Minutes Inland Waterways Users Board Meeting No. 83 Held at the Embassy Suites by Hilton Charleston (West Virginia) Grand Ballrooms A & B 300 Court Street Charleston, West Virginia 25301 May 17, 2017

[Note: The following minutes of the Inland Waterways Users Board meeting No. 83 were approved and adopted as final at Inland Waterways Users Board meeting No. 84 held on July 19, 2017 at the Embassy Suites by Hilton Portland Airport, Portland, Oregon, Firs and Oak Rooms, located at 7900 Northeast 82nd Avenue, Portland, OR 97220.]

The following proceedings are of the 83rd meeting of the Inland Waterways Users Board held on the 17th day of May 2017, commencing at 9:00 o'clock a.m. in Grand Ballrooms A&B of the Embassy Suites by Hilton Charleston (West Virginia), located at 300 Court Street, Charleston, West Virginia 25301, Mr. Martin T. Hettel, Chairman of the Inland Waterways Users Board presiding. Inland Waterways Users Board (Board) members present at the meeting included the following:

CHAIRMAN MARTIN T. HETTEL, American Commercial Barge Line, LLC.

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

MR. ROBERT J. INNIS, LafargeHolcim, Inc.

MR. JEFFERY A. KEIFER, American Electric Power (AEP), River Transportation Division

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

MR. MICHAEL T. SOMALES, Murray American Transportation

MR. WILLIAM M. WOODRUFF, Kirby Corporation

Board member MR. DAVID CHOATE, Bruce Oakley, Inc. passed away on March 19, 2017.

Also present at the meeting were the following individuals serving as observers of the activities of the Inland Waterways Users Board, designated by their respective Federal agencies as representatives:

MR. LET MON LEE, Deputy Assistant Secretary for Policy and Legislation, Office of the Assistant Secretary of the Army for Civil Works (ASA (CW)), Washington, D.C.

MS. BRANDEN LEAY CRIMAN, Director, Inland Waterways Gateway Office, Maritime Administration (MARAD), U.S. Department of Transportation, St. Louis, MO.

MR. NICHOLAS MARATHON, Economic Analyst, Transportation and Marketing Division, Agricultural Marketing Service, U.S. Department of Agriculture (USDA-AMS/TMD), Washington, D.C.

LT. MATTHEW M. FORNEY, OMAO/DOD Liaison, Office of Coast Survey, National Oceanic and Atmospheric Administration (NOAA), U.S. Department of Commerce, Silver Spring, MD.

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

MAJOR GENERAL DONALD E. JACKSON, Executive Director of the 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, U.S. Army Corps of Engineers, Institute for Water Resources, Alexandria, VA.

MR. KENNETH E. LICHTMAN, Executive Assistant and Alternate Designated Federal Officer (ADFO), Inland Waterways Users Board, U.S. Army Corps of Engineers, Institute for Water Resources, Alexandria, VA.

Program speakers in scheduled order of appearance were as follows:

MR. MARK R. POINTON, Executive Secretary and Designated Federal Officer (DFO), Inland Waterways Users Board, U.S. Army Corps of Engineers, Institute for Water Resources, Alexandria, VA.

MAJOR GENERAL DONALD E. JACKSON, Executive Director of the 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.

MR. DAVID RUSS TOLLE, Inland Navigation Program Manager, Navigation Branch, Operations and Regulatory Division, Headquarters, U.S. Army Corps of Engineers, Washington, D.C.

DR. MARK F. SUDOL, Director, Navigation Data and Decision Support Center, Institute for Water Resources, U.S. Army Corps of Engineers, Alexandria, VA.

MR. STEVEN D. RILEY, Navigation Data and Decision Support Center, Institute for Water Resources, U.S. Army Corps of Engineers, Alexandria, VA.

MR. BOBBY DUPLANTIER, Senior Project Manager, New Orleans District, U.S. Army Corps of Engineers, New Orleans, LA.

MS. FRANCHELLE E. CRAFT, Project Manager, Galveston District, U.S. Army Corps of Engineers, Galveston, TX.

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

In response to questions raised during the proceedings, additional information was provided by the following individuals:

MR. MICHAEL J. TOOHEY, President, Waterways Council Inc. (WCI)

MR. PATRICK J. DONOVAN, Director of Planning Center of Expertise for Inland Navigation and Risk-Informed Economics Decision Making, U.S. Army Corps of Engineers, Huntington, WV.

MR. BYRON D. WILLIAMS, Chief, Project Management Branch, U.S. Army Corps of Engineers, Galveston, TX.

MR. DAVID P. LOVETTE (*via telephone*), Engineering Division, U.S. Army Corps of Engineers, New Orleans, LA.

MR. CHRISTOPHER L. DUNN (*via telephone*), Engineering Division, U.S. Army Corps of Engineers, New Orleans, LA.

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

MR. MIKE FEWELL, Bulk Marine Barge Manager, Dow Chemical Company, Houston, TX.

MR. JOHN S. DOYLE, JR. Jones Walker LLP.

PROCEEDINGS

MR. MARK POINTON: Good morning. My name is Mark Pointon. I am the Designated Federal Officer [DFO] for the Inland Waterways Users Board [the Board]. I want to welcome you to the 83rd meeting of the Inland Waterways Users Board here in Charleston, West Virginia.

This is the second Inland Waterways Users Board meeting we have held in Charleston. Fortunately, or unfortunately, it has literally been 20 years since we held our last Users Board meeting here in Charleston [Inland Waterways Users Board meeting number 31 was held in Charleston, West Virginia on November 20, 1997]. One of our benefactors from Charleston, Mr. Charles T. Jones, served on the Inland Waterways Users Board both as a member and as Chairman [Mr. Jones, President and CEO of Amherst Industries, began serving on the Users Board in 1989 and was Chairman of the Board from January 1, 1990 to October 1992.] It has been a long time since we have held a Board meeting in Charleston. Hopefully we can avoid another 20 years hiatus before we come back to the fine city of Charleston.

I don't know who ordered up the weather for the tour yesterday [on the preceding day, Tuesday, May 16, 2017, the members of the Users Board, senior staff of the Army Corps of Engineers, and other individuals visited Greenup Locks and Dam located at Ohio River mile point 341.1 below the point in Pittsburgh, Pennsylvania and Winfield Locks and Dam located at Kanawha River mile point 31.1 from its junction with the Ohio River] and our little social event on the Charleston Riverfront last evening, but it was fabulous. We could not have asked for anything more than that. I guess Robert McCoy [Board member Robert R. McCoy from Amherst Madison, Inc.] gets credit for that since he is the member of the Board from this geographic area.

Before we start the meeting, I am obligated 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. The Board provides the Secretary of the Army and the Congress with recommendations on funding levels and priorities for modernization of the inland waterways system.

The Board is subject to the rules and regulations of the Federal Advisory Committee Act of 1972, as amended. This is a "Government in the Sunshine" Act meeting, and as such is open to the public. It looks like with have a fairly good attendance for today's meeting which is awesome.

The U.S. Army Corps of Engineers is the sponsor of the Board and the Corps provides the Executive Director, the Designated Federal Officer, and for all normal activities of this body. At this time we have had no requests to make a public comment before the Board, and we have not received any written comments submitted for the record prior to the meeting. If anybody wishes to make a public comment at the end of the meeting please feel free to see me at the break and we will provide you an opportunity to offer your public comments during the public comment period at the end of the meeting. These proceedings are being recorded and a transcript will be available shortly after the meeting.

I would like to now call on Colonel Philip Secrist, District Engineer and Commander of the Corps' Huntington District, who was our gracious host and tour guide for yesterday's site visits.

COLONEL PHILIP M. SECRIST III: Major General Jackson, Chairman Hettel, Board members, USACE Headquarters staff, other Federal agency representatives, and other attendees, on behalf of Brigadier General Mark Toy, Commander of the Corps' Great Lakes and Ohio River Division [LRD], welcome to Charleston, West Virginia. I am Colonel Philip Secrist, District Engineer and Commander of the Corps' Huntington District.

To begin, I wanted highlight one of the points made earlier by Mr. Pointon. Twenty years is too long between visits of the Users Board to the Huntington District's area of responsibility. I will make sure myself and my successors continue to invite the Inland Waterways Users Board to come back to Charleston and the Huntington District and see all the great work that my team accomplishes every day and the challenges that they face, so it won't be another 20 years before you come back to this area. The District has a lot to offer and a lot of expertise and expertise when it comes to the inland navigation system, and to showcase the importance of the inland waterways system, not only to this region of the country but to the nation as well.

Again, thank you for participating in the site visits to Greenup Locks and Dam and Winfield Locks and Dam. The District staff made great technical presentations and the site visits gave you an opportunity to see up close the challenges of operating and maintaining these extremely important components of the inland waterways system. The exchange of information and the dialogue between the participants on the site visit, both at the project sites and on the bus travelling between the project sites, was great.

I look forward to today's proceedings and observe the important work of the Inland Waterways Users Board. I welcome you, any time you want to come back to this region, the Huntington district, please give me a call and I would be glad to host you again.

Again, thank you for your attention and call on me or any of my staff if you have any questions or concerns. I hope you have had an enjoyable time in the Charleston area and have an informative, productive and successful meeting.

MR. POINTON: Thank you, Colonel Secrist. We greatly appreciate all of the support from the District's staff for both yesterday's site visits and today's meeting. Moving on in the agenda, we are going to the opening remarks by the Executive Director of the Inland Waterways Users Board, Major General Donald E. Jackson.

MAJOR GENERAL DONALD E. JACKSON: Thanks, Mark. Good morning everyone. I hope everybody got a good night's sleep last night. I saw a lot of you out on the river and a lot of you beside the river at that wonderful reception. Hopefully all of you enjoyed being near the

river in one way, shape or form. It is a beautiful town, Charleston, West Virginia. Colonel Secrist, thanks to you and your team. Thank you and your team for hosting the site visits yesterday. These visits are vitally important to the senior staff from USACE Headquarters and the Office of the Assistant Secretary of the Army for Civil Works to get out to these project sites and see the amazing work that is being done in the field and understand the challenges of operating and maintaining these components of the inland waterways system.

To Mr. David Dale, Senior official of the Great Lakes and Ohio River Division, thank you for serving as our regional host.

It is always helpful and always important for the members of this Board to be able to visit project sites and see the great work that the men and women of the Corps are doing and to meet the people that are making it happen. The people who are manning the locks and dams through all kinds of weather and doing all kinds of incredible things with some really, really old stuff, despite the many challenges that we have in providing them the resources to do their job. It is always an honor to meet those individuals and this trip was no exception.

I would also like to thank the Huntington District Waterways Association for the great social event they hosted last night along the riverfront. It was very, very nice. We really appreciate the warm welcome from the local community.

Robert [Board member Robert McCoy], thanks again to you and your team at Amherst Madison, especially Mr. Charlie Jones. What a treasure he is.

I have heard about him from you and from others for years, and it was a true honor to meet him last night. Mr. Jones is a legend in the navigation industry, a Chairman Emeritus of this Board, one of the earliest members and Chairman of this Board; he is truly amazing. Chairman Hettel told me a little bit a while ago about how he actually truly (unintelligible) of the locks and dams in large credit to Mr. Jones and his knowledge of the river. Thanks again for that.

Mark [Pointon], to you and your team and the folks from the Huntington District who handled all of the details and logistics associated with the site visit yesterday and the meeting this morning, and who got all the read ahead materials sent out and who got this meeting venue setup, I really appreciate that. I know it is hard to get all that stuff together.

To the Board members, as I always say, I really appreciate your participation at these meetings and your interest in our activities as they relate to the inland waterways system. I know you guys have a day job and have a lot of stuff going on. I know it is hard to get these Board meetings set up on a regular basis, but I really appreciate the time that you invest in coming to these meetings and your candid input during the meetings. The insights that you provide help us within the Corps to try and manage our program more effectively.

Mr. Chairman, I always appreciate your tireless leadership, you are always in Washington, D.C. fighting for the inland waterways. It is an honor, Mr. Chairman, to serve on

this Board with you. I appreciate, as always, all the things you do on behalf of the nation's inland waterway system.

I would like to take a moment and recognize a few people in attendance at today's meeting. Ms. Andrea Murdock-McDaniel. Andrea, if you could please wave so everyone can see you. Ms. Murdock-McDaniel is our newest Acting Chief of the Operations and Regulatory Division at USACE Headquarters. Andrea comes to Headquarters by way of our Southwestern Division office where she serves as the Chief of the Operations and Regulatory Division. Andrea will be serving as the Acting Chief of the Operations and Regulatory Division at USACE Headquarters for the next several months into the foreseeable future until we can officially name someone to take over those duties. Andrea, thank you for joining us at today's meeting and for your leadership at Headquarters and for your many years of leadership at the Southwestern Division and for serving as my Chief of Operations and Regulatory Division at the Little Rock District when I served as the District Engineer and Commander at the Little Rock District.

Mr. Mike Toohey, thanks, as always, for all you do with the WCI [the Waterways Council, Inc.], it makes a difference to all of us. Thanks for taking the time to be here with us at today's meeting. It means a lot.

We have a great agenda today. We are going look at some different stuff, I think, today which is great. We are also going to talk a little bit, Mr. Chairman, I am not sure if you are going to talk about the changing of the guard as we get ready to change some of our Board members here, but I know we have several of our Board-members-elect in attendance at today's meeting, and I would like to take this opportunity to publicly recognize them.

Mr. David Earl, Manager of Marine Operations for Marathon Petroleum. Welcome sir.

Mr. Mike Fewell, Bulk Marine Barge Manager for the Dow Chemical Company. Welcome sir.

Mr. Michael J. Monahan, President of the Campbell Transportation Company. Welcome sir.

I saw some of you yesterday.

And Matt Ricketts, President and Chief Operating Officer of the Crounse Corporation. He was tentative at best but was not able to join us today.

Welcome. We are glad to have you guys here and look forward to putting your efforts to bear on this Board. To those members of the Board who will be rotating off the Board, I certainly want to extend a special thank you for what you have done and your contributions to ensuring the success and accomplishments of this Federal advisory board.

I would like to offer a few quick points before I turn it over to the Chairman for his opening remarks. These are some really interesting times in Washington. I don't know about you, but I can barely stand to turn on the television and watch cable news anymore. It is almost

as if our government is falling apart, but there is a lot out there, a lot of things going in the media, but there is also a lot of great stuff happening in Congress right now. There is a lot of great things happening inside the Administration. It is an exciting time in Washington. It is hard to know where it is all going to end up.

Turning to the Corps budget. For most of you, you understand the Fiscal Year [FY] 2018 budget process has been really, really interesting.

Last year we went through our normal cycle of putting together a budget. We submitted somewhat of a budget to the Office of Management and Budget [OMB]. It sat on the shelf until about March when we got some initial marching instructions from OMB. It was a verbal pass back that gave us very, very little guidance or direction.

You hear a lot about infrastructure spending bills and stuff. There was really no guidance in the FY 2018 pass back that gave us any indication that there was anything different that was going happen with the FY 2018 budget so we have proceeded forward.

We believe the release date of the President's FY 2018 Budget Request is going to be next week, either May 22nd or 23rd, and our first Congressional hearing before the House Appropriations Subcommittee on Energy and Water Development is on May 24th. So it is going to be really, really quick for the FY 2018 budget.

With respect to the Fiscal Year 2017 appropriations, the Congress recently approved the FY 2017 omnibus appropriations [Public Law 115-31, signed into law on May 5, 2017] which included a significant plus up by Congress for the Corps' Civil Works program, which is great news.

