they used to designate particular units that they were in. And over the years, the customs have been passed on as far as you have a unit symbol. You put a symbol on something metallic, et cetera, and you provide that to folks who do great work for that particular organization or with that organization in this case.

The second part, what I was trying to describe, the tradition is if you give a coin out like this and you're at a bar, and if I challenge you with the coin of the command and you don't have your coin, you buy.

[Laughter.]

MAJOR GENERAL GRISOLI: So thank you very much.

CHAIRMAN LITTLE: Yes, sir. Thank you very much.

[Applause.]

CHAIRMAN LITTLE: For those of you who know how much I hate to buy, rest assured that if you meet me in a bar, I'll have my coin with me.

[Laughter.]

CHAIRMAN LITTLE: Thank you very much, General. I appreciate that very much. It's been a great year and a half. It really has. It's something we can look back at with a great deal of pride, and it was accomplished by two groups, industry, and the Corps, who although we have different perspectives on policy at times, and different approaches to how we go about our business, we share a common goal and a common belief in the system, in the strength of the inland waterway system and its value to the nation. And Jeanine helped us throughout all those meetings stay focused and stay focused on the goal and to accomplish something very great today. But I think that's something very important for all of us who leave here today, to remember that we do share a common goal. And we do have a great natural resource out there,

that we've taken the wisdom from our forefathers to develop for the good of the nation, and appreciate that very much. Thank you.

Next on the agenda is miter gate replacements. Mr. Chapman, Bill Chapman, will make this presentation.

Bill?

MR. WILLIAM R. CHAPMAN: Thank you, Mr. Chairman, Ms. Darcy, General Grisoli, Board members, and fellow guests. I'd like to thank you for this opportunity to share with you the great work of all those who were involved in a recent response repairs to both Markland and Greenup locks. Without a truly team effort, the impacts to this nation would have been undoubtedly much greater than they were.

What I want to do is to share with you a chain of events and the responses and repair efforts, as well as the way ahead for continued uninterrupted navigation, assuring the reliability of our system to all the members of the navigation industry and the Corps of Engineers. My presentation will kind of highlight these efforts at both Markland and Greenup locks and dams.

Okay. For those of you who were unaware, we had a major catastrophe at one of our miter gates at Markland Lock and Dam, September 27th. Actually, it should be 2009. I'm one year ahead, but it was last year, last fall.

Markland is located in the Louisville District, just below Cincinnati, Ohio. There's a graphical presentation of the Ohio River, kind of shows it where it's at. It's basically in the middle of our system.

What I'm going to do is kind of step you through a chain of events here, and we have a video here that shows how things progressed, and I'll kind of talk through it here, just about a two-minute video here.

[Video played.]

Okay, on September 27th, motor vessel Stephen Colby completed a down bound lockage out of the main chamber. As you can see, the vessel is leaving at this point, everything looks pretty normal. He's pushing out. That is the downstream control station, the lock operator's station. Tow is exiting the chamber heading down river at this point.

Okay. The CQ Princess, it's a passenger vessel, entered the chamber, locking upbound. Lock operators prepare the lock, closing the emptying valves and making sure the Princess was secure at the upper end. That'll happen here in just a second. You'll see the miter gates close.

One thing that's kind of unique, it looks like there's a little bit of turbulence in the lock chamber, which is kind of normal after you would expect a vessel to enter the chamber. Miter

gates are closing at this point, and as you notice, there's still appears to be some flow entering through the chamber, still something going. As the locks close, you'll see a wave occur.

That wave right there was because the upper filling valves were not totally closed at this point. Okay, the leaves were not properly mitered and the chamber continues to fill as you see that happening. The lock operator tries to close the filling valves, but due to some mechanical issues on a solenoid, pilot valve, it remained open.

The miter gate device, as you can see as it comes up, buckles under the load and the gate leaves, move over the sill, the strut arms break away, and three of the four anchor arms fail, as you can see it just happen. So now the water's flowing out uncontrolled.

Okay. The river wall leaf you'll see here just in a minute, which is the leaf on the right hand side, will break away and fall into the chamber. Lock operator moved back. Now, you can see it broke away. We didn't have a picture of that but you can see the gate is in the chamber at this point. It's kind of semi-buoyant. There are some air pockets in it but those are actually filling with water. The middle wall leaf actually is pointing downriver now, beyond the miter gate, miter sill.

At this point, the lockmaster, he's on the radio and telephone notifying the manager of the incident. You see the lock, the gate is gone.

That's just kind of an interesting video that we had from our cameras that are at the project site.

Dave, you can go back to the presentation here.

Okay, the damage that occurred at this was, obviously, the miter gate broke away. The anchor arm is torn away on the remaining gate that's still there. You can barely see it right here. Here's one that's intact; here's the one that's broke away. And that's holding that one gate in place. It's basically hanging on a thread.

