Minutes

Inland Waterways Users Board Meeting No. 76

August 12, 2015

Gaylord Opryland Resort Hotel and Convention Center 2800 Opryland Drive Nashville, Tennessee

[Note: The following minutes of the Inland Waterways Users Board meeting No. 76 were approved and adopted as final at Inland Waterways Users Board meeting No. 77 held on December 2, 2015 in St. Charles, Missouri.]

The following proceedings are of the Inland Waterways Users Board meeting held on the 12th day of August 2015, commencing at 9:00 a.m., at the Gaylord Opryland Resort Hotel and Convention Center, 2800 Opryland Drive, Nashville, Tennessee, Mr. Martin T. Hettel, Chairman of the Inland Waterways Users Board presiding. Inland Waterways Users Board (Board) members present:

CHAIRMAN MARTIN T. HETTEL, American Electric Power (AEP) River Operations, LLC;

MR. DAVID CHOATE, Bruce Oakley Inc.;

MR. CHARLES A. HAUN, JR., Parker Towing Company, Inc.;

MR. MARK K. KNOY, American Commercial Lines, Inc.;

MR. G. SCOTT LEININGER, CGB Enterprises, Inc.;

MR. ROBERT R. McCOY, Amherst Madison, Inc.;

MR. DANIEL P. MECKLENBORG, Ingram Barge Company;

MR. BRUCE REED, Tidewater Barge Lines, Inc.;

MR. MICHAEL T. SOMALES, Murray American Transportation, Inc.; and,

MR. WILLIAM M. WOODRUFF, Kirby Corporation.

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 for Civil Works, Washington, D.C.;

RADM GERD F. GLANG, Director, Office of Coast Survey, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce, Silver Spring, MD.;

MS. LAUREN K. BRAND, Associate Administrator for Intermodal Systems Development, Maritime Administration (MARAD), U.S. Department of Transportation, Washington, D.C.;

MR. NICHOLAS MARATHON, Transportation Economist, Agricultural Marketing Service, U.S. Department of Agriculture (USDA), Washington, D.C.

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

MAJOR GENERAL JOHN W. PEABODY, Executive Director, Inland Waterways Users Board and Deputy Commanding General for Civil and Emergency Operations (DCG-CEO), U.S. Army Corps of Engineers, Washington, D.C.;

MR. MARK R. POINTON, Executive Secretary and Designated Federal Officer (DFO), Inland Waterways Users Board;

MR. KENNETH E. LICHTMAN, Executive Assistant and Alternate Designated Federal Officer, Inland Waterways Users Board.

Program speakers in scheduled order of appearance were as follows:

MR. DAVID F. DALE, Director of Programs, Great Lakes and Ohio River Division, U.S. Army Corps of Engineers, Cincinnati, Ohio;

MAJOR GENERAL JOHN W. PEABODY, Executive Director, Inland Waterways Users Board and Deputy Commanding General for Civil and Emergency Operations (DCG-CEO), U.S. Army Corps of Engineers, Washington, D.C.;

MR. MARTIN T. HETTEL, Chairman, Inland Waterways Users Board;

DR. MARK F. SUDOL, Institute for Water Resources, U.S. Army Corps of Engineers, Alexandria, Virginia;

MR. JEFFREY A. McKEE, Chief, Navigation Branch, Operations and Regulatory Division, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.;

MR. EDWARD E. BELK, Chief, Operations and Regulatory Division, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.;

MR. DAVID F. DALE, Director of Programs, Great Lakes and Ohio River Division, U.S. Army Corps of Engineers, Cincinnati, Ohio;

MR. JEFFREY A. McKEE, Chief, Navigation Branch, Operations and Regulatory Division, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.;

MR. WILLIAM M. WILSON, Chief, Planning, Programs and Project Management, Nashville District, U.S. Army Corps of Engineers, Nashville, Tennessee.

Other individuals who provided additional information in response to questions raised by Board members during the meeting included the following:

MR. DENNY A. LUNDBERG, Director, Inland Navigation Design Center, U.S. Army Corps of Engineers, Rock Island District, Rock Island, IL.

MR. MICHAEL E. BRADEN, Chief, Olmsted Division, Louisville District, U.S. Army Corps of Engineers, Louisville, Kentucky.

There were two speakers who provided public comments during the public comment portion of the meeting:

MR. JAMES STARK, Executive Director, Gulf Intracoastal Canal Association (GICA), and

MR. JOHN S. DOYLE, Jones Walker LLP.

PROCEEDINGS

MR. MARK R. POINTON: Could we take our seats please. Welcome everybody. I'd like to welcome everybody to the 76th meeting of the Inland Waterways Users Board. We are here in Nashville. We have actually never had a meeting in Nashville before.

Oddly enough, we had a meeting in Chattanooga, and it was 13 years ago. The same duration as when we last met in Galveston, so that is not an intentional scheduling on our part, but I guess Marty went back and checked the schedule of previous meetings and felt that it was time to come back to this area.

I thought we had a great tour yesterday of the Chickamauga Lock and Dam. We had a really good briefing from the Nashville District folks and from the Great Lakes and Ohio River Division people.

I'd also like to thank our sponsor today, the Tennessee River Valley Association and

some of the industry folks. I think Crounse Corporation and a few other companies are participating in that, and Mr. Cline Jones is here from the Tennessee River Valley Association. Thank you.

Thank you, Mr. Jones.

My name is Mark Pointon. I am the Designated Federal Officer [DFO] and the Executive Secretary for the Inland Waterways Users Board.

We have a fairly full agenda today, so I hope we can keep it moving. Nothing deviating from what we have done in the past.

Before we start the meeting, I'm obliged to read for the record that the Inland Waterways Users Board was created pursuant to Section 302 of the Water Resources Development Act of 1986. It provides for 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 of 1972, as amended. This is a "Government in the Sunshine Act" meeting, and as such is open to the public.

The U.S. Army Corps of Engineers is the sponsor of the Board and provides for the Executive Director, the Executive Secretary, the DFO and all normal activities.

We currently have one individual who has indicated they would like to make a public comment. So when we get to the public comment period at the end of the meeting, anybody who is interested, please let me know during the break and we'll try to work you in. There is a finite amount of time for public comments at the end of the meeting.

The proceedings are being recorded, and that transcript will be available shortly after the meeting, within a couple of weeks after the conclusion of our meeting.

I'd like to call in Major General John Peabody now to conduct the oath of office for the reappointed Board members. All ten members that are here at the meeting today are, in fact, reappointed, they had served a previous term. General.

MAJOR GENERAL JOHN W. PEABODY: Thank you.

At this time I do want to comment that we have one new member who has been appointed. Unfortunately, he's attended several of the last meetings, but he was not able to join us today -- he has an important conflict with his firm, he's not able to be here today, Mr. Rob Innis of Holcim Inc. So he is the one new member who will join the Board.

At this time I would ask all the other members of the Board to join me in front of the flags here and we will conduct the oath of office.

If you would all raise your right hand, please: I, state your name, do solemnly swear that

I will support and defend the Constitution of the United States against all enemies, foreign and domestic, that I will bear true faith and allegiance to the same, and that I take this obligation freely, without any mental reservation or purpose of evasion, so help me God. Congratulations, gentlemen.

MR. POINTON: Thank you, General. I would now like to call on Mr. David Dale from the Great Lakes and Ohio River Division to provide welcoming remarks for the Nashville District office and for the Great Lakes and Ohio River Division.

General Kaiser [Brigadier General Richard G. Kaiser, Commander, USACE, Great Lakes and Ohio River Division] and Lieutenant Colonel Murphy [Lieutenant Colonel Stephen F. Murphy, Commander, USACE, Nashville District] are involved with the Mississippi River Commission activity, so David has graciously offered to provide some opening remarks. Thank you, sir.

MR. DAVID F. DALE: I will be very brief because I have a lot of other things to say later in the meeting.

First of all, welcome to the Great Lakes and Ohio River Division and the Nashville District, on behalf of General Kaiser. He wished he could be here, but there comes times when he and I have to divide and conquer, as we have multiple things going on. And as Mark pointed out, he's fully engaged with the Motor Vessel *Mississippi* trip, and that's going very well.

So with that said, welcome to Nashville. If you need anything from us, please let us know and we'll be glad to get you some assistance. Short of that, in the interest of time, back to you, Mark.

MR. POINTON: Thank you, David. I would now like to call on General Peabody to provide his opening remarks. General.

MAJOR GENERAL PEABODY: Thank you very much, Mr. Pointon.

First of all, I want to thank Secretary Darcy [Ms. Jo-Ellen Darcy, Assistant Secretary of the Army for Civil Works] and her staff, and her previous Principal Deputy, Ms. Dominguez [Ms. Marie Therese Dominguez, former Principal Deputy, Office of the Assistant Secretary of the Army for Civil Works], for working so hard to make these reappointments possible. The bureaucratic requirements always seem to be more complicated and difficult than what we would like. But without Ms. Darcy's leadership, we would not have you reappointed in a relatively timely manner. Thank you, ma'am.

Thanks everybody for attending today. I especially want to thank the Nashville District. This is an incredibly busy and complicated week for them. They are hosting not just the Inland Waterways Users Board, but the Mississippi River Commission, two different groups visiting Chickamauga Lock, lots of logistical movements around Tennessee's former battlefields. And they have done a fantastic job, so congratulations and thanks to them.

Also, I want to reiterate the thanks to Mr. Cline Jones and the Tennessee River Valley Association for providing the refreshments today.

We did have rather in-depth discussion yesterday on the Chickamauga Lock, the history behind it, the alkali aggregate reaction, which is also known as the concrete growth, which has made that structure so difficult for the Corps to manage. And, of course, the limited funding has made it difficult for us to efficiently execute the multiple contracts that we have under construction to include Chickamauga Lock.

The Board's insights, input and continued discussions on this, I think, will be very important to inform the decision-making process that the Administration needs to go through to judge where and how to allocate the resources available for the multiple purposes that we have and the Chickamauga Lock, is a very important part of that equation.

I want to complement our Chairman and the Board members for continuing to focus on a distributed orientation of the Users Board meetings. We have continued to move to different parts of the system. We were in Walla Walla last year [Inland Waterways Users Board meeting number 72 held on August 18, 2014], we were in Alabama two meetings ago [Inland Waterways Users Board meeting number 74 held on February 25, 2015], and then in the Houston, Gulf Coast area, Galveston area the last meeting [Inland Waterways Users Board meeting number 75 held on May 14, 2015], and now we are on the Tennessee River. And I think this kind of broad systemic holistic approach to the Board's responsibilities is highly commendable and I would encourage that to continue.

We have a lot of meaty topics to go over in addition to the normal updates associated with project execution. We also are going to have some continued discussions on LPMS [Lock Performance Monitoring System] and how we manage our data.

I concur with the Board's general assessment that we are probably not -- I know we are not where we need to be in regards to having clear requirements and processes to capture the data in a standard fashion so that we have confidence that its meaning from one point in the system to another is relatively the same, and we are committed to continue to work with the Board to improve the way we capture and process that data so that we have confidence in what that data means.

And of course, we'll discuss the progress on the Capital Investment Strategy [CIS]. Mr. Eddie Belk, our Chief of Operations and Regulatory Division at Headquarters, has been working closely with Ms. Darcy's staff and the Office of Management and Budget [OMB] to go through that proposed strategy for the capital investment approach, and that will be part of our discussions later today.

From my perspective, the big picture issue that we continually need to work on, and it's an iterative process of -- large context and important details is the long-term vision that this Board has for the inland marine transportation system and how to prosecute that vision in the

most effective way with the resources available.

I think we made good progress on that, but I also think it's clear that we have quite a ways to go, and it's probably going to take several more attempts at this before we really get it where it needs to be.

The Fiscal Year [FY] 2017 Civil Works Budget is currently being developed. The Corps Headquarters staff has submitted the initial proposals to the Secretary's office and are in the process of going through detailed reviews with Ms. Darcy's staff, and I think we are relatively on point with that.

The one highlight I would make is that from the navigation perspective, this is the first year that we will be using asset management data to inform the budget process. This has been an aspirational goal for several years. It's been more difficult than we first thought it would be simply because: (A) we have never done it before, and (B) there's an incredible amount of data out there associated with the condition assessments and the risk assessments of our various projects.

And this is not exclusive, of course, to the inland marine transportation system, but it applies across the entire Corps. That comprises about 50 percent of our O&M [Operation and Maintenance] budget.

Ms. Darcy is very focused on pushing us in this direction, and her leadership has been critical in moving this forward. I think we'll have a good first look at this this year and we'll see how that goes, and I know we'll learn from that experience as well.

Lastly, I would now like to call on our Federal observers to make any opening remarks that they have, and then we'll get on with the meeting. First up is Mr. Nick Marathon from the Department of Agriculture. Sir, the floor is yours.

MR. NICHOLAS MARATHON: Thank you, General. I appreciate the opportunity to go on the tour yesterday and be at the meeting today. Today I am representing Mr. Arthur Neal. He is the Deputy Administrator of the Transportation and Marketing Program of the Agricultural Marketing Service at the U.S. Department of Agriculture [USDA].

We currently have some ongoing work with the University of Tennessee, its Institute of Agriculture, to look at the benefits of waterway improvements to agriculture. This is part of the USDA's ongoing work as directed by the Agricultural Act of 2014, the 2014 Farm Bill [Section 6206 entitled "Study of Rural Transportation Issues" of the Agricultural Act of 2014, Public Law 113-79, enacted February 7, 2014], and it is going to be an update of a 2010 report entitled "Study of Rural Transportation Issues" which was mandated by the 2008 Farm Bill. That report discussed the impact of transportation infrastructure on the movement of agriculture goods. We expect an early 2016 delivery of the report and will gladly share it with the group.

Again, thanks for the opportunity to be here today.

MAJOR GENERAL PEABODY: Thank you, sir. And thank you for your participation in yesterday's events.

The next Federal observer will be our representative from NOAA, Admiral Glang, who is also on the Mississippi River Commission. He's splitting his duties this week. Admiral Glang. Sir, the floor is yours.

REAR ADMIRAL GERD F. GLANG: Thank you General. Good morning, everyone. This is my first opportunity to take on NOAA's role as an observer at Inland Waterways Users Board meeting, I appreciate the opportunity.

Myself and Dr. Norma Jean Mattei are both commissioners from the Mississippi River Commission, and we are able to intersect here with the Users Board meeting. It's not often we get to have that opportunity. Thank you.

MAJOR GENERAL PEABODY: Thank you, sir. And we also have here representing the Maritime Administration today, Ms. Lauren Brand, Associate Administrator for Intermodal Systems Development, representing Maritime Administrator Paul "Chip" Jaenichen. Ma'am, the floor is yours.

MS. LAUREN K. BRAND: Thank you, General Peabody.

I've been in my new role for about eight months now, and as you know, we are a participating observer to the Board by statute. What you may not know is that the mission of our office is to improve the maritime transportation system, including port connectors and marine highways through investment, integration and innovation, to meet the current and future needs of the nation.

We are opening an innovation center and we hope to take some of the information we learn here to help feed that center to work with you on innovations that could help move more freight on the waterways.

We have a vested interest in the success of this industry and doing business and moving more freight on our inland waterways.

We also facilitate the funding of port and intermodal connections through infrastructure specifically, and we work through our Secretary of Transportation to designate marine highways. So we support what you do and look forward to working with you. Thank you.

MAJOR GENERAL PEABODY: Thank you, ma'am. We appreciate your collaboration and attendance here today.

And finally we have, representing herself, the Assistant Secretary for Civil Works, Ms. Jo-Ellen Darcy, and my civilian boss. Ma'am, the floor is yours.

MS. JO-ELLEN DARCY: Thank you, General. And thank you, everybody, for being here today. I'm glad we were all able to be here today and get you sworn in, to have this Board continue with the valuable function it provides, not only for us in the Corps, but for the country. So congratulations to all of you for the renewed terms, and look forward to working with you.

I am going to have to say that this Users Board has been partly informing me of all of your work through General Peabody and through his leadership on being on this Board, and I think that we all owe him our gratitude for his leadership, and we will miss his leadership because this will be his last Users Board meeting.

So, with that being said, General Peabody all the best in your future, and hopefully you won't be a stranger to this group.

MAJOR GENERAL PEABODY: Thank you ma'am. And on that note, I would also like to highlight that we have attending today my successor, Major General Donald "Ed" Jackson. Ed has spent about the last month in between jobs, getting familiar with the Civil Works portfolio, getting briefed by the Headquarters staff, and visiting some of the areas of the nation that have important civil works issues that he doesn't have personal familiarity with.

General Jackson brings a fantastic wealth of experience. He is a strategic thinker, and I know he's going to continue to advance the Civil Works program and improve its performance, including with the Users Board here. So, Ed, thanks for coming here. And I would also note that as soon as we finish this meeting, the responsibilities of the Deputy Commanding General for Civil and Emergency Operations will be all his.

I say that with neither glee nor satisfaction, but support for the great work that he's going to do going forward. Ed, congratulations. We're all proud of you.

Okay. Mr. Pointon, I'll turn the podium back to you to continue moving forward with the meeting.

MR. POINTON: Thank you. Before I call on Chairman Hettel to make his opening remarks, I'd like to remind everybody to identify themselves and speaking into the microphone so that we get a fairly good recording and transcript of the meeting. You all do a fairly good job with that, but I just want to remind you all, you might have forgotten.

Marty, the mic is yours, sir.

CHAIRMAN MARTIN T. HETTEL: Thank you, Mark, and certainly welcome everybody to our Inland Waterways Users Board Meeting No. 76 here in Nashville. And a very special welcome to the Honorable Assistant Secretary Darcy, we are certainly glad that you are here today with us.

Thanks to the Corps' Nashville District for hosting our meetings. We appreciate all of the

work that went into the scheduling and the site tours and transportation and the meeting today, nicely done.

And thanks again to our sponsors for the coffee service for today's meeting. If you happen to see a member of the organizations involved in this sponsorship, please take a minute to thank them.

Mississippi River Commission members, fellow Board members, thank you for your flexibility in the stakeholders' dinner aboard the Motor Vessel *Mississippi* last night.

From my past tour on the Motor Vessel *Mississippi*, along with our discussions last night, in my opinion, these types of interactions between organizations are invaluable. General Peabody, a personal thank you for making this happen.

As stated at our last meeting, we are planning a site visit to LaGrange Lock [located at Illinois River mile 80.2 in Versailles, Illinois] in November. Looking at the driving time between Peoria and La Grange and St. Louis to La Grange, St. Louis is about a 30-minute bus ride longer. But with the flexibility of transportation in and out of St. Louis, it looks like we'll hold our meeting in St. Louis in November. And we are looking to do it either the week of November 2 or the week of November 16. So if you folks can look at your schedule and possibly make Mr. Pointon aware, that would be helpful.

Yesterday we toured Chickamauga Lock [located at Tennessee River mile 471.0]. Not only did we see a deteriorating facility, but we also heard that it could cost up to \$360 million on major rehab of the existing chamber and deconstruction of the cofferdam that was put in place to build the new chamber, if we do not build the new chamber, of course.

With the remaining cost to complete the new chamber at Chickamauga at \$680 million, it sounds like we'll have to move ahead with the construction of the new chamber.

However, the Board needs to understand how this does affects the benefit to cost ratio at Chickamauga. Not only for the Chickamauga project, I think the Board needs to understand the whole BCR [Benefit-to-Cost Ratio] process for any project that we are looking to build or are building so that we can make a better recommendation to the Assistant Secretary and to the Congress on where we put our funds.

We are looking forward to the discussion on enhancement to the LPMS system and hearing from Dr. Sudol.

I find it difficult to understand how the Corps is performing economic analysis on projects when we do not capture the true delay in transit times at locks, which, of course, are part of the shipper-carrier costs.