We have been finalizing the terms of the FY 2018 budget. We also submitted our requirements to the Headquarters, Department of the Army and also to Office of Management and Budget for the FY 2017 work plan.

We have not gotten any of the pass back concerning the FY 2018 budget, not that I can tell you guys now anyway, but we have not seen the final outcome of the FY 2018 budget or the FY 2017 work plan as of this morning's meeting. I do not really know anything more than what we recommended and gave as our capability focus. We will certainly know that within the week.

It is going to be a tough timeline for us. Right on the heels of all that we will be working the Fiscal Year 2019 budget starting at the end of this month. So you can see, there is a lot of stuff that is moving.

We are hoping to get some new guidance from the Administration on perhaps how we look at infrastructure in the Fiscal Year 2019 budget. We have not seen it yet.

I do not know how this is all going to play out so just stay tuned and I will try to keep you Mr. Chairman, I will try to keep you up to speed with what we get in, and Mike Toohey as well, so we can all work together.

One of the interesting things we have been involved with is this new infrastructure initiative that has been started at the National Economic Council under the leadership of Mr. Gary Cohn. At the last Users Board meeting [Inland Waterways Users Board meeting number 82 held in Lake Charles, Charles on February 24, 2017] I mentioned the President's appointment of D.J Gribbin, to serve as the Special Assistant to the President for Infrastructure Policy. Mr. Gribbin is a member of the National Economic Council.

We have been included to represent the waterways in terms of laying out what the requirements are for the future investments in the waterways for the new Administration to include identifying legislative hurdles, policy hurdles and regulatory hurdles that we face that might be addressed by the new Administration and sort of think through how they are going to develop this new infrastructure policy.

We have enjoyed the opportunity to have some good conversations. I have another meeting later this week. We will continue engage and will continue to work the development of an infrastructure policy with the White House.

With respect to our engagement with Congress, we have reached out to different congressional committees and I have met personally with the Chairman of the House Transportation and Infrastructure Committee, Subcommittee on Water Resources and Environment, Representative Garret Graves [Representative from the 6th District of Louisiana] as well. We are just starting to try to figure how we can stitch all these different pieces together, so more to follow. I certainly appreciate your input.

With respect to the repeal of the "Waters of the U.S." rule, it isn't necessarily pertinent to inland waterways per se, but it has some affect. It is a huge ongoing effort within the U.S. Environmental Protection Agency. Mr. David Dale is leading that effort for the Corps, and despite his desires, he is taking that responsibility back with him to the Great Lakes and Ohio River Division. David has been serving as our Interim Director of Contingency Operations and the Office of Homeland Security for the past four or five months. We will continue to work that in the courts with the Administration directly.

Concerning the appointment of a new Assistant Secretary of the Army for Civil Works, and Mr. Let Mon Lee may say something about this in his opening remarks, we still do not have an Assistant Secretary of the Army for Civil Works identified and/or nominated.

Mr. Doug Lamont continues to serve as the Senior Official Performing the Duties of the Assistant Secretary of the Army for Civil Works. Doug will stay in that position until August and he will retire at that time.

If we do not have a nominee at that time, then I assume that all those duties will go to Mr. Eric Hansen, who serves as the Deputy Assistant Secretary of the Army (Management and Budget) within the Office of the Assistant Secretary of the Army for Civil Works. We will continue to keep you up to speed on that appointment process.

As at all of our Board meetings, we are always privileged to have our Federal observer team join us at today's meeting. Joining us today we have Mr. Nick Marathon from the U.S Department of Agriculture, Agricultural Marketing Service. Nick, thank you and welcome. I will give you a chance to speak in just a minute.

Joining us the National Oceanic and Atmospheric Administration's [NOAA], Office of Coast Survey, we have Lt. Matt Forney. Lt. Forney, welcome and thanks for that taking care of Captain Matt Fletcher [Executive Officer to the Deputy Commanding General for Civil and Emergency Operations] last night, showing him the town of Charleston. I will find out all about it on my six hour drive home.

And representing the U.S. Department of Transportation, Maritime Administration, we have Ms. Branden Leay Criman, who serves as the Director of the Inland Waterways Gateway Office, based out of St. Louis, Missouri. Branden, thank you and welcome.

And last but not least, my good friend, Mr. Let Mon Lee, from the Office of the Assistant Secretary of the Army for Civil Works [ASA (CW)]. This is Let Mon's last Users Board meeting. He will be retiring at the end of June, much to my dismay, but he has been a tremendous, tremendous advocate for the inland waterways system for many, many years, working both in the Corps, on Capitol Hill, and also in the Headquarters for the ASA(CW), working tirelessly to help us continue to do the things we need to do for the inland waterways. Let Mon, thanks for all your service and great friendship more than anything.

With that, Nick, let me turn it over to you and allow you make your opening comments.

MR. NICHOLAS MARATHON: Thank you, General. For the record, I am Nick Marathon, representing the Transportation and Marketing Program within the U.S. Department of Agriculture's Agricultural Marketing Service. I am representing Mr. Arthur L. Neal, Jr., who is the Deputy Administrator of the Transportation and Marketing Program in the Agricultural Marketing Service. I would like to begin my remarks by extending my thanks to the Huntington District office of the Army Corps of Engineers for the very educational and insightful site visits to the Greenup and Winfield Locks and Dams yesterday. It is always good to get a first-hand look at literally the nuts and bolts of the operations of this structures, and in the case of the visit to Winfield Locks, to give the participants on the site visit, the opportunity to actually see and hold one of the bolts that is suffering degradation to gain a sense of the need, complexity and scope of rehabilitating that facility.

Next, I would like to extend a special word of thanks to two members of this Board and the companies that they represent on this Board, Mr. G. Scott Leininger and CGB Enterprises, Inc. and Mr. Daniel P. Mecklenborg and Ingram Barge Company, for arranging a site visit by our newly confirmed Secretary of Agriculture, the Honorable Sonny Perdue, to the Consolidated Grain and Barge Company's Riverside loading facility in Cincinnati. Ohio on May 11, 2017. Secretary Perdue had an opportunity to tour the loading facility and meet with the chief economist of Consolidated Grain and Barge and discuss the important role that foreign trade plays in American agriculture and observe first-hand the significant and important role that barge transportation has in the movement of export bound grain from the interior sections of the nation

to coastal ports where export bound grain is transferred to ocean going vessels for shipment to overseas customers countries around the world.

During Secretary Perdue's visit to Cincinnati he announced the release of a report on the proposed reorganization of the international trade functions within the Department of Agriculture as required by Section 3208 of the Agricultural Act of 2014, Public Law 113-70, including a plan for the establishment of an Under Secretary for Trade and Foreign Agricultural Affairs within the Department, in recognition of the ever-increasing importance of international trade to American agriculture.

Agricultural trade is critical for the U.S. farm sector and the American economy as a whole. U.S. agricultural and food exports account for 20 percent of the value of production, and every dollar of these exports creates another \$1.27 in business activity. Additionally, every \$1 billion in U.S. agricultural exports supports approximately 8,000 American jobs across the entire American economy. As the global marketplace becomes even more competitive every day, the United States must position itself in the best way possible to retain its standing as a world leader.

That concludes my remarks sir. And once again I appreciated the opportunity to attend the site visit and today's meeting.

Thank you.

MAJOR GENERAL JACKSON: Thank you Nick. Lieutenant Forney, opening comments.

LIEUTENANT MATTHEW M. FORNEY: Thank you, Major General Jackson, Chairman Hettel, Board members, fellow Federal observers, staff and guests. For the record my name is Lt. Matthew Forney with the National Oceanic and Atmospheric Administration, Office of Coast Survey. I am here representing Rear Admiral Shep Smith. Admiral Smith is the Director the Office of Coast Survey and he also serves as the National Hydrographer.

I plan to keep my remarks pretty brief. I would like to begin my remarks by expressing my thanks to the Huntington District office of the Army Corps of Engineers for the great site visits to the Greenup and Winfield Locks and Dams yesterday. They were very educational. I appreciate the opportunity to attend today's meeting of the Users Board and engage with the members of the Board and the users of the inland waterways system. As you are aware, we have just had a high water event, and if the navigation industry or the users of the inland waterways system have any comments or concerns the products or services provided by the Office of Coast Survey or NOAA, our office always welcomes your feedback concerning our products or services.

That concludes my remarks sir. Once again I appreciated the opportunity to attend yesterday's the site visit and today's meeting.

Thank you General.

MAJOR GENERAL JACKSON: Thank you Lt. Forney. Next we will turn to Ms. Branden Criman from the Maritime Administration. Ms. Criman, welcome.

MS. BRANDEN LEAY CRIMAN: Thank you General Jackson. For the record my name is Branden Criman. I serve as the Director of the Maritime Administration's Gateway Office for the Inland Waterways. My office is located in St. Louis, Missouri.

The Inland Waterways Gateway Office area of responsibility includes portions of fifteen states adjacent to the navigable rivers. This area includes from the Headwaters of the Upper Mississippi River in Minnesota to Memphis, Tennessee; the Missouri River from North Dakota to its mouth near St. Louis; the Illinois Waterway from Chicago to its mouth just above St. Louis; and the Ohio River from its headwaters in Pennsylvania to its junction with the Mississippi River at Cairo, Illinois.

Thank you for the opportunity to attend the site visit to the Greenup and Winfield Locks and Dams and this morning's Users Board meeting.

When I had the opportunity to provide remarks to the last Users Board meeting in Lake Charles, Louisiana in February of this year I mentioned that the American Waterways Operators [AWO] was finalizing an economic impact analysis focused on the U.S. towboat and barge industry. The study entitled, *"The Economic Contribution of the U.S. Tugboat, Towboat and Barge Industry"*, was released in draft form to partners and stakeholders in April, and is expected to be released to the public later this month. I would like to share an excerpt of that report with this Board:

"The tugboat, towboat and barge industry directly employs nearly 55,500 Americans and supports more than 301,500 jobs nationwide. In 2014, the industry invested nearly \$2.2 billion in property, plant and equipment, including new vessels. Taking into account direct, indirect and induced impacts, the industry contributes \$33.8 billion each year to the U.S. GDP [Gross Domestic Product], including \$19.4 billion in labor income and \$5.2 billion in taxes."

The U.S. tugboat, towboat and barge industry produces these economic impacts while currently utilizing only 6 percent of the available capacity of our inland waterways. Consider the exponential consequences of the industry over the next 20 years, as marine highway services absorb congestion, as a routine choice for shippers.

I also want to provide a bit of background and an update on a MARAD sponsored study of the economic impacts associated with unplanned lock closures. The Maritime Administration awarded a Cooperative Agreement to the National Waterways Foundation [NWF] to analyze the economic consequences of unscheduled closures of a small number of representative navigation locks. The project will create an analytical template that can be applied to additional locks and dams as circumstances warrant.

The National Waterways Foundation awarded the study to a team of researchers from the University of Tennessee and Vanderbilt University. A meeting was held this past November in

Cincinnati, where the research team provided a briefing on the status of the unscheduled lock closure study. The next steps in the study are to complete the analysis of an unscheduled closure at Markland Locks [located at Ohio River mile point 531.5 from the point in Pittsburgh, Pennsylvania and 449.5 miles from the mouth of the Ohio River at Cairo, Illinois] and the Calcasieu Locks [located at Gulf Intracoastal Waterway mile point 237.6 west of the Harvey Lock in New Orleans]. The study team will also be comparing the methodology which they developed as part of this study with the U.S. Department of Agriculture's study of the economic consequences of an unscheduled closure at LaGrange Lock and Dam on the Illinois Waterway and Lock and Dam 25 on the Mississippi River which Mr. Marathon of the U.S. Department of Agriculture previously reported on at the Users Board meeting in December 2016 in Linthicum Heights, Maryland.

The next update on the study will be at the National Waterways Foundation June 2017 meeting. Delivery of the final report is scheduled for summer 2017.

And lastly, the Maritime Administration recently had the pleasure of meeting with navigation stakeholders on the Missouri River to discuss reliability issues and economics of the industry, at which time we were notified of a proposed feasibility study to be conducted by the Army Corps of Engineers' Kansas City District office and sponsored by Port Kansas City. The initiative will evaluate the function and reliability of the Bank Stabilization and Navigation Project ["BNSP"] and the navigation system.

Working in concert with other State agencies, port authorities and stakeholders the study will evaluate and recommend improvements to the system to increase navigation use and benefits. The study has been proposed to initiate in Fiscal Year 2019. The Maritime Administration supports this initiative and we look to forward to learning the outcomes of this study, if funded.

That concludes my remarks sir. Once again thank you to the Huntington District of the Corps for conducting yesterday's site visit and the opportunity to attend today's meeting. Thank you.

MAJOR GENERAL JACKSON: Thank you very much Ms. Criman. And last but not least, Mr. Let Mon Lee from the Office of the Assistant Secretary of the Army for Civil Works.

MR. LET MON LEE: Thank you General Jackson. For the record my name is Let Mon Lee and I am representing Mr. Doug Lamont who is serving as the Senior Official Performing the Duties of the Assistant Secretary of the Army for Civil Works, as we await the Administration to appoint someone to that position.

I just want to follow up on General Jackson's comments about the Administration's infrastructure initiative. This is a great time for the inland waterways industry. For the first time since I have been with the Corps, we actually have an Administration that connects infrastructure investments with water resources. Before this Administration, when people talking about investments in infrastructure, they were only talking about roads and highways. No one ever mentioned waterways.

I know you Mr. Chairman went to the White House to meet with Mr. D.J. Gribbin. Let's not let this opportunity get away from us. Right now is the time. We are still in the "inform and teach" phase of the new Administration.

Let's take this opportunity to inform and teach and advise the new Administration and the people who are coming to Washington as to who the Corps of Engineers is and what our capabilities are. Many people do not know who we are. They don't know what the Corps does or can do. Let's tell our story before those opportunities are closed off.

If you think all of these issues will get fixed by the Congress, nothing is going to get passed by the Congress any time soon. If you think the Administration has a lot of headlines to worry about with all the stuff going on, the Congress has the same stuff going on.

Now is the time to get into the room and start talking because everybody has the attention span of a cockroach in this Administration. If you don't capture their attention right now, they are going to go move onto something else and we are going to lose this opportunity to make our case. I beg you not to shut those doors right at the beginning of this Administration.

Let's get in there and have these conversations with them. Even though you may not always like the feedback you may receive, at least you are in the conversation.

I don't mean to be lecturing anybody today. I talk this same way to my own kids, but I have been dealing with this stuff for almost 40 years and this is the first time that anybody mentioned -- I know the last Administration all they wanted to talk about regarding infrastructure investments were always roads and highways. Nobody mentioned waterways. Nobody mentioned ports. Now at least this Administration mentions waterways and ports. Let's get our foot in the door and get our big (inaudible) in there.

Should I pack my bags and go home now sir?

MAJOR GENERAL JACKSON: No Let, that was wonderful and an impassioned plea to advance a cause that you feel very strongly about, very passionate, and I know it comes from your heart. I'm just wondering if Mr. Hettel, you have to follow that. Mr. Chairman, I turn the microphone over to you.

CHAIRMAN MARTIN T. HETTEL: Thank you, General Jackson. Wow. Let Mon, I am glad you didn't hold anything back. I can assure you, Let Mon, we will continue to be in front of the Administration as much as we can to make certain to include waterways infrastructure in any infrastructure initiative we see going forward. You are correct, whether we like the answers we get or not, at least we are at the table and engaged in the discussions.