This is the kind of response - Louisville Operations and Engineering determined that middle wall leaf was stable after applying some structural reinforcements to it, and approximately 20:30 hours [on 27 September], the auxiliary chamber was opened to traffic, to pass traffic. That was the main chamber we were looking at. So at that point the river re-opened to traffic through the auxiliary chamber on a very cautious and safe passing, with a lot of discussion going on.

To kind of talk about the recovery and repair, what was done here, as we went on through. We must have had a slide slip out of here, but that's okay.

The survey crew did a survey and found that river wall leaf was partially blocking the bulkhead sill and the leaf had to be moved in order to be able to set bulkheads to dewater the chamber and effect repairs.

Okay. Also at the same time, new miter gate leaf contract was accelerated. We already had that ongoing for a mid-March delivery. We had to award a helper boat contract to assist in vessels getting around the work that was going to be taking place in that auxiliary chamber as we removed the gates and effected the repairs. We also contracted salvor to move that river wall miter gate, the one that was on the bottom, because it was blocking the bulkhead sill, so we could not dewater the lock chamber until it was moved. The middle wall leaf was placed onto the DeLong barge, which was a barge we borrowed from St. Louis District to help us make the repairs.

Okay. This is just another picture. I can go through these kind of showing some of the repair efforts. This picture on the left is the middle wall [leaf] being removed, and the next picture to the right of it being laid on the barge.

This here is dealing with the contractor who actually was moving, pulling the gate off the sill. The picture in the upper left-hand corner shows some of the operations that were in place. The other two pictures show the heavy lift, gate lifter, the Shreve, picking the gate up after the lock chamber was dewatered and placing it on the barge to take it to the repair facility for repairs.

Okay. Following on, the fleet returned to Louisville to make repairs on the 13th of November. The completed gate leaf was then finished on January 12th, and installation of the repaired leaf. One thing that was really critical on this was the river levels, and the chamber had to be dewatered, so that was going to take us some time.

Okay. This slide here shows some of the work that was being done. Some of it was in good weather conditions; some of it was in not so good, as you can see from the picture in the lower bottom hand corner when they were trying to dewater the chamber, a lot of ice. This time of year, this was November, December of time frame, not the best condition to work on the Ohio River.

I'm not sure what happened there, Dave, we got a couple mix ups on the slides there.

Okay, just the path forward. The solenoids at the projects, some of the things we did, we made sure that we checked those very closely since that happened to be one of the major contributing factors. Older units were replaced or repaired, depending on the condition. We did a check across the entire Division on our interlock systems. We're developing plans to enhance the interlocks. We're reviewing the lockage procedures with all of our lock operators. Also there's an ongoing effort through the Inland Marine Transportation System. The IMTS training

program is being developed and will be unveiled I think here in the next coming months. The programs that we have in place will dovetail right into that.

One of the critical things is installing new miter gates at the lock chambers. That's on the schedule for Calendar Year 11. The first set of gates has already been delivered; the second set of gates is due in July, and we have those scheduled for next calendar year for installation.

A couple system wide recommendations that came out of the Board of Investigations that looked into this. FEM, which is our Facility and Equipment Management program, we'll be continuing implementation of that and address some of these small pieces that could create an incident like this. Maintenance intervals and inspection procedure for the solenoids are specifically being addressed at the projects across LRD and be directly part of the FEM implementation. This is an interlock issue, added a "valve to gate." We had a "gate to valve." In other words, if a gate is closed, you can't open a valve, but we want to make sure we have a reverse to cover all the bases, so we're looking at adding that to this project and other projects that do not have those.

Ergonomics. Improve control ergonomics at the sites. Let's make sure the operator can see everything, can see what's going on, whether it's through cameras, whether it's through having the controls all visible right in front of him. Standardizing lock operating procedures, training and certification, that's being undertaken but also in concert with the National IMTS initiative.

Another thing is we want to make sure we increase public and customer awareness to report any unusual conditions during the lockages. If somebody would have said something, the flows a little bit strange, or we've got a little push going out of that lock chamber, you know, the towboat, that might have raised a level. Maybe we have an issue there and it could have maybe abated an incident like this. So we want to make sure we raise that awareness. We're doing that through public service announcements, talking at the Inland Waterways Conference, the lock master's meetings, and just other industry and Coast Guard functions. We're making sure we bring this issue up; tell us, talk to us, if there's something unique, something unusual.

Another item that we're investigating and undertaking to develop what's called a system-wide failure mode and effects analysis (FMEA), basically it's to find out that little piece, that little switch or that little light, or that little lever or solenoid that has the propensity to create a catastrophic taking out a gate or stopping a total operation. We want to look at that very close. We tend to focus on a lot of the big things, the structural elements, the big items. We want to look at that little thing. It's a team based approach involving lock masters, mechanics, facility engineers, partners from industry, kind of looking at this to help us and make sure we're capturing all these little issues. That's ongoing as we speak.