We are also looking forward to the update on the Capital Investment Strategy. The WRRDA 2014 legislation [Section 2002(d)(1) of the Water Resources Reform and Development

Act of 2014, Public Law 112-121, dated June 10, 2014], of course, is the vehicle that directed the Secretary to develop a new 20-year Capital Investment Strategy.

The WRRDA 2014 legislation gives specific criteria in developing the Capital Investment Strategy. That being, to ensure to a maximum extent possible that, the investments that are made under the 20-year program are (A) made in all geographical areas of the inland waterway system.

Well, we, the Board, believe the Capital Investment Strategy, specifically the "Maximized Inland Waterways Trust Fund" scenario within the CIS, which the Corps developed in conjunction with the Users Board and as delivered to the Assistant Secretary's office, lists projects that can be completed on the Ohio River, the Monongahela River, the Tennessee River, the Illinois River, the Upper Mississippi River, and the Gulf Intracoastal Waterway.

We, the Users Board, consider this directive from WRRDA 2014 to be made in the Capital Investment Strategy as delivered to the Assistant Secretary.

The second directive of the Capital Investment Strategy in the WRRDA 2014 legislation states that the Capital Investment Strategy is to ensure sufficient funding on the inland waterway projects.

Well, the Users Board also considers this directive from WRRDA 2014 to be met as in the Capital Investment Strategy, specifically, the "Maximized Inland Waterways Trust Fund" scenario is utilizing the full contributions of the Inland Waterways Trust Fund.

We can complete the projects in some cases decades earlier than before, with the yearend balance of the Trust Fund never exceeding \$90 million, and never dropping below \$20 million on an annual basis.

So while the Users Board agrees these two parameters of the WRRDA legislation have been met in the Capital Investment Strategy, there are other reasons to move forward with these projects.

In an article that was published by the Society of American Military Engineers, it states the following, "According to the Institute for Water Resources, from 2010 to 2012, the Civil Works program of the Army Corps of Engineers provided an annual estimated National Economic Development net benefits of \$87.1 billion, and stimulated \$27.3 billion in returns to the U.S. Treasury."

With a program spending somewhere above \$5 billion a year, that equates to a 16-to-1 return of economic benefits and a 5-to-1 return in revenue to the Treasury.

Within the same article it states, "The inland waterway lock and dam network moves about 885 million tons of domestic commodities annually." Now, I'm assuming that includes the Great Lakes. I think our inland waterways system is somewhere around 665 million tons.

However, they also state the traffic is expected to increase by 61 percent by the year 2040. That equates to an increase of 540 million tons, for an estimated total of 1.45 billion, that's with a "B," tons that will be shipped on the inland waterways lock and dam network by the year 2040.

In order to prepare for this additional tonnage that is expected to move, we must improve our inland waterway system. Not only improving the reliability, but increasing capacity. The Capital Investment Strategy as delivered to the Secretary's office does just that. It lays out major rehabilitation projects to improve reliability, and it increases the capacity by building new lock chambers that have already been authorized, and have begun construction large enough to move today's tows.

That will conclude my opening remarks, and I look forward to today's updates and presentations. Thank you, Mark.

MAJOR GENERAL PEABODY: Thank you, Mr. Hettel.

I apologize, there's one item I meant to cover and I neglected in my introductory remarks, and that is that we have, serendipitously, members of the Mississippi River Commission here today in addition to Admiral Glang, and I'd like the actual commissioners, if you could please stand and be recognized.

Dr. Norma Jean Mattei from Metairie, Louisiana. General Dave Hill from Dallas, Texas [Brigadier General David C. Hill, Commander, USACE, Southwestern Division]. I thank you both for coming, I appreciate it.

MR. POINTON: Next on the program is the approval of the minutes from the last Board meeting, No. 75, which was held in Galveston. The minutes are one of the tabs in your informational books.

Can I ask the Board for someone to make a motion to approve those minutes?

CHAIRMAN HETTEL: So be it.

MR. POINTON: All right. Let me write that down. A motion is on the floor. Gentlemen, what's your vote? All in favor.

BOARD MEMBERS: Aye (unanimous).

MR. POINTON: Any nays? Hearing none the motion to approve the minutes of Users Board meeting No. 75 is approved unanimously. Thank you gentlemen.

Next up on the agenda is Dr. Mark Sudol, who is going to talk to you about the Lock Performance Monitoring System. And that's been an enduring issue about that data. Marty has

mentioned it already in his remarks. We'll have a brief presentation. But Dr. Sudol probably knows more in his head than what's on that presentation, so he's going to address that issue right now. Mark.

DR. MARK F. SUDOL: Good morning, everyone. I apologize for not making the last meeting, but I'm here now, and I'm here to answer your questions. I'm glad there are lots of questions. I'll briefly go through them. I have four slides and it will open up the questions, because I know a number of members have those questions.

Next slide. This is the historic LPMS issue, delay time, how we deal with delay times, not only Bayou Sorrel, but also at a number of other locks.

What I've done is -- when I found out this was an issue and I took over as the NDC [Navigation Data Center at the Institute for Water Resources] Director, one of the things I wanted to do was go out and do a lock tour. So in July, with Mark's [Mark Pointon] help, I went out and visited ten locks, from Pittsburgh all the way down to Bayou Sorrel. And those pictures, the right picture is the one I took when I visited the lock itself in July.

So one of the things I wanted to do was talk to lock operators, how they collect the data, what some of their issues were, not only with LPMS, but how they collect the data.

One thing I learned from a long time ago is you go out and talk to the folks on the ground and see how things are happening. So that's what I did, and I hope I'll be able to answer most, if not all, of your questions today on that.

One of the questions that came up is when the helper boat is connected and when we start delay time and how that was done. And how the policies interacted with actually how we collect the data.

And what we found out after my tour and after actually talking to the folks that worked on LPMS, it looks like Bayou Sorrel was one of the only locks that was doing it differently than everybody else.

So what we decided to do is to change how we collect data at Bayou Sorrel.

Arrival time now starts the delay time, so we've taken out the helper boat connection or location as a factor in starting that delay time.

Arrival time is generally set by lock operator. And what I found out in talking to lock operators, it is not a point in time directly -- or, excuse me, a point in space.

It is a combination of a point in space and working with the towboat operators or the captains in when they get into the queue and how they lock in.

So that's how we are going to be doing it from now on. So when a towboat comes down,

gets close or at the arrival point, him or her, the captain will call in to the lock operator. The lock operator will put them in queue, and that will start the real delay time. It won't be when the helper boat connects anymore.

What we have done is worked up a new proposal, we have done our internal consistency. I briefly discussed it with Jeff McKee [Mr. Jeffrey A. McKee, Chief, Navigation Branch, Operations and Regulatory Division, Headquarters, USACE] for national policy at the nav level. We are proposing it to you all here for your stakeholders, that's what we promised to do, to make sure we are meeting your needs.

And once you give us your input, we are going to continue to go back to Jeff and make sure it meets his needs completely, and as you know, it probably does. And then we can establish those new procedures almost immediately.

That's the plan to fix, at least, the issues of Bayou Sorrel. And, again, that picture on the right is the one I took on my tour, because I wanted to get out and talk to the folks and find out what's happening.

Also, one of the other questions that have come up, I've talked to P. J. at the Nav center in Huntington [Mr. Patrick J. Donovan, Chief of the Planning Center of Expertise for Inland Navigation and Risk Informed Economics, USACE, Huntington, WV], and we are working up procedures for how we have to go back and look at historic data and recalibrate it with the new procedures and everything else, so that if there's an issue there, we can fix that. And P. J. is working on a couple options to do that analysis.

And on that, I'd like to open up the questions and any other things that will come up, and I know there are a couple more questions.

MR. POINTON: That's Patrick Donovan. He's the Director of the Inland Center for Navigation in Huntington, West Virginia, just so you know who P. J. is.

MR. WILLIAM M. WOODRUFF: This is Matt Woodruff. Just a couple of thoughts as we are looking at this.

I think one of the overriding priorities that is important to us isn't just efficiency, but it is safety, and I think that has to come before all other considerations.

One thing that I want to be sure that we are considering and thinking about when we are determining arrival times is that we don't put any artificial fences around geographic locations when vessels are waiting in queue that causes a vessel to choose to wait in a location less safe than another location that might be further away.

Another example of this is Bayou Sorrel, as you may know, is getting ready to close for dewatering, which is expected to cause a lot of traffic to re-route to the Algiers Lock in New Orleans.

The Coast Guard has great concerns about that in hurricane season and having too many vessels that are queuing up at Algiers, so that if we had a pop-up hurricane, they may not be able to get out. So the Coast Guard is actually saying that they may prohibit vessels from queuing up in proximity to the lock and may stage vessels further away. And so I think as we look at the systems for capturing delay, we need to make sure that we are capturing delay even if it's delay not in immediate proximity of a lock, because that may not be the safest place for those tows to wait for a variety of reasons.

DR. SUDOL: That's exactly true, sir. One of the things I talk to lock operators on is how they do arrival time and where they actually connect it.

And most of the lock operators that I've talked to, they don't go with that fixed arrival point. If the tow is coming down and there are four or five boats already in the queue, they will allow that towboat captain to get in the queue miles above the arrival point, if that makes sense.

They work it out between themselves. They know where the tows are on the system. They connect up with either the boats upriver or down river, depending on which way they are coming and they work that out with the tow captains. And talking to lock operators, there's a lot of that going on, a lot of talk with the tow captains to make sure.

But in terms of what's happening with the dewatering of Bayou Sorrel and Algiers Lock, we'll work with the Coast Guard to make sure that's a little clearer so that if we have to have other places to lock up, we'll work with them to do that. We'll connect up with the New Orleans district, because they are the ones that run the locks.

MR. WOODRUFF: Thank you.

CHAIRMAN HETTEL: Dr. Sudol, Marty Hettel here. Thank you for being in attendance today.

Let me first start off, you mentioned Bayou Sorrel was the only facility that you thought was having discrepancies in arrival times. I would ask you to look at Brazos Floodgates and the Colorado River Locks on the GIWW [Gulf Intracoastal Waterway].

I made a presentation at the GICA [Gulf Intracoastal Canal Association] conference last week and I'm going to reference that later too. And the transit time between Brazos on the LPMS stated an average of 13 minutes, and we all know that that's unrealistic, especially with your non-federal sponsor, the Texas Department of Transportation, looking at a study on how we can improve or eliminate Brazos, they really need to capture that information for the shipper-carrier costs.

And I'm glad to hear that you can reconstruct the data at Bayou Sorrel. And let me just give you an indication of why.

I went back and looked for a 26-day period, tracked all the arrival times at Bayou Sorrel. 289 single lockages and 189 double lockages took place in that 26-day period. The single lockages, the arrival time was never adjusted, never changed. But, of course, the double lockages, when the assist boat arrived, they changed the locking time.

That left LPMS not capturing 81 days of delay, boat delay. Utilizing a number of \$300 a day for the boat and the barges, which may be on the light side --

MR. MARK K. KNOY: An hour.

CHAIRMAN HETTEL: At \$300 an hour for the boat and barges, that's some \$600,000 in shipper-carrier costs you are not recognizing.

So the total cost, using the actual arrival time for that 26-day period, was \$1.492 million to the industry, at \$300 an hour. And, again, that may be light.

So when I look back at the September 2013 re-evaluation of Bayou Sorrel, the least cost of the project had a BCR of .68. And that was with annual incremental cost of \$11.5 million a year, and annual incremental benefits of \$7.8 million a year.

Well, when you take this 26-day period, take the \$1.492 million and divide it by 26 days, it's about \$57,000 a day the industry absorbed in cost. Multiply that daily cost times 365 days, is almost \$21 million. Is that not the incremental annual benefits? And when you look at the \$21 million versus the incremental annual costs that puts the BCR up around 1.82.

So I really think we need to get you to reconstruct the data of Bayou Sorrel, and then get the Corps to again look at that project, utilizing the actual delay times at Bayou Sorrel. I think we'll find that the BCR is well over 1.0.

DR. SUDOL: That's why I've already talked to Mr. Donovan.

MAJOR GENERAL PEABODY: Dr. Sudol, I just want to clarify here to the points that the Chairman is making. Do you agree with his assessment on the way the data is collected, and that because of the general concerns he's expressed, that we are, in fact, probably underreporting the delay times?

DR. SUDOL: Yes, sir.

MAJOR GENERAL PEABODY: So in terms of the facts, we are in general agreement, maybe not on all of the specifics, but on the general concerns?

DR. SUDOL: Yes, sir.

MAJOR GENERAL PEABODY: Okay. So it seems to me, then, Mr. Chairman, the first step is to ensure that the Board is satisfied with the approach that Dr. Sudol has recommended

here, and we can provide as much detailed information as the Board may want, focusing on getting the data accurate first.

I understand the Board's concern with the implications for the data to BCR and other data that informs policy decisions on allocating resources. But I think we should disaggregate those two issues, separate those two issues.

Focus on the data and then focus separately, as you have already suggested, on really digging into how BCR's are developed and calculated and then if the Board wants to make any recommendations to the Administration associated with prospective changes to that, then the Board could do so.

But I do think we should take these two issues separately. Although I acknowledge in terms of analysis, although I acknowledge that they clearly have a cumulative impact.

CHAIRMAN HETTEL: Thank you, General. And let me reiterate, Dr. Sudol, Vice Chairman Woodruff's comments. It's an arrival time, not an arrival point.

DR. SUDOL: Correct.

CHAIRMAN HETTEL: That's really critical. And I'll give you one more example of data I found that's askew in what the LPMS is reporting from what I see online.

We just went through a Belleville [Belleville Locks and Dam located at Ohio River mile 203.9 below Pittsburgh, PA] and Racine [Racine Locks and Dam located at Ohio River mile 237.5 below Pittsburgh, PA] lock closures. And when I looked at a 24-hour period, the actual delay was 27.77 hours for those vessels in that 24-hour period. That same period on the LPMS only showed a delay of 14.05 hours on the average delay.

Now, I think that's being constructed because we locked two different cuts through that chamber. So the first cut sits for 28 hours, the second cut sits for zero hours, so the average is 14 hours.

DR. SUDOL: I don't think that's how they do it, sir, but I'll check on that.

CHAIRMAN HETTEL: Well, that's what's being reported on the LPMS when I look at it on the Internet. So that's just another point that I think we need to clarify.

And I agree General, we have got to, number one, correct it moving forward. And I'd be happy to send you my spreadsheet of the delays at Bayou Sorrel that I tracked in that 26-day period. And then if you could compare them to what you get when you reconstruct the data at a later date that would be great to make sure we are all on the same page.

DR. SUDOL: Okay.

CHAIRMAN HETTEL: Thank you.

MR. POINTON: And, Marty, could you provide that detail to Mark Sudol and myself so that we have something articulated that we could go back and talk to the technical people that are going to be looking at that data with us?

CHAIRMAN HETTEL: Absolutely. I've got it on a flash drive, but I don't think you can accept it.

MR. POINTON: Yeah, that's not going to work.

CHAIRMAN HETTEL: Yeah, I'll e-mail it to you. Thank you.

MR. WOODRUFF: This is Matt Woodruff, if I could follow up. I think that the level of granularity in this presentation is appropriate for this venue, but I would request that the Board be provided a copy of the actual draft policy that's being considered so that we can provide -- you say you want stakeholder review and input, I'd like to actually see the document and provide input on that.

DR. SUDOL: Exactly. That's what we were hoping you would ask for. That's the whole point, is we want to be more open and transparent to the Board, and give you a say in what we are doing.

MR. WOODRUFF: Perfect. I would appreciate it, and I'm sure the other members would appreciate a chance to look at that and share that with our operations folks.

The second thing, I don't want to belabor the point at Bayou Sorrel, but I think it's important to note for the record.

In addition to the skewing of the benefit to cost ratio by the way delays are counted, another aspect of the prior study at Bayou Sorrel that I think is problematic and bears review was the fact that the traffic projections used in that study were based on a report from the U.S. Department of Energy, I believe it was conducted using data through 2009.

And so that data showed a drop in movements that were a function of the economic downturn our nation experienced, and they basically projected that line to continue that downward trend into the future.

They gave no consideration at all to the shale oil revolution, to the new developments of oil and gas and petrochemical facilities along the Gulf Coast.

I think that the reality we have seen since that time would show that those projections were woefully incorrect, and I think that when we look at changing the analysis of the delay times and the benefits, that we should also look at those traffic projections and make sure that they are using more current data that more accurately reflects what's actually happening in that

area.

MAJOR GENERAL PEABODY: Mr. Woodruff, if I could capture that and make sure we understand it, I think you are suggesting that the assumptions that are being made associated with future traffic projections are perhaps too crude and need to take in consideration more specific traffic realities, is that accurate?

MR. WOODRUFF: And newer realities. They used data that perhaps was the best estimate available at the time, but many things have changed in the nation since that time, things that few people anticipated.

And so I'm not criticizing what they did, I'm just suggesting that we need to update it with the new reality to get a better estimate of the need for that facility's replacement.

MAJOR GENERAL PEABODY: Yes, sir. Mr. Chairman, what I would suggest is that we take on a task, as you have asked us to, to specifically develop a briefing and explanation for how, not just BCRs, but traffic projections and forecasts are developed, and that we walk through that in some detail with the Board members so that the Board does have -- we have a clear common understanding of actually how the system works, in sufficient detail that we can make judgments, or the Board could make judgments about the recommended changes to the processes, and then we can take those under advisement.

Those that we can do on our own authority, of course, we might be able to carry out. Others might require a policy change or consideration by the Secretary. I'm just not familiar enough with the rules that govern those. But I think this is an important initiative that we need to understand and have a clear common understanding of, and then you can make recommendations that will address whatever specific concerns that you have.

CHAIRMAN HETTEL: Thank you, General.

And I certainly agree, as I stated in my opening comments, it's important for us to understand to make a better informed recommendation on where not only the Trust Fund dollars go, but the dollars from the General Treasury.

And to Matt's statement on tonnage, as I mentioned in my opening statement, a 61 percent increase in tonnage. For Bayou Sorrel in 2014, that lock passed 22 million tons. If it, in fact, increases 61 percent by 2040, that's going to increase that lock to 36 million tons.

So I'm confused – the Institute for Water Resources says we are going to get a 61 percent increase in tonnage in 25 years, but as Vice Chairman Woodruff noted, the last study said there would be no increase in traffic. Thank you.

DR. SUDOL: Thank you.

MAJOR GENERAL PEABODY: So, Dr. Sudol, when will we be able to prospectively

apply this, not just at Bayou Sorrel, but the rest of the system.

DR. SUDOL: Sir, we'll be writing up the proposed change in policy, which will be rather short, one to two pages maximum. And we'll get that out – we'll run it by Mr. McKee at Nav policy Headquarters. Get that back out to the Board, hopefully, by Monday of next week, depending on Mr. McKee's schedule. It will be rather short. Get the Board to review it. And once they are okay with it, then we'll get back to Mr. McKee and get his final approval, and then we'll implement it.

MAJOR GENERAL PEABODY: One of the concerns that I have is it seems -- you mentioned this, that we have provide -- and I think it's appropriate, but I think it results in some, probably, differences at different points in the system. We allow the lock operators, the project managers' judgment to decide what constitutes an arrival time.

And it seems to me that what we are proposing to do is a fairly significant shift in the way we operate, and that would require some training and some understanding at the project level. And so Mr. McKee and Mr. Belk, I would ask you to work with your team to figure out what's the appropriate approach to implement this.

I don't think -- I mean, my gut tells me that just putting this on paper and putting it out is a necessary but insufficient condition to really affect the changes in the documentation that the Board is seeking, and I think that we owe them that.

DR. SUDOL: Can I make one statement, sir?

MAJOR GENERAL PEABODY: Please.

DR. SUDOL: In terms of talking to lock operators, the majority of them are actually using that arrival point that I talked about, that's how they are doing it right now.

The only really significant change they were doing is specifically about the helper boat, how the helper boat is connected with when they start the delay time.