MR. LEE: Exactly.

CHAIRMAN HETTEL: We will do everything we can to move that forward just because you inspired me so much with your remarks.

Moving on. Welcome everybody to Inland Waterways Users Board Meeting No. 83 here in Charleston, West Virginia. Let me start out with a thank you to Marathon Petroleum and Mr. David Earl for sponsoring our coffee service for today's meeting. Also the Board would like to recognize and thank the Huntington District Waterways Association for sponsoring the social event on the Kanawha River waterfront last evening. And as General Jackson already mentioned in his remarks, what a special treat is was to have dinner last night while transiting the Kanawha River aboard Amherst Madison's M/V *Laura J*. I don't think, and this is no disrespect to you Robert [McCoy], I don't think that venue would have been available if it wasn't for former Chairman of the Users Board, Mr. Charles T. Jones. What a gentleman he is and an honor to be in his company and spend some time with him. Please pass on to Mr. Jones our thanks and best wishes.

The Board extends its appreciation to the Corps' Huntington District office for coordinating and organizing our site visits to the Greenup and Winfield Locks and Dams yesterday. The Board recognizes the logistical coordination that goes into scheduling these types of events. However, theses visits are very informative to the Board members and we appreciate all the planning that went into our tours yesterday.

As you heard the General speak, there has been a lot transpiring in Washington D.C. these days since our last Users Board meeting in Lake Charles, Louisiana at the end of February. One of the positive things that the Board would like to highlight is the passage of the FY 2017 Consolidated Appropriations bill [Public Law 115-31, signed into law on May 5, 2017.] that funds the Corps through the remainder of the current fiscal year ending September 30th.

Within the bill is the full use of the FY 2017 deposits into the Inland Waterways Trust Fund [IWTF] and depending on whether the Olmsted Locks and Dam project is funded at a level of \$225 million for FY 2017 or the Corps' capability figure of \$250 million, the bill makes available between \$375 million and \$393 million for Inland Waterways Trust Fund related projects.

Language in the bill specifically states the following, I'm going to quote this, directly right out of the bill:

"The agreement provides funds making use of all estimated annual revenues in the IWTF. The Corps shall allocate all funds provided in the IWTF Revenues line item along with the statutory cost share from funds provided in the Navigation line item prior to allocating the remainder of funds in the Navigation line item. The Corps has indicated that several construction contract options are set to expire in the very near future. If the decision is made by the Administration to fund any of those projects in the work plan, but the funding is not made available in time to exercise the existing options, costs could escalate unnecessarily. Therefore, notwithstanding the work plan deadline established in the Title I front matter, the Corps shall allocate the additional funding provided for construction of IWTF projects, and notify the Committees on Appropriations of both Houses of Congress of such allocations, not later than 10 days after the enactment of this Act.

This legislation was signed into law by the President on May 5th. Today being May 17th we have surpassed the ten day deadline that the Corps was to notify the Appropriations committees on funding of our Inland Waterway Trust Fund related projects. We hope to hear today that the Lower Monongahela River Locks and Dams 2, 3, and 4 project, the Kentucky Lock project and the Chickamauga Lock project have had funds allocated in order for the Corps to be able to exercise the options on these ongoing contracts, thus not incurring unnecessary additional costs and delays on these projects.

That will conclude include my brief opening remarks.

I would like to take this time to open up the floor to any other Board members who may wish to offer any opening remarks at this time.

Hearing none, thank you.

Mr. Pointon, back to you, sir.

MR. POINTON: Thank you, Mr. Chairman.

Next on our program is the approval of the minutes from our last Users Board meeting. That would be Users Board meeting number 82, held on February 24, 2017 in Lake Charles, Louisiana.

The minutes were sent electronically to the Board members a couple weeks before the meeting and a hard copy of the minutes from that meeting are also included in the read ahead notebooks that were sent to the Board members last week. Can I see a motion from the Board to approve the minutes of Board meeting No. 82?

MR. ROBERT R. MCCOY: So moved.

MR. POINTON: Mr. McCoy so moved. Can I have a second?

MR. ROBERT J. INNIS: Second.

MR. POINTON: Mr. Innis seconds. Thank you. All in favor if approving the minutes of Users Board Meeting No. 82 please say "Aye".

BOARD MEMBERS: Aye. (Unanimous).

MR. POINTON: Any "Nays". (No response.) Outstanding. The minutes from Users Board Meeting No. 82 are approved unanimously. Thank you gentlemen.

Next on the agenda will be a presentation on the FY 2017 funding as well as anything we can talk about for FY 2018.

As General Jackson mentioned earlier in his remarks a lot of that information is predecisional and will be released next week so we cannot release that information to the public today. Filling in for Mr. Jeff McKee who is back in Washington working hard putting the finishing touches on the FY 2017 work plan is Mr. Russ Tolle who is the Inland Navigation Program Manager at the USACE Headquarters office.

MR. DAVID RUSS TOLLE: Good morning General Jackson, Chairman Hettel, other Board members, other Federal agency representatives, fellow Corps employees, and other attendees. For the record my name is Russ Tolle and as Mark said, I am the Inland Navigation Program Manager at USACE Headquarters.

Next slide please. Here you see a recap of the Fiscal Year 2017 funding. The President [former President Obama] submitted his Fiscal Year 2017 budget request to the Congress on February 9, 2016. The Senate Appropriations committee passed their version of an Energy and Water Development appropriations bill on April 14th. The House Appropriations committee passed their version of an Energy and Water Development appropriations bill on April 19th. The House Appropriations bill on April 19th and passed the full House of Representatives on May 26th. Come the end of the last fiscal year, we still did not have a passed appropriations bill for the new fiscal year starting October 1st. So we started the new fiscal year with a Continuing Resolution and it was enacted on September 29th, 2016 [Public Law 114-223, the Continuing Appropriations and Military Construction, Veterans Affairs, and Related Agencies Appropriations Act 2017], which provided funding for FY 2017 through December 9, 2016.

As the December 9th deadline was approaching, the Congress had still not passed an appropriations bill, so the Congress passed another continuing appropriations bill [Public Law 114-254, Further Continuing and Security Assistance Appropriations Act], signed into law on December 10, 2016, which provided FY 2017 funding through April 28, 2017. That Continuing Appropriations bill also provided supplemental appropriations to address emergency situations and to rehabilitate and repair damages to USACE project caused by natural disasters.

Next slide. One of the things that we talked about at previous Users Board meetings is the "Least of" rule. What the "Least of" is that FY 2017 Continuing Resolution funds are limited to the "least of" the amount contained in the President's Budget Request, House Appropriations Committee Report 114-532 or the Senate Appropriations Committee Report 114-236. As you are aware and we have discussed at previous Users Board meetings, the only project that received construction funding in the President's FY 2017 Budget Request was the Olmsted Locks and Dam project. There was no funding requested for the Lower Monongahela River Locks and Dams 2, 3, and 4 project, the Kentucky Lock project or the Chickamauga Lock project. That is where the "Least of" rule enters into the discussion.

The second bullet on the slide show the Supplemental Appropriations amounts we received in Public Law 114-254, the continuing appropriations law that was passed last December. You can see the Corps received \$54.827 million in the Construction account; we

received \$290.708 million in the Mississippi River and Tributaries account; we received \$259.574 million in the Operations and Maintenance account; and we received \$419.891 million in the Flood Control and Coastal Emergencies account, for a total of \$1.025 billion in supplemental funds to address emergency situations and to rehabilitate and repair damages to Corps projects caused by natural disasters.

Next slide. As the April 28th deadline was approaching, the Congress had still not passed an appropriations bill, so the Congress passed another continuing appropriations bill [Public Law 115-30, Making Further Continuing Appropriations for FY 2017 and for other purposes, signed into law on April 28, 2017], which extended continued funding through May 5, 2017. Then, as Chairman Hettel mentioned in his opening remarks, the Congress passed and the President signed into law the FY 2017 Consolidated Appropriations bill [Public Law 115-31], which includes the Energy and Water Development Appropriations Act of 2017 [Division D of Public Law 115-31], which funds the Corps for the remainder of the fiscal year which is September 30th.

Next slide. This slide show the additional Fiscal Year 2017 funding for navigation in the Appropriations Act. Under the category titled "Investigations" you can see an additional \$15 million was added, including \$5.0 million under the sub-category titled "Navigation", \$5.0 million for "Coastal and Deep Draft" investigations, and \$5.0 million for "Inland" investigations.

Under the category titled "Construction", you can see an additional \$295.45 million was added, including \$211.2 million under the sub-category titled "Navigation", \$75.25 million in the sub-category titled "Inland Waterways Trust Fund", \$8.5 million in the sub-category titled "Section 107" and \$0.5 million in the sub-category titled "Section 111".

At the bottom of the slide you see an additional \$3.968 million was added to the Mississippi River and Tributaries, Operation and Maintenance, Dredging category.

Next slide. This slide continues to show the additional Fiscal Year 2017 funding for navigation in the Appropriations Act. In the Operation and Maintenance account, you can see an additional \$421.565 million was added, including \$24.365 million in the category titled "Navigation", \$268.0 million was added to the category titled "Deep Draft Harbors and Channels", \$46.5 million was added to the category titled "Inland Waterways", \$49.0 million was added to the category titled "Inland Waterways", \$28.0 million was added to category titled "Small, Remote and Subsistence Harbors", \$28.0 million was added to the category titled "Remaining Items".

You can see at the bottom of the slide the total amount of additional funding comes to a total of \$735.983 million, \$15.0 million for Investigations, \$295.45 million for Construction, \$3.968 million for Mississippi River and Tributaries Operation and Maintenance dredging, and \$421.565 million for Operation and Maintenance activities.

MAJOR GENERAL JACKSON: Russ, before you go to the next slide, can you please explain what the "Remaining Items" category includes.

MR. TOLLE: Sir, there would be a number of different things under that category. Unfortunately I don't have those details. I will have to get back to you on that. Jeff [McKee] is still working out the details in that category, putting things together that is going to fall under this category.

MAJOR GENERAL JACKSON: What types of things go under the "Remaining Items"? This term is sort of a catch all term, but what are the type of things, whether or not you know specifically how many dollars go to this or that. I want the Board members to understand what we mean by "Remaining Items."

MR. TOLLE: Yes, sir. They will be things -- sometimes we have some contingencies come up, some different types of actions that are not in these other items. Funding for -- I don't know, just a lot of different things, sir. It is kind of a catchall.

MR. POINTON: The remaining items are -- typically there are items not listed under an individual state because they are not a project specific activity, they are typically our programmatic activities, like our Research and Development mission. For example, the collection of Waterborne Commerce Statistics, is funded out of the Remaining Items. That is where we are getting all of our navigation data and the LPMS [Lock Performance Monitoring System] data that we present to you.

The inland waterways navigation charts. It is more national benefits, coastal mapping, things like that are included under Remaining Items for navigation.

MR. DANIEL P. MECKLENBORG: This is Dan Mecklenborg. I have a question on the O&M [Operation and Maintenance] for navigation and inland waterways. So how do I interpret this? I see the \$24.365 million in the category titled "Navigation" and the \$46.5 million in the category titled "Inland Waterways", so that adds up to \$70.865 million, almost \$71 million. Is that only a part of what gets applied to O&M for the inland waterways system and inland navigation or is that the whole sum?

MR. POINTON: How those are categorized is the \$24.365 million can be used for anything that is designated as navigation. For the Deep Draft, that \$268 million has to be applied to projects that are considered deep draft navigation projects and on down the line. You add all those items up together and you get to that \$421.565 basically for total O&M for navigation.

MAJOR GENERAL JACKSON: No, what Mr. Mecklenborg is asking, though, is he's saying, okay, if you add up navigation plus inland waterways, is that for the inland marine transportation system, notwithstanding the deep draft ports and the Gulf Intracoastal Waterway? Are we putting \$70 million against inland waterways and \$268 million against coastal navigation? Is that the breakdown, if that is what you are asking?

MR. MECKLENBORG: It is. I know WCI [Waterways Council, Inc.] puts out slides that show significantly higher number than that. Maybe at the break I will check and see what the WCI representative in attendance at today's meeting says whether that is the case or maybe --

MR. MICHAEL J. TOOHEY: This is appears to be in addition to the President's budget.

MR. MECKLENBORG: So this is additional funding. That was my question. Thank you.

CHAIRMAN HETTEL: Russ, with this being additional funding, I take it that is why the Inland Waterways Trust Fund category on the previous slide only mentioned the \$75.25 million, because you take into account what the President's portion was? That is \$75.25 million plus about \$33.75 million for the Olmsted project adds up to about \$109 million from the Trust Fund.

MR. TOLLE: Yes, sir.

CHAIRMAN HETTEL: Thank you.

MR. POINTON: To answer Mr. Mecklenborg's question, that line item for navigation, some of that could very well be applied to the inland waterways. I don't have the detailed project by project allocations for you. It is in the work plan and has not been approved yet. The rule of thumb, half that could very well be funding for inland waterways, maybe more, maybe less.

MR. TOLLE: Inland or coastal. It has not designated at this point.

MR. WILLIAM M. WOODRUFF: This is Matt Woodruff. This is all O&M, is that correct? I see O&M and everything. That is all O&M related to those line items; is that correct?

MR. TOLLE: That is the O&M portion of the appropriations.

MR. WOODRUFF: That is in addition to what included in the President's budget request.

MR. TOLLE: Yes sir. Moving on to the next slide. "Navigation Provisions." Including in the Consolidated Appropriations Act just passed by the Congress and signed into law by the President was a provision or direction provided by the Congress that said between one and four new study starts and between one and four new construction starts would be navigation related. Another provision within the Appropriations Act prohibits open water placement of dredged material in Lake Erie unless the State approves such placement in its water quality certification.

Next slide. The Fiscal Year 2017 Work Plan. As I indicated at the beginning of my remarks, Jeff [McKee] is back at USACE Headquarters putting the final touches on the work plan. The FY 2017 Work Plan along with the President's FY 2018 budget are scheduled to be released the week of May 21st. Both the FY 2017 Work Plan and the President's FY 2018 budget will be posted to the USACE website and available at the following web address: http://www.usace.army.mil/Missions/Civil-Works/Budget/.

Chairman Hettel, I know you were looking for some encouraging words about what is going to be included in the work plan. And as such, because it is not released yet, unfortunately

we are not able to provide you with any of the dollar amounts or anything that are going to be in the projects that will be included in that work plan at this time.

CHAIRMAN HETTEL: Thanks, Russ. Can you confirm that the ten day deadline concerning the additional funding to the IWTF projects be sent to the House and Senate Appropriations committees has been followed through on?

MR. TOLLE: I cannot. I see Let Mon -

MR. LEE: It has not. We are late.

CHAIRMAN HETTEL: May I be so bold as to ask why.

MR. LEE: Because the Administration has not blessed it yet. We are working hard on it.

MR. TOLLE: Okay. With that, Jeff McKee or I would be glad to answer your questions -- e-mail me and we will address those.

MR. POINTON: We could actually call Jeff right now, I bet he's going to answer. Does anyone have any other questions for Russ before we move on to the Russ' presentation on the status of the Inland Waterways Trust Fund and the inland waterways construction projects?