Also we've developed a written checklist for each lock operation. Some lock ops are more unique than others, so one size doesn't fit all. So we're looking at that, making sure we

educate and retrain and reemphasize the importance of a process, a procedure to go through as you lock a boat. Kind of like a pre-flight checklist an airline pilot would use. Something along that line so that we make sure that we address all the issues.

Now I'm going to kind of switch gears here to the Greenup; miter gate anchors failed. This happened January 27th of this year; got the right year this time. Greenup is located in our Huntington District, downstream from Ashland, Kentucky, and that kind of gives you an idea. It's actually not the next lock up from Markland, there's Meldahl in between, but it's two locks away from Markland. So it's in roughly the same reach, right in the middle of the system, in the heart of the system.

Okay. We had a miter gate anchorage failure here on the 27th of January. Basically what happened, while closing the gate, the miter gate, there was a loud pop that was heard as the gate was moved to it's miter position, and after that pop, the gate actually moved back and basically rested in the position it's at now, with a gap of about two and a half feet here, and dropped about a foot and a half down from a normal closed position.

Okay. When the pop was heard, what it actually was, one of the major anchor bars had failed catastrophically. Here's the anchor bar right here, normal anchor bar, and here's the failed anchor bar, at this point, and there's where it would be connected to. So you can see it broke. That gap was about 14 inches. That's about a five inch thick piece of structural steel, probably 10 to 12 inches in length, so fairly hefty piece of structural steel that failed under the load.

One of the things that had happened, as it failed, there happened to be a tow in the main chamber, and ended up having to remain there for three days. You couldn't move it until after the gate was stabilized. So that was a major incident that we had not seen or had to deal with like this in the past.

We went through some initial stabilization efforts. The piece that was broken we actually cut a piece of structural steel to weld it in there to reinforce and stabilize that gate. Here's the piece of steel here. Here it is welded in; work being done. We also put some additional stiffeners on it to make sure that that gate did not move. It was sitting, kind of teetering there on a precarious point there. Any rocking one way or the other could have tipped it over and it would have ended up in the bottom of the lock chamber as the one at Markland, which we were trying everything possible we could to make sure that did not happen.

After it was stabilized, the efforts were done. We employed a small helper boat to remove the individual barges one at a time. The reason we did that with a small boat was we wanted to minimize the wheel wash and any turbulence in that area, so each barge and then tow was taken out one at a time, very slowly, through the gap that was left after we were able to miter the other gate back in its reset position.

After we did that, we also did some other structural supports, additional stabilization on it, after we got it out there because we knew the water was coming up, we had some wind going on, we did a lot of things to make sure that that gate did not move until we were able to get the heavy lift crane up there to remove it. One of the reasons we went to these extreme efforts is, what was kind of unique to this gate, it had some strain gauges anchored on one of the anchor arms here, and we had some readings in those that really concerned us, that the other anchor arm was about ready to fail. So we had to make sure we had them strapped in place, and if it did pop, it wasn't going anywhere. It may just tip over to one side and then we hold it there, and then we could remove it with the crane and affect repairs.

One of the other things is working this time of year. This is January. Well, what happens in January? You get a lot of flow, you get warm weather, cold weather, a lot of rain, a lot of snow melt. The river was rising. At one point it was rising a foot an hour. So we had to make some efforts to move the flow around the dam so that it kept the turbulence from coming around the end and creating some wave action.

That picture in the lower right hand corner happened to be one of the stabilizing points we were going to use, but the water came up so fast we were unable to get any welds on there to support the gate.

There again, not optimum conditions to do the work, snow, ice, and wind. Also 8 degree temperatures, not a pleasant condition to be working out there, but I have to take my hat off to the crew. They jumped in fantastically, performed well above what anybody could expect during those conditions.

Okay, the gate lifter, the Shreve, arrived on February 6th. It happened to be just downstream a little ways at Markland. It'd been working at Markland, so it wasn't that far away. Given the rising river conditions, we had to be concerned about vertical clearance, we had to shoot for that window of opportunity to get it underneath the bridges. So we had a short window in there, we got it under there, got it up to Greenup. It arrived on the 6th, started making the provisions for lifting. That actually was a connecting beam that would connect to the gate. The Huntington District repair crew had modified that gate so it could be lifted out, and they were doing that all up until that time on February 11th when we made the connection to the gate itself.

These are pictures of the gate being removed and moved over onto the Shreve's barge that goes with it. It's all one unit.

There it is again, being lifted, moved over, set in. Sometimes we call it toaster slots but it's actually a repair area on the barge. We can actually store three gates in there to work on them and move them in and out. So this was the operation here. We picked it up, moved it across a wall, set it down into the slot and we began work.

After we did an inspection on it, we were very fortunate. There's minimum damage to the gate itself, other than the anchor bar. We had some minor sill damage. What we call the gudgeon pin or the connecting pin. Plates, obviously, were bent. Pintle had just a little bit of work that needed to be done on it. That's the point that it rotates on. We had an engineering analysis done of the anchor bar that it failed, because we were really concerned on why it failed at this point, It just kind of failed with no reason whatsoever, no indication. The strain gauge didn't show anything, just pop, and it went.