What was happening previously was, at Bayou Sorrel specifically, is they didn't start the delay until actually the helper boat was connected up to the tow.

The argument in the previous policy was, if the helper boat wasn't connected to the tow, technically, it wasn't ready to lock. So they didn't count that as delay.

So that's really the only significant change we are doing. The remainder of it in terms of what the arrival time is, most of the -- all of the lock operators I talked to, they talk to the towboat captains and are using a very much common sense, where are they in the queue, where are they around the arrival time, to adjust that arrival time to make sense, making sure that, if one tow is ahead of the other close to the arrival time, and tow "A" is a ways away from arrival time, they don't let tow "A" call in and say, hey, I want to get to queue first before the lower boat that

just hasn't called in yet.

And so they work with the towboat captains and have a good relationship in most cases of where they are and where they are getting into the queue. Now, they do adjust -- there are some tows that have to lock because of specific reasons, and they work with them on a case-by-case basis.

CHAIRMAN HETTEL: Dr. Sudol, I think you are correct that the majority of lock operators use an arrival time. I would ask again that you look at Brazos.

DR. SUDOL: Yes sir.

CHAIRMAN HETTEL: Because they are not using the arrival time, they are using arrival point. When you passed the buoys, that's their arrival time, and 13 minutes transiting those facilities is not reasonable. And the same holds true at Colorado, so I would look at those also.

DR. SUDOL: I've got those written down.

CHAIRMAN HETTEL: Thank you.

DR. SUDOL: I apologize to the Board. I'm new as the NDC manager, so I'm still learning, and one of the things I am doing is going out to the sites.

MAJOR GENERAL PEABODY: No, this is great work, great discussion. I appreciate the Board's concerns.

Just to close this out, Mr. Belk and Mr. McKee, my concern is that whatever process we finalize, and the way we do it is important, and it's important that it results in the actual expectation that the understanding of how delay times are calculated and the data is agreed to by both the Board and the Corps. And we are not there at this moment at all the locations, but that's where we need to be.

The process that we follow internal in the Corps to get there, I think, is an important one, and I just wanted you guys to make sure that we look at it and actually achieve the intent, and that we just don't have a process that does not satisfy the concern. That's my concern. Thanks.

MR. POINTON: I'm afraid to open the floor for any more questions for Mr. Sudol. Are there any more questions for Mark Sudol?

MR. MICHAEL T. SOMALES: Just to comment as a former mariner who spent a lot of years steering towboats for a living, we are taught in our instruction that the arrival point is when you get there.

So in a situation where there's no traffic around a lock, you steer right up to the arrival

point, call the lock, make your arrangements to get through. And I have been told by lockmasters that I've called too early, guys wanting to get up or whatever it is.

But in situations -- and I'm in the Pittsburgh market, and like we have Emsworth [Emsworth Locks and Dam located at Ohio River mile 6.2 below Pittsburgh, PA] down for 47 days right now and the delays are as long as three days. So the queue begins at the arrival point cell, that's the first boat that should be prepared to lock, and then the queue assembles behind that. And the last boat may have safe harbor as far as five -- three, four, five miles away.

And typically what goes on, as the boats lock down, the queue moves forward and the next boat just works its way down to the arrival point and ties off.

So the idea of just when you call in, it shouldn't, I don't think, be real difficult to put a system in place and not be subjective about it, an objective system nationwide that at the call-in, when the vessel makes contact. And if one boat is in front of another and the guys in the back makes a call in to try and get ahead of somebody -- I've seen that before, and that sorts itself out real quick usually on the scene. The captain in front says "Whoa, whoa, whoa." So just to lend a little bit of common sense to it.

DR. SUDOL: That's exactly true. I was at Emsworth, which was one of the locks I visited.

MR. SOMALES: Thank you.

MR. POINTON: Are there any more questions for Mark Sudol? We are going to go on to the next item on the agenda. Jeff McKee is the Navigation Business Line Manager for the Corps of Engineers, and he is going to provide an update on the Inland Waterways Trust Fund and the status of the particular projects that are underway.

MR. JEFFREY A. McKEE: Good morning, ladies and gentlemen.

This slide is an update from what you see in your read ahead information book. The original slides that went out were through the 30th of June 2015. This is updated through the 31st of July so it's the latest data that's out there on the U.S. Treasury website.

And you will see in terms of changes, the tax revenue is up to almost \$77.8 million so far in Fiscal Year 2015. Interest on investments, almost \$10,000. So the total balance currently available in the Trust Fund is a little bit over \$102 million.

There have been really no drawdowns for Corps of Engineers projects as of yet. That will happen at the end of the year. So you will see this balance continue to increase through the end of the fiscal year.

CHAIRMAN HETTEL: Jeff, I'm sorry to interrupt. My book does not state that slide. Would you be so kind as -- my book states March 31, 2015.

MR. McKEE: What should have gone out -- it should have had through the 30th of June, and it would have had revenue of \$67 million rather than the \$77 million. It's gone up by about 10-and-a-half million dollars in July. And it would have been down in around the \$92 million for the total available through 30 June.

MR. POINTON: The presentation that was sent out in the read ahead notebooks was through the end of June and is in Tab 4 of the read ahead notebook.

MR. McKEE: It should be the first presentation under Tab 4.

CHAIRMAN HETTEL: Okay. Well, I'm a little bit caught up with you now, Jeff. Thank you, I apologize for the delay.

MR. McKEE: No problem.

MAJOR GENERAL PEABODY: Mr. McKee, one of the things that is difficult for me personally is to look at a string of numbers and understand trends.

And so what I would like you all to do is just look at this over several quarters, maybe a couple years' time, hindcast maybe a year, forecast maybe a year, and kind of show the Board how the Trust Fund -- how we have and how we are projecting the Trust Fund is being executed.

MR. McKEE: I'm glad you mentioned that, sir. The next slide, please.

MAJOR GENERAL PEABODY: Go ahead. I mean, I looked at that chart and I don't get it, but I'll await your explanation.

MR. McKEE: So this is a chart of the Trust Fund revenues that have come in by month and it's a cumulative tally of the Trust Fund by month.

At the right you will see at the top in green Fiscal Year 2015, and then in red Fiscal Year 2014, kind of orange Fiscal Year 2013, and 2012 and 2011. So you will see a bar chart above each month there.

In terms of FY 2015, you will see now this FY 15 amount increasing significantly above what the prior years were. I believe this is mostly attributable to the new fuel tax that was increased from 20 cents a gallon to 29 cents a gallon, effective the 1st of April. So starting in April, you are going to see increased revenues coming in from the nine cents per gallon increase in the fuel tax.

And so that's why you see that FY 15 number starting to go up significantly in April, May, June and July.

CHAIRMAN HETTEL: So with what you are seeing in the increase that went in effect

April 1st, I believe --

MR. McKEE: Correct.

CHAIRMAN HETTEL: -- could you project on a fiscal year basis?

MR. McKEE: We had made projections early on that Fiscal Year 2015 would be up around \$96 million. Revenues were around \$81 million, \$82 million in FY 2014. Based on that level, we estimated there would be the nine cent tax would translate to about an additional \$30 million or \$35 million increase a year.

Basically, this tax is going into effect the second half of fiscal year 2015, so we project it at about the end of September we would be up around \$96 million.

And then starting in FY 2016, we'd be pulling in roughly \$110 million a year in diesel fuel tax revenue. You'd have a full year of additional tax at the full rate of 29 cents per gallon in FY 2016.

CHAIRMAN HETTEL: Your estimates of increased tax revenue, I think I heard you say \$30 million to \$35 million for one full fiscal year.

MR. McKEE: For the entire fiscal year, that is correct.

CHAIRMAN HETTEL: Which total would be somewhere in the neighborhood of \$115 million?

MR. McKEE: The Treasury Department was projecting around \$110 million for Fiscal Year 2016.

CHAIRMAN HETTEL: And is that what you are going to --

MR. McKEE: We --

CHAIRMAN HETTEL: We'll find out in a year when it actually happens.

MR. McKEE: We will find out in a year. We'll find out in early October when the September numbers roll in, how close we are to the \$96 million.

CHAIRMAN HETTEL: And the only reason why I bring that up, Jeff, in the Capital Investment Strategy we utilized a figure of \$116 million a year. It's not a big difference, but every dollar counts, so to speak.

So thank you.

MR. McKEE: Correct, sir.

Any other questions on this particular slide? In terms of a quarterly projection, this is based on the end of the third quarter, so it does -- it is consistent with the slides from here on out that you have got in your folder.

So this is through June. You can see the \$67 million in FY 15 compared to the other levels for the prior fiscal years, through the third quarter of the fiscal year.

Next slide. This is an indication just for the total allocations that have been given out by project.

You will see for Olmsted, at the last meeting, at that point in time we had given the project \$205 million. Effective the end of June, there was an additional \$2.3 million given to the project out of the FY 15 work plan.

On Kentucky Lock you will see total allocations of \$14.7 million. At the last Users Board meeting we had a total allocation of \$12 million from the work plan. There was an additional \$2 million provided in reprogramming, and then at the end of June there was an additional \$700,000 provided to the project.

And then under Chickamauga Lock you will see an allocation of \$3 million that was given to the project at the end of June.

And those are the changes since the last meeting. Questions on this slide?

Next slide please. For project updates, Mississippi Valley Division, we have got the Lockport Pool (Major Rehabilitation) Illinois Waterway, Inner Harbor Navigation Canal Lock Replacement – Gulf Intracoastal Waterway, and Lock and Dam 27 (Major Rehabilitation) Mississippi River.

Next slide. There are no real changes to Lockport, we are still on track for completion the end of September 2016 for the forebay wall.

Next slide. And you can see the construction completion date here. No changes, of course, to this project.

Next slide.

MAJOR GENERAL PEABODY: What's the estimated date of completion?

MR. McKEE: The end of September 2016, sir.

MAJOR GENERAL PEABODY: Thank you.

MR. McKEE: For the IHNC Lock Replacement, this is one where we have suspended

the original project that was moving forward, and we are looking at a shallow draft lock as opposed to a deep draft lock, and so there are a couple things going on there.

We have provided funding, which I'll show a little bit later, to work on a General Reevaluation Report [GRR] for this. We have completed the interim project accounting based on the last project.

We'll be working with the non-federal sponsor, the Port of New Orleans. They have requested release of the money that's being held in escrow, and we are sending a letter to them asking for the additional share that they owe that is currently held in escrow to be given to the district to balance the funds on the old project.

Next slide. Next project, Lock and Dam 27, Major Rehabilitation, Mississippi River.

CHAIRMAN HETTEL: Jeff, can you go back to the previous slide. A question on the Inner Harbor, and I know your General Re-evaluation Report is due the end of December in 2017.

MR. McKEE: That is correct.

CHAIRMAN HETTEL: Well, because this project was already authorized and already went through the Civil Works Review Board, will there have to be another Chief's report and then go through the Civil Works Review Board again, and then go through the authorization process? Or can you step us through that?

MR. McKEE: My take on it -- and this is my take, this is not the official Corps position. My thought is because there would be a significant change in what the authorization would be, there would be a Post Authorization Change Report that would be prepared in lieu of the Chief's report, but basically does the same thing as the Chief's report, outlines what the requirements would be.

And then that Post Authorization Change Report, once it went up, approved by Ms. Darcy, subject to approval by the Office of Management and Budget, would be submitted to the Congress for subsequent re-authorization. And that is my thought on the process.

MAJOR GENERAL PEABODY: I'll give you my take. I think this is a judgment call that has yet to be made.

Mr. McKee is correct, I don't think that there is a specific requirement for us to have a Civil Works Review Board.

However, because of the really major nature of a General Re-evaluation Report that this is contemplating, this is closer to the normal requirements we would have for a Civil Works Review Board. So I think fundamentally General Jackson and Mr. Stockton [Mr. Steven L. Stockton, Director of Civil Works, USACE] at some future point will need to make a judgment

as to what's the appropriate way to make recommendations to the Secretary on this.

And I don't sense that we would need a Civil Works Review Board, but that somewhat depends on how the actual information developed by the General Re-evaluation Report develops. So we are going to have to look at that as it develops. The point, though -- I think the more important point is not the process that we follow, but that we are committed to updating the information so that we can make a policy judgment as to the value of updating this project and the benefits and costs associated and environmental consequences associated with doing so.

CHAIRMAN HETTEL: Thank you, General. And the only reason why I brought that up was to stress the point that Inner Harbor, I believe, is celebrating its 94th birthday this year, and next year we are facing a 90-day closure, which will basically cut off anything east of New Orleans.

Now, I know we are working on an alternate route to go up through Breton Sound, but that's a lot of open water to transit through. So this is a project that could be injected into the Capital Investment Strategy, depending upon when we can get the Post Authorization Change Report completed and what the processes are to move forward with this project.

So it's important that we get that information. I don't want to sound like as soon as we can because I know it's a long process, but that very well could change what our recommendations would be in the Capital Investment Strategy, depending upon what the General Re-evaluation Report states. Thank you.

MR. McKEE: Thank you, sir.

MR. WOODRUFF: If I could just add something. I know you have commented that there is the route through Breton Sound that could be, in good weather, used. I think it's important to note that that route would take vessels beyond one of the artificial lines our nation has drawn stating what our boundaries are. And, therefore, as a matter of law, a vessel that does not have a Certificate of Documentation [CoD] cannot transit that route, which would affect, as I understand it -- maybe some of the dry cargo barge operators know better than I, but virtually all dry cargo barges are undocumented barges.

MR. KNOY: No, that's not true.

MR. WOODRUFF: That's what we were told. So substantial numbers, or what?

MR. KNOY: Every barge we own is documented. They are shaking their head.

MR. CHARLES A. HAUN: They may be using the wrong term – documented or load line.

MR. KNOY: They are documented. They are not ABS [American Bureau of Shipping].

MR. WOODRUFF: Right. They have a CoD. Because we were told at the GICA meeting last week that few dry cargo barges were documented.

MR. KNOY: I'd say the vast majority are documented. The vast majority. Anybody disagree with that? No.

MR. WOODRUFF: Okay. Good. Because all of our tank barges are documented. It was said to be a dry cargo concern. Well, if it's not a concern, then I certainly --

MR. KNOY: What is the concern transiting that area?

MR. WOODRUFF: There's a huge concern from an operational --

MR. KNOY: I don't want to go out there.

MR. WOODRUFF: No, I'm not suggesting it's not a concern for operational and safety reasons, but there was stated to be a regulatory reason why dry cargo barges might not be able to make that trip.

CHAIRMAN HETTEL: Thanks, Matt. And I would reiterate Mr. Knoy's statement that, documented or not, in our shop, I don't think we are going to run out there for the risks that it imposes. So it's important -- Inner Harbor is an important facility within the system. Without that lock, the only other way to go in a safe transit is all the way up to Paducah and down the Tenn-Tom [the Tennessee-Tombigbee Waterway], which is like, I'm going to estimate, an additional 1,100 miles of transit; probably more than that. So it's important that we get through this GRR and see where we can get this project going again. Thanks, Jeff.

MR. McKEE: Yes sir. Next slide, please. For Lock and Dam 27, the only change is the updating of the anticipated project closeout.

Next slide. All work on Lock and Dam 27 is complete. It was completed in 2013.

Next slide. Updates for the Great Lakes and Ohio River Division, I am not going to focus on Olmsted or the Monongahela River Locks and Dams 2, 3 and 4, since Mr. David Dale will be addressing those specifically in detail.

Next slide, please.

On Emsworth, just some changes in ARRA [American Recovery and Reinvestment Act of 2009, Public Law 111-5, enacted February 17, 2009] funds, surplus funds were given back. Some additional funds were provided to the project in 2015, \$1,000 from each the General Treasury and \$1,000 from the Inland Waterways Trust Fund. So just minor changes on that, with the reprogramming and the de-obligation of ARRA funds.

Next slide. And then some changes in the actual completion dates and the capital

closeouts that are shown there. And my recollection, that's about a two-month delay for that project. But that is fully funded, so no additional funds are anticipated for that project at this point in time.

Next slide. On Kentucky Lock, the big change, as we discussed earlier, there was \$14.7 million given to the project this year, \$12 million given from the original allocation from the FY 15 work plan, the \$2 million in reprogramming, and then the recent addition of \$700,000 to update the project costs and benefits.

MAJOR GENERAL PEABODY: Mr. McKee, could you go back just for a second to the Emsworth Locks and Dam slide?

So when it will be physically completed, what is the residual DSAC [Dam Safety Action Classification] rating of the dams, the back channel and the main dam once the rehabilitation is completed?

Let me rephrase that. What is the projected residual DSAC rating -- because I think we have to go in and do some dam safety analysis following the rehabilitation?

MR. McKEE: I'm going to need a lifeline on that. We'll have to check on that, sir. I don't remember off the top of my head.

MAJOR GENERAL PEABODY: Would you follow up on that for the next Users Board meeting?

MR. McKEE: We will certainly follow up on it.

MAJOR GENERAL PEABODY: And then once we have the actual determination, make that information available to the Users Board.

MR. McKEE: Will do, sir. Denny [Mr. Denny A. Lundberg, Director, Inland Navigation Design Center, USACE, Rock Island District] you don't recall, do you, or Andy [Andy A. Harkness, Deputy Director, Inland Navigation Design Center, USACE, Pittsburgh District]?

MR. DENNY A. LUNDBERG: I know there's a post-construction risk assessment scheduled, and that will be performed, and then a re-evaluation.

MAJOR GENERAL PEABODY: I just think it's important that we close the loop on all dam safety issues with the Users Board so that they understand that the risk reduction that's been bought with the rehabilitation.

MR. McKEE: Correct. We'll do that, sir. Thank you.

Next slide.

Kentucky Locks and Dam, the additional funds that we have indicated, and additional work being done on the upstream cofferdam, to be sped up with the additional funds that were provided.

Next slide. And you can see here a slight change from the last time. You see about a three month slip in the construction completion dates there. And then you will see what happened is they actually split out a separate line item for the lock. That originally had been combined with the downstream cofferdam. The total duration was about 5.5 years, and that's been split out to two-and-a-half years for the downstream cofferdam and four-and-a-half years for the lock itself.

Next slide. Chickamauga Lock and Dam. On Chickamauga, again, in the original work plan funds, there were no allocations to Chickamauga Lock. Ms. Darcy sent a letter over to the Congress at the end of June, indicating that \$3 million would be provided to that project. And as was discussed out on site yesterday, that \$3 million will be used for grouting of the foundation of a cofferdam that we saw out on site.

CHAIRMAN HETTEL: Jeff, a question for you. You are showing the remaining balance of \$1.038 billion. Yesterday we heard a number of \$680 million.

MR. McKEE: \$650 million.

CHAIRMAN HETTEL: \$650 million? Could you tell us the discrepancy on the \$1.038 billion versus the \$650 million?

MR. McKEE: The discrepancy is the \$650 million is based on efficient funding. The \$1 billion was pushing this schedule out considerably, so there's significantly more escalation during construction on this \$1 billion dollar project.

MAJOR GENERAL PEABODY: I believe it's fair that this was based on previous assumptions that we would resume construction in 2029 or thereabouts.

MR. McKEE: Correct.

MAJOR GENERAL PEABODY: Over a decade from now. So I still don't think that we have good -- personally, I don't know that we have good information to make a judgment as to assumptions on the continued construction of this project. But this is based on those previous assumptions, and the \$650 million is based on efficient funding going forward, or close to efficient funding going forward.

MR. McKEE: And we would complete in the mid 2020's as opposed to starting construction in the late 2020's.

CHAIRMAN HETTEL: Thank you for that clarification. And maybe we'll hear about this later in the day, but your economic analysis update on Chickamauga, are you utilizing the

\$1.038 billion, or are we utilizing the efficient funding stream of \$650 million to do your economic update?

MR. McKEE: My recollection was it was using efficient funding.