Mr. Joseph Aldridge from Headquarters has given this presentation at previous Users Board meeting, but Mr. Aldridge is also working on the FY 2017 the work plan, so the responsibility for this presentation also falls on Russ' shoulders. Russ, when you are ready, please go ahead and begin your presentation on the financial report of the Inland Waterways Trust Fund and the inland waterways construction projects.

MR. TOLLE: Thank you Mark. Next slide.

This slide shows the status of the Inland Waterways Trust Fund as of the end of March 2017 [March 31, 2017]. The beginning balance in the Inland Waterways Trust Fund at the beginning of Fiscal Year 2017 on 1 October 2016 was \$57,350,502. Fuel tax revenue deposited into the Trust Fund over the past six months [October 2016 to March 2017] has been \$51,039,613. That is an estimate by the Department of Treasury. That is not based on actual revenues received but an estimate for that time period, and then interest on investments over that six month period is \$179,008. Our year to date [October to March] figure of Trust Fund revenues is \$51,218,621. The balance in the Trust Fund at the end of March 2017 was \$108,569,123; that is the summation of the beginning year balance plus the current year revenue and interest.

CHAIRMAN HETTEL: Russ, is that year to date total revenue, is that as of April 30th or --

MR. TOLLE: Sir, it is as of March 31st.

CHAIRMAN HETTEL: 31 March. Thank you.

MR. TOLLE: We do not have the April figures yet.

MR. POINTON: The Treasury statements, to complete them takes about two weeks after the end of the previous period. Right about now is when the April monthly statement is going to be available, probably sometime this week.

MR. TOLLE: You will see in the right hand column titled "USACE" there are no dollar figures. No funds have been transferred to the Corps of Engineers at this point in time which is why there is a balance of \$108.569 million in the Trust Fund.

What we have been doing over the last number of years, as funds were appropriated by Congress, we track the accounts between Construction General and Inland Waterways Trust Fund, and then at the end of the year, we get the transfers from the Trust Fund based on what we obligate during the fiscal year. That is the reason why the Trust Fund has such a high balance until the end of the fiscal year in September.

Next slide please. This slide is a graphical representation of the cumulative amount of the fuel tax revenue collected by month for the last several fiscal years beginning with Fiscal Year 2012 and continuing through the six months of Fiscal Year 2017. Fiscal Year 2017 tax revenue collections are shown in that reddish color on the graph.

You can see through the end of March 2017 the revenues were \$51.219 million. Year to date fuel tax revenues are a little bit behind where we were in the first six months of Fiscal Year 2016 [fuel tax revenues during the first six months of Fiscal Year 2016 were \$57.302 million].

As you compare fuel tax revenues collected in Fiscal Year 2017 to those collected in Fiscal Year 2016, you will see we are lagging just a little bit behind in each month.

Next slide please. This slide shows the level of fuel tax revenue in the Trust Fund for the last three months – January, February and March – for Fiscal Years 2012 to 2017. You can see that last year's revenues through March of 2016 stood at \$57.302 million compared to \$51.219 million for the current fiscal year through March of 2017. We are well above the previous years' figures of fuel tax revenue [fiscal years 2012 to 2015] and that is due to the increase in the fuel tax from 20 cents per gallon to 29 cents per gallon which occurred as part of the ABLE Act [Section 205 of Title II of Division B of Public Law 113-295, the "Achieving a Better Life Experience of 2014" also referred to as the "ABLE Act of 2014", dated December 29, 2014, with the fuel tax increase to 29 cents per gallon effective as of April 1, 2015].

Next slide please. This slide displays a summary of the last six fiscal years [fiscal years 2012 to 2017] for the President's Budget Request and the eventual allocations to various inland waterways construction projects. In the column on the far right is Fiscal Year 2017.

In Fiscal Year 2017, the only construction project that was included in the President's Budget Request was the Olmsted Locks and Dam project at a figure of \$225 million. So far

\$155 million has been directed to the Olmsted Locks and Dam project under the Continuing Resolution Authority to continue work on that project.

You will note that the Lockport Pool Major Rehabilitation project on the Illinois Waterway in the state of Illinois was physically completed in March of this year and it is scheduled to be fiscally closed out by September 30, 2017, the end of the current fiscal year. I will talk more about the Lockport project on the next slide. But I did want to bring to your attention the \$550,000 de-obligation from the Lockport project in the far right hand column of the slide. You will see footnote 10 at the bottom of the slide. The footnote reads "*Reflects* \$550,000 reprogrammed from Lockport (Split 50% General Treasury/50% IWTF) to Fargo Moorhead Metro (100% General Treasury). The \$225,000 IWTF reprogrammed from Lockport remains at HQUSACE for future allocation to IWTF projects."

I believe that should figure should be \$275,000. I believe that is a math error. I have sent an e-mail back to Mr. Joseph Aldridge to confirm that, but on the next slide, the Lockport Pool Major Rehabilitation project slide we actually show the \$550,000 de-obligation and the split between the funds being returned to the Construction General account and the Inland Waterways Trust Fund account, and on the slide it shows \$275,000 being returned to each account.

CHAIRMAN HETTEL: Russ, would you do me a favor and go back to Slide No. 2 [the Fiscal Year 2017 Status of the Trust Fund] for a moment? You see these millions of dollars in the Trust Fund, and we don't want to lose track of that \$275,000 in being returned to the Trust Fund from the Lockport project. Could there be a line item in Slide 2 that would reference where that \$275,000 would appear on this slide, because right now the balance in the Trust Fund is upwards of \$108.844 million, when you include the \$275,000 to the \$108.569 million. Can that \$275,000 be included in your next presentation?

MR. POINTON: Yes sir, we can indicate that that amount is included in our Trust Fund account at USACE Headquarters, yes, because that is still available to be applied to inland waterways projects.

CHAIRMAN HETTEL: But the \$275,000 is not currently part of the \$108.569 million figure that is shown on slide 2?

MR. POINTON: No sir, it is not.

CHAIRMAN HETTEL: Thank you.

MR. TOLLE: That is all I have on the budget. I will provide a project update on the Lockport Pool Major Rehabilitation project. Then Mr. Bobby Duplantier, Senior Project Manager from the New Orleans District of the Corps will give a presentation on the Inner Harbor Navigation Canal Lock study, followed by Mr. David Dale, Director of the Programs Division at the Great Lakes and Ohio River Division [LRD] will give an update on the various Great Lakes and Ohio River Division projects [Olmsted Locks and Dam; Lower Monongahela River Locks and Dams 2, 3, and 4; Kentucky Lock; and Chickamauga Lock]. I won't provide an update on those projects, but I did want to talk about the Lockport Major Rehabilitation project briefly.

Next slide please. The Lockport Pool Major Rehabilitation project was physically completed in March of this year and we are looking at having the financial close out of the project by September 30th of this year.

Construction on the project was completed. We are already reaping the benefits of the project as of last year. We will have the capitalized cost close out of the project by 30 September of this year.

Subject to your questions or comments, that completes by presentation.

CHAIRMAN HETTEL: Russ, are we not going to go through the rest of Mr. Aldridge's presentation?

MR. TOLLE: I had not planned on doing that since -- but if you want to go through, we can.

MR. POINTON: There are particular items for Brazos River and Colorado River Locks and for all of the LRD projects and also the Inner Harbor Navigation Canal Lock.

We were expecting that we would probably address those questions when those particular presentations were up, but if you wish to, Mr. Chairman, we can go through them right now.

CHAIRMAN HETTEL: If you would to go to the Inner Harbor Navigation Canal Lock slide, Mark, for a moment? I just to make sure we know what we are looking at. The \$1.401 billion cost figure that is shown as the "Total Project Cost" in the top right corner of the table is not the project cost estimate of the "Tentatively Selected Plan" that the New Orleans District released in January of this year; that project cost figure is associated with the previously authorized deep draft lock; is that correct?

MR. POINTON: Yes sir, that is correct.

CHAIRMAN HETTEL: Okay. And we won't get this type of report on the Tentatively Selected Plan until it gets to the Chief of Engineers report and through project authorization; is that correct?

MR. POINTON: If I understand the process, I believe you are correct, Mr. Chairman.

CHAIRMAN HETTEL: Okay, thank you. And for the rest of the project updates, Russ that is the only question I had. I am fine with the rest of them until we get to the individual presentations. Thank you.

MR. POINTON: Thank you Mr. Chairman. Thanks, Russ. Are there any other questions from any other Board members? Hearing none, we will move on. Thank you Russ.

Next up on the program we are going to have a presentation by Dr. Mark Sudol from the Corps' Navigation and Civil Works Decision Support Center. The subject of Dr. Sudol's presentation is "Improvements to the Corps' Lock Performance Monitoring System [LPMS] and Waterborne Commerce Data" through the WISDM [Water Infrastructure System Data Manager] Version 3.0 viewer. Dr. Sudol, please proceed when you are ready.

DR. MARK SUDOL: Thank you Mark.

Good morning General Jackson, Chairman Hettel, other Board members, Corps of Engineers Headquarters staff, other Federal agency representatives and other attendees. For the record my name is Dr. Mark Sudol and I am the Director of the Navigation and Civil Works Decision Support Center at the Corps' Institute for Water Resources.

To begin with some good news that I received last night or yesterday afternoon. An update on where we are with access to the data for the Board members and other private citizens shortly. Quick and dirty updates. LPMS is part of our Waterborne Commerce Statistics Center. LPMS and Waterborne Commerce Statistics Center are part of the core mission of IWR [the Institute for Water Resources], both LPMS, Waterborne Commerce work under the Navigation Data Center, which I am the Director; Mr. Pointon is the primary Navigation Business Line manager or program manager for IWR.

This is part of our core mission that we are doing, basically we are updating this information to get the data to you. Here is the LPMS website. I will briefly go through it. We received some feedback from Users Board members, a number of Board members were providing feedback.

We were having trouble lately. The CORPS LOCKS website [http://corpslocks.usace.army.mil/] has been having intermittent reliability issues. There have been problems with the server, but we are about to move that over to the cloud. I will provide an update on that today.

We go here, the WISDM 3.0 Navigation Viewer, down here at the bottom. We were awaiting final Army Research Laboratory approval for cloud activation and I received that approval yesterday afternoon at 3:30. We will be sending out a MIPR [Military Interdepartmental Purchase Request] today or tomorrow and we should have access and start moving stuff over to the cloud and provide access to Board members by next week. That is progressing forward so the CORPS LOCKS website should be moved over to the cloud and that should fix all the problems with the servers going down.

It will also allow us to get access to other data, which I will get to in a few minutes and show you. I will have one of the members of my team go through that as we get in here in a second. As we get input to the Navigation WISDM viewer, I will briefly show everybody and remind everybody what it is. We made some changes that we are waiting to get that out to you, the public, and that will also be available next week. We will have passwords and logins for you to get access to that on the web via the cloud probably next week or, worst case, the week after next, but it is coming very shortly. Next slide, Socrata and improved data availability.

Some of the Board members, many of you already have access to Socrata. We are going to do a brief demonstration in a couple seconds. I will have one of my folks come up and go through that to show you what data is already out there.

Also, as we talked earlier, the Waterborne Commerce Statistics Center data is a different from the Lock Performance Monitoring System, or LPMS data. The LPMS data is what goes to the locks. Waterborne Commerce Statistics Center data is actually the data that moves between ports and is more detailed data.

We are working with the folks in the Waterborne Commerce Statistics Center. The Waterborne Commerce Statistics Center is located in New Orleans. We will be putting their data on the Socrata website probably within the month. There was some confusion or problem with the way they had data organized to make it available to Socrata. We are fixing that now and we will have some of the data available probably within a month.

The other important news with the Waterborne Commerce Statistics Center data, those of you that have access to it or seen it in the past -- I know, Chairman Hettel, you asked about it. In 2019 we are going to go from annual processing to quarterly processing. So instead of – currently we are collecting data all year in 2017. We start processing the data in 2018. We won't publish the 2017 waterborne commerce statistics data it until the fall of 2018.

We are basically coming to a year and a half behind. We are going to switch to quarterly processing in 2019. They will collect data monthly, for example, in January, February and March. Then they will process the data in April, May and June and publish it in July.

CHAIRMAN HETTEL: Dr. Sudol, when will the 2016 be published?

DR. SUDOL: In the October timeframe, hopefully sooner. We are changing the way we do business. It takes a little bit of time to implement these changes. They have got to change their whole way of business. They are changing that in 2017 and 2018. They are putting the plan together now and we will be switching over in 2018. They have to publish 2017 and 2018 reports so they can clear the decks to start fresh in 2019. That is why it has been taking a little longer.

Next slide. I will now do a quick demonstration. Again these are live demonstrations that I will be showing. This is the live information right now of the status at the locks. This is what you will have access to in about a month.

The display is a little -- for example, information regarding lock status, this is what General Jackson wanted on one screen. You can do this for an entire division or one district office within a division or the entire nation, where you can see which locks are open and available, which locks are closed, which locks where we have planned stoppages, and then displayed in the red are the ones which are closed. We will have more information in this in the future. In this window we have more information, what the stoppage is and things like that. We are making those changes.

If you go to lock queue, this is what you see, for example, this is live as of today. If you go to Mississippi River Lock 22, we have four vessels in the queue. The wait time is currently 96 minutes and the average queue over the last 24 hours was 85 minutes.

Last week we had 22 vessels in the queue, now we are down to 4 vessels. This is updated every few minutes depending on what is inputted by the lock operators. This information will be available along with the ports and harbors and you can see a summary of the data here.

Information on hydropower production and availability will also be available to you.

This is part of the CWBI [Civil Works Business Information] program using this system to view the different data. Notices to Navigation Interests. One of the members of the project development team will be updating all of these Notices to Navigation Interests. If you want information on those notices and the lock chambers, to get the information you go down here. These are all features of the viewer that I have shown you before.

Vessel traffic, you can see live vessel traffic. This is based on a vessel's AIS [Automated Information System] signal. You will be able to see that.

Finally, you can see financial data. This is last year's work plan. As we get the new work plan updated, we will put that information into the viewer and have different layers that you can see, depending on which year.

MAJOR GENERAL JACKSON: One of the things I would like to do for the next Users Board meeting is to overlay what we know about the FY 2017 work plan with the FY 2018 Budget and walk the Board members through each waterway. We can make it the ones you want to focus on, just so everybody has an understanding this is the big picture, here is what we are going to be working on for the next year.

That would include what we are doing for construction, operations and maintenance, and general investigations. That way, we can tailor that to help tell the story of where we are investing our dollars.

DR. SUDOL: There is also historical performance data as well. We will have some webinars, probably in two weeks, to go through the viewer with your members or your technical folks, if you want to see it. To get trained, it doesn't take very much and we will show you and then you can pull the information yourselves.

MAJOR GENERAL JACKSON: Mark, can any of the Users Board members call you or members of the project development team? Can they contact you at IWR any time and have your team walk them through any questions or have your team give them a personal tutorial once they leave this meeting today and go back to their computers in their home office? DR. SUDOL: Yes sir, by all means we will be happy to help anyone use the system. Accompanying me to today's meeting are three of the members of the project development team: Ms. Courtney Greenley, Mr. Steven Riley and Dr. Forrest Vanderbilt. Could you please stand.

They are the smart ones. Ms. Greenley is our outreach and website expert. She will be updating the Navigation Data Center website. Dr. Vanderbilt is our primary point of contact working with other federal agencies and he is also a data guy. Mr. Riley will come up to the front of the room and run a demonstration of the Socrata application to Navigation Data Center information including lock unavailability and stoppages, historical vessel queue information and historical waterways tonnage trends. For those individuals not familiar with Socrata, it is a company that provides cloud based visualization and analysis tools to better understand government data at all levels of government, including federal, state and local governments.