After the engineering analysis was done, it showed that there was fatigue in the metal and there was also something that was -- the weldments were not -- I guess they were not perfect, as you'd say in the real world. We looked at the weldments, how it was put together. There was a little bit of undercutting on the weld. Then we even questioned, well, should the weld be there on the pin plate?

We did some research, went back to the original design and that's the way the original design was for that plate. There was no change in it, so that's the way the gates were manufactured, fabricated, and installed.

So a couple things we had to do after that, we really raised the level of concern. We went and looked at all of them at Greenup because they were all of the same design, same welding type. We did not appear to have any issues with those, at least visually. We did some non-destructive testing on those weldments and anchor bars to make sure they were in good condition, and we could service the lock until we replace those gates.

This is just another picture of the Shreve lifting the gate, reinstalling the gate between the 19th and 22nd of February. So we're about a month of closure.

Okay, reinstalling. This is the final alignment. We had to go and do a dive inspection, make sure everything was in good condition underwater. We actually removed the gate in the wet and reinstalled the gate in the wet. When you don't have to do major maintenance you can do that fairly easily. When you have to do major sill work or work on the bottom, structural work, or sill or sill plates, then you have to dewater the chamber. We were fortunate we didn't have to do that. The dive inspection showed no issues with the submerged sills. The pintle ball and sill, and the stops.

We replaced the anchor arms, lengths, and pins at this point. Basically we're moving ahead here, getting closer to be completed here.

Here it is, the final tap. They put the final pin in. This was a big sigh of relief from everybody.

February 22nd, the main lock is back in operation. So it was a little less than a month of out of operation, removing a gate, doing some repairs and putting it back in under some

conditions that were less than ideal to work. Normally, we'd do work like that during the late spring, summer, early fall, maybe into the first part of the winter. Normally we don't do this type of work in the middle of the winter, but thanks to the crews, both crews, at Markland and up at Huntington, we minimized the impact the best we could to everyone.

Next slide.

This is the one that always want me to kind of take my hat off to the navigation industry for both Markland and also for Greenup. They had immediate involvement in this, helping us to work the queues, working the traffic, breaking the tows apart. One thing that was unique, at Greenup, because there's a very high tonnage lock, they assigned an immediate POC to that, Richard Kern, and a helper boat that was provided. He provided queue management and prioritization to all tows going in and out of Greenup during that time of closure.

This just kind of gives you an idea here. The delay at Greenup was initially about 59 hours, but then it leveled off to about 36 hours, thanks to the work of industry and Richard and the team that he had there.

To kind of just talk about the path forward on Greenup, right now we plan to dewater this lock at least every three years, may cut it to two. We're looking at it very closely. Also in the works, procuring main chamber gates, we have a contract already awarded for one set. That was awarded in September of '09. Scheduled delivery and fabrication usually takes 18 to 24 months. We're looking at trying to award a second contract for another set of gates there sometime in Fiscal Year '11, depending on how the funding goes on that. And then we've also got the Greenup major rehab report. We're working on that for Fiscal Year '11, '12, and I think that was in the IMTS, Ms. Hoey's presentation. You saw Greenup in there a little bit, and I think that's part of this overall major rehab.

Couple things I just want to highlight here. At Greenup, I mentioned that all the anchor bars were inspected, as well as others within the district. Also what I did was looked at that, said we need to look at this systemically across LRD. I directed inspection and testing of all of our anchor bars and connections across all of our projects in LRD immediately after this to make sure we didn't have this type of situations out there.

Also, after the visual inspections, there's some ongoing and non-destructive testing on here where we thought we might have some issues. I haven't heard of any big ones, but you know, where you got maybe a little micro crack. We're doing some non-destructive testing or something that looked kind of out of the ordinary, undercutting of a weld. We're taking some extra steps to make sure we're on top of that and we don't see any of these others hidden things that we normally would not see without really cleaning, sandblasting, really doing a thorough inspection. And also, nationally, working with Mr. Ensch, and the Corps of Engineers has and is inspecting all of its miter gates and anchorages using the basic guidance that we put together as a basis for developing their process, and I think just recently uncovered one of the incidents at one

of the locks in the Arkansas system, Lock 7. This very similar thing was uncovered using this process that we developed and shipped out to take care of everybody.

I think that was my last slide, so I'll entertain any questions at this point, or concerns. I think that all I really want to say is it was a collaborative effort between the districts, the industry, the monumental efforts of the repair crews and the fleet, so important to keeping the system viable and reliable.

They're our 911, you know, take care of these situations when they happen. Some of them take a little longer than others. In the case of Markland when the gate was on the bottom, you know, they'd take a gate out, fix it, and put it back in, in less than 21 days or so. It was a monumental effort especially during that time. And my hat's off to the folks out there who really do the work and really work well.