CHAIRMAN HETTEL: OK. Thank you.

MR. KNOY: General, I'd like to follow up on your comment about potentially not really getting into this for another decade. I would just question why we would put \$3 million towards the effort if that's really the case.

The language here says "Construction to restart due to a \$3 million allocation in July." It's kind of a false preview, or no?

MAJOR GENERAL PEABODY: I mean, fundamentally, this is about the appropriations and funding process that we have, which is a year-by-year decision-making process.

For many projects we do get, if not efficient funding, some reliable funding from year to year. Olmsted is a good example of that. The Joint Federal Project out in California is another one [the Folsom Dam Joint Federal Project, a collaborative project being implemented by USACE and the U.S. Bureau of Reclamation]. But the reality is that the nation does not have the resources to fully efficiently fund all Corps projects. We just don't. And so the policy choices that are made from one year to the next could vary. And our assumptions -- generally, our assumptions are always that when we recommend a project for consideration for authorization to the Secretary and the Congress, that recommendation is based on -- and the cost calculus is based on the assumption that when the project is funded, it will be funded efficiently.

In reality, that actually rarely happens. Like I said, with dam safety projects we tend to get close to efficient funding, if not fully efficient funding. With some other high visibility projects that are high priority for the nation, we tend to get it, but for many of them we don't. In the history of the inland marine transportation system capital improvements is we tend to not get efficient funding for most of those projects.

MR. KNOY: General, I appreciate that. My point is very specific, why even spend \$3 million on the project?

MAJOR GENERAL PEABODY: Well, because the Congress allocated the resources.

MR. KNOY: Very specifically to that facility?

MAJOR GENERAL PEABODY: No. Congress allocated the resources in a funding bucket for inland navigation. And the Secretary and her staff and our staff went through a process of determining which projects we could execute the money on, and that that resulted ultimately in a choice of allocating those funds, and there were \$3 million that was available.

Frankly, there were some very difficult policy conundrums with the legislative language that Ms. Darcy and her staff had to work through. And, ultimately, the decision was made that we did have the flexibility to allocate the funding to that.

Ma'am, I don't know if you want to comment at all.

MS. DARCY: The General is correct that in the additional work plan funding there was an allocation pot for inland navigation. And the language in the report said that we needed to be able to show progress within that fiscal year for that money expenditure.

And at Chickamauga Lock for \$3 million we could award a contract for the grouting there, so it fit into the parameters that the Congress gave us as far as how we could spend that money.

MR. KNOY: One last attempt and I'll let this go. But, again, if we are not going to move forward with the project, why would we even do the grouting? Why would we even pump out the cofferdam? Why wouldn't we just leave it filled with river water and let it sit for a few years until we figure out what we want to do? Why do we need to do the grouting, its \$3 million?

MAJOR GENERAL PEABODY: Again, it all goes back to limited resources. And so we just don't know how much resources we are going to have from one year to the next for various aspects of the Corps program. Therefore, we make choices based on what's available year by year.

I mean, it's frustrating to me as the executer that has responsibility to try to carry these out. And it can be massively inefficient in terms of the total cost to the taxpayer, but that's the reality of the available funding that the Corps has for its programs.

And I don't -- a lot of people criticize OMB, but, frankly, I don't envy them, because they have the unenviable task of trying to fit into a ten-pound -- or a five-pound bag, ten pounds worth of stuff. And so it's just an annual decision-making process, is the best I can answer you.

If you are looking for a coherent logic of the total efficient funding of the project, that's not the process. The process doesn't enable that, in my judgment.

MR. KNOY: I guess in light of all of the things we have to discuss today, just if there's any question whatsoever that the project is going to pass a BCR, it just seems like we are pouring \$3 million down the drain on a project that may not ever go forward.

MAJOR GENERAL PEABODY: And that is a possible future policy choice to be made in the future: Do we continue to complete a project that we have sunk close to \$200 million in, and that has serious reliability issues, but, yet, does not have a huge amount of traffic, although we could probably conclude that if the project were completed, that the traffic through that area would probably increase. I mean, these are difficult choices, is all I can tell you, because of the reality of the limited funding. And that's the key driver, in my opinion.

MR. KNOY: Okay.

MR. EDWARD E. BELK: If I could follow up on one of your comments in response to Mr. Knoy's inquiry.

MAJOR GENERAL PEABODY: Please.

MR. BELK: And I think you and Ms. Darcy have described the complexity of the decision-making process. But there was another facet to this decision, and that was that we could, in fact, buy down some incremental level of risk with this level of investment. Not a big level, not a big risk reduction, but we did achieve a modest level of risk reduction. Which for that particular facility in its current state is even more important. So very modest, but that was another piece of the decision matrix.

MAJOR GENERAL PEABODY: Go ahead, Mr. Mecklenborg.

MR. DANIEL P. MECKLENBORG: Go ahead, General.

MAJOR GENERAL PEABODY: The other point I was going to make is this question is an important question for this Board to wrestle with. And does the Board want to put the resources necessary to rehabilitate – not rehabilitate, but to replace Chickamauga Lock going forward. And if the Board wants to do that, then is this a sufficient priority for the Board to change its current priority recommendations amongst the four major active projects. And how does that affect other future potential areas that are of priority interests to the Board, like Bayou Sorrel or Upper Ohio or whatever the projects are.

I think that is the big picture issue that the Board needs to wrestle with. And that's exactly what we are trying to get to with the Capital Investment Strategy, is to provide a framework that can better enable those choices so that you have clearer information related to the risks and the conditions at the various pieces and parts of the system, because at the end of the day the resource challenge is not going away.

Notwithstanding the increased taxes and the cost share change in Olmsted, the fundamental reality of limited resources is not going to change. And so that's where this Board really needs to make some hard recommendations and choices to inform Ms. Darcy and her staff.

MR. KNOY: Thank you General.

MR. MECKLENBORG: The efficient completion of Chickamauga Lock is something that I know my company certainly supports. What we don't support is wasting funding over an extended period of time while we try to reach an elusive decision.

So we are hopeful that whatever decision is made, it's made quickly, and hopeful that decision is the completion of the lock project on an expedited, efficient basis. If that involves

moving some of the funding around for other projects, you are correct General, that's something this Board ought to think about and provide recommendations. Thank you.

CHAIRMAN HETTEL: Dan, just to reiterate, the Capital Investment Strategy utilizing the maximum Inland Waterways Trust Fund deposits does provide the funding to finish this facility by 2026.

Now, the decision I think part of this Board has to look at is the \$360 million that we heard yesterday of O&M [operation and maintenance] that they would have to provide on the original chamber should we not build the larger chamber.

MR. MECKLENBORG: Are you saying O&M or major rehab?

CHAIRMAN HETTEL: Major rehab, major rehab, which will still come out of the Trust Fund. So those are all important considerations that we need to look at.

MR. MECKLENBORG: Yeah, we would not support that.

CHAIRMAN HETTEL: Absolutely, I agree. Thank you.

MR. WOODRUFF: Mr. Chairman, one of the things that I recognize is that the Corps is compelled to prepare analyses based on various different parameters. And I understand the \$1.038 billion and that that is adjusted for inflation to the date when this project is in someone's schedule of when it could be built.

But while that is data, it's not really information that's usable for this Board. Because if you have already taken into account the sequencing of projects in putting those numbers together, it does not give this Board any ability to compare projects on an apples to apples basis to give a priority recommendation, because the projects on your list that' are coming up next are going to look like a cheaper project than the project at the end of the list because of the inflation factor. So I think when we are considering prioritization, we have to be looking at factors and numbers that are apples to apples. And when you put an inflation factor and a time delay factor for some projects different than other projects, you are turning everything into apples and oranges and bananas and who knows what else. So I think for purposes of Board consideration, we need to see un-escalated figures or figures that are all escalated the same so that we can consider those projects on an equal basis.

MR. HAUN: Excellent point.

MR. McKEE: We can certainly show a total project cost so that you are comparing apples to apples without the fully funded cost showing the escalation.

MAJOR GENERAL PEABODY: That's a fair criticism or recommendation, and we'll take that under advisement and find ways to make sure that we are doing that. Thank you.

MR. McKEE: Any further discussion on Chickamauga Lock?

Next slide, please. Any other questions on any of the projects we have gone over?

MR. POINTON: Jeff, stay at the podium. Jeff, you are up next. And thank you so much for getting us back on schedule, sir.

MR. McKEE: Thank you Mark. This is just a quick update on what we have done with the FY15 work plan funding. Just as a refresher, FY15 provides an additional \$523 million for the navigation program.

We got \$15 million for Investigations split out, as you see there, between the different types of navigation projects.

The Construction account, the one that you are primarily interested in, \$207 million, of which \$112 million was specifically for the Inland Waterways Trust Fund projects. And then the MR&T [Mississippi River and Tributaries] account, \$6.4 million.

The next slide, please. O&M, \$295 million, for the total of \$523 million. All of the O&M, all of the MR&T was allocated at the beginning of February, but we did have some residual funds that were not allocated.

If you go to the next slide, this is a comparison of what the President's budget was for navigation, a total of \$1.825 billion and the additional \$523 million.

So the CROmnibus bill [the "Consolidated and Further Continuing Appropriations Act, 2015", Public Law 113-235, dated December 16, 2014] gave us \$2.34 billion for the navigation program, and you see it by these different accounts how much the Congress gave us.

The next slide, please. This was the way the funds for the Construction account for the Inland Waterways Trust Fund projects were originally allocated.

We increased the Olmsted Locks and Dam project by \$45 million to \$205 million. And, of course, that is split 85 percent from the General Treasury and 15 percent from the Trust Fund, which went into effect in Fiscal Year 15 based on the language in the Water Resources Reform and Development Act of 2014 [Section 2006(a)(2)].

The Kentucky Locks and Dam project received \$12 million, and we had \$6 million that was sitting out there unallocated.

The Lower Monongahela River, Locks and Dams 2, 3, and 4 project went from \$9 million to \$58 million total, an additional \$49 million put on that project.

The Lower Monongahela Locks and Dams 2, 3, 4, Kentucky Locks, and that \$6 million were anticipated to be split at 50-50 between the General Treasury and the Inland Waterways

Trust Fund, and so our anticipated Inland Waterways Trust Fund share in Fiscal Year 15 was going to be just under \$69 million at \$68.75 million.

Based on the recent allocations, the Olmsted project was increased by that \$2.3 million to \$207.3 million. No change to the Lower Monongahela Locks and Dams 2, 3 and 4 project, it stays at \$58 million. The Kentucky Locks project got the additional \$700,000 for the economic analysis, and then the \$3 million for the Chickamauga Lock and Dam project.

Because the Olmsted project received \$2.3 million, and that is split 85/15, you'll see our total projected Inland Waterways Trust Fund share has dropped down to just under \$68 million for FY 15 for the four Trust Fund projects.

Any questions --

MR. POINTON: Any questions for Jeff?

MR. McKEE: -- on any of those changes we have made to the Trust Fund projects and what we are projecting for actual use of the Trust Fund in FY 15?

Next slide, please. In the Investigations account, we made initial allocations for the Inner Harbor Navigation Canal, the \$589,000 to fund the General Re-evaluation Report, \$700,000 to do some additional Pre-construction Engineering and Design work on High Island to Brazos to look at some of the economics on that project. And then a new start feasibility study for the Three Rivers project, that's funded at \$150,000. And for those of you that were at the Little Rock meeting [Inland Waterways Users Board meeting No. 71, held on May 1, 2014 in North Little Rock, Arkansas], you received a presentation on the Three Rivers project, which is trying to protect navigation on the McClellan-Kerr Arkansas River Navigation System and the Arkansas, White and Mississippi Rivers and prevent a breach in the waterways there.

Also we provided additional funds at the end of June to the Calcasieu Lock study, \$750,000 to work on Pre-construction Engineering and Design.

Also \$505,000 was provided for the Upper Ohio River Navigation Study. This is to produce some additional economic analysis as well as engineering analysis that were recommended by the Civil Works Review Board that was held last October.

And \$50,000 was provided for the Upper Mississippi River and Illinois Waterway Project, to scope what would be required to re-look at the economics for that project. There are some outstanding economic issues, and this was provided to do a re-scope to see what the extent of the study would be.

So those are the changes in the Investigations account allocation.

You can see the funding that was provided in the O&M account, \$70 million on the waterways, and \$15 million for the inland harbors, as well as \$6.4 million for the MR&T

program.

No changes to that, all those funds were allocated back in early February, so there are no additional changes there.

If you are interested in the complete project listing, it's on the Corps' website which is http://www.usace.army.mil/missions/civilworks/budget.aspx.

That concludes my update on the FY 15 Work Plan allocation, subject to your questions.

CHAIRMAN HETTEL: A question, and I guess some candor. Can we get a copy of your presentation?

MR. McKEE: Absolutely. This will be sent out.

CHAIRMAN HETTEL: Which leads me to my candid statement that we discussed last night. There have been a couple of presentations already given today that we don't have the current slides in.

MR. McKEE: Correct.

CHAIRMAN HETTEL: You have a presentation here that we haven't received.

MR. McKEE: My sincere apologies for that.

CHAIRMAN HETTEL: I think of the nine presentations that are given today, the Users Board received four of those in our pre-read-ahead materials. It's really difficult for us to have a constructive conversation and collaboration when we don't receive the materials or even know what's going to be presented at the Board meeting.

I think back in the January meeting of 2014, General, we agreed that we should have the read-ahead materials at least two -- at least one week prior and, hopefully, two weeks prior to our meeting, in order for us to be productive at these meetings and have a collaborative conversation.

Hopefully, we can get that moving forward for our next meeting in November to where we could be prepared to ask you intelligent questions on the presentations that are being provided here. Thank you.

MR. McKEE: Absolutely agree, sir. Again, my sincere apologies for not getting mine to you in a timely manner.

MAJOR GENERAL PEABODY: This is exactly why I will relinquish responsibility to General Jackson at the end of the meeting. No, I share your frustration and I apologize, Mr. Chairman. The challenge and the reality is that often the truth changes and variables morph and evolve and we get new information. And I think the staff always wants to provide the best, most

updated information to the Board, but in so doing, I think we owe you our best draft one to two weeks out, with a target of two weeks out, so that you have something. And then if the information changes, then we should just present that in hard copy, if possible, and if not, with digital and then just address the changes. I'll ask Mr. Belk and Mr. McKee to take that on, and I'm sure General Jackson will be more successful than I in making that happen.

CHAIRMAN HETTEL: Thank you, General. And I agree, two weeks prior, things may change. And we understand that it possibly could change in a presentation. If they do change, I don't why we don't have copies of it, of the changes, when they are presented at the meeting. So I appreciate that. And we realize changes will possibly take place. And when they do, if we could have hard copies delivered to us as soon as possible so we can continue a collaborative exchange of information.

Thanks, Jeff.

MR. McKEE: Yes, sir. Are there any other questions for me? Thank you.

MR. POINTON: Thanks, Jeff.

Next up, I'd like to call on Mr. Edward Belk to provide an update of the Capital Investment Strategy.

MR. BELK: Thanks, Mark. Can people hear me? I'm going to do it from my seat, if it's okay with the Chair.

First of all, a little background. Obviously, we had -- the WRRDA had passed back in June of 2014, and part of that was legislation that authorized and directed the Corps -- and, actually, in the legislation it said in concert with the industry to develop a new Capital Investment Strategy for the next 20 years for the inland navigation system.

And so the Capital Investment Strategy, as this Board knows, has been a fixture on every Inland Waterways Users Board meeting agenda since that time.

And I guess on behalf of the Corps I have to say that we can't overemphasize the value of the leadership that Chairman Hettel has provided, and the representation and advocacy this Board had infused on behalf of the navigation industry in that strategy and in the draft report that is currently in play. You have, I think, made it better and I think got us to a good spot in terms of what that strategy looks like, the assumptions behind it, and the priorities and objectives that it seeks to achieve.

Our last report to you was, obviously, down in Galveston back in early May. At the end of the conclusion of that meeting, we took a few minor additional comments that we got from Chairman Hettel and this Board, incorporated them into the draft, the final draft report, that you have seen a version of it back in the May time frame. And so we took that and began the vetting and review process within the Administration.

Ms. Darcy's staff has been incredibly helpful in taking that, passing it on to the Office of Management and Budget. We got it to Ms. Darcy's staff late May. Within a week they turned that around and provided it to the Office of Management and Budget [OMB] to begin the process of the Administration review and vetting.

Now, I'll tell you, at this point it remains under review within the Administration, it remains in a pre-decisional status, and we continue to work through comments, and really helping the Office of Management and Budget and the Administration understand some of the complex assumptions, objectives and, I guess, imperatives behind the strategy that we are seeking to achieve.

So if you'll go to the next slide, this really says a lot, but really what it says is right now we are engaged with OMB primarily to walk through those assumptions and make sure that they have an understanding of those, and are comfortable with not only those assumptions, but the investment implications of them long-term.

So we have been working with that. We've had a number -- we, the Corps and the Army, Ms. Darcy's staff -- a number of engagements in the last couple of months from early June up to as recently as a week and a half ago, to work through some of those comments, work through some of those questions, to make sure we are doing what we can to achieve an understanding and comfort level within the Administration.

So if you'll go to the next slide, some of the areas that the discussion with the Administration has touched on or kind of reflected on in this slide -- and, really, the intent here while it remains pre-decisional within the Administration -- the intent here is to give you some feedback of where -- some of the questions we are getting and some of the focus areas that are a part of the discussions right now.

First is the whole issue of what is the problem we are trying to solve with our strategy. And really that gets to -- and this Board has talked about it -- it's reliability, it's dependability, it's incorporating some of the longer-term trends that we have discussed over time, and helping, I guess, the Administration see and understand kind of those basic drivers that are causing both this Board and the Congress to make this a priority.

We continue to talk about usage, I guess, the higher traffic locations. OMB really wants to understand how we are capturing those, how they are treated in our strategy.

And, of course, what we are trying to do is walk through the risk-based approach that we have taken to developing the strategy, where we look at both the condition of all of our assets, all of our locks and dams, the consequences of failure of those locks and dams over their service life. And in that consequence piece, that's where we capture usage. That's where we get at some of the things that OMB is trying to understand.

So the outcome of the strategy, again, is a risk-based strategy that helps us shape what

priorities, us together, the Corps and industry, shape those priorities. So those are the kind of the discussions we are having to try to bring clarity to consequences and to risk.

In terms of the future, there are lots of questions about how we are contemplating future requirements that don't currently exist, how we are pulling those in. Of course, we do have in the strategy items that are early in the planning phase and don't yet have a federal interest as defined by a BCR. They will at some point, and so those are in there. And we are helping them understand how those work their way up eventually as we make progress and get to investment decisions.

The whole issue of 20 years, I think, is another challenge. How do we -- how are we comfortable that we have set the right priorities today that capture what we think the future will look like in 20 years. And I think part of that discussion is kind of describing the fact that this Capital Investment Strategy is not a -- will not be a product that, once approved, will be hermetically sealed and never to be touched, never to be reviewed again.

We see this as sort of an -- I think this Board sees this as a point of departure, it's a strategy. Every year we will revisit assumptions. We will revisit priorities. We will revisit some of the -- Mr. Woodruff talked about the changes in the petrochemical industry and what that's proposed nationally. And those kind of changes are going to occur over the next 20 years, we can't contemplate what they are.

But the point is, we, the Corps and this Board and the industry will use the strategy to revisit annually and make sure that we are incorporating those trends. So we are working through trying to explain some of that so that it's clear.

And then, really, I think a big area that we continue to have discussions on is the whole business of the three scenarios. I'm sure the Board remembers that we have got three investment scenarios over time that we have incorporated into the strategy.

One is generally the investment level that we are seeing within the President's budget, given the fiscal realities that the Corps' budget is not going anywhere anytime soon, at least upward. And so given that fixed trend, what can we squeeze in.