Many of you already have access to Socrata. If anyone wants access either today or next week for these things, please give either me or one of the members of the project development team your card. Probably you should give your contact information to Mr. Greenley, she is the one who will make sure it happens.

MAJOR GENERAL JACKSON: I encourage the Users Board members to take advantage of this, because if you are like me, you sit in these briefings, you say to yourself "This is really cool". But after the Board meeting ends and you go back to your day job and you get 500 phone calls, and you totally forget about how to log on to this system, and then you want to get back to your desk and figure out how to use it and you need somebody to help you out and walk you through the system. Someone to help you to get you set up so you have the system right there at your fingertips. Let Dr. Sudol know and he will put you in touch with the right folks, the smart, bright folks we have working on this team, and make sure you are set up.

DR. SUDOL: And I would like to build on General Jackson's comments. If there are any newly appointed members of the Board who will begin their service on the Board at the end of this month, if you would like to access this data, please let me know. There are a number of the newly appointed Board members in the room today, so if you would like to access this system please let me know. And to the Board members who will be departing from the Board, please feel free to continue interacting with me on this data system.

The one thing I do ask is that you give me and the members of the project development team constructive feedback and comments and suggestions as to how we can make improvements to the system and make it more useful to you and better for all of us. That is really the only thing I ask.

If there are things we are missing, if there are things you would like to see displayed differently, if there are things you would like to download, please let us know.

Right now many of the Board members have asked me about the monthly downloads. We are going to fix that so you can download as much data as you want. That is an easy fix. A lot of this stuff is very easy. We are going to make it available to you, whatever you need. Let me turn the floor over to Mr. Riley and he can continue with his demonstration.

CHAIRMAN HETTEL: Just to comment. I have already logged onto the system and received my password. That is about as far as I have gotten. I have talked to Dr. Sudol about setting up a webinar that can walk people through the steps in accessing the system.

DR. SUDOL: We will put that webinar up right away. We are probably going to have our first Socrata webinar probably late next week. The first webinar will be late next week. We plan to hold several webinars. We are not going to have just one. We will have several. What I would also ask if you have your technical folks, if you have technical folks that need access to the data to actually use it, please feel free to add them to the list.

Steven [Riley], would you please come up to the front. This is the Socrata website. Steven is going to log on and give the demonstration from here.

MR. STEVEN D. RILEY: I just want to expand upon what Mark [Dr. Sudol] just said that if your technical folks want to get in touch with us, what we are building here in both of these demonstrations, what Mark [Dr. Sudol] just showed you and this one, are capable of being used by your developers or your technical folks. We are not trying to build the "end all, be all". We are trying to build something that can be consumed, so this is a good data platform. There are some visualizations built in, but if, for instance, your companies need to consume this to build your fleet's status, you can do that without having to load the rest of the data. If you need to get in touch with us to figure out how to do that, please do so.

DR. SUDOL: On the e-mail to the Users Board members that we sent out to you, we will have the points of contact of the technical folks on there. If you cannot reach me or you cannot reach one of the technical folks, please speak to one of us and we will get back with you. I will give you access and information and how to do that. Our goal is to make it easy for you.

MR. WOODRUFF: This is Matt Woodruff. I just want to add that I tried getting into the system and I had some issues with it and Ms. Greenley was extremely responsive, got back to me right away, and has been very helpful. Right now it is just waiting for me to have the time to get back into it.

MR. RILEY: I want to point out that our approach here with this platform is to do it in phases that I am sure you guys are familiar with us trying to do it in a phased approach. We have a bunch of reports and PDFs currently available on our legacy navigation website. We are trying to convert those legacy data formats onto this open data platform so that you can use the developers' tools on your own. Once we get all of those converted, we are going to try to review reports. This is not the final stage. These are just a handful of things we have right now. As Mark [Dr. Sudol] said, we are also going to be adding waterborne commerce data here and we will be displaying our Treasury reports as well.

MR. INNIS: How do you do the data download? When you talk about the master file, is it a comma delimited Excel file, or are you talking about --

MR. RILEY: Let me open up one for you. I will point out that the slow loading of this site is actually not common. This website is hosted. When you click on a data set, you will actually have a bit of information extracted from the data set. In this case we are looking at a historical log that is similar to the queue report. One of the problems that the Board members have asked that I solved is to be able to look back historically at those queues, so we tried to answer that here.

We have some descriptive information. As you scroll down, you get information about the data itself: the columns, how the information is stored. Then you get to the bottom and click here.

DR. SUDOL: As Steven [Mr. Riley] goes through this demonstration – he is one of the developers of the site. His view is for the developer. When a user logs in, it will be easy use. You won't have the background, you have the visualizations to click on the data.

MR. RILEY: The number of clicks you will have to take to get to the same place I am going will be much less.

DR. SUDOL: I don't have access to all this. I get the simple views. If I can get into it, you can.

MR. RILEY: We are also going to learn a little bit today about the size of this.

MAJOR GENERAL JACKSON: Is there a way to go back then and start over, Mark, and do it the way these guys would see? Because it's confusing to me. If I am not going to have the same level of access as Mr. Riley, then I want to know what buttons I need to push.

DR. SUDOL: If we can get to the visualization. I apologize for this. We are building as we go. I should have had him log in with me and then he could go through instead of going through the developer portal as General Jackson said.

CHAIRMAN HETTEL: Dr. Sudol, while you are squaring that away, I just to make sure I understand where all the data comes from that gets inputted into this system, is it from the LPMS system?

DR. SUDOL: There are two different systems. For LPMS, the lock data, it comes from the LPMS system, so essentially the locks.

CHAIRMAN HETTEL: Which makes it all the more important and critical that the information in the LPMS system is the correct information and that it accurately reflects what is occurring at the locks and that the data in entered correctly and accurately into the LPMS system.

DR. SUDOL: That is one of the last things I was going to discuss. What Chairman Hettel is talking about is as we uncover issues with the data, one of the questions that came up, which we are going to get to in a minute, we are finding inconsistencies in some of the data

regarding either how the data is entered, how different Districts enter data one way versus other Districts, and how different lock operators enter data.

We found that we need some standardization. The second part of the refinements to the LPMS system is going to be not only fixing the system, but we are also going out to the Districts and Division offices and lock operators to do two things.

First, educate them on what is available online so they don't get surprised, and second, talk about standardization and also how we can modify the system and make it easier for them. How we can help standardize the system so lock operators all see the same pull down menus.

What we found out yesterday in talking with one of the lock operators during our site visit yesterday, they did an update on our server the night before and went back to a previous version of the software that didn't allow certain pull down menus. We wouldn't have known it unless the lock operator told us.

Steven [Riley] had to get on last night and get the correct version of the software back on the server so they could get -- everybody has the same pull down menu. Those sorts of things are still happening. We talk about moving to the cloud, LPMS is one of the first systems moving to the cloud, so then we don't have to worry about outages on weekends and things like that also.

This is the view you'll get when you log in.

MR. RILEY: This is one of three or four sample visualizations we have right now. As I said, we started with the reports that are currently on our navigation website and tonnage, stoppages, and usage.

In this case we are looking at the tonnage by month over a period of time. I believe this is Fiscal Year 2010 through Fiscal Year 2016 and up to 2017. This tool allows you to actually drill down into an individual month's worth of data. You can select the timer and scroll down and you can see the amount of tons that were included in each of our Divisions, and each of the individual river systems.

MR. INNIS: Can you cross reference that with river levels and lock outages?

MR. RILEY: We cannot right now. That is not something that we're capable of, so that's not something that we can put on this visualization.

MR. INNIS: How would you -- what would this data, you just download it, what format would it come in?

MR. RILEY: Let me go back to the previous report that I was trying to show you. There you are -- and these are hot links. By that, I mean if you snag the URL [Uniform Resource Locator] from what this says, you can repeat it with that same URL. If you get the link of the CSV [Comma-Separated Values] you can always open like that.

MR. INNIS: You can get it on a daily basis, the download, so you can pull it into your data?

MR. RILEY: The different data will have different update --

MR. INNIS: Frequencies?

MR. RILEY: Correct. These we will probably do some on a weekly basis, some on a monthly basis. I don't know if you have decided on a daily basis.

DR. SUDOL: No, but the other thing, if the Board members need daily data, we will look at preparing a daily report.

MR. INNIS: I am not suggesting that.

DR. SUDOL: The data is available and building these reports is not hard. If you have a need, we are here to meet your needs. That is the bottom line. That is why Steven [Mr. Riley] is willing, we are able to work through this and that is why we want that input. If you are looking for a certain report, cross referencing --

MAJOR GENERAL JACKSON: Give us your feedback. This is a way for you to communicate specifically what you would like to see in the program and the project team can try to work that in. As you get more familiar with this software and we get some of the bugs worked out --

DR. SUDOL: He can't give feedback to himself. Either you can do it through the feedback button or call. As we send out the passwords and logins, we will put Stephen [Riley], myself, Courtney [Greenley], Forrest [Vanderbilt] and even a couple more folks on the project development team that you can contact directly, their office contact information. If you can't reach me – I am not one of the tech folks. I can walk you through a little bit, but it is really going to be some of the tech folks that can walk you through, talk to your tech folks to get access to what you need.

MR. RILEY: In addition to the feedback button, all of these data sets should have a contact name and an email address associated with them. That person might have the most knowledge on the data itself. It is not always the same person, but through any of those means we will be able to help.

DR. SUDOL: There will be two views really. As Board members get on they will have access to these overall. If your tech folks need higher level access to get into more information, the meta data, the user names, we will give you that access to that other level so the tech folks can get in and do the things that Steven [Riley] is doing, things like that.

We will tailor the system to what your needs are. Steven [Riley] gave me access to the higher level and that is all I get to see is that view. I do not get to see the developer view. I do not get that sort of thing. I don't think they trust me going into the data.

MR. RILEY: This is another example, hopefully, of a summary visualization that we have done as opposed to clicking through at a monthly basis.

MR. INNIS: Can you create filters yourself once you have a user name?

MR. RILEY: You can actually create your own graphs. The possibilities for you are limitless in terms of tailoring it.

DR. SUDOL: An interesting little tidbit while Steven is going through this, in talking to the Socrata people, the folks from the Waterborne Commerce Statistics Center have one of the largest databases in the government. We are one of the first ones to really make use of their big data operations so they are really interested in using and looking at how much data is actually in the waterborne commerce field and parse out in a way that doesn't give up industry secrets.

We are dealing with the "Rule of Three" to make sure your shipments are not identified. We still have to take care of that here, so we are working through those issues with Socrata on waterborne commerce data right now.

MR. RILEY: Maintaining shipper confidentiality

DR. SUDOL: I want you all to know that is one of the main things we are making sure -the other thing we are talking about is what level of cargo is available so that we don't get down into level of cargo that put forth issues of security. They can't get access to the right, for example if it is a chemical barge, a chemical barge carrying di-ammonium phosphate or ammonium nitrate or something like that, a hazardous material. We don't get to that level of detail in the public data.

MR. RILEY: To finish this demonstration, as you can see we can go through and look at an individual month and drill down to the lock chambers here and look at the different traffic traveling in both directions. Right now we are seeing this has four different rows, two for each chamber -- one for the whole lock site, but this is a pretty easy, quick way to get information. As I scroll down you can see the full view.

DR SUDOL: The Socrata tool is available now to anybody that wants it. We are giving out passwords already. Anybody that needs a password, please see one of us at break, we will get your contact information and make sure you have passwords. Again, we already received permission from the Army Research Lab yesterday around 3:30 yesterday afternoon so we will be putting the stuff out on the cloud, which will be done this week. We are getting access to the previous display out probably within the next two weeks, but we will have passwords -- and a lot of this information is already in the cloud.

We can't give out passwords until the final checks are done. We have access to it and you will shortly. We will go public in a few weeks because we are the Corps' pilot project for moving stuff to the cloud. So Mr. Garcia [Mr. Gregory Garcia, Chief Information Officer,

USACE] is behind us, we are going through the correct cyber security and all that is all moving along at the same time.

Finally, there is one other issue we are working on moving to the cloud, is a hand-held application. You put in whatever lock you want and there is a hand-held app. You can pull up all the information about that lock and this will go live within a month or so. We just have to get final permission to put out an app, our own app of the lock information. We are moving forward on that. General Jackson told me to move forward and if anybody gets in my way to call him. So far I have not had to call him. We are going to put the application on the Corps applications site.

Subject to your questions or comments that concludes our demonstration of the viewer.

CHAIRMAN HETTEL: Dr. Sudol, with all of the improvements that you have made to the LPMS system and with this new application, I have attended in several meetings and conferences and heard about the Corps' River Information Services [RIS]. Does that tie in here or what is the relationship between what you are developing and the River Information Services effort underway -- help me understand the relationship between the two efforts.

DR. SUDOL: The River Information Services system is another system that is being proposed by the folks in the Pittsburgh District in LRD [the Great Lakes and Ohio River Division] and the Corps' Engineering Research and Development Center [ERDC] down in Vicksburg, Mississippi.

It is kind of a, I don't know how to say it, but it is as much of a duplication of some of this, but it is not a duplication of all of it. We have tried to coordinate with them to say that some of the information that they are going to provide in the River Information Services system we already have available. We are more than happy to work with them to get this out, but there is some internal communications we have to work through in resolving some of those issues.

CHAIRMAN HETTEL: What is the ultimate goal of River Information Services system?

DR. SUDOL: Sir, I honestly don't know. I know one of the things they told our IT [information technology] folks – there was a meeting with our IT folks -- we had a Civil Works Investment Review Board that I serve on for IT services. There was a meeting last week with our IT folks, and one of the proponents of the River Information Services system said the objective of the River Information Services system is to make the inland navigation system more efficient. That is what was told to the IT person.

Again, I have not talked to the folks building that system, nor have I been on the calls. One of the things I want to ask them is what their ultimate goal is.

MAJOR GENERAL JACKSON: Chairman Hettel, let me try to answer that. I believe, and I have seen, I have been given a briefing on the RIS and there is a chart and it is a little complicated. Without seeing the chart it is hard to explain it, but really it is a way of tying in things that are internal to the Corps and external to the Corps to include things that the Coast

Guard has out there so it pulls in data from the Coast Guard. The idea is it is sort of more still in the discussion phase right now. It is kind of a one stop shop for all things information so you don't have to go to multiple different places to find different pieces of information that help understand everything that is going on on the waterways.

What Dr. Sudol is demonstrating for you here today is more of an internal Corps look, but there are other things that are out there that other agencies are responsible for. The idea is to have a way of pulling in all that information so you have access to all that information in one application. Again, we have a lot more discussion to do on that, but that is sort of the way it was presented to me several months ago when I first got my update on where we are on that.

CHAIRMAN HETTEL: I am not going to speak for the rest of the Users Board members, but I will put my thoughts into this discussion. If this is going to turn into a place where our professional mariners in the wheelhouse can access the information from one spot, I think that is certainly beneficial for our professional mariners out there.

I have heard discussions of the possibility of the Lock Operators Management Application, LOMA -- is that what it's called -- being involved in this. To the point where our professional mariners could look up Lock 52 [on the Ohio River] and see that there are, say 12 boats waiting to take their turn to lock through, then they could make their professional estimation as to the transit time as to when they leave Smithland Lock [Smithland Lock is located at Ohio River mile point 918.5 below Pittsburgh and is 20.4 miles above Lock and Dam 52] and transit down to Lock 52.