Any questions? Comments?

CHAIRMAN LITTLE: Thank you, Mr. Chapman. I agree. The teamwork springs right into place at times like this, and, fortunately, we've become very good at it, industry and Corps working together to react to these things because we've been getting a lot of practice doing it.

Obviously, we dealt with the delays at Markland and Greenup. But we kind of teetered I guess a little bit on the closure as well, with that extended outage at Markland. You know we're always just a little more vulnerable when that happens to shutting down the river entirely and stopping the fuels that need to get where they're going on the river. In many cases it's fuels for power plants up and down the river. Compounded by the fact that you have high water conditions, and these things never happen in the good times, high water conditions and severe winter type conditions. We're vulnerable out there. And that's what concerns us, and I know it concerns the Corps as well.

What else is out there? And how are we taking a systemic look, broader look at other potential closures like this. Could you elaborate maybe a little bit more as to how we're taking an across the board look at identifying potential interruptions like this?

MR. CHAPMAN: Very good question, Mr. Chairman. And like I said, we look at this continuously, daily. Our folks at each district have a very robust inspection program out there and try to get ahead of the curve, as we say. Get ahead of that. Don't want to get behind the 8-ball, want to get ahead of the curve, is what we're trying to do.

We've taken various strategies, inspection strategies, dive inspections, maintenance standards. Those are all pieces or spokes of the wheel that help us develop a robust look at where we need to go, where our issues are. Asset Management is a key piece that we're looking at, the operation condition assessments, where we assess conditions of components, facilities, what critical component, non-critical components, we prioritize those. So we're looking at that

throughout LRD, and I even think we're looking at that nationally, and other divisions I'm sure are doing the same thing.

How do we get there? Again, it's a collaborative effort. We've got to see all the right -- you know, make sure all the pieces to the puzzle are there, the failure mode and effects analysis is one key to it. Miter gate replacements is another key to it, you know, how do we do those? And we fund those, basically, under a major rehab, which was Markland's, under major rehab. Greenup, we knew we had some issues with that, so we are moving forward with replacing Greenup under our O&M program.

All pressures on our program. We are taking a systemic look at each one of those, prioritizing them, and have I guess a long term, strategic look. It's constantly changing because constantly we have different pressures that come into play, and when you have catastrophic events like this, it kind of reshuffles the deck. So we're looking at that at this point.

CHAIRMAN LITTLE: All right. Thank you, Mr. Chapman.

Mr. Ensch, I know this falls within your bailiwick. Do you have something further you wanted to add on this?

MR. MICHAEL G. ENSCH: Mr. Chairman, if I could.

CHAIRMAN LITTLE: Yes.

MR. ENSCH: A couple of things. I'm Mike Ensch; I'm the chief operations at headquarters for the Corps of Engineers. And there's a handful of activities that we do have underway that look at this in more of a systemic pattern.

Facilities and Equipment maintenance, equipment maintenance that Bill mentioned, is being implemented nationwide. We're on the final phases of our implementation of that, not only in our locks but powerhouses and other structures. So that will assist us in accumulating maintenance patterns, maintenance requirements, and enabling us to take a look at those in a systemic fashion.

We're looking -- strain gauges. I think Mr. Chapman mentioned on Greenup that there were some strain gauges installed. We averted a very serious issue at The Dalles by virtue of having strain gauges on those massive gates, those hundred and ten foot tall gates out there along the Columbia River.

So looking at a program nationwide on the projects we feel critical have strain gauges involved, our folks at the waterways team down at ERDC, our Engineer Research and Development Center, are looking at different scales of implementing strain gauges on projects. We don't need a gauge at every project in every location on the gauge.

So those are things that we're doing. The condition assessments that wrap into our asset management program as a whole, the condition assessments will be completed. I think Jeanine mentioned these earlier today. They'll be completed on all inland navigation structures by the end of this fiscal year. That meets our timeline. We're going to begin to do those condition assessments on a routine basis and drive budget decisions, because that'll enable us to put the resources where we feel appropriate.

And I might just take a step one more on the budgetary side of the picture. When we look at a miter gate replacement program like Mr. Chapman mentioned, and we have \$9 million, \$11 million, \$14 million packages in our budget, those are large increments. Sometimes they're easy to fall out of the budget picture. When we have to take a near term look at something, those funds sometimes are easy to go out and divert to other uses or a number of other uses when we get right down to the contract award time frame.

So from a programmatic standpoint, we're taking a look at how we can get into a program of gate replacement where we take a look on the Ohio in particular, the Allegheny, the Mon, -- take a look at all of the projects there. What are the time frames for gate replacements; how can we programmatically look at that? Pull the funds together, and then move ahead with a systemwide program for gate replacement?

The folks in Cincinnati have done a good job of looking at those alternatives right now, coming up with some criteria to apply the contract mechanisms we would use. But that would just be one facet of what we're attempting to drive the reliability on the system.