The other scenario was a scenario that reflected the President's budget trends, plus the funding pots that we have been getting in the last few years from Congress. So using that kind of a cash flow, that kind of an investment stream, what will that buy us, where will the priorities be?

And then the third category was one that reflects complete use, complete allocation, complete application of Inland Waterways Trust Fund dollars. And it assumes that there will be a General Treasury matching dollars to buy down those contributions as they come to maximize the execution of the strategy.

So those three funding scenarios, we are having a lot of discussions trying to explain kind

of the implication of those on the budget and help OMB understand kind of where we see those going, and the outputs, the values of those, how we will over time, as you will remember, pull some things to the left, accelerate risk buy-down, accelerate delivery of infrastructure as a result of those additional investments.

And so I do not have a firm date yet on when the review process will conclude and when we will have a final report that the Administration is comfortable with. That will be a conditions based outcome more than a time based outcome. But I will tell you we continue to engage with Ms. Darcy's staff''s help with OMB to work through some of these questions to get to a comfort point on what the Administration can support.

I'll stand by, and I and Jeff and Doug Ellsworth will be glad to take any questions from the Board.

MR. MECKLENBORG: Mr. Belk, I guess it looks like there is almost a philosophical debate that is at work still. And that's a little bit surprising and a little bit concerning in the sense that -- or maybe a lot concerning -- in the sense that this process was supposed to be kind of an update of what had been worked on in a significant fashion, was embraced by the Congress, was embraced by the Inland Waterways Users Board, and certainly the Corps at a point in time, and that this revision is something that had a lot of time and effort from Board members into it as well.

So some of the questions as far as the usefulness of the framework or the goal of producing the best overall return to the nation and things of that nature seemed pretty much capable of subjectivity.

So it's a concern, and we certainly look forward to seeing what comes out of the process, but it is hopeful that it will be somewhat close to what all of the hard work had recommended earlier this year.

MR. BELK: Thank you for that, Mr. Mecklenborg. And I would say that over the discussions we have had, the Office of Management and Budget and the Administration are trying very hard to understand first. So some of this is just an understanding and helping achieve that. And General Peabody talked about the math problem that OMB has, and so they are trying to figure out how this strategy either helps or doesn't help with the math problem that they struggle with every year from fiscal realities that we face as a nation.

So thank you for feedback.

CHAIRMAN HETTEL: Very eloquent, Mr. Mecklenborg.

I'm going to start off with Mr. Belk, General Peabody and Madam Secretary Darcy. Again, I apologize for some candid comments here.

These five bullet points you gave on your second slide, I consider all of them already

done when we finish the Capital Investment Strategy plan. I don't know why we are rehashing this. I really don't. Let me finish here and I'll let you comment on my other candid comments.

As I stated in my opening statement, the Board believes the Capital Investment Strategy as delivered to the Assistant Secretary's office on the maximum use of the Trust Fund meets the criteria of WRRDA 2014 that was, in fact, signed into law by the President on June 10th of 2014.

You also heard in my opening statement the value to the nation of the Civil Works program performed by the Corps of Engineers described per the Institute of Water Resources.

We have heard of an increase in tonnage. It could be up by 61 percent by 2040. By building these projects sooner rather than later, we are not only saving waterways Trust Fund dollars, but saving General Treasury dollars in avoiding incremental cost increases by delaying projects further.

We are putting people to work to build these projects, and we are putting them to work in good family wage jobs. By building projects, we will improve upon the already safest, most environmentally friendly, most fuel efficient, and most cost effective means of transporting products within this country of ours.

So I only have one question. And maybe the Assistant Secretary can answer this, or maybe you can, Eddie. What am I missing here? Does the Administration not see the points I just stipulated? I'm confused. I'm somewhat disappointed. We need to move forward with this thing. We can't continue to wait and push these projects out.

And, again, I apologize for my candor in my remarks. Thank you.

MR. BELK: Well, first off, Chairman Hettel, candor has, I think, come to be expected from you and this Board, so no need to apologize for that. I would be more shocked if it was otherwise, but you make great points.

And I think part of the dynamic that we are sorting through here -- and this is really, I think, typical of any large sort of federal investment recommendation or program that the nation has to consider, OMB's and the Administration's questions are really one of seeking to understand.

They don't necessarily telegraph disagreement. They don't necessarily telegraph lack of support necessarily, but it does telegraph important points and principles that they are trying to understand as a part of reaching that Administration position on this strategy.

So the points you have made are excellent. Those are the kinds of interactions that we are having to help flesh out some of the questions and get to a point of where the Administration is comfortable and can make a decision on what will be advanced to the Congress for further action. So great points.

And, in fact, I'm glad that we have transcripts of these, because we can take those and share them as part of the internal deliberations that we continue to have.

MS. DARCY: Mr. Chairman and members of the Board, I just want to reiterate what Eddie has said and also compliment the Headquarters staff of the Corps of Engineers who has taken this on within the Administration to help answer these questions. The goal is to get the questions answered in the way that the strategy can move forward sooner rather than later and help us to inform the budget decisions that we are going to have to make this year and next.

And the questions raised were raised from the points that Eddie said. And I'm not going to rehash exactly because he put it eloquently. And, also, he personally has taken this on within the Administration to help to answer these questions. And I don't think that there is a better group of people or people who can represent this Board in those discussions than Eddie and Jeff. So I want to thank you for that, and our commitment to get this over the finish line as soon as we can.

MR. WOODRUFF: Mr. Chairman, I don't want to rehash what you or Mr. Mecklenborg said. I agree with those comments. But I do -- as someone who was involved in the original development of the Capital Development Plan, I would like to invite your attention back to that thick document that was the result of a couple of years of hard work, where I think we addressed answers to many of the questions that are on this page and talked about what a 20-year plan is and the fact that it's a living, dynamic document. And, quite frankly, in my view, you shouldn't worry too much about what if 15 years from now we are doing something different than we thought, because as time goes on, the plan will live and grow. But you still need to look in the future and have an idea of where you might be going to help inform where you actually will go.

I think those in the military uniforms around the table understand that even though things rarely go according to plan, you still have a plan, because that forms the basis from which you move out.

And so I would urge you to go back and look at what's in that plan for a couple of reasons. First of all, a lot of work went into it. A lot of the questions, I think, that are on the list are answered there. But more importantly, that plan has, in fact, received the scrutiny of Congress, and I believe a fairly substantial endorsement from Congress, and through the WRRDA process signed by the President. So to me that suggests that it's a pretty good place to go for guidance.

MR. BELK: Thank you.

CHAIRMAN HETTEL: Let me just answer your statement on helping the Administration understand and what the Users Board does.

Madam Secretary, thank you. I think anyone on this Board would be more than happy to help you help the Administration understand the importance of moving forward with this. And I'll volunteer my help any way I can. Eddie and Madam Secretary, if you need my input, please

don't hesitate to contact us. And I'm sure the rest of the Board members feel the same. Thank you.

MR. BELK: Thank you, Chairman Hettel. Chairman, if you might indulge me, I would like one final note before we move on.

I just want to recognize General Peabody and his leadership and contributions to the Corps over many years. I've had the distinct pleasure and honor to work with General Peabody when he was Commander of the Mississippi Valley Division and the President of the Mississippi River Commission, and after his elevation to the Deputy Commanding General for Civil and Emergency Operations at our Headquarters, and upon my reassignment there back in January I had the privilege again to work with him.

Sir, I just appreciate your professional and passionate advocacy of your duties and the carrying out of your duties, and also your assistance to me professionally and personally over the many years. So thank you for your service, and God bless.

MAJOR GENERAL PEABODY: Thank you, Eddie.

If I could just wrap this up, perhaps, with a couple of observations.

Mr. Woodruff, to build on your observation that everything is dynamic and evolutionary and things change, it reminded me of a quote attributed to, and I'm going to paraphrase this, Dwight Eisenhower, "The plan is nothing, planning is everything." So the process of developing the plan really informs how to execute reality when it deviates from what you expected would happen.

The three principles that this -- it is an update in one sense to the Capital Projects Business Model. But in another sense it's an improvement and variation from that, in my view.

From the Capital Projects Business Model, notwithstanding the fact that the recommendations associated with the budget were not accepted by the Administration -- put that aside.

The process of collaboration and criticism of project execution by the Corps resulted in, I think, somewhere around 20 recommendations. We adopted every single one of those that applied to -- that were not policy requirements, that weren't associated with the budget, and we are continuing to improve that. In fact, I just sent this morning a note out to the field focused on one of our critical campaign plan objectives, which is basically we call it delivering on our commitments, delivering quality solutions and services. And we are reinforcing our project and program management doctrine, and we are attempting to develop a more rigorous and disciplined approach to risk assessment and calculation throughout the lifecycle of a project, which tends to be much longer in the Civil Works arena than it does in Mil Con [Military Construction], which really complicates our ability to deliver.

So the Corps -- and you are not going to see a change overnight because the project lifetimes are so long. But we see very clear indicators that the Corps is improving its delivery performance. Those indicators are not clear enough that you are going to be satisfied, I think, at this stage in time.

Now, when you look at the Capital Investment Strategy, to me where this launches from the collaboration we worked on together in the Capital Projects Business Model, and I think is a dramatic improvement, is -- the three principles that we said we were going to focus on are: (1) finish what you start; (2) efficient funding within available resources; and (3) lifecycle asset management.

And that last piece is the most important to me, because what we are doing is we are taking operational condition assessments, operational risk assessments as they exist, understanding the consequences, and then applying this framework for decision making on what we are going to put -- or what we are going to recommend putting resources toward to delivering optimal outcomes for the nation within the available resources, right?

I think where we are getting hung up on this, and I've said this to some of you guys in the past, the budget scenarios are important. And resources at the end of the day is the strategy, right?

But without the larger framework to guide the decision choices on the resources, I think we would continue to stumble from decision to decision without achieving the kind of holistic consequences that you guys are searching for.

And so, as the Secretary said the OMB has not been intimately involved in the development of this. Well, now -- and the Administration has to understand this, and understand the important potential budgetary implications of the framework, and that is critical.

And we have to go through the process that satisfies their concerns that, frankly, my view, is a good part of this is just bringing them up to speed on where we are. And as you all know, this has been a long process for us to go through with you. It's taken a heck of a lot of work. It is not intuitively obvious to the casual observer -- to quote my calculus textbook as an undergraduate -- of what we are doing. And so that's really where we are.

But at the end of the day what I would encourage all of you to continue to use as your guiding principle for the application of this strategy, whatever specific form it ends up taking, is this notion of lifecycle asset management, following condition and risk assessments, and then understanding what is most important for the system.

This is going to fundamentally come down to a specific choice on Chickamauga Lock in my judgment. And the choice is going to be, do we, in fact, finish that project or not? Because when we started the project, the BCR was significantly higher than what is today as a result of significantly changed traffic scenarios.

We can debate whether those traffic projections would change if the project were completed, and I think that's an important debate. But I don't think we want to put in a ton of extra money, as you suggested, Mr. Mecklenborg, on Chickamauga Lock to maintain the existing structure while we continue to defer that project in the future.

So, fundamentally, this comes down to recommended priorities from this body, right, given these changed conditions, is Chickamauga Lock a higher priority today for you than it was two weeks ago when we didn't have this information about the prospective costs to update the anchors.

So with that fairly long dialogue, I guess I just fundamentally would tell you that I'm very pleased personally with the progress we have made on the Capital Investment Strategy. I think the collaborative approach, even though we continue to disagree on some specifics, I think is an example of exactly how government should work.

And I don't think we should get overly concerned about some of the details of whatever the Administration forwards to the Congress. I think we should focus on the big picture and continue to work through the big picture of the strategy.

MR. WOODRUFF: Thank you, General. And I think under your watch we have made some really great strides in terms of having a better objective set of criteria by which we can evaluate, as you say, the lifecycle of these projects, because I think that is essential.

What still concerns me a little bit, and I think makes it important to have something like the Inland Waterways Users Board and the smart guys on your staff sitting around the table with people who understand navigation, is it's going to take us a while before we really fine tune the objective criteria, the weighting factors that have to be put into that, what I call, black box, where you put data in and an answer comes out, how you manipulate and the size of the gears in that black box will change the answers. So I think it still requires informed judgment to help us say, is this really the correct answer that the formula is giving us, or do we need to tweak the formula here and there. And I think that's going to be an iterative process as we look at what the formula tells us, compare that to what our judgment tells us, and should be the answers.

And over time I think we'll see the formulaic answer and the judgment answer getting closer and closer together, but we have to keep working on that. But I still -- notwithstanding the fact that our formula is getting much, much better, I still think there's a role for the kind of things that we do at these Users Board meetings and our other meetings.

MAJOR GENERAL PEABODY: We agree.

MR. BELK: That concludes my presentation.

MR. POINTON: We are a little behind schedule. We are about 15 minutes behind schedule. We have a break scheduled, so we are going to go ahead and take that break now.

(A brief recess was taken.)

MR. POINTON: Can we take our seats please. We are going to reconvene the meeting.

I'm going to call on David Dale to go ahead and give us an update on the status of the Chickamauga and Kentucky locks. And, of course, he'll be going through the Olmsted project and the Lower Monongahela project as well.

You have got the floor, David.

MR. DALE: Thank you very much. First of all, I wanted to express my appreciation to the Secretary, to General Peabody, to the Board members, for giving me the opportunity to come talk to you about some of the great work that we are doing in the Great Lakes and Ohio River Division.

The first item I want to cover is a spreadsheet that Jeff McKee touched on regarding the financial status of the Olmsted project. And I just wanted to bring some clarity to that, so I'm not going to dwell on it, just a little clarity.

And that's in that line that's called "Remaining Balance", if you will look at that right there, \$1.056 billion. That number is generated because of the fact we take the \$3.1 billion that we have authorized on the project in the PACR [Post-Authorization Change Report], and we have to spread that over the duration of the project.

So you will note a disconnect between that \$1.056 billion remaining balance and some of the numbers you will see later in the presentation relative to what we actually expect to happen. So that's why you see that. So I just wanted to bring that to closure.

What you see happening is that's where we were at when we started, that's where we are at now with this process. But we are actually buying that number down over time, and I'll talk more about that in a minute.

Any questions on this slide?

CHAIRMAN HETTEL: Thanks, David. You know me better than that. I certainly appreciate that fact, and I want to make sure the Board members understand that while you are showing the \$1.056 billion left to be spent at Olmsted in your TEP [Total Estimated Project cost] slides, as of today you are estimating about \$2.8 billion.

So we could see a reduction of almost \$200 million on the cost of this project. And I will attribute that to General Kaiser and Colonel Beck [Colonel Christopher G. Beck, Commander, Louisville District] and Mike [Braden] and your crew down at Olmsted, and what you are doing down at Olmsted and David I think they are doing everything they can to move this project forward and get it behind us and get it operational. So as we refine this, maybe at the next meeting there might be an inclination to show us how much sooner you could get the thing

operational.

MR. DALE: I'll answer that as I go through the presentation.

CHAIRMAN HETTEL: Thank you.

MR. DALE: Because it's not really \$200 million, but it is a substantial number and I'll try to touch on that. If you could go to the Olmsted slide.

Before I move down that path I want to take a moment, because it is a big team effort that we pull together to move this project forward. And we have some of those team members here with us because of the proximity, so I just wanted to kind of highlight who is here.

Mike Braden, who is the – he kind of runs the project for us on site, you haven't met Mike. If you haven't met Mike, he's the guy that's kind of the brain trust. Matt Lowe is the project manager, he's also part of the brain trust. Linda Murphy is our DPM [Director of Program Management at Louisville District], she's fully engaged.

And sitting on top of all of that, with a lot of knowledge there, is Colonel Beck, Colonel Chris Beck, Commander of the Louisville District. And if there's a Commander all in on a project, he is all in on Olmsted. You can ask him details and he's got them in his head, so I appreciate you doing that.

And I just wanted to highlight this and touch on one other thing, because it's kind of an initiative that the Board put in place that we are following through with in the Corps.

If you notice up here, I have got a lot of letters behind my name, the "P.E." and the "PMP" thing. The "P.E." is always the Professional Engineer. "PMP" is a Project Management Professional.

And that's one of the recommendations that the Board made. And I will tell you Mike Braden, who is on site managing the project, is a P.E. and a PMP. Matt is also a P.E. and a PMP, and so we have got those people, those credentials, that expertise on site managing this project for you, and we are having results.

I will also start off by apologizing for not having this slide to you in advance. You had a read ahead that we gave to you, so you have had a chance to look at it.

And the facts really haven't changed. What I've done is I've added a few additional slides in here to bring clarity to the message I want to communicate to you guys, because I was concerned that I wasn't doing that and I was getting some feedback over the last couple days, and I rolled that into what you are going to see here. And I will get that to Mark and we'll get that posted on the site very, very shortly so you will have it for your records and it will also be in the minutes obviously.

Next slide. I'm also going to move pretty quickly to try to get us back on schedule, so don't hesitate to slow me down, otherwise I will move quickly. A pretty typical agenda that we cover.

The next slide. This is an important message as I give this presentation, what I want you to walk away with. Bottom line up front, the project cost at completion is \$65 million under the fully funded \$3.1 billion that we laid out in the PACR; \$65 million under. And I'll give you some more clarity here.

Project completion schedule two years ahead of schedule. Two years ahead of schedule. Currently shooting for a project completion in 2022. And with some good luck and some good hard work, that maybe get a little better.

And then, lastly, the reason that's happening is because we have capability funding we have been applying to the project. We have been using that money very wisely to actively mitigate risk and to buy down cost and schedule.

And that, in fact, is what generates the \$65 million under budget, two years ahead of schedule outcome is that capability funding, along with a lot of hard work by some smart people.

Next slide. So just some analytics to kind of give you some insight into what makes up those numbers. When I take it to the top left-hand corner here, the Corps' 80 percent confidence level Total Project Cost Summary [TPCS]. So this is what the Corps of Engineers independent cost estimators have developed for this project with risk. So this is our total -- this is what we really expect to occur.

When you look at this number, I've got dollars on this axis and we have got the years. And these are the years in which we did estimates. So back in 2012 when we got the PACR authorized, got the project re-authorized, did the PACR, all that, we were stating just under \$3.1 billion in 2024 for operational.

What you can see is over time, in 2013 that came down a little bit. In 2014 it's up just a little bit, and then you see it dropping off here. So that's where we are at right now from 2012, the PACR, we are down \$65 million.

If you go to the right-hand corner here, what I want to share with you, I think at the last Users Board meeting and the meetings before that, we talked about a TEP number. And everybody was very concerned about it, and rightfully so.

That TEP number, and I tried to bring some clarity as to what that is. That's the contractor's projected total estimated price for his contract. That's what the contractor is projecting. That's without risk.

Okay. So the TEP went up. Now you see it picked up here. That was Users Board meeting number 75 and we laid that out to you. We have brought that down through

negotiations and working with the contractor on what he has included in his estimated price and we brought that down \$30 million. That will continue to go down as we bring additional clarity to those assumptions that he made.

And I'm not going to go into a lot of detail into that, but there are thousands of line items that make that up. But that's the progress that you see.

So the total price is going down. The contract value is going up a little bit. You almost think, gosh, that doesn't make sense to me. How can that be?

And how that can be is because we are taking some of this money, some of this capability funding we are getting in advance of what we had originally asked for, and we are spending it to do things to buy down risk, escalation and overhead. So we talked to you about those.

When we did the PACR in 2012, we had \$244 million of risk in the project. For the dam portion of the project we had \$200 million of risk, a residual risk that was out there that we know could happen. That's the basis of our 80 percent confidence level.

And what we have been doing over the last several years is buying that risk down. So right now we are carrying about \$120 million in residual risk on the project. So that's a good thing.

MR. KNOY: David, could you explain just to a layman, what do you mean by that? Like what's a typical example of buying down the risk on the dam.