My concern is that the lock operator at Lock 52 is going to call that motor vessel and say, "Captain, I don't see you locking here until 4:00 this afternoon. It is 6:00 o'clock in the morning. You might as well pull it back and not arrive here to wait your turn until an hour before you can lock through."

I understand trying to be more efficient, but all that is going to do is reduce the actual delay that we are experiencing waiting to lock a vessel through. Our professional mariners are not told what speed to run their vessels at and the lock operator does not know if we have got tow work scheduled to do at Paducah or if we are doing a crew change or taking on fuel or whatever the case may be. I just want to make sure, in my estimation, I do not want this turning into lock operators telling our vessels what speed to run at.

MAJOR GENERAL JACKSON: Mr. Chairman, I don't think there is any intention to do that. In my view, we are still in the very much conceptual stage with it. Mr. Pointon, what I would like to do – I thought we talked about this at a previous Users Board meeting, but maybe we haven't. But what I would like to do, maybe it is a good opportunity in the future, whether it is at the Users Board meeting in July or the one after that that we have a presentation on the River Information Services system so as to bring the Board members up to speed on that initiative and give you an update on what it is so that there is no confusion and the people working on the River Information Service effort can hear the concerns and receive feedback from this Board on what they are contemplating.

CHAIRMAN HETTEL: They have heard feedback from me. I do not know if the other Board members have talked to the people developing the River Information Services system about it.

MAJOR GENERAL JACKSON: I want to get it all out there so we can be the beneficiaries of the questions you have of them and the conversations you had with them. If you are willing to put that on the agenda I recommend you do that.

CHAIRMAN HETTEL: Absolutely.

MAJOR GENERAL JACKSON: I am concerned about two things. One, is the concern that the system and the information that we are providing to users of the system is confusing to them, we do not want to do that. My second concern is the Corps of Engineers is a big, decentralized organization. That can be a good thing sometimes, but then again, sometimes it is not, because we have people, multiple offices doing the same thing. We have to do a good job at the Headquarters level to make sure everybody understands what it is we are doing and why we are doing it and we are not doing duplicative work that is not going to be not helpful. We will get something put together for the next Users Board meeting on the RIS.

MR. POINTON: We will put it on the agenda for the next Users Board meeting. Are there any other questions or comments for Doctor Sudol? Hearing none, thank you Doctor Sudol.

DR. SUDOL: Thank you.

MR. POINTON: Thank you, Mark. Next up on the agenda we are going to get an update on the status of the work on the Inner Harbor Navigation Canal Lock study. We will get an updated project status on that reconfigured project and a couple of the particular issues that Chairman Hettel asked for at the last Users Board meeting and how the project alternatives were developed and how the depth of sill was determined and the project funding and construction schedule. The presentation will be given by Mr. Bobby Duplantier, Senior Project Manager in the New Orleans District office of the Corps. Mr. Duplantier, when you are ready please proceed with your presentation.

MR. BOBBY DUPLANTIER: Good morning General Jackson, Chairman Hettel, other Board members, Corps of Engineers Headquarters staff, other Federal agency representatives and other attendees. For the record my name is Bobby Duplantier and I am a Senior Project Manager with the New Orleans District of the Army Corps of Engineers.

I will give you a brief update on where we are with the Inner Harbor Navigation Canal Lock Replacement General Reevaluation Report.

As you can see on the slide, the Tentatively Selected Plan for the replacement lock is a new lock which measures 900 feet in length by 110 feet in width by 22 feet in depth. A draft report was released to the public on January 6, 2017 and we just finished our public review
comment period a little over a month ago on April 7, 2017, after I believe we had three extensions of public comment period due to the amount of public interest in the project.

The public review period just ended and we literally received thousands of comments on this project and our plan to move forward. In the box titled "Path Forward" in the lower right hand corner of the slide you can see that the ADM or "Agency Decision Milestone" was scheduled to take place in April 2017. That time line has now been moved to June 2017 for the "Agency Decision Milestone" due to the extensions to the public comment period, but we are maintaining the remaining schedule for the Final Supplemental Environmental Impact Statement to be released in March of 2018 and a Final Chief of Engineers Report in June of 2018.

In reading through the minutes of the last Users Board meeting in Louisiana I saw that there was some discussion about the sill depth of the Tentatively Selected Plan of 22 feet that we are recommending as the tentatively selected plan. I included in your read ahead materials a document entitled "Engineering Assessment and Response to Technical Issues" dated 29 April 2015, Issue: Determination of Floor Depth for Shallow Draft Lock, which the District prepared in 2015 to explain the factors that we considered when deciding on the 22 foot sill depth.

I won't go through the entire document with you but if you have specific questions I can address them. I do want to hit on Point No. 1 of the section entitled "Summary of Technical Considerations", and that is the provision of adequate clearance for the design vessel. Army Corps of Engineers EM [Engineering Manual] 1110-2-1604 requires that the sill depth be one and a half to two times (1.5 to 2 times) greater than the design draft of a vessel to allow for the safe entrance into and exit from a lock. The design draft of a fully loaded liquid tank barge that we are considering using the new lock is eleven (11) feet.

There was a lot of discussion with the Gulf Intracoastal Canal Association [GICA] and Port of New Orleans about this subject. We were going back and forth trying to determine what would be the maximum draft of the design vessel going through the new lock, is it 11 feet, is it 12 feet? What we found, our decision was to go with a 22 foot recommended sill elevation which would satisfy the maximum depth for either of those vessels. To make a long story short, the one and a half to two times the design vessel draft is the reason why we are going with the 22 foot sill depth.

Another point in this document, if you look at, and Point No. 3 speaks to the "Constructability" of the project. I had the project development team look at this. The existing Inner Harbor Navigation Canal Lock is maintained at a sill depth of 32 feet. By setting the sill depth of the new lock at 22 feet, minimal excavation or backfill will be required for construction of the new lock. We did look at some of the costs as far as going from a 16 foot to 22 foot, but what the engineers told me was that it would have been actually more expensive to build a lock at a depth of 16 feet versus a depth of 22 feet.

Intuitively it did not seem to make sense to me, so I dug a little bit deeper into it. The reason it is more expensive to build a lock with a 16 foot sill depth is based on the cost of sediment testing in the area that we found, any dredge material that we removed from the project site would have to be transported to a commercial landfill, which is very expensive and would

add to the total cost of the project. If we were to go deeper than 22 feet we would pull out more material, then it's going to cost more. That is a quick rundown on how we selected 22 feet as the depth of the sill, again, the engineering assessment goes into more detail than I did.

CHAIRMAN HETTEL: I have a question for you and you may not be able to answer this, and it might be a question for someone from your engineering staff. I had one of our vessels run through that area and asked them to take soundings for this area and around the bridges, and the water depth in this area may fluctuate due to tides and everything else, but they said that the shallowest spots they found in the area was 28 feet and the deepest spots they found in the area was 32 feet, so if you are considering building a lock with a 22 foot sill depth, you have anywhere from 6 to 10 feet, don't you have to build up the bottom of the channel? How does that work? How do you do that? That is my question.

MR. DUPLANTIER: Mr. Chairman, I would have to engage one of the members of our engineering team to get you an exact answer to your question. I would think you let the channel silt in naturally. You wouldn't want to dredge it out. I mean, the extra depth wouldn't necessarily hurt.

CHAIRMAN HETTEL: It is interesting that we have a 22 foot sill depth in a location where we have anywhere from 28 to 32 foot of water.

MR. DUPLANTIER: I can get back to you with an answer at the next meeting to let you know how we would handle that extra depth if our surveys and soundings of the project area are similar to yours in that we found depths in the range of 28 to 32 foot.

MR. MICHAEL T. SOMALES: I guess the question is, if it is 22 or 28 to 32 feet, you are talking about dredged materials already has the depth, you wouldn't need the dredge material to come out, it is already that deep.

MR. MECKLENBORG: It would be interesting to know, in terms of the actual design of the structure, is it intended to have a soil bottom or is it intended to have a concrete base?

MR. DUPLANTIER: The lock would have a concrete base.

MR. MECKLENBORG: If the lock will have a concrete base with a sill depth of 22 feet, you are going to be building up a heck of a lot of concrete there. That is our only question.

MR. DUPLANTIER: Understood.

MR. WOODRUFF: Stated another way, the canal is already 28 to 32 feet deep, what you are doing is looking at the cost of larger lock gates versus the cost of more fill, because I don't think we are dredging, I think we are filling here to get the sill up to the appropriate depth.

One of the things that we saw in our tour yesterday was -- and there was discussion about the cost of miter gates and the standardization of gates and trying to have this system set up so that the gates from one facility could be used at another facility.

Whether it is 16 feet or 22 feet, I am hoping that you are looking across the nation, and whatever it is, you are either making them modular or all the same size to the extent we can so that if a gate breaks in one facility, a replacement gate from another facility can be brought in. These one-off decisions kind of confound the implementation of the process of standardizing the size of gates across lock structures.

MR. DUPLANTIER: You are talking about the operation and maintenance of the actual facility. One thing to note, the placement of this new lock is not going to be directly in the right of way that the vessels would be traveling currently. If a vessel were out in the canal and took depths measurements there that is not where the new lock is going to be located. Because we want to maintain the current navigation movement, the lock replacement site is slightly offset and is closer to the levees and flood walls, which would indicate that there is more sediment there.

MR. WOODRUFF: That makes perfect sense. What I am thinking about, though, in terms of the gates and sills and all that is the total cost of ownership over the life of the project. We might think we are saving a little bit of money now, but when it comes time to replace those gates or if there is a failure, what is the cost to be able to perform the repair and the time delays associated with being able to get the lock back in operation?

I think there are a lot of us who over the course of years of service on this Board have come to realize that just about every lock on the system is unique and you cannot take a part from one lock and use it in another lock if that part fails. I just hope that as we are designing these new locks that we are picking up some of the lessons learned from the discussions we have had at these meetings and ensuring that, to the extent we can have commonality, that we are doing so.

MAJOR GENERAL JACKSON: This is General Jackson. Let me address that. General Semonite [Lieutenant General Todd T. Semonite, Chief of Engineers and Commanding General, U.S. Army Corps of Engineers] has given us the directive to do that. We will owe this Board at some point in time in the future an update on the status of that initiative. I asked Ms. Andrea Murdock-McDaniel to set up a time later this summer to lay out for the Chief what we have done. Every one of these things is built individually. I do not know why 50, 60 years ago when we built this system we did not build it so they could be done interchangeable, because they were all done separately, separate contracts, separate designs.

I think there are some things we can do to retrofit locks, per se, that might allow us to use more standardized components. There are a number of standard components we can use that are standardized now. We need the inventory and accounting systems in place for those components to make sure that we think in terms of how we might manage that inventory. Some of the bigger pieces, like miter gates and other things, are very unique as you heard yesterday.

I think there are some things we can do. We are looking at that now. Once we have got it figured out internally, what we are able to accomplish and what we are trying to do, get some approval from the Chief of Engineers, we will it lay that out for the Board members.

The other question I have for you Mr. Duplantier – we are running a little ahead of schedule. To the extent that you can contact the lead engineer on the phone to answer some of these technical questions, I don't really want to wait until the next Users Board meeting to answer some of these technical questions.

Let's get some of the answers to the questions posed here today and put some of these things to bed if we can get ahold of the lead engineer on your project development team. If he is available call him on the phone and hold him up to the microphone and let's get these questions answered.

MR. DUPLANTIER: Will do sir.

MAJOR GENERAL JACKSON: If we can do that sometime between now and the break if they are available, that would be great. That way hopefully get some of these questions answered and move along. Some of these same questions came up at the last Users Board meeting as well.

MR. DUPLANTIER: At the last Users Board meeting there was also some discussion about completing the project in an eight year construction schedule versus a ten year construction schedule. We can complete the project in an eight year construction schedule with pretty minimal impact. The main thing -- and, since we are going to have the lead engineer on the phone where he can kind of walk us through this as well -- what we are basically going do is – the St. Claude bridge is a very critical part of this project because the Hurricane and Storm Damage Risk Reduction System and the Mississippi River levees all tie into the bridge at this structure. It is actually a part of the Storm Damage Risk Reduction System. If we were to start the construction of the replacement bridge concurrently with the construction of the replacement lock, we could get the duration of construction down to an eight year construction schedule.

I don't have the funding schedule in front of me, but it peaks at approximately \$200 million a year investment to get it to down to an eight year construction cycle. When we have the project engineer on the phone he can talk in greater detail about that.

CHAIRMAN HETTEL: Did you say an additional \$200 million in costs or a savings of \$200 million in costs?

MR. DUPLANTIER: I was just talking about compressing the construction schedule from a ten year period to an eight year construction schedule. The \$200 million figure is the maximum amount that we would need in one fiscal year to achieve this eight year construction schedule.

CHAIRMAN HETTEL: Okay I understand. But does the eight year construction schedule reduce the overall cost of the project?

MR. DUPLANTIER: The total project cost would be approximately \$900 million. It is a minimal reduction in total project cost due to time savings cost, but it isn't anything significant.

It is simply due to starting some items concurrently. Typically when you go faster it is going to cost you more, but in this case it probably won't cost more.

Subject to your questions or other comments I will go try to get the engineer on the phone.

MAJOR GENERAL JACKSON: I don't want to put anybody on the spot, but I think it would be pretty helpful.

MR. POINTON: Thanks, Bobby. I guess we will hold the questions for the lead engineer until Mr. Duplantier gets him on the phone.

Next on the agenda we will have a presentation by Ms. Franchelle Craft on the Gulf Intracoastal Waterway Brazos River Floodgates and Colorado River Locks System Feasibility Study. Ms. Craft is with the Corps' Galveston District office and is the Project Manager on the study.

MS. FRANCHELLE CRAFT: Good morning General Jackson, Chairman Hettel, other Board members, Corps of Engineers Headquarters staff, other Federal agency representatives and other attendees. For the record my name is Franchelle Craft and I am the Project Manager on the Gulf Intracoastal Waterway Brazos River Floodgates and Colorado River Locks System Feasibility Study and as Mark has already said, I am with the Galveston District of the Corps.

I would like to take a moment to acknowledge Ms. Melanie Alvord from the Texas Department of Transportation, who is joining us today. She would like to say a few words.

MS. MELAINIE ALVORD: Good morning. I am here on behalf of Mr. Dan Harmon, Director of the Maritime Division within the Texas Department of Transportation. The Texas Department of Transportation has a great degree interest in this study and is glad to serve as a study partner with the Army Corps of Engineers. I am the Senior Federal Liaison with the Texas Department of Transportation and the Texas Department of Transportation as well as the Congress has great interest in this study. Thank you for the opportunity to attend this meeting.

MS. CRAFT: The purpose of this morning's briefing is to present an update on the status of this feasibility study. The goal of our study effort is to complete a feasibility level navigation study focused on maximizing the efficiency of the Brazos River floodgates and the Colorado River locks to the greatest extent practical. The study will focus on increased navigation efficiency within the Gulf Intracoastal Waterway [GIWW] system, developing an alternative plan of improvement that is environmentally acceptable and sustainable, developing an alternative plan of improvement that is economically justified, and a plan of improvement that increases vessel safety within the GIWW system.