CHAIRMAN LITTLE: All right. Thank you for that further elaboration.

Questions for Mr. Chapman or Mr. Ensch?

Mr. Knoy?

MR. MARK K. KNOY: Steve, this is Mark Knoy. One question, Mike. A lot of times I hear those folks from the Corps talk about those five lock chambers in the middle of the system between Cannelton and Greenup, because they're designed similarly.

Any concerns about Meldahl or Cannelton that we should be aware of today?

MR. CHAPMAN: Good question, Mark. We are looking at those, and I can tell you Meldahl already has a set of gates being fabricated. They're to be delivered this fall for installation next year. So as you alluded to, a lot of those in a similar era, similar type of design. Meldahl, McAlpine's north chamber, Greenup, Markland and Cannelton, all kind of fit in that same category. So we're looking at those. Those, if we look at our systems, are our priority projects, and we're trying to get those in the system where we can, we can fit them in there, and looking at the risk that's involved, look at the conditions, and prioritizing those.

So that is a good question, and we are addressing those. And depending on how many cycles they've been used, how old they are, how many issues we've had, we've done some remedial work to maintain the integrity of them. So we're working those.

MR. KNOY: One other question, if I may, Steve. It seems somewhat obvious that they're that locking up the small craft through the main chamber.

Is that a standard operating practice versus maybe saving the main chamber for the larger tows and using the auxiliary chamber for the smaller vessels?

MR. CHAPMAN: Normally we work both chambers. That time of year you get a lot of drift, especially at Markland. Drift ends up being in the auxiliary chamber, close on that side there, so we tend to use the main chamber especially in the winter months to abate the drift. And then when you apply that, we use that auxiliary chamber to help get the drift out of the way. So that was one of the reasons.

MR. KNOY: Okay, all right.

CHAIRMAN LITTLE: Further questions? Mr. Martin?

MR. MARTIN: Bill, I just want to clarify, would you say that the root cause of the Markland failure was the solenoid or -- I wasn't sure if you were making that conclusion.

MR. CHAPMAN: It was a combination. The root cause really was the solenoid. There is a solenoid that operates the high pressure side of the valve, opening and closing the valve. The solenoid failed in a partially extended position; the little pin was sticking out. So when they went to move the miter gates, to close the miter gates, the interlock system, which is the test to make sure, hey, you know, the gate's open, you're not supposed to be moving the locks, tried to work. The other solenoid on the other side tried to shut the valve, but because that pin was failed in its partially extended position, it couldn't perform as designed. So it's like a little design issue that we're looking at as we look at this across the Corps. That's why we wanted to make sure we got it covered, gate to lock, lock to gate.

But what happened is that solenoid on the other side ended up failing too, because it overheated because it was trying to shut the valve. So, basically, it's like trying to stop a motor from turning. It'll overheat and burn up.

So that's essentially what happened. The solenoid created the issue, but then some procedures, process procedures with the lock operators, kind of exacerbated the issue, too, so we got a combination there.

MR. MARTIN: Thank you.

CHAIRMAN LITTLE: Other questions? One last question.

The new miter gate leaf for Markland, was that being fabricated in Portland, Oregon?

MR. CHAPMAN: Oregon Iron Works I think who it was that was involved.

CHAIRMAN LITTLE: Okay. And that's in Oregon? Okay, and did I understand you to say that Meldahl gates were also being constructed?

MR. CHAPMAN: They're being fabricated also.

CHAIRMAN LITTLE: Where are they?

MR. CHAPMAN: I'm not sure. I'd have to look it up and get back to where those --

CHAIRMAN LITTLE: You don't know where they are?

MR. CHAPMAN: No, I don't.

CHAIRMAN LITTLE: Okay, all right. Okay, thank you.

MR. CHAPMAN: Thank you.

CHAIRMAN LITTLE: That concludes that part of the agenda.

Mr. Pointon, we have the public comment period now. Do we have anyone who wishes to speak? I think Cornel Martin has indicated an interest in speaking during this part of the program.

MR. CORNEL J. MARTIN: Mr. Chairman, General Grisoli, members of the Board, on behalf of the Inland Waterways Industry and all those who rely on our inland waterways to ship commerce across this great nation, we'd like to thank you for the efforts that you put into the report that was approved today, all of your work and the work of all of those who participated in that effort.

Waterways Council has joined with American Waterways Operators and National Waterways Conference in putting out a request to all of those who depend on the rivers to join in supporting your effort. To date, as you know, Mr. Chairman, we've accumulated over 150 organizations and companies that have joined in support. Those include vessel operators as well as shippers, but also labor organizations and environmental group, chambers of commerce, farm bureaus, a lot of agricultural groups from across the nation. And it's a good broad range of folks who have joined in, in support of this effort.