MR. DALE: I'm going to try to touch on an example of what we've done. But that's just things that could happen that's not part of – for example, when you do an estimate, when you figure out you have got to pour concrete, you figure it's going to take the "X" number of hours for so many cubic yards. But then you also know that maybe it's going to rain in the middle of my pour, how much money to -- so you carry risk to cover those uncertainties, okay?

MAJOR GENERAL PEABODY: Let me take this on for a second. This is a really important question that you are asking, Mr. Knoy. And this is exactly the kind of enterprise challenge that we have and issues that we are trying to get after.

At the end of the day that translates into a number and the number is cost. So we started with, I think, what, \$244 million was the risk associated with the PACR, the updated cost a couple years ago, whenever that was.

MR. DALE: Correct.

MAJOR GENERAL PEABODY: And so as we go forward in time and as we accelerate execution, or because of seasonal advantages that we've had with low river stages and so forth, or additional resources that the Administration makes available, what that should do -- and this is where we are not quite at the point of being able to articulate, but we are working on it. What it

should do is you will see that \$244 million figure change and come down.

And, remember, that's an 80 percent confidence level. So there is a possibility that that \$244 million number could actually increase with time if some unknown variables play out that we hadn't anticipated.

The bigger challenge that I think we have as an agency is we tend to talk about risk in very broad and general terms. But as engineers, we have a mandate to be able to nudge that risk down into some kind of quantified analysis that should be, in simple terms, be translated to our stakeholders like you with a dollar sign. And that's where we are trying to go. We are not there now. I tortured the heck out of Mr. Dale and some of his colleagues a couple nights ago trying to move in this direction. But I will tell you this, it is my sense that the team that Mr. Dale just highlighted here is probably more advanced in executing this kind of rigorous disciplined analysis than anyone else in the Corps right now, with a potential couple of possible exceptions.

So what I think David will do with his team going forward is use this as a kind of pilot or demonstration on how the Corps can quantify risk. And then not just quantify it, but explain it in simpler terms so the uninitiated can -- and I include myself in those ranks -- can understand it.

MR. DALE: Thank you, sir. I hear that that does not kill you, makes you better. So we are getting better.

MAJOR GENERAL PEABODY: Yeah, right.

CHAIRMAN HETTEL: General, I appreciate that. So back in my simplistic thinking, you are carrying \$200 million of residual risk, right?

MR. DALE: No, that's the point we are trying to communicate. Back when we did the PACR in 2012, for the dam we were carrying \$200 million.

CHAIRMAN HETTEL: So when this whole project is over with and that risk is down to \$50 million, does that decrease the cost of the project?

MR. DALE: Yes. Absolutely, yes. Which is our objective, is to deliver this project for the least cost possible, as soon as possible.

So that's what we are trying to communicate. Risk is coming down on this project. We are taking steps to buy that residual risk down. And this is not something that I make up. This is not something that these guys make up. This is a number that was sent off to an independent set of Corps cost engineering experts and asked them to go out and do that estimate independent of these guys, so that it's not what we think. This is what these independent cost estimate engineers do.

So we have got a risk that's coming down. Another thing that's coming down is -- I told you we are now scheduled for operational in 2018, project completed in 2022, that's two years

ahead of schedule. That's two years of escalation that we will not be exposed to. That's this curve. You see this coming down.

This little tick up here is associated with, when we got re-authorized, it was really about a year behind because we had done the PACR. We hadn't indexed it. It's a pickup a little bit, but then we brought that back down and pulled the schedule to the left.

And then, ultimately, just the overhead cost of being on site. It costs a lot of money just to be there. All of the trailers, the equipment, the staff, the management. But two years reduces that. And also there's some things we are doing case-by-case to be more efficient. But, generally speaking, I wanted to share these trends with you.

So we are under budget and ahead of schedule, and we are doing that with investing money, and it's having a return on investment. And these numbers all add up to that \$69 million savings at this point in time.

Next slide, please. I wanted to touch on an example of – Mark [Knoy], you kind of asked about what is this risk thing.

The team has a very complex process they go through. A big spreadsheet, and we actually have a dedicated risk manager that's responsible, they go through it, always looking for opportunities, what we can do with this risk to mitigate it.

A couple of years ago we recognized this – the center portion of this drawing is the pier of one of our tainter gate supports. The piers are sticking up out of the water.

When we build that, we have to lay the concrete in lifts. So we build the shell, we put it in the river, and then we pour lifts in. You can only pour at certain depths because of the – before the concrete sets up, it's a liquid and tends to put too much pressure on walls, so you have to do it in lifts.

When you do it in lifts, because of the structural needs of this design, each layer has to be bound to the other layer very tightly.

To do that, the conventional method is to go in there with a very labor intensive process with water blasters and high pressure washers and go in there and blast that thin film of stuff off there and expose a nice rough surface, so when you pour the next layer you get a nice tight bond.

If you look over here on the right, that's a picture down in there and you can see how tight all the rebar is in there. It's extremely labor intensive, it took days to do it. And that exposed the construction workers to a lot of time in the river and opportunities for delays.

So the team worked at what we could do to make that better. How could we mitigate that risk? What the team did was they came up with this self-consolidating concrete. They came up with a new mix design, we spent some money with engineers and scientists just looking at this.

We got all the right people in place. We did the testing to validate the new design, the new approach to placing this concrete worked.

So now we can place that concrete without having to go through all of that water blasting and that intensive labor. And what that results in is direct savings of about \$5.5 million and indirect savings of about \$30 million on the project.

And as a result of that -- USACE is always looking for new ways to do things. And when you do things on projects, you want to share those with others so everybody can learn from it. And so we do an "Innovation of the Year" Award, and we are very proud that USACE chose the Olmsted team for this self-consolidating concrete.

So, again, this is an example, just one piece of many, of risk that we went out and we mitigated. It's had a payback, but we had to spend some money to get there. It didn't come for free, but that investment had paybacks better than the expense.

MAJOR GENERAL PEABODY: Mr. Dale, could you please explain how the indirect savings there, how you calculate that?

MR. MICHAEL E. BRADEN: The overhead costs --

MR. DALE: Mike, can you please introduce yourself so we can record your remarks for the record.

MR. BRADEN: Mike Braden, Chief of the Olmsted division, Louisville District, Corps of Engineers.

Sir, that's based upon the overhead costs for the low water season. So it's very time consuming from a schedule perspective to go in there and green cut all these two foot lifts and using the self-consolidating concrete, we minimized our exposure out in the river. Our estimated savings, I would say, is at least one low water season.

MAJOR GENERAL PEABODY: Fantastic, thank you.

MR. DALE: Thanks Mike. So we are going to get back into some more traditional slides which you should see in your read ahead notebook, but I did want to at least spend a little time because I've been hearing about the questions.

So what can we get for these capability funding levels? What is the payback? What is the return on investment? And the answer is you are getting schedule and dollars that you save. And we'll talk a little bit more about that as we go through the slides. I'm not going to dwell on this. Just the overall picture, you have seen this before.

The next slide please. The same thing here. The isometric of what we have got planned, it is color-coded down there by fiscal year.

The one thing I would point out here is right now that plan is intact with a key assumption, a key assumption that we get this \$216 million in capability funding this year. Right now we have got about \$207 million. So we are still working that very hard to get up to that capability funding so we can ensure that we deliver these other pieces that we have got circled in red.

The next slide please. This is really more of a breakout of what we just talked about. The items that you see struck through here, those are struck through, because if we don't get the \$216 million, those are the things that we will likely not accomplish. If we stick with the \$207 million and we don't get the \$216 million, those are things that we will not do.

CHAIRMAN HETTEL: David, I'm sorry. Your differential in what you are saying, the \$216 million that you are asking for versus the current \$207 million, the \$9 million would hold up the setting of how many nav pass [navigable pass] shells?

MR. DALE: Mike, do you want to cover the details?

MR. BRADEN: Yes. It would directly impact two of our baseline milestones this year, navigable pass Shell 4 and navigable pass Shell 5, simply because we couldn't advance the baseline predecessor activities between now and September 30.

So we'd have to pull off our craft and equipment on those activities until September 30, restarting them in October, leaving us less than 60 days until the end of our low water season to accomplish those baseline milestones.

We would continue the setting of Paving Block 7, which is scheduled for this Friday, and Paving Block 8 two weeks after that, and then set Nav Pass Shell 3but Nav Pass Shell 4 and Nav Pass Shell 5 would be pushed out.

CHAIRMAN HETTEL: So dependent upon your shell setting season, I know you set shells through December and January some years when river conditions permit -- if the river conditions permit, can you still set those shells without the additional \$9 million?

MR. BRADEN: They would be delayed, so they would enter into a higher risk period of time. So possibly in December or January, which is a more difficult time to set them. And those shells are not as robust in high velocity, high elevation.

Currently, with the capability funding, we would set those in our normal low water season, and then the stretch goals would be paving blocks, which are much more robust in the December-January time frame.

CHAIRMAN HETTEL: OK, thanks.

MR. DALE: So the team will not give up. We are going to continue to look for

opportunities to mitigate everything that has occurred. But at this point in time, as you make that projection into the future, that's likely what would occur.

Next slide please.

MAJOR GENERAL PEABODY: So I'm a little confused here. You are calling \$235 million the baseline, but that seems to be a bit of a --

MR. DALE: Our capability this year, efficient funding capability, is \$216 million. If we received the \$235 million that we could spend, we could buy down some future risk. It's good work, but it's not critical path.

MAJOR GENERAL PEABODY: I just think it's a bit of a misnomer, because to me the baseline is whatever the Administration decides is the President's budget, okay?

MR. DALE: Okay.

MAJOR GENERAL PEABODY: And that's the baseline. Now, your capability funding or additional work due to seasonal variations, I just think we need to have titles that more accurately reflect what they are. At the end of the day the Administration -- the President's budget is -- to me, that's the baseline, right?

MR. DALE: We will correct that.

MAJOR GENERAL PEABODY: Thank you.

MR. DALE: No problem.

MAJOR GENERAL PEABODY: And we all have to acknowledge that that President's budget is going to be robust, but may not always fully fund the capability because of the math problem we talked about earlier with competing requirements.

MR. DALE: Absolutely, concur.

Next slide please. Just some pictures for you. Many of these you have seen, some are photos from the past.

Another piece of risk mitigation that we have done, we talked to you about in the past, is bringing the dustpan dredge *Hurley* up from MVD [the Mississippi Valley Division of USACE]. It's an example of cross-regional cooperation. And that has mitigated a significant risk out in the river doing a mass excavation of the river bottom, an activity that used to take four to six weeks in duration, we pushed that down to about a week's worth of effort.

Now, it cost a lot of money to get the dredge up there, but it pays for itself.

In photo number 2 you can see Tainter Gate 1 that we have hung already. And we are placing Paving Block shell number 5 out in the river. In photo 3 you see Admiral Paul F. Zukunft, Commandant of the U.S. Coast Guard, visit Olmsted. There have been a lot of high-profile visitors interested in the project.

Photo number 4 is a picture of a navigable pass shell with the wickets going on top of it. And then in photo number 5 is a picture of Paving Block 6 getting ready to move down the skid way, and then in photo 6 is a picture of our second tainter gate arriving on site.

CHAIRMAN HETTEL: Where are those tainter gates built and where do they come from?

MR. BRADEN: G&G in Mississippi.

CHAIRMAN HETTEL: And what waterways do they use to get to Olmsted?

MR. DALE: It came up through the Kentucky Lock and the Tennessee-Tombigbee waterway.

CHAIRMAN HETTEL: Through the Tombigbee. Okay, thank you.

MR. DALE: Next slide, please. This slide I'm not going to dwell on, it's a lot of the same information you have seen before, not a whole lot of change.

Our Budgeted Cost of Work Scheduled, Budgeted Cost of Work Performed, and Actual Cost of Work Performed all still look good. That essentially says that we are doing what we said we were going to do for the price we said we were going to do it.

Down at the bottom of the slide is our TEP of the project. Again, that's what the contractor is predicting. You can see the TEP go up in March from the Users Board meeting that we briefed to you, the increase, and we see it coming down some. Which is the trend I want you to focus on, is that we are actively managing, that the team is not just accepting a number. This is just the contractor's estimate of what he thinks its worth, and then we work through it to help him to justify and eventually put it into contract.

Next slide please. This is a very similar slide to what you have seen in the past. This is our planned expenditures over time. This is what we call an Earned Value Analysis based on a DOD Gold Card. It's a process that the Department of Defense developed many years ago, and it tracks the details of the expenditures. We blew this up so you can get some visibility. But in the end what that tells you is we are tracking the plan, and this is a capability funding plan.

Now I've added something new that you haven't seen before. See this blue line right here? I laid that in just to give a little visibility to, well, what if we just stuck with \$150 million a year, 2024?

That's not exact, it's a notional ideal of what that curve would look like. And what you see is that gets us done in 2024 at \$3.1 billion.

MAJOR GENERAL PEABODY: Would you explain what the three different colors mean?

MR. DALE: Sure. We have down at the bottom -- I'm sorry, they are not spelled out.

We have a blue, red and a green line, ACWP, the Actual Cost of Work Performed. The BCWP, the Budgeted Cost of the Work Performed, and then the BCWS, the Budgeted Cost of the Work Scheduled.

Those are some performance metrics that we pulled out of the Earned Value Management system and it gives you an indication of whether the contractor is doing work he planned to do, if he's doing it for the price he anticipated, and is he doing it when he anticipated it happening.

It's not an absolute of on schedule or not, but it's certainly a good indicator of something you need to look at or not look at. And in this case we have very, very good Earned Value numbers.

Next slide, please.

CHAIRMAN HETTEL: If you could back up one minute. Thank you.

Your total estimated contractor price versus your remaining contingency, I can see where that yellow portion "Remaining Contingency", is the basis of the PACR.

MR. DALE: Yes sir.

CHAIRMAN HETTEL: So if the total estimated contractor price is \$2.873 billion, so that's a \$226 million savings over the PACR, is that correct?

MR. DALE: Yes sir.

CHAIRMAN HETTEL: So there is a possibility of finishing this project and saving \$200 million?

MR. DALE: I caution you on that assumption. If none of the risks that we are anticipating -- remember that slide had residual risk on it?

CHAIRMAN HETTEL: Yes.

MR. DALE: So that is risk that's still out there that we are still exposed to, that we have not been able to either eliminate or bypass. So right now on this contract there is \$175 million in residual risk we are carrying that we think is still likely to occur with an 80 percent confidence

number, so \$65 million is what I think at this point in time.

CHAIRMAN HETTEL: Okay. So the residual rests within the \$226 million?

MR. DALE: Yes sir.

CHAIRMAN HETTEL: Okay. I understand now. Thank you for that clarification.

MR. DALE: No problem. Next slide, please. This is a slide you have not seen before. I added this because folks wanted to know what is our capability funding.

So let me try to take you through this slide. It's relatively busy. I want to draw your attention mainly to the blue box, because that's really where the questions have driven around, what is the capability funding for the Olmsted project.

So you have a blue line that runs up through the curve there. And then you have got these stair steps that just try to give you points in time of capability by fiscal year.

The figure of \$216 million, that's our capability funding for Fiscal Year 2015. The figure of \$268 million is our capability funding in Fiscal Year 2016. You see how it marches along. What you will notice is that 2016 is our peak year, and we are beginning to bleed off to where we don't need as much in the out years.

The other thing that's occurring is that we are getting done sooner than if we would have stuck with basically the PACR number.

So, again, an illustration of what can we get for this capability funding level. You get an earlier completion at a lower total cost. That's what we are buying with our capability funding.

Yes, Marty.

CHAIRMAN HETTEL: I'll let Mr. Knoy go first.

MR. KNOY: With the dam operational in any of those years, 2018 hopefully, does that mean the pool will actually be raised then, or not?

MR. DALE: 2018 --

MR. KNOY: Well, whatever you have up there that the date dam is operational, when will the pool actually be raised?

MR. DALE: It should be 2018.

MR. KNOY: So dam operational means the pool will be raised --

MAJOR GENERAL PEABODY: The dam is operational, that means we can -- the project is functional for purposes of passing navigation traffic and, in fact, we can raise the pool and manage it with the wicket gates for purposes of low-water traffic.

MR. KNOY: So then the Lock and Dams 52 and 53 wickets would go out of commission as we know it today?

MR. DALE: That's correct. 2018 is when we would be able to stop using Locks and Dams 52 and 53, with the exception of some extreme conditions.

MAJOR GENERAL PEABODY: So let me talk about that.

MR. KNOY: I'm sorry. You said "with exception of extreme" --

MR. DALE: Some extreme low water conditions, there will still be a problem until either they are demo'ed [demolished] out –

MR. KNOY: So this is the sill of the dam itself?

MAJOR GENERAL PEABODY: There will be a transition period where we still have Locks and Dams 52 and 53 features in place.

MR. KNOY: Right.

MAJOR GENERAL PEABODY: And those – if we operate Olmsted with those features in place, that has very important safety implications that we need to work through. One of the things we need to do that we haven't done, because we just don't need to yet, but we will, LRD [Great Lakes and Ohio River Division] will need to come up with an operational plan for how to manage the project safely during that interim period when Olmsted is functionally complete and operational, but the dam features from Locks and Dams 52 and 53 are not yet removed. That is not something that has been developed to my knowledge.

MR. DALE: That is correct sir.

MAJOR GENERAL PEABODY: It's not something we need to develop now, but a year or two out, yes, that's something LRD is going to have to work very carefully to develop and coordinate with the navigation stakeholders such as yourselves.

CHAIRMAN HETTEL: General, that's a very good point. Again, I'm not a professional mariner, but I would assume the Lock and Dam 53 sill wouldn't be the issue due to the closeness -- it's so close to Olmsted that you are primarily looking at the sill at the dam at Lock 52.

MR. DALE: I believe that's correct, yes.

CHAIRMAN HETTEL: And the last thing I was going to say, these are really good

slides. Can you please get these to the Users Board members?

MR. DALE: They will be posted.

MR. POINTON: Actually, David has already provided them to me, and first thing when I get back to my computer, I'll send them out to all of you.

CHAIRMAN HETTEL: This is really good stuff, David, and I'd appreciate that if you can get that distributed to us.

MR. DALE: And I apologize for not having the foresight to get it to you ahead of time, but it was kind of a work in progress.

The next slide, please.

So kind of ties in to the demolition of Locks and Dams 52 and 53. We were looking at it and evaluating do we really need to demolish Locks and Dams 52 and 53 or was there some level of demolition that we could go to less than full demolition and do it safely. And is there any way it does not impact the operation of the Olmsted project. So we are working our way through that.

We talked about this numerous times so I'm not going to dwell on it, but I am going to point out two things that probably has shifted since the last time we chatted.

Safety is still a significant concern, and I'll talk about that in the next slide you will see.

And then the other is we are actively doing an engineering analysis, because one of the things, as we went through the safety analysis and started talking to engineers, we realized that there are concerns about sedimentation and how the river flows, the river bottom moves around down there, and we need to go through that modeling to make sure we are not doing something to disrupt the safety of navigation, or just cause ourselves some long-term O&M problems with sedimentation.

So we are working our way through those issues. We are not throwing it out the window or anything, but we have not made a decision on demolition or not to demo. We are still working our way through it.

Next slide. And then lastly -- previously I said my real concern --

MAJOR GENERAL PEABODY: I'm sorry to go back. Could you project for the Board when you think you will be able to make that decision?

MR. DALE: I think it will be four or five -- three or four Users Board meetings down the road before we can --

MAJOR GENERAL PEABODY: So another year away from finalizing that decision?

MR. DALE: Yes sir. Yes.

MAJOR GENERAL PEABODY: Okay.

MR. DALE: What I wanted to point out, the last time I briefed you guys, I said my main concern with safety was recreational traffic.