Next slide. The feasibility study is a Section 216, which is 100% federally funded. We have partnered with the Texas Department of Transportation, who will contribute shipping data, conduct some hydrologic and hydraulic engineering analysis of the Brazos River's portion of the study and will provide the environmental assessment for the study. All of the data that they

provide will be coordinated with USACE technical specialists and will be reviewed per USACE guidelines.

Next slide. This slide presents a project timeline of the existing Brazos River Floodgates and Colorado River Locks and the current study effort.

The Brazos River Floodgates and the Colorado River locks were authorized by Congress in 1941 to manage sediment flows into the GIWW. Construction was completed in 1943.

The Colorado River Locks were authorized for conversion into locks in 1950.

Both structures were constructed to manage sedimentation and navigation on the GIWW.

Section 216 of the Flood Control Act of 1970 and amended by the Water Resources Development Act of 1986 provides the Secretary of the Army with general authority to review the operations of completed projects, when found advisable due to changed physical, economic or environmental conditions, after which a report is made to Congress on the advisability for modifying structures or operations.

A reconnaissance level study was completed in 2000. The study considered a variety of measures, some of which were considered for the recent study effort to address modifications to the floodgates and the locks. Due to funding constraints, the study and its recommendations stalled. Some of the measures from that reconnaissance study are included in this study.

In 2014, our study partner, the Texas Department of Transportation started assessing navigation at the GIWW Brazos River Floodgates using state allocated funds, and developed an array of alignments for the Floodgates.

We received funds to initiate the feasibility study for the Colorado River Locks in the Fiscal Year 2016 work plan.

The Southwestern Division thought it a more practical approach to combine the two studies into one complete navigation study using a systems approach for this stretch of the GIWW as a cost savings measure and to capitalize on partnership opportunities with the Texas Department of Transportation in assessing navigation impacts.

In 2016, we conducted as Alternative Milestone Meeting to obtain concurrence on a focused array of alternative plans and guidance on technical and policy issues. Currently we are continuing to evaluate alternative plans of improvement.

Next slide please. "Brazos River Floodgates and Colorado River Locks – Project Location." If you look at the map, you can see location of the Colorado River Locks and the Brazos River Floodgates. The Brazos River Floodgates are located just a few miles west of Freeport, Texas. Approximately 40 miles to the west of the Brazos River Floodgates are the Colorado River Locks, located just a few miles from Matagorda, Texas.

One of the primary missions of the U.S. Army Corps of Engineers is to maintain safe, reliable and efficient waterway systems to allow for the movement of commerce as well as support national security and provide recreational opportunities.

The need to maintain the effectiveness of the Brazos River Floodgates and the Colorado Locks is critical to the national economic interest due to the type of commodities transported along the Gulf Intracoastal Waterway which include products such as crude oil and refined petroleum products, liquefied natural gas and chemicals which are used throughout a wide array of industries.

From a national security perspective, there is a significant risk to these structures, not only because of the type of commodities that are transported along the GIWW but also due to their proximity to the Gulf of Mexico, which is a significant source of oil production, and to ensure the continued movement of goods along the GIWW.

The Brazos River Floodgates and the Colorado River Locks were constructed to prevent excessive sedimentation in the GIWW and minimizing sedimentation continue to be a primary objective for the facilities. Excessive sedimentation increases maintenance dredging needs and associated costs which result in delays encountered by the commercial navigation industry. The Brazos River has the highest water and sediment discharge of all Texas rivers and the second highest sediment load discharge to the entire Gulf of Mexico, second only to the Mississippi River.

Per our study authority, the project development team will investigate ways to continue managing sediment through the GIWW and assess alternative that will improve navigation efficiency along the waterway.

Next slide please. "Aerial Imagery of the Brazos River Floodgates and the Colorado River Locks." There are four different structural components to the two structures. There is as East and West floodgate at the Brazos River facility and there is an East Lock and a West Lock at the Colorado River Locks.

The Locks and Floodgates were designed and constructed when barges were typically 26 feet to 35 feet wide and when tugs pull the barges through the structures. Both projects' chambers are 75 feet wide and the maximum width that they can accommodate are 55 feet wide.

Today it is the standard practice for towboat operators to push at least two 35 foot wide dry cargo barges side by side, for a total width of 70 feet, rather than the historical practice of pulling two in-line barges of 35 feet wide. A typical tank barge measures 54 feet in width, so tank barges must transit each lock and floodgate in single file. The need to break up a tow causes significant time delays.

As you can see on the right hand side of the slide, the gates to enter the Brazos River are oriented in a downward angle. When the gates were designed, barges were towed behind a tug boat. The angle were built into the design of the structures so that the downstream current in the Brazos River would help align the tow to go from one side of the river to the other. By the time

the gates were completed, most barge traffic had switched over to a push boat system. The angle of approach is now a detriment, especially to two and three barge configurations as they come in from the protected water of the gate structure into the Brazos River and have to negotiate the downstream current of the river to establish the correct upstream approach angle necessary to enter the opposite gate.

As you can see on the left hand side of the slide, the Colorado River locks are located at the interaction of the Colorado River and the GIWW, and again the tows have to negotiate the downstream current of the river as they attempt to establish a correct approach necessary to enter the opposite lock, depending upon whether they are headed westbound or eastbound.

Next slide. "System Component Summary". As you can see from the table on the slide, the structures are very similar in age, the Brazos River Floodgates were completed in 1943 and the Colorado River Locks in 1951. The Brazos River Floodgates are 750 feet long by 75 feet wide, whereas the Colorado River Locks are 1,200 feet long by 75 feet wide.

I want to focus on the far right column of the table, the column titled "Average Tows per Day Transit. For both structures, an average of 38 tows transit each structure every day.

The current configuration of the structures causes tripping of the barges ["Tripping" refers to the practice of breaking apart a tow and transiting one barge across the crossing and then returning to move the remaining barge across the crossing and then reconfiguring the entire tow and continuing their travel as one unit.] which leads to significant vessel traffic delays and accidents as barges and vessels navigate through a structure system that was never designed for larger capacity vessels.

Next slide. "Bottom Line Up Front." This study is an investment in the national interest. We decided to use a systems approach to achieve efficiencies and increase the effectiveness of identifying opportunities to modernize both structures simultaneously. Through the application of a system analysis of these two structures we hope to be responsive to the Inland Waterways Users Board's strategy of applying a life cycle approach to support USACE infrastructure asset management. In short, we are getting more bang for our investment when you put the two projects together. If we were to separate the two projects and conduct two separate studies the cost of each study would be approximately \$4 million.

The following slides will provide an overview of the significance of each structure and illustrate the reason why we are proposing using a systems approach. I will go over the economic significance, the navigation challenges, and the study team's plan to assess the system functionality as well as improve the operational performance of the two structures.

Next slide. "Rationale For Systems Analysis." Traffic commonality suggests any substantial change at one project has the potential to alter traffic patterns or operations at another project.

Assessing benefits outside of a system context reduces the certainty of all potential project benefits being accurately captured.

Performing a systems level analysis is the typical recommendation of the Planning Center of Expertise for Inland Navigation and Risk-Informed Economics Decision making [located within the Huntington District of the Army Corps of Engineers in Huntington, West Virginia] when any substantial changes to a navigable waterway or navigation structure are being evaluated.

If you look at the table at the bottom of the slide which displays the average commodity tonnage at the Brazos River Floodgates and the Colorado River Locks project sites you will see the two projects have a significantly high level of traffic commonality. The average annual tonnage that passed through the Brazos River Floodgates was 22.5 million tons during the period from 2010 to 2014. The average annual tonnage that passed through the Colorado River Locks project was 21.6 million tons during the same time period. The average annual tonnage that passed through both project sites was 21.0 million tons during that same time period.

The degree of commonality between the two projects was 97% in the case of the Brazos River Floodgates and 99% in the case of the Colorado River Locks. That high degree of traffic commonality suggests that any substantial change at one project has the potential to alter traffic patterns or operations at the other project site. These changes can be beneficial or detrimental.

For example, while expanding a chamber at one project could be beneficial in reducing trip costs and delays, it could also result in larger tows calling at other project in the system less equipped to handle them.

A single bottleneck in the system can alter shipping plans for users in ways which may not be possible to access without looking at the system as a whole. Assumptions made regarding traffic patterns and characteristics which derived from looking at projects individually may take on an entirely different meaning when looking at a system as a whole. Production functions for goods associated with commodity shipments through projects also play a role in the efficiencies gained through implementation of project alternatives and are best assessed within a systems context.

Next slide. "Project Benefits." Benefit categories are generally reductions in tripping, outages related to river conditions (head differential at gates, velocity), tripping related to channel width, delays and outages related to accident repairs, and accident repair costs.

Approximately 22 million tons of commodities transit both facilities each year, with a high degree of commonality and there is little commonality with other GIWW projects.

Approximately 56 accidents occur each year at the Brazos River Floodgates and approximately eight (8) accidents at the Colorado River Locks. Accident frequency has generally been increased since 2002.

In 2016, navigation notices were issued for accident related repairs for 221 days out of the year at the Brazos River Floodgates. For comparison purposes, in 2015, navigation notices

were issued for accident related repairs for 167 days out of the year. These repairs are generally performed ten hours a day, Monday through Friday.

For the Alternative Milestone Meeting a screening level economic analysis identified a rough order of magnitude annual impacts of these issues, in other words, an estimate of what benefits are out there to be achieved, however it is unlikely that any one alternative would ever realize all of the benefits.

Allision repair costs were estimated to be \$1 million at the Brazos River Floodgates and \$200,000 at the Colorado River Locks based on a five year average.

Delays due to allisions have been estimated by the Texas Department of Transportation at \$10 million at the Brazos River Floodgates and \$2 million at the Colorado River Locks. For comparison purposes, the Shipper-Carrier Cost model estimates delays due to allisions at \$8.8 million at the Brazos River Floodgates.

Tripping costs were analyzed using LPMS data and represent delay costs for all tows which would have not had to trip given a 125 foot channel width. Direct tripping costs were estimated to be \$4.2 million at the Brazos River Floodgates and \$1.2 million at the Colorado River Locks. For comparison purposes, as part of the Gulf Intracoastal Waterway Master Plan, the Texas Transportation Institute did a similar analysis of tripping costs and estimated that tripping cost were \$6.2 million as the delay cost of all tripping at the Brazos River Floodgates.

Tripping induced queuing delays were estimated to be \$4.6 million at the Brazos River Floodgates and \$1.2 million at the Colorado River Locks.

As part of the Alternative Milestone Meeting, various percentages of each of these possible benefits were assumed to be realized by each alternative and weighed against preliminary cost estimates.

CHAIRMAN HETTEL: Could you please go back to that slide for me for a minute. You said if you were to study the Colorado River Locks and the Brazos River Floodgates projects separately, it would cost an additional \$400 million?

MS. CRAFT: No. It would be \$4 million for the Brazos River Floodgates study and \$4 million for the Colorado River Locks study, but together it is \$5.3 million.

CHAIRMAN HETTEL: Okay, so you are saving about \$2.7 million by studying both together.

MS. CRAFT: That is correct and that includes the contributions from Texas Department of Transportation.

CHAIRMAN HETTEL: When I look at this slide, I think this slide tells you the reason why we think the two projects should be studied separately. There are much more costs at the Brazos River Floodgates, many more accidents, many more problems that we incur at the Brazos River floodgates than we do at the Colorado River Locks.

Our concern is that if at the end of this study process by studying these two projects together results in a project authorization, the benefit to cost ratio of the two projects taken together would be lower than if you had developed a benefit to cost ratio for the Brazos River Floodgates improvement versus a benefit to cost ratio for an improvement at the Colorado River Locks. One project could very well drag down the other project, and I think that was the point that Vice Chairman Woodruff was making at our last Users Board meeting. These statistics tell us that the two projects should be studied separately.

MR. WOODRUFF: Just to add to the cogent and powerful remarks from the Chairman, I suspect there are any number of locks on the system where you take two adjacent locks and the same cargo goes through each lock, but that does not mean that the locks pose the same issue or the same problem.

That slide tells the story, as Chairman Hettel has said, you have five times the number of -- or more than five times the number of accidents at the Brazos River Floodgates as you do at the Colorado River Locks, five times the number of delays, four times the amount of tripping.

We have a problem at the Brazos River Floodgates, a problem that we do not necessarily have at the Colorado River Locks. I think we got this on the record at the last Users Board meeting, but I want to be absolutely sure that when this is all said and done, whether it is done separately or done together, that we have separate BCRs [benefit to cost ratios] because Congress may very well look at that and say, we need to fix the problem at the Brazos River Floodgates. We maybe want to fix the problem at the Colorado River Locks, but we will do it later.

We would hate to see a result come out of this study that because of the way the study was done and combined, that the recommended plan for improvement at the Brazos River Floodgates does not compete well against other projects elsewhere in the country, when it is in reality, what we believe to be a significant problem whereas we do not think the Colorado River Locks is a significant problem compared to the problems we have elsewhere on the system.

I am not saying it is not old and I am not saying that it could not be improved, but I think I could say that about virtually every lock on the system.

Whereas the Brazos River Floodgates is a situation where we have to aggressively manage risk to ensure transportation. That is the issue.

I certainly understand and appreciate the desire to cut costs, but I am also concerned about the time factor. We have slowed down the Brazos River Floodgates study in order to add the Colorado River Locks. Now we are talking about getting a waiver from the "3 X 3 X 3" standard because it is going to take longer to study them together.

I see that there are positives to this approach but there are also negatives to this approach as well. I appreciate you giving us the explanation, but I guess from a user's perspective and in representing the users of that segment of the waterway, we would hate to see anything happen that would delay in any way our opportunity to solve what we view as a safety and operational issue at the Brazos River Floodgates.

MR. PATRICK J. DONOVAN: Good morning, General Jackson, Chairman Hettel, other Board members. For the record my name is Patrick J. Donovan and I am the Director of Planning Center of Expertise for Inland Navigation and Risk-Informed Economics Decision making located within the Huntington District. When it comes to the sensitivity analysis of alternative plans of improvement, separating the benefit to cost ratios for the individual alternative plans of improvement that is doable.

As decision makers, we can do a system analysis as we are discussing today to develop a single benefit to cost ratio of a plan of improvement for both structures, and we can also prepare a separate sensitivity analysis where we develop a separate benefit to cost ratio for each project site, because you are absolutely right, there are greater concerns at the Brazos River Floodgates structure. There are huge safety concerns at the Brazos River Floodgates and we understand that and we recognize that. It is a doable option to continue on this path without changing what we are doing, because any change can slow down the study schedule. If that is the desired outcome and we can look at a sensitivity analysis on developing two separate benefit to cost ratios, I believe we can work that into the analysis.

MR. WOODRUFF: I am more confused now than I was before. Is there going to be a separate benefit to cost ratio for each project site or is there not under the way the system analysis is going to be conducted?

MR. DONOVAN: The system analysis will have one benefit to cost ratio for the entire system, understanding your risks and concerns. I understand that. We can then look at the projects individually as well within that analysis.

MR. WOODRUFF: Okay I want to ensure -- and I have been saying this at multiple meetings over the course of the past few years -- at least from the portion of industry who talks to me, and I cannot speak for the other people sitting around this table, we would be not just upset, but we would be angry if we end up with one benefit to cost for this project.

We never asked to fix anything at the Colorado River Locks. We asked to fix a big problem at the Brazos River Floodgates. The Texas Department of Transportation recognized that the Brazos River Floodgates were a big problem as a result of their study of the GIWW, and they approached to the Corps and said, "Let's fix the Brazos River Floodgates".

Suddenly we are studying the Brazos River Floodgates and the Colorado River Locks, which we never said was the problem, and we would hate to see the Brazos River Floodgates not get fixed because somebody added the Colorado River Locks to the study.

MR. DONOVAN: Understood. I clearly hear that.

MR. LEE: Does the non-Federal sponsor want to do the combined study? Are they the same study sponsor?

MS. CRAFT: They are a partner. The division decided that it would be best if we would partner together, it would be save on study costs, and they are just focusing on the Brazos River Floodgates. We are focusing on both.

MR. DONOVAN: It is a system analysis because of the commonality of traffic; that is why you are seeing both projects being analyzed at this time.

MAJOR GENERAL JACKSON: Do me a favor.

MR. DONOVAN: Yes, sir.

MAJOR GENERAL JACKSON: You guys schedule another time to come back and talk to me and help me understand and articulate what the concerns are and why we added one to the other -- I just want to make sure that I understand it, because I cannot address any of Mr. Woodruff's questions, because I do not know who made the decision.

I understand typically, Mr. Woodruff, what we are trying to do is look at these and articulate these navigation systems as systems, because if you knock one thing out the whole system is impacted. But we need to be careful how we do that. I understand your concerns about the real problem not being addressed. Let me come back here, me personally, come back to you with a better understanding of the issue. I hear and understand your concerns.

MR. WOODRUFF: I appreciate that General Jackson, and I just received confirmation from the Texas Department of Transportation representative that the Department's desire is to look at the Brazos River Floodgates. They did not wish to add the Colorado River Locks to the study.

CHAIRMAN HETTEL: I would add a final note to Vice Chairman Woodruff's point on this slide, what also we are not incorporating is, as we learned at our Galveston meeting [Inland Waterways Users Board meeting number 75 was held in Galveston, Texas on May 14, 2015, preceded the day before by a site visit to the Brazos River Floodgates] that the LPMS data was not correct at the Brazos River Floodgates. That is just going --

MS. CRAFT: It is both systems.

CHAIRMAN HETTEL: It shows we are already doing a separate analysis for the Brazos River Floodgates separate and apart from the Colorado River Locks.

MS. CRAFT: We are working with the Inland Navigation Planning Center of Expertise to correct the LPMS data and they have used shipping data from the Kirby Corporation to compare the two. They made some changes to the LPMS data, so we have gotten that corrected.

CHAIRMAN HETTEL: I think there are many more, not that the Kirby folks don't transit that facility a lot, but there are a lot of other operators that transit that facility, and you are taking a portion of the data, not the full complete data.

MR. WOODRUFF: The way it was explained to me when the contractor came and requested our data is that they were reaching out to multiple operators, not just us, and getting the data to compare what industry delay figures were, what arrival times were, what the lock waiting times were. We certainly do not want to be the only one company -- in fact, we were promised we would not be the only one who stayed upwind of that. Hopefully there are other people who have given data because --

MS. CRAFT: So far you are the only one. We have reached out to several people, but you have been the only one that has responded.

CHAIRMAN HETTEL: I'm sorry, you said you talked to several people?

MS. CRAFT: Several industries. The Texas Department of Transportation team has an economist that is leading that effort. He has reported back to us that the Kirby Corporation has been the only company that has responded so far.

CHAIRMAN HETTEL: Is there a possibility that we could get a list of people that were contacted to provide the information?

MS. CRAFT: Okay.

CHAIRMAN HETTEL: We might be able to help you get a bigger response than that one operator.

MS. CRAFT: Okay.

CHAIRMAN HETTEL: Thank you.

MR. WOODRUFF: Absolutely. The Board members can reach out to our peers in the industry and try to encourage them to submit data. We want the best possible data and we want data to spread out over multiple companies so that there is no identifiable information attributable to one individual company.

MS. CRAFT: Next slide. "Study Problems." This slide shows the problems that the study is looking to address.

The list of problems we are seeking to address in the study include the following:

- > Hydraulics and channel geometry present navigational hazards at river crossings;
- Outdated 75 foot width and alignment of floodgates at Brazos River and Lock chambers at Colorado River;

- Outdated lock and floodgate construction at sector gates leads to structural, electrical and mechanical maintenance issues;
- Shutdown of operations during high water periods causes significant economic impacts to the navigation industry;
- Sedimentation at the Gulf Outlet at both the Brazos River and the Colorado River; and,
- Bankline erosion on the south end of the rivers and the GIWW crossings at both the Brazos River and the Colorado River.

Next slide. "High River Flows, Outdated Structures and Unrefined River Alignments Contribute to Navigation Issues". This slide shows some photographs of the types of problems encountered at the structures during periods of heavy rain that increase flow into the rivers. In the photograph in the upper left, high river velocities at the crossings trigger gate closures at predetermined differentials in water level at the Colorado Locks to reduce the likelihood of accidents while navigating through the structures or at the crossings. In the photograph in the upper right of the slide you can see a towboat pushing a barge through the lock structure. In the photograph in the lower left of the slide you see barge traffic waiting at a mooring station during high river stage event. And in the lower right hand of the slide you can see the higher river stages of 1 to 2 feet as the floodgates reopen at the Brazos River.

The Brazos River Floodgates have an average delay time of roughly 12 hours per delay event while the Colorado River Locks has an average delay of roughly 3 hours per delay event. Next slide. "Study Opportunities". This slide shows the study opportunities. They are as follows:

- Improve navigation efficiency on the GIWW by updating structures, channel alignments and improving flow characteristics at the river crossings;
- Reduce potential accidents that result from vessels striking guidewalls, thus reducing potential hazardous material spills into the waterway;
- Improve navigation tracking systems and records management to help determine future trends and to allow for adjustments to accommodate traffic changes.

Next slide. "Focused Array of Alternatives." This slide shows the five alternative plans of improvement which we are currently considering. The five alternative plans that we are considering are as follows:

 Alternative 2 (Brazos River Floodgates and Colorado River Locks) – Major Rehabilitation of existing floodgates/locks

- Alternative 3 (Brazos River Floodgates and Colorado River Locks) Remove structures on existing alignment (open channel at Colorado River Locks), add gates to create lock at Brazos River Floodgates
- Alternative 4 (Brazos River Floodgates and Colorado River Locks) Convert floodgates to locks/locks to floodgates (widen alignment to 150 feet)
- Alternative 6 (Colorado River Locks) Rebuild locks at same location with a wider channel (150 feet)
- Alternative 9 (Brazos River Floodgates) Move channel alignment north/south of existing alignment with/without floodgate/lock options

From these five alternatives there are multiple systems combinations that could be modelled to improve system efficiency. Further assessment of the traffic data, the hydraulic data and the cost of each will be compared and used to screen among all possible systems combinations.

CHAIRMAN HETTEL: Excuse me. Does Alternative 9 just address the concerns at the Brazos River Floodgates?

MS. CRAFT: Yes

CHAIRMAN HETTEL: So in effect, you are sort of studying the two structures separately.

MR. BYRON D. WILLIAMS: Excuse me. My name is Byron Williams. I am the Chief of the Project Management Branch in the Galveston District office. The study team is looking at the Colorado River Locks and the Brazos River Floodgates separately; however, you risk the chance of losing your benefits or the increased benefits if you are only focusing on the Brazos River floodgates and say you assume you stop all the tripping and stop all delays, then you have a bottleneck at the Colorado River locks, so you lose your benefits.

Therefore we are looking at it as a systems approach to capture both, maximize the benefits to both. However, we are looking at the Brazos River Floodgates separately and the Colorado locks separately as well. As Mr. Donovan we can do a sensitivity analysis to come up with the benefit to cost ratio and we can possibly move forward only if the benefit to cost ratio determines that it is beneficial to go separately.

You are looking at the cost to make a determination, but won't have the benefits because we haven't gathered them yet. It is going to take some time to look at the alternatives as a combination and separately as well before we make a final decision.

MR. WOODRUFF: I appreciate that. As long as we have the numbers where I recognize you might lose some benefit of doing the Brazos River Floodgates if you don't do Colorado River Locks, but you also potentially reduce costs. Being able to do it individually and

combined should give you a range of options. I just want to make sure we have separable data so that we can make the right decision.

MR. WILLIAMS: It is our goal to make sure that we do make the right decision, either separately or together. We are not sold on making it a system analysis just because the benefits don't show that is the best option to take.

MR. WOODRUFF: I appreciate that.

MR. MECKLENBORG: I have a question. Why are you looking to widen the channel to 150 feet?

MS. CRAFT: That is what the engineering team came up with because that is what they see on the Mississippi River.

MR. MECKLENBORG: It is 110 feet in width at most structures on the Mississippi River.

MS. CRAFT: I will take that information back to the study team.

MR. MECKLENBORG: Thank you.

MS. CRAFT: Next slide. "Brazos River Floodgates and Colorado River Locks Study Milestones." This slide shows our study milestones.

We received funds in March of 2016 to initiate the study.

The Alternatives Evaluation and Analysis milestone was September of 2016.

The District requested an exemption from the "3 X 3 X 3" planning process in February of this year and that decision is pending.

The milestone to present out Tentatively Selected Plan is June of 2018.

The date for the Agency Decision Milestone is November of 2018.

The milestone to complete the Feasibility Report is February of 2020.

The milestone to hold a Civil Works Review Board meeting on the study is April of 2020.

The milestone to complete State and Agency review is June of 2020.

And finally, the milestone to complete the Chief of Engineers Report on the recommended plan of improvement is August of 2020.

So in total, the study is scheduled to take four and one-half years to complete and a total cost of \$5.3 million.

Next slide. "Next Planning Steps". This slide shows our steps in the study. These next steps include the following:

Identify baseline conditions through the use of AdH (Adaptive Hydraulics) Model Step 1: Hydrographic Assessment Step 2: Sediment Analysis

- > Assess existing Lock Performance Monitoring System (LPMS) data
 - Obtaining traffic data from two different navigation industry groups for comparison
 - Develop benefits based on hydraulics and hydrology and traffic data
- Develop the Future Without Project Conditions
- > Reconfigure and refine the alternatives and screening based on the following:
 - Ability to meet objectives and avoid constraints
 - Benefits
 - Environmental Impacts
 - Best professional judgment
- Set up, calibrate and run models on 3 or 4 alternatives (depending on structural alternatives at each lock/floodgate location)

SHIPSIM (a ship simulation model); WAM (Waterways Analysis Model); and NIM (Navigation Investment Model)

Subject to your questions that concludes my presentation.

CHAIRMAN HETTEL: Just to comment. I think we have had an open discussion of this topic and I know we asked you some tough questions. Please understand we just want to do what is best for the inland waterway industry. The questions were not meant to be put you on the spot. Do not take it personally. I know there were some pretty tough questions and thank you for your presentation.

MR. POINTON: Are there any additional questions for Ms. Craft? Hearing none I think Mr. Duplantier was able to contact the people in the Engineering Division in the New Orleans District Office to get some answers to some of your earlier questions concerning the Inner Harbor Navigation Canal Lock study.

MR. DUPLANTIER: Members of the Board, I have on the phone Mr. David Lovette, Ms. Danielle Washington and Mr. Christopher Dunn, all from the Engineering Division within the New Orleans District of the Corps. They will try to answer your questions concerning the Inner Harbor Navigation Canal Lock study. Can someone say something to see if we can hear you? Is that okay?

One of the questions that was posed by the Board concerned the depth of the channel in the Inner Harbor Navigation Canal, there was a vessel traveling through the INHC and they reported some water depths somewhat deeper than our existing channel. The question I believe, and correct me if I am wrong, was, how are we going to handle that additional depth with a new lock in place with a sill depth of 22 feet, how are we going to handle that additional depth?

MR. DAVID P. LOVETT (via telephone): As long as the new depth, existing depth is less than the new depth of the channel, the plan at this point is no action for the portions of the channel that are deeper than what is required.

MR. DUPLANTIER: As the channel fills in, we will perform maintenance dredging to the authorized depth, but we would not go in and fill the channel to the depth?

MR. LOVETT (via telephone): That is correct. As you may recall, I believe the Lake Borgne Surge Barrier sector gate actually has a sill quite a bit higher than the existing depth. It is more in line with the authorized GIWW depth.

MR. WOODRUFF: This is Matt Woodruff, one of the members of the Users Board. Can you hear me okay?

MR. LOVETT (via telephone): Yes sir.

MR. WOODRUFF: What is the depth of the Lake Borgne Surge Barrier gate?

MR. CHRISTOPHER L. DUNN (Via telephone): We believe it is at minus 16 feet.

MR. WOODRUFF: One of the things that we on the Users Board have been grappling with, I don't know what the sill depth of the locks are throughout the waterway system. I know the Gulf Intracoastal Waterway has an authorized depth of 12 feet. I suppose 16 feet at the Lake Borgne Surge Barrier makes sense to me. You want to have a little bit of extra clearance, but the decision to go to 22 feet for the sill depth at the Inner Harbor Navigation Canal Lock sort of confuses me because we use the same boats and barges throughout this system.

We are curious why you are going with 22 feet as the sill depth whereas if we are going - if you tell me that every lock and dam on the GIWW, for example, Leland Bowman, Calcasieu, the Colorado River Locks are 22 feet, then I will say, "Okay well, I understand that." But if there is something other than 22 feet, I am not sure why we are going to 22 feet at the Inner Harbor Canal lock.

MR. LOVETT (via telephone): The 22 feet for the sill depth is based on the Engineering Manual. First off, as Mr. Duplantier mentioned during the first question, the existing channel is much deeper than 22 feet, and when the study team looked at the existing channel the cost associated with building a shallower lock would actually be about the same or actually more expensive due to the amount of fill that would be required to be placed in the channel just to build the base slab for the structures to sit on.

In terms of the engineering manual, there is a requirement in the EM and that recommends 1.5 to 2 times the vessel draft to place the sill depth at. That recommendation, by setting it at 22 feet, you actually lower your emptying and filling times, which makes it a lot

more efficient because you are reducing the hawser forces on the vessels to an allowable range. The hawser forces are what limit your filling and emptying times on your lock structure. You are filling and emptying the lock chamber lot faster. By constructing the sill depth to minus 22 feet you are actually getting a cheaper lock because you are not putting in all the additional building you need to build the channel higher.

MR. WOODRUFF: That is a great answer and makes perfect sense to me so I appreciate that.

MAJOR GENERAL JACKSON: There was a couple of other questions that Users Board members had that are technical in nature. If you have them, we have got the guys on the line that can answer them. I want to make sure that we get everybody to a good spot on this.

MR. MECKLENBORG: I think Mr. Woodruff's question and the response covered both of our questions.

MAJOR GENERAL JACKSON: Okay. No other questions then?

MR. MECKLENBORG: Not from me. Thank you.

MAJOR GENERAL JACKSON: Mr. Duplantier, thank you. And to the team back in New Orleans, thank you. This is General Jackson. Thanks again for assembling on such short notice, but I think this is helpful getting everybody to a happy on this. Thank you very much for you time.

MR. DUPLANTIER: Thank you.

UNIDENTIFIED SPEAKER (Via Telephone): Yes, sir, happy to help.

MR. POINTON: Well, that is actually a good time for a break.

MAJOR GENERAL JACKSON: Before everybody takes off, sometimes people leave before the end of the meeting. If you are on the Board currently, if you could gather by the flag so that we can get photo of the whole group together. Then we will go on a quick break. The sooner