We've already sent out a press release immediately after your vote, a joint press release from our three organizations announcing your vote and announcing your approval of the report, and endorsing that and joining with you in urging both Congress and the Administration to move this project forward, to move this plan forward, and to get it signed into law so that we can continue to enjoy the benefits of our inland waterway system.

So on behalf of our partners, American Waterways Operators - Tom Allegretti's not able to be here today but Ms. Larson, Amy Larson, from National Waterways Conference is here today. On behalf of those and the 150 organizations that have already signed on to endorse your efforts, thank you for those efforts and all of your work.

CHAIRMAN LITTLE: All right. Thank you, Mr. Martin.

As part of my closing remarks, I again want to thank all the members of the Users Board for their hard work during the past year, both on the Board and as part of the IMTS team. Again, Ms. Hoey and the Corps of Engineers for all their hard work.

This completes this phase of our efforts, but there's still much to be done in trying to implement and enact the recommendations in this report, which are so crucial to the Inland Waterways System. There's still much work to be done.

General, for your first meeting, we kind of set the bar pretty high, but again we appreciate your participation here and your involvement. And I'll turn the microphone over to you for a few closing remarks.

MAJOR GENERAL GRISOLI: Thanks Mr. Chairman. I've enjoyed the session today. I think that, really, we have shown that between industry and government, we could work together and collaborate together to provide opportunities for our senior leaders to move forward with ways that can enhance our waterways long term. And I'm excited about it. We understand now that we have the ball with Ms. Darcy. We also know that there are several other leaders in the Administration and in the legislative branch, that will take a look at this, and we look forward to working with everyone as we move forward. So thank you very much.

CHAIRMAN LITTLE: Thank you General.

That concludes this meeting. I will entertain a motion to adjourn.

So moved by Mr. Knoy.

A second? By Mr. Daily.

All in favor say aye?

[Chorus of ayes.]

CHAIRMAN LITTLE: The meeting's adjourned. Thank you gentlemen.

[Whereupon, at 3:38 p.m., the meeting was adjourned.]

CERTIFICATE OF REPORTER

I, Robin E. Bogess, Electronic Reporter, do hereby certify that the foregoing pages were recorded by me electronically and thereafter reduced under my direction to typewritten form; that the pages are a true record of the proceedings in the above matters; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this testimony is taken; and further, that I am not a relative of or employee of any attorney or counsel employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

Robin E. Bogess

Electronic Reporter

Addendum

Organizations, Associations and Companies that have expressed support for the IMTS Recommendations

ORGANIZATIONS AND ASSOCIATIONS		
The American Waterways Operators	Dredging Contractors of America	
National Waterways Conference, Inc.	Ducks Unlimited, St. Louis Mid-County Chapter	
Waterways Council, Inc.	DuPage County (IL) Farm Bureau	
Alabama State Port Authority	Effingham County (IL) Farm Bureau	
American Agri-Women	Farm Resource Center	
American Land Conservancy	Grain and Feed Association of Illinois	
American Soybean Association	Great River Economic Development Foundation	
Association of Tennessee Valley Governments	Greene County (IL) Farm Bureau	
Bond County (IL) Farm Bureau	Gulf Intracoastal Canal Association	
Boone County (IL) Farm Bureau	Hancock County (IL) Farm Bureau	
Bureau County (IL) Farm Bureau	Huntington District Waterways Association	
Calhoun County (IL) Farm Bureau	Illinois Agri Women	
California Marine Affairs and Navigation Conference (CMANC)	Illinois Association of Drainage Districts	
Carpenters District Council of Greater St. Louis and Vicinity	Illinois Biotechnology Industry Organization	
Carroll County (IL) Farm Bureau	Illinois Corn Growers Association	
Chemical Industry Council of Illinois	Illinois Farm Bureau	
City of Pittsfield. IL	Illinois Fertilizer and Chemical Association	
Clark County (IL) Farm Bureau	Illinois Grape Growers and Vintners Association	
Coalition of Alabama Waterways Associations, Inc.	Illinois Seed Trade Association	
Cook County (IL) Farm Bureau	Illinois Society of Professional Farm Managers and Rural Appraisers	
Coosa-Alabama River Improvement Association, Inc.	Illinois Soybean Association	
DeWitt County (IL) Farm Bureau	Indiana Corn Growers Association	
DeWitt (MO.) Drainage and Levee District	Indiana Soybean Alliance	