Well, I've tempered my position a little bit, in that we have got a barge sitting on top of one of the piers at Lock and Dam 53 as we speak. They navigated through Olmsted safely, and as they went upstream they ended up getting on one of the piers at Lock and Dam 53, and they are still there today. They are working to get them off, there's high-value cargo for I think, TVA, some turbines and things.

So even when we got that much attention on site, that much notice, we still have people run over things. So it really concerns me. We are going to look really hard at the safety aspects.

Anyway, I wanted to share that with you.

CHAIRMAN HETTEL: I understand your concern, and it's a very unfortunate scenario on the industry's part. I don't know the details of it and I don't -- as I stated before, I'm not a towboat captain, but there are a lot of transits that go by there that do not end up on the piers at [Lock and Dam] 53. Just to make sure that everyone understands, that is not a normal occurrence.

MR. DALE: Absolutely. And the only reason I put this in here is to highlight -- I felt like I had kind of laid out -- and I didn't have concern about a risk to commercial navigation. There is a risk to commercial navigation.

And I'll respect what Marty said, I think it is low but it is there and it's something we need to consider, so we need to think about that.

The next slide please.

In summary, what I'm going to leave you with is what I started with, the project is under budget and we are ahead of schedule. And we are -- in that case we are able to say that because of the capability funding we have been receiving to date and all of the hard work that the team is doing on site to actively manage risk to buy down schedule and budget, and deliver the project as soon as possible, for the least cost possible.

Subject to your questions, that's all I've got.

CHAIRMAN HETTEL: Just a comment here. As we discussed last night, I think it is better off to project your savings as being under the PACR authorization.

MR. DALE: Go back one slide. And I said that wrong because I have a bad habit of saying "budget." Under the fully funded baseline.

So subject to any questions, I'm going to move on to my next presentation. And I'm going to try to catch up some time, because I told Mark I would get us ahead of schedule.

So with the Lower Mon [the Lower Monongahela River Locks and Dams 2, 3, and 4 project], really not a whole lot of change in the Lower Mon, things are going very well.

When you look at your slide deck, if you looked at them ahead of time, you will notice some significant changes in the financials.

And what we have done is, on the Lower Mon project I told the team I wanted to go ahead and roll in to their perspective, as far as reporting purposes, the fact that we right now are delaying the Landside Chamber and we are delaying the Port Perry Bridge.

And what you see, those changes reflect that. And the reason I did that is we still have an authorized project and it's still all in there, but I wanted to get some visibility on our performance baselines. And so we are kind of setting that as our performance baseline from point forward. So that's really the change that you see in this slide, is recognition of the delay of that work.

Next slide please. Kind of a summary, you have seen this same thing with the changes that are written in here. It's the delay of the Landside Chamber and the Port Perry Bridge, highlighting that our current forecast is \$1.138 billion -- excuse me, \$1.22 billion.

The 902 limit is \$1.761 billion, so we are in good shape relative to the 902 limit. With this plan we still achieve 90 percent of the benefits of the project.

Next slide please. I'm going to move quickly.

Next slide. Many of these you have seen before, no changes from this slide.

Keep going. Next slide, please.

CHAIRMAN HETTEL: David, I'm sorry, I'm going to hold you up. That previous slide, the municipal relocations, that does not include Port Perry Railroad Bridge; is that correct?

MR. DALE: That's correct, it does not include Port Perry.

CHAIRMAN HETTEL: And does that include the dredging?

So you are looking -- similar to what you tell us at Olmsted, if I'm reading this slide correctly, we could be operational at Charleroi [Lock and Dam 4] and removal of the dam at Elizabeth [Lock and Dam 3] by 2025; is that correct?

MR. DALE: 2022 we should be operational, 2025 is when the capitalized cost --

CHAIRMAN HETTEL: Oh, yeah, 2022.

MR. DALE: Yes sir.

CHAIRMAN HETTEL: Great. I would request for our November meeting that you give us the efficient funding levels for each year going forward in order to complete this project by 2022.

MR. DALE: I've got those. I can forward it to you as we send the other stuff out so you will have that.

CHAIRMAN HETTEL: That would be great, thank you. And we need that for our recommendations at the end of the year.

MR. DALE: I've got that, I just failed to include it in this presentation.

Next slide please. We have refined this a little bit, but it's essentially the same slide that you have seen in the past, and a little graphical of how we plan to build this thing out by year and segmented by phase.

Next slide. A look at the middle wall isometric, to give you a feel for how that is broken out. Again, not any significant change.

Next slide. A few pictures of the work that's ongoing.

Next slide. And then this one is very similar to the Olmsted slide, how we are tracking expenditures and schedule. You can kind of see how the changes in the Port Perry Railroad Bridge and the deferment of Port Perry Railroad Bridge and the deferment of the Landside chamber affect the numbers. Again, I wanted to get those in there for a performance baseline perspective.

Go to the next slide. One more, please.

This is the S-curve modified based on those changes. And they have laid in here -- essentially, a bar chart showing progressing of key phases of the construction project.

The next key phase that's coming up is we open bids on the next large contract award. Those look good. And we should see an award likely this week or next, early September. But that's going to move forward.

Next slide. Future challenges, obviously, just funding the project efficiently, to capability. That's looking pretty good right now.

Something that the team -- we have been working with these guys, just like we did with the Olmsted team, trying to refocus on how you have got to manage risk, look for the opportunities, look out into the future, try to figure out what you can do.

It's not just enough to say there's \$200 million of risk or there's \$10 million of risk. The key is, once you identify it, you can go after what can you do to mitigate that.

So those are some of the things that they are doing and looking at right now, is what can we do to mitigate, to make sure that we deliver on what we said.

Next slide, please. That's really all I have on the Lower Mon.

CHAIRMAN HETTEL: Please go back to slide 9. I just want to reiterate the importance of getting these efficient funding numbers. I'm sorry. Slide 8.

I see your comment down there, "Completion date of the Charleroi River Chamber could be as late as 2027 if not awarded efficiently."

I can't stress enough, if you can get us those efficient funding levels so we can help you finish this project by 2022. Thanks.

MR. DALE: You'll have them. Any other questions? I will close with thank you very much for the opportunity, I appreciate it. I really appreciate all the questions, it helps us focus.

MAJOR GENERAL PEABODY: Thank you Mr. Dale.

Mr. Chairman, to your point about efficient funding. Mr. Belk and Mr. McKee, what I think we ought to be doing is portraying the suite of active projects at each meeting in probably one slide that looks forward some short period of time, two or three years, I'm not sure how far, but it should be a relatively short period of time, and inform the Board what efficient funding would mean in terms of total costs amongst those active projects.

Because, again, we will not have, even if the best projections transpire, we will not have all of the -- and the Administration fully matches funds available, even if that would happen, we still would not have sufficient funds to fully effectuate all active projects.

Therefore, given changes to realities associated with project reliability, I think it's important that this Board understand the potential choices to make and priorities. And with that information, I think they will be able to be in a better position to provide recommendations to Secretary Darcy on how they view how those priorities should be allocated or changed.

CHAIRMAN HETTEL: Yes, definitely, General. And there may be, depending upon what you give us, if there's not enough dollars in the -- money in the Trust Fund, we would say, well, push this project back rather than this project. So, yeah, that will be great. Thank you.

MR. POINTON: David, were you going to give us a brief status on the Chickamauga Lock and the Kentucky Lock economic updates?

MR. DALE: I believe we talked about that economic update as much as we need to. It's in process. We know the BCR ratios, the range, and we will be bringing this to closure in August. But, no, no presentation. I felt like we covered that adequately. My apologies.

MR. POINTON: No problem.

CHAIRMAN HETTEL: Let me ask that question again. You said you believe the economic updates for Chickamauga and Kentucky would be completed by the end of August, is that what I heard you say?

MR. DALE: Yes sir.

CHAIRMAN HETTEL: And can that be distributed to the Users Board?

MR. DALE: Chickamauga Lock, we are only talking about Chickamauga Lock.

CHAIRMAN HETTEL: When that is complete, can you get that distributed to us, please?

MR. DALE: Yes sir.

CHAIRMAN HETTEL: Thank you.

MR. POINTON: Thanks David. Next on the program, Jeff McKee is going to --

MAJOR GENERAL PEABODY: Well, before you go to that, let me make one comment on the Lower Monongahela project. On Monday I signed a memorandum to Secretary Darcy. I'm not sure if you have seen it yet, ma'am, but we've had many conversations about this associated with the Port Perry Bridge and the Landside Chamber. And basically what that memorandum does is forward Secretary Darcy the recommendation from the Users Board that we not proceed with action on the Port Perry Bridge. And from the Corps' technical perspective, we don't believe we need any more in that regard. However, there is going to be some additional analysis done in coordination with the Coast Guard on that issue.

And then as a matter of priorities, ma'am, we are recommending that we indefinitely defer the Landside Chamber, so that would prevent us from having to hit the 902 cost limit on that project. We could have a functional project, we just wouldn't have the full authorized two chambers of that project. And then at some future point in the distant future, prospectively we could complete the Landside Chamber as a separate issue. So I just one wanted to make it clear what position the Corps had taken on that so that the Board was aware of it.

CHAIRMAN HETTEL: Thank you, General. And, Madam Secretary, just to clarify, we

can achieve 90 percent of the benefits of this project without the river chamber or the raising of Port Perry Railroad Bridge. So I think that's important that only 10 percent of the benefits would have cost hundreds of millions of more dollars moving forward. So I think that was important to note too. Thank you, General.

MR. KcKEE: Just a correction for the record, sir. I believe you meant without the Landside chamber and the Port Perry Bridge.

CHAIRMAN HETTEL: I'm sorry. Yes. Thank you.

MR. POINTON: Seeing no other questions, Jeff, why don't you go ahead and proceed.

MR. KcKEE: Okay. A quick overview of where we are on the lock river outage process and reporting.

Next slide. Obviously, we are coordinating with a variety of our USACE District offices, as well as other Federal agencies, and will be coordinating with the Board as well, along with all of the stakeholder and any industry folks we have got there. We will continue to provide our schedule of closures at various meetings and conferences.

And as indicated at our May 15 meeting with the Users Board, on the 11th of May we fielded our "Notice to Navigation Interests" website [http://ntninotices.usace.army.mil/]. And so all of the closures, as well as other information pertaining to the waterways, both on the coastal side of the house and on our inland waterways, are to be posted on this website for "Notices to Navigation Interests."

And anybody can go in and take a look at this. We are also posting appropriate public affairs news releases on that website as well. Yes, sir.

CHAIRMAN HETTEL: Jeff, I've been to that website. At least all of the "Notices to Navigation Interests" are on that website, but it's pretty difficult to filter out the construction of the boat dock versus the closure of a lock. If there's some way you can take that website and categorize disruptions to navigation, something to where we don't have to run through the 300-some notices to navigation to find when Newburgh [Newburgh Locks and Dam located at Ohio River mile 776.1 below Pittsburgh, PA] is going to be shut down at the 1,200 foot chamber for repairs.

That's just been my experience. I don't know if anyone else has been on that website. But it's pretty cumbersome to try to sort through which ones are facility related for closures.

MR. KcKEE: We will certainly take a look at that, sir, to see if we can put some additional granularity to help there. Thank you.

Next slide, please. This is what the website looks like when you go into it.

Next slide. There is a searchable feature that you can put in here for whether it's waterway or not.

And then the headings here, you have the individual notices that are listed here that you can click on. You can click on dates. You can click on what it is that you are looking at. You can click on the different headers to show the waterways, as well as any different attachments that may be assigned to that particular notice.

So you can sort it by whatever waterway you want, or sort it alphabetically by notice, or chronologically by date, just by clicking on these different headers here that are on the website.

Next slide. So, for instance, if you actually click on that notice of navigation, you would see something like this come up that would spell out what it is that that particular notice pertains to, whether it's the closure of a lock. So we will work at somehow trying to get some sort of distinction there between what would actually impact the traffic as opposed to just actual construction.

Next slide. Again, a sample of what could be put out as a public affairs news release as well. This particular one is showing the past outage on the Columbia Snake River system.

Looking forward we will continue to improve the process with involvement with industry and the stakeholders, ensure we are communicating, and then we will have coordination across the entire IMTS [Inland Marine Transportation System] with the different industry stakeholders and work groups.

And in terms of next steps, on the next slide, you will see at this point in time we are working with all of the Corps District offices, trying to collect best management practices, collect who it is that they are coordinating with. We will from there draft a standard operating procedure, circulate that with the industry and with the Corps folks for review and comment.

Once we get that, we will make revisions to it, get it back out, conduct some conference calls and webinars to try to discuss what sort of discrepancies we may have or things where we felt a need to have some more communication to try to resolve some issues. Then revise it again, and then circulate that out to the Corps of Engineers District offices, as well as out to industry, before going forward with a final standardized operating procedure.

So that's where we are. We expect to have, at least, a draft hopefully by the October-November time frame, so by the time we have the next Users Board meeting you should have at least gotten a draft standard operating procedure from us to take a look at.

MR. MECKLENBORG: Jeff, do we have the slides or --

MR. KcKEE: You will have these slides, sir.

MR. MECKLENBORG: Thank you.

MR. KcKEE: I will get them out and they will be posted on the web, and I will send copies out to the individual Board members tomorrow.

MR. POINTON: Any other questions for Jeff. Great, thank you.

MR. KcKEE: Thank you.

MR. POINTON: Next up on the program we have Mr. Mike Wilson from the Nashville district, he is going to give us, hopefully, an expeditious presentation on the regional importance of the Tennessee and Cumberland basin reservoir system.

MR. WILLIAM M. WILSON: I'll do my best. First off, I just want to welcome this distinguished group to Nashville. It's good to have you here, I hope you come back often. I was asked just to give a quick overview of the Tennessee-Cumberland River system. The Cumberland River is several hundred yards out the back door.

If you'll go to the next slide. And first off, I'm sorry, for those that were at the Mississippi River Commission briefings on Monday, you are welcome to read your Blackberrys or go outside and make phone calls, because this is a very similar presentation.

You can kind of see what my goals are here. Primarily, I want to point out that we are a very effective water management system for both the Ohio and Mississippi Rivers, both during flood situations and in drought, because we have the ability to moderate our discharges probably better than most of the other major rivers and tributaries in the Ohio River Valley.

Next slide, please. You will see here we had two authorizations. The first one came after the floods during the 1920s and 1930s. The top four projects [Wolf Creek Dam, Dale Hollow Dam, Center Hill Dam and J. Percy Priest Dam] were authorized by the Flood Control Act of 1938 as water storage projects with some hydropower, you will see that next.

Then the next set of legislation [the Rivers and Harbors Act of 1946] that came along was more toward the navigation side. The projects that are in bold print were actually authorized and built [Cordell Hull Dam, Old Hickory Dam, Cheatham Dam, and Barkley Dam]. Those that are not in bold print were just authorized, but were never built.

And we got some later authorizations for our smaller projects up on the upper end of the system. I won't discuss them too much because they are really not pertinent to the larger Ohio River Valley.

Next slide please. This just shows the authorities that we have. Those in green are original authorities. Those in red were not given.

We basically have two distinct types of projects in our system. And I'll go a little bit more into detail in a little bit.

One thing I will point out is that recreation was later added to every one of our projects, and water quality and water supply also are now a part of every one of our projects.

Next slide. This is a good picture or depiction of our system. These are our storage projects. You can see the orange is really the portion of the pool that is dedicated to flood storage. There is also hydropower at every one of our flood storage projects. And what you will also notice is that there are no locks on these projects.

Then we have what are called "run of the river" projects, which you will notice on there that that there is no water storage capacity. Those are primarily for navigation, with the secondary purpose of hydropower. This comes into play, I'm primarily sure of this, because of the 2010 flood, which I will talk a little bit more about, there was a lot of lack of understanding for how these projects right here were managed. They have very limited storage.

But these projects with a lot of storage have both the ability to hold back water during a flood, and to provide water downstream during a drought.

Next slide. I borrowed this slide from TVA [Tennessee Valley Authority] because we are in the Tennessee and Cumberland Rivers system and they have an extensive network of projects also. They contribute a lot to both flood damage reduction and drought mitigation, that when you get to the mouth of both the Tennessee and Cumberland Rivers, there is a canal just upstream of both locks.

We manage the two rivers connected. The pools have to be balanced. A lot of coordination, and a lot of that comes into play. The LRD office in Cincinnati takes over control during a flood situation, but in the meantime we have to manage the Cumberland River, and the Tennessee Valley Authority has to manage the TVA Tennessee River project, so that at the end they both are running almost identical.

Next slide. The main purpose of this slide here is to show – again I borrowed this slide from the TVA – is that their tributary projects having a lot of storage, and this is very similar to ours. The TVA is running their river projects on the main river have very little storage. So once the water gets to the main river, there's very little ability to store it.

Next slide. Okay. These are our project purposes: Dam safety trumps everything we do. We will always default to dam safety over just about anything else. But this does show the project purposes. And the next slide shows how complicated managing the system is for us. Every one of those red circles or oblong shapes, whatever it is, is a stakeholder that has an interest in that particular project's purpose, and a lot of times there are competing interests. So what it comes down to, really, more during a flood or drought, of managing the system, it becomes more and more complicated.

The next slide. The one thing I want to show here is we don't do this by ourselves. We have our water management staff. And an integral part of our management of our system is our

hydropower operators. They are the ones that actually control all of our gates and all of our releases. And they communicate very well back to the District office just so that there is an understanding of what is going on in the field.

We are very connected to the Great Lakes and Ohio River Division office in Cincinnati. As I said, they take over control during certain types of situations. But, really, our Federal partners are very important. We work closely with the TVA, which I've already discussed. The National Weather Service and the U.S. Geological Survey [USGS] are very integral, the USGS basically for the gauges that they install, and the Weather Service, because they are the ones that actually give out the river forecasts.

Next slide. One thing I want to point out here, we do have a lot of ability to manage flows. We use Kentucky and Barkley, because those are the twin systems connected.

You can see how much water we can store, depending on the situation. Going into the situation with winter pool, we store over five million acre-feet of water. And if you don't know what an acre-foot of water is, if you have five million acres, it's one foot of water deep for that entire area.

Summer pool during normal operations, which is really only taking the water up to 365 feet mean sea level, we can store almost a million and a half acre-feet; but if we maxed out the system, 4.5 million acre-feet. Also, we can augment flows during a drought. Basically, starting early in the summer we start letting our water out to both supplement hydropower, supplement water quality, and often it supplements navigation, depending upon which part of our system you are in.

The effects of this slide won't work since it is not in PowerPoint, but if you go to it, what you see behind here was a cow hanging from a tree 30 feet above the river bank. This was during the Historic Flood of 1937. That cow had a bad day. This cow had a little bit better day, but this was during the Flood of 2010; very similar situations, very similar parts of the river. But I believe this cow was actually rescued, but it just shows the impact of the flooding on the Cumberland River. The point is to get to high ground before the water comes up.

General Peabody remembers this event very well. Late April 30, May 1st, it started raining, they were calling for six inches of rain. This is ultimately what we had. These contours show the depth of water. You can see the nucleus or the center point of this contour is 17 inches, 17.8 inches.

I live on the Harpeth River, and the water was probably six or seven feet higher than I've ever seen it before. My neighborhood had over 300 houses flooded.

The main point I want to make here is the water fell in this area right here. That was the bulk of the water, and then it ran downstream on the Cumberland River.

If you would go to the next slide. This shows where our storage is. That's the intense

rain, the 17 inches right in here, 15 inches a little bit higher up. Here is where our storage is, up in here. We were not able to capture the water for that flood event. It fell on our "run of the river" projects that could not hold back the water. And that's a major teaching point, communication point, in this region.

This building where we are today right here had water, I think, ten feet in the lower levels, the entire complex was flooded.

Next slide, please. Also what this shows, this depicts the amount of volume and the amount that we were holding back. You can see these three storage projects right here [Wolf Creek, Dale Hollow and Center Hill] still had plenty of ability to hold back water.