Indiana Rivers Ports and Terminals, Inc.	Minnesota Water Resources Association
International Liquid Terminals Association	Missouri Corn Growers Association
The International Propeller Club of the United States	Missouri Levee and Drainage District Association
International Union of Operating Engineers Local 513	Mo-Ark Association
Iowa Corn Growers Association	Montgomery County (IL) Farm Bureau
Jasper County (IL) Farm Bureau	National Association of Manufacturers
Jersey County (IL) Farm Bureau	National Audubon Society
Kane County (IL) Farm Bureau	National Corn Growers Association
Kendall County (IL) Farm Bureau	National Council of Farmer Cooperatives
Kentucky Chamber of Commerce	National Grain and Feed Association
Kentucky Corn Growers	North American Equipment Dealers Association
Kingdom of Callaway (MO) Chamber of Commerce	Ogle County (IL) Farm Bureau
Knox County (IL) Farm Bureau	Ohio Corn Growers Association
LaSalle County (IL) Farm Bureau	Pacific Northwest Waterways Association (PNWA)
Lee County (IL) Farm Bureau	Paducah Area Chamber of Commerce
Little Rock Port Authority	Peoria County (IL) Farm Bureau
Louisiana Association of Waterway Operators and Shipyards	Perry County (IL) Farm Bureau
Macon County (IL) Farm Bureau	Pike and Scott County (IL) Farm Bureaus
Marshall-Putnam (IL) Farm Bureau	Port of Cincinnati, LLC
Mason County (IL) Farm Bureau	Port of Houston Authority
McDonough County (IL) Farm Bureau	Board of Commissioners of the Port of New Orleans
McLean County (IL) Farm Bureau	Port of Pittsburgh Commission
Menard County (IL) Farm Bureau	Port of Portland (OR)
Mercer County (IL) Farm Bureau	Port of Vancouver (WA)
Mid Central Illinois Regional Council of Carpenters	Red River Valley Association
Minnesota Chapter of ASFMRA	Rock Island County (IL) Farm Bureau
Minnesota Corn Growers Association	Rosedale-Bolivar County (MS) Port Commission
Minnesota Grain and Feed Association	Sangamon County (IL) Farm Bureau

Shelby County (IL) Farm Bureau	Tri-State Development Summit	
Stark County (IL) Farm Bureau	Tri Rivers Waterway Association	
Steel Manufacturers Association	Tulsa Port of Catoosa	
Stephenson County (IL) Farm Bureau	Upper Mississippi Waterway Association	
Tennessee Cumberland Waterways Council	Upper Mississippi, Illinois and Missouri Rivers Association	
Tennessee River Valley Association	Warrior-Tombigbee Waterway Association	
Tennessee-Tombigbee Waterway Development Authority	Washington County (IL) Farm Bureau	
Tennessee-Tombigbee Waterway Development Council	Waterways Association of Pittsburgh	
Texas Agri Women	Whiteside County (IL) Farm Bureau	
Texas Waterways Operators Association	Will County (IL) Farm Bureau	
Transportation Research Board/ Marine Board		
COMPANIES		
Advantus Strategies, LLC	Brunswick River Terminal, Inc.	
AEP River Operations	Buffalo Marine Service, Inc.	
Agriservices of Brunswick, LLC	Bunge North America	
Alter Barge Line, Inc.	C&C Marina Maintenance Company	
American Commercial Lines	Campbell Transportation Company	
American Inland Ports, LLC	Canal Barge Company, Inc.	
American River Transportation Company	Cargill, Inc.	
Amherst Madison, Inc.	CF Industries Holdings, Inc.	
Artco Fleeting Services	CGB Enterprises, Inc.	
B&G Towing LLC/Acme Marine LLC	Channel Shipyard Companies	
Bayou Fleet Inc.	CHS Inc.	
Bludworth Marine LLC	Cincinnati Bulk Terminals, LLC	
Blue Danube Incorporated	CITGO Petroleum Corporation	
Bob Brackmann Farms	Clarkson Grain Company, Inc.	
Brennan Marine, Inc	Colusa Elevator Co.	

CONSOL Energy	Natures Way Marine, LLC
Crounse Corporation	New Orleans Shipyard
Deloach Marine	Northern Partners Cooperative
E.ON U.S.	Nucor Steel Tuscaloosa, Inc.
Farm Credit Services of Illinois	Osterholt Farms
FirstEnergy Solutions	Parker Towing Company
Grain Processing Corporation	PowerSouth Energy Cooperative
GROWMARK	Rentech Energy Midwest
Hartsburg Grain Company	Sause Bros., Inc.
Hodel Farms Inc.	Smurfit Stone Container Corporation
Ingram Barge Company	T&T Marine Salvage, Inc.
Inland Marine Service	Thomson, Rhodes & Cowie P.C.
The Integra Group, Inc.	Tidewater Barge Lines, Inc.
J.A.M. Marine Services, LLC	TradeWinds Towing LLC
Kirby Corporation	Trinity Marine Products, Inc.
K-Sea Transportation Partners, LP	Turn Services, LLC
Lafayette Workboat Rentals, LLC	Twomey Company
LeBeouf Bros. Towing, LLC	United Ocean Services
Magnolia Marine Transport Co.	Upper River Services, LLC
Marathon Petroleum Company LLC	Valvero Energy
MARMAC, LLC d/b/a/ McDonough Marine Service	Volunteer Barge & Transport Inc.
Marquette Transportation Company, LLC	Vulcan Materials Company
Martin Marine	The Waterways Journal, Inc.
McNational Inc.	