J. Percy Priest, which is closer to the Nashville area, was maxed out; water was at the top of the gates. These three projects, Cheatham, Old Hickory and Cordell Hull were totally overwhelmed.

Okay, next slide. This shows the amount of water we were holding back, 1.6 million acre-feet. Nobody in the public quite understood that. So our District Commander at the time, Lt. Col. Anthony Mitchell, said come up with something they can relate to.

So, in essence, the Tennessee Titans football stadium, which was right across from the Motor Vessel *Mississippi* this morning, could hold back, I'm sorry, 233 miles of the stadium vertically could be filled with water. That's what the storage was.

Next slide. This slide shows Cordell Hull Lock and Dam, which is approximately 125 miles upstream of Nashville. Water had never been that high before; almost, but not quite.

We picked up a lot of trash that was on the banks. That was an issue.

And as Bob Sneed [Mr. Robert B. Sneed, Chief of the Water Management Section, Hydrology and Hydraulics Branch, USACE, Nashville District] our water manager likes to point out, folks in that end of our region really like Mellow Yellow and 7-Up.

Next slide. This is a picture of Old Hickory Lock and Dam. This would work a lot better in PowerPoint, but, in essence, this platform behind this grate is the top of our lock wall. Once water gets to that point, it has free access to the powerhouse, because there are connecting shafts between the top of the lock wall and the powerhouse.

The water got to within 6.6 inches of the top of the lock wall. The weather system, like I said, overwhelmed our projects. If we would have allowed the water to come up over the top of the dam, it would have flooded the powerhouse. We would have lost total control of the gates, and we would have had to raise the gates, putting four more feet of water on downtown Nashville.

Folks originally didn't understand why we had to put so much water downstream, but it

was to save this powerhouse and the dam.

Next slide, please. Can anybody figure out where the flood head is on this PowerPoint slide? It's pretty obvious.

Cheatham Lock and Dam was totally overwhelmed. The project is designed to go under water, but not to the extent that it actually went under. See the top of the lock wall right here, you can see where the water got to.

Next slide. You can see here what a dry day looks like. And you can see -- if it was actually a PowerPoint slide, you would see the lock in the dry condition, then you'd see the water up to the top.

It was almost totally destroyed; not totally, but it did totally destroy almost all of our equipment. We received \$39 million in flood supplemental appropriations. That allowed us to go back and fix this, we have actually raised everything up one floor, and it is back and functioning.

The lock was closed down for a little bit over 25 days. Our staff did a great job attacking that problem, and we were able to get the lock up and operational in time to get a barge of coal upstream to the TVA power plant right before the plant ran out.

Next slide. It was a record setting event; we exceeded all previous records after our projects were put into place. Prior to the 1950s, when our projects actually went online, these numbers were much higher. But once the projects had the ability to hold back water, this was the maximum event where we just totally overran the previous maximum numbers.

Next slide. One of the things I want to point out, because I know there has been a lot of discussion about the flood, but not a lot of discussion about the good things that happened afterwards.

We received \$2 million to do post-flood investigations and a flood documentation report, I'll talk about a little bit more of that in a minute.

Flood profiles were key to our stakeholders to understand what did to our flood damage curves and the predictions for the future.

Working with the local communities, we came up with emergency evacuation plans so that they could better react the next time we had an event or something similar to that.

The flood warning systems are key. The local communities put in flood warning systems that now were designed to handle a flood equivalent to the 2010 flood. Older warning systems that were not designed to handle a flood similar to the 2010 event have been replaced.

We did do two Reconnaissance studies. The Harpeth River study actually is currently

finishing up the feasibility phase. The Cumberland River study was never approved to go forward and was broken into smaller studies that could be done under the auspices of our Continuing Authorities Program, and we are working very well with the City of Nashville on that.

Next slide. This is a very important document. We received funds to this post-flood investigation study, and this gave us all of the information, all of the historic information that we collected after the flood.

High water marks, our folks were out there day after the water starting receding to make sure we knew where the water got to so we could put that into our models.

Rainfall summaries, all of these things that you could see on here, it helps us identify where we needed new gauges.

We came up with GIS inundation levels which were key to our stakeholders. They now know they can now go in and look on a document and figure out where the water is going to be under certain events.

Next slide. This this mapping effort was key with our stakeholders also. We now have much better tools in our water management system to help us predict and ultimately manage future events.

Next slide. Again, this is very similar. These are some more of the tools that we were able to come up with some of the supplemental funding that we had that we use on a daily basis.

Next slide. One of the great efforts we have is working with Metro Nashville on their flood preparedness. Nashville was devastated, so they became very proactive and went in to the point that they have a county-wide Metro -- Davidson County-Metro Nashville combined flood preparedness effort.

And the biggest effort that we were involved in was the Nashville "SAFE" tool, which is an acronym for 'Situational Awareness of Flood Events.' And it is basically a predictive tool that their emergency management personnel has used, taking the gauges that the USGS installed, new models from the National Weather Service, and our hydrologic and hydraulic information, they now can proactively determine where to put their energy towards closing roads or getting people out of harm's way.

It's a very valuable tool that is now being used. Chattanooga saw the value of it, and we are working with them developing that, and there is even talk that Memphis might want to do it.

Next slide. I know this was a bad slide for a lot of people. But the flood event of 2011 along the Mississippi River, as bad as 2010 was for us in the Nashville area, 2011 was probably much more devastating to our region.

Next slide. You can see right here, we held back a lot of water. This time we had water actually falling on top of our basins, and we were able to hold it back. You can see we held back a total of 3.3 million acre feet of water. That compares to only 1.6 million acre feet of water held back during the May 2010 event. The primary difference is where the water fell. But we did help out quite a bit on the downstream flooding. Unfortunately, not as much as I wish we could have.

Again, putting this in perspective, 474 miles worth of water stacked up, an area the size of a football field.

Next slide. You can see here kind of how much our water storage projects were full. During 2010 Wolf Creek was only half full. This time we were able to hold back much more water just because of where the water had fallen.

Next slide. Jumping over to the drought side, 2012 turned out to be a drought year. And a lot of times folks want us to vacate our reservoirs to give us more ability to hold back water during a flood.

If we vacated our reservoirs in 2012 early, we wouldn't have had water that ultimately helped the Mississippi River.

Next slide. You can see these numbers. The Tennessee and Cumberland River basins are six percent of the total drainage area of the Mississippi River basin. But during a drought we can provide as much as 40 percent of the flows coming down the Mississippi south of the Ohio River.

Next slide. The key point here, this just shows historic low levels of the Mississippi River at Memphis. In 2012 it was 9.8 feet below normal. You can see what the flows were. You can see what we contributed to the flows. The delta between the two, if the Tennessee - Cumberland system had not been putting out water, the water would be 15.4 feet below normal rather than 9.86 feet below normal at Memphis.

So that's one of the other values. A lot of times we think about the flood control but we don't think about our ability to affect droughts.

Okay. My last slide before questions. Another good silver lining to the cloud, we were able to go in and acquire some funds to greatly update our water management system. I showed you some of the previous tools, but we have a more modern system that is connected to our emergency manager's conference room. And now we have a much better battle rhythm, if you know the term, when we go into a flood event.

So while these floods were devastating, they did allow us to become a little bit sharper as we learned from our lessons.

One of the big takeaways is we have to communicate our system and its lack of ability to

do things and its ability to do things. Limitations are big for our stakeholders to understand.

All right. I'm back on schedule. Any questions?

MR. POINTON: Well done. Thanks, Mike, great job. I really appreciate it. Are there any questions for Mike? Hearing none, next on the program, we have a public comment period. I have two individuals who have indicated they would like to make a public comment.

We are going to start off with Mr. Jim Stark from the Gulf Intracoastal Canal Association.

MR. JAMES STARK: Thank you Mark. I'll be brief since I know we are running a little bit late.

I am Jim Stark, the Executive Director of Gulf Intracoastal Canal Association, a regional trade association with about 200 members, both operators on the GIWW and people that do business with those operators.

At your last meeting in Galveston I addressed you on several issues that affected the GIWW, and I was prepared today to talk a little bit more about issues that affect our commerce on the GIWW.

However, I was very pleased to see the emphasis that the Users Board put on the LPMS problem and its solution. I'll be working very closely with Dr. Mark Sudol. I've already made contact, and we'll work together to make sure we get those numbers correct.

Also, on the other couple of problem children we have on the GIWW, the Brazos River Floodgates and the IHNC [Inner Harbor Navigation Canal]. I am glad to see progress is being made to get to where we need to go with all of those projects.

Thank you, again, members of the Users Board, for focusing on that, and thank you to the Corps for a quick response on the LPMS project.

MR. POINTON: Thank you Jim. I appreciate it.

Next up is Mr. John Doyle from Jones Walker. I believe he will be representing WCI [Waterways Council, Inc.], John, is that correct?

MR. JOHN S. DOYLE: Sure.

MR. POINTON: If I say so, right?

MR. DOYLE: I'll be happy to represent myself as well.

I've had the opportunity to watch the Users Board since it was established almost 30

years ago. I have to tell you, I have never seen it function better than it has the past couple years. I think it's a real credit to all of you who are members of the Board. I think it's a credit to the Corps of Engineers.

The quality of the analysis, the quality of the presentations that we are seeing at Board meetings now is unparalleled. It's far superior to anything that we saw for much of the history of the Board.

The level of conversation that has taken place, I think it's probably apparent to everybody here, is a completely honest, completely candid conversation that goes to the heart of the issues that address what the Board was originally created to do, and that's to try and create a partnership that really acts as a partnership between the Corps of Engineers and industry to try and help this country make the best investment decisions we can for our future and for our economy.

But, most importantly, we have got to have a shout out to leadership, because at the end of the day, there's no better example of the statement that leadership matters.

And, Marty, the job you have done has been fantastic. General Peabody, absolutely the same is true there. You have taken the level of quality of this Board to a place it hasn't been before. I know General Jackson will get a chance to try and do an even better job under his reign. But all of us who deal with these issues really appreciate the great work that you have done. And General Peabody, nothing but fair winds and following seas is how we Navy guys would wish you as you go forward into your future.

MAJOR GENERAL PEABODY: Thank you.

MR. POINTON: Thank you, John. We are getting to the point in the agenda where we are going to have some closing remarks. General Peabody, would you like to go first?

MAJOR GENERAL PEABODY: Sure. Thank you. Mr. Pointon. And thank you, Mr. Stark and Mr. Doyle for your comments on the general satisfaction with the direction that we are headed, that's great to hear.

First let me summarize what I think are some of the key tasks or key takeaways that we, the Corps, need to take on to continue to assist the Board in its responsibilities from this discussion. We've hit all these points, but I just want to summarize them.

First of all, the LPMS reporting system, I think we have got a great start on getting that where it needs to be, but we need to finalize it, and then we need to make sure it's properly socialized across the enterprise, and then we have got to execute and evaluate our ability to execute what we are forecasting. So we have got the solution, now we need to execute it. So that's number one.

Number two, I think this is a really important topic -- and I think it's going to be somewhat painful and difficult for us all to go through, but I think it's necessary -- to have some

discussions with the Board on how the benefit cost ratio analysis works, and how the process works, so that the Board can understand, as I think, Mr. Mecklenborg, you stated it, what's inside the black box.

And then related to that, how we do traffic projections. I recall several Board meetings ago we had a briefing on traffic projections. And I think I left that just as confused as anything from that discussion. But my bigger takeaway was that I had trouble understanding the assumptions that were made and how we made the assumptions. And I think that is a point that you had, Mr. Chairman that I think we need to look at.

The third issue is -- and we had multiple discussions, in-depth discussions on this and kind of a brief summary today. But whenever the Administration makes a final decision on the Capital Investment Strategy and it's submitted, then I think, clearly, the Board will need to assess it and make it its own views known.

But I would also comment, as I did earlier, that I think the bigger picture is that the framework behind the strategy is really more important than the budget scenarios or the budget recommendations. Although, they are clearly very consequential and we all get that.

But to me the framework will enable this body to make the best possible recommendations and judgments as to the priorities that you need to have so that you can carry out the business of moving commerce on the nation's inland waterways.

Number four, efficient funding projections for active projects. Mr. McKee, I think this is an important thing. I don't think we need, probably, to do it every Board meeting, perhaps every second or third Board meeting, maybe at least on an annual basis. I'd defer to your judgment, Mr. Chairman, and the Board, on what you want. But I think that having that visibility on a semi-regular basis would really assist you in doing your duties.

And then the last thing is kind of a bigger issue that I alluded to earlier, but this is how the Corps does its work. And it comes from, I think, the discussion that Mr. Dale had on the Olmsted project. But contingency management, performance and project delivery and cost culture is changing fairly dramatically in the Corps. It's difficult yet to see the outcomes with clarity, but the underlying culture used to be, well, we have a cost overrun, we get a PACR and then Congressman or Senator "Whomever" is going to take care of it with an earmark, and we will take care of it.

And the truth is that because of earmarks, the Corps never really had to think strategically and programmatically. And it's not that we didn't, I think we did, but we didn't do it to the degree that we need to, and owe the nation.

That has changed. And I've told Chairman Shuster [Representative Bud Shuster, PA-9th District, Chairman of the House Transportation and Infrastructure Committee] and Chairman Gibbs [Representative Bob Gibbs, OH-7th District, Chairman of the House Subcommittee on Water Resources and Environment], I think it was the week before last, Steve Stockton and I

went up to meet with them, and I told them very clearly, I'm glad earmarks are gone. I may be one of the few people in the Corps to believe that. But I truly am, because it forces us up above the project level. And we are having -- Mr. Doyle, the comments you made, I think, are a credit, frankly, to the fact that we no longer have earmarks, the fact that we are thinking more strategically, it's a forcing function, so I think that's a good thing.

I want to thank several folks here today. First of all, our staff, who always do a great job. And notwithstanding our inability to satisfy the two-week rule, nonetheless, that the staff works very, very hard to address your concerns, and I think the comments Mr. Doyle made are a credit to their hard work.

The Mississippi River Commission, having them here, I think, is very special and I would encourage, Mr. Chairman, you to continue to try to find ways to build that relationship and leverage those capabilities of that body.

Our federal observers, it's always great to have them here. Nick [Marathon], you always come to all of the trips, as well, and I know it's hard for Federal observers to do because you have so many other duties.

And especially, of course, Ms. Darcy, our civilian leader and Secretary, who has one of the most difficult jobs I'm aware of in the Federal government, and, ma'am, we really appreciate your leadership.

To the Board members, the last thing I'll say is just a couple of observations. I've been working on inland waterway issues for seven years now, and it's not a very long period of time compared to most of you, but it's been a learning process for me. And I have learned a lot and I've learned a lot from all of you.

We haven't always agreed on issues, but disagreement is not disloyalty, or it doesn't mean you can't find ways around problems. And I think we have managed to do that over time, and it really gratifies me greatly to hear Mr. Doyle attest to that.

I will tell you, the Corps always takes your view seriously, even when we don't agree with your points of view. But the fact that you sometimes criticize us, I think, really helps make us better and it helps elevate our game.

I just think it's important to have that criticism done in a way that's collegial, and I think we have arrived at that point, and I think that really needs to be sustained. And we have always tried to improve. And as long as, I think, we do that and you do that, then together we can get this body where it needs to be.

The very last thing I'd like to do is to have a couple people I'd like to recognize. These things don't happen on their own. Really, weeks and months of work go into every single one of these, and we do them on a quarterly basis. But usually it's the local district that does the logistics, it's so difficult.

These three people, I hope they are here. Lynn Kinser. Lynn, could you come forward, please? Come over by the flags, I'd like to give you a coin. Lynn is the program analyst for the Navigation Branch in the Nashville District, and she did a fantastic job basically coordinating the conference. So on behalf of all of the Board members, congratulations.

Is Andrienne Washington here? Adrienne is a budget analyst here in the Nashville District, and she also worked with Lynn to do the coordination for this meeting.

And I can tell you, just the Board itself is difficult enough, but when you also have the Mississippi River Commission in your playground for the entire week, that's also very difficult. You did a fantastic job.

And the master of Chickamauga Lock, Don Getty, is he here? Don, come on up. It's not easy to get all of the attention you get for all the reasons you get it, which is a project that's just a big problem, it's very complex. The unknowns are greater than the knowns, but your ability to explain where we are and the challenges that we have and the potential solutions working their way forward, I think, is really setting the stage for the best possible decisions given over the uncertainty, but you have done a fantastic job, and I know the whole Board thanks you for that.

CHAIRMAN HETTEL: Very nice, General. I think we have -- as I started my opening comments, the LPMS and CIS are two important items that the Board is looking at and, hopefully, working through Dr. Sudol we can get the LPMS straightened around.

And again, I'll reiterate, Assistant Secretary Darcy, we appreciate everything you could do to move the Capital Investment Strategy forward. And, again, more than happy to help in any way we can, and thank you for your attendance today.

General Jackson, we look forward to November. Welcome aboard and happy to have you and it will be great to get to know you and work together.

And let me finish up my final comments to General Peabody, as this is his last meeting as Executive Director. As a matter of fact, probably in 12 minutes he will no longer be Executive Director and relieved of his duties.

Sir, we have come a long way from when I first met you. I don't know if you recollect this or not, we had a discussion at the 2010 November stakeholders meeting at Pike Island Lock and Dam [located at Ohio River mile 84.3 below Pittsburgh, PA] between you and Colonel Graham [then Colonel William H. Graham, then District Commander, Pittsburgh District and now Brigadier General, Division Commander, North Atlantic Division, USACE] and myself on whether or not miter gates that were installed at Pike Island Lock should have been an O&M expenditure or a Trust Fund expenditure.

MAJOR GENERAL PEABODY: My views have not changed, but it doesn't matter.

CHAIRMAN HETTEL: General, we have been through many phases on project repairs and upgrades in the last five years. I have heard you talk of the "fix as fail" approach. Of course, then it moved to a "fail to fix" position. And I think we are turning the page to really being more proactive on repairs and upgrades to the inland waterway system.

In the last five years we have seen you hold back as much water as you possibly could in the Great Lakes and Ohio River Division to keep the river from coming up, and then we have seen you release as much water as you could to raise the river during the drought so we could keep navigation going. So your flexibility is certainly appreciated.

I can tell you, personally, I was very -- and we have talked about this -- I was very apprehensive when I read you were replacing General Walsh [Major General Michael J. Walsh (Ret.), former Deputy Commanding General for Civil and Emergency Operations, USACE] in only my second Users Board meeting as Chairman. I was a little bit intimidated at the reality of you being the Executive Director of this Advisory committee.

Well, I can tell you, I couldn't have been more wrong. These last two years have been my privilege to serve as Chairman of this Advisory board, sitting next to you as the Executive Director.

Hopefully, in these last two years we have learned from each other. I know I have a better understanding of the position of the Corps, and hopefully you have a better understanding of the position of industry.

Most importantly, the members of this Board would like to thank you for your 35 years of exemplary service to this great country of ours. We, the Inland Waterway Users Board, wish you the very best in your future endeavors, and hopefully our paths will cross again.

Thank you very much, General.

MAJOR GENERAL PEABODY: Thank you. Ms. Darcy, I think you get the last word, ma'am.

MS. DARCY: Actually, I think because it's your last meeting, you should have the last word.

MAJOR GENERAL PEABODY: Well, with that, I think the last word is thank you, and we are adjourned.

MR. POINTON: Do we have a motion to adjourn the meeting.

VARIOUS MEMBERS: So moved.

MR. POINTON: I'll put you all down as moved and seconded and approved. The meeting is adjourned.

(Meeting adjourned at 12:55 P.M.)

CERTIFICATE

STATE OF TENNESSEE)

COUNTY OF DAVIDSON)

I, Sandra Andrys, RMR, LCR, a Shorthand Reporter, do hereby certify that the foregoing proceedings were taken down and transcribed to the best of my knowledge, skill, and ability.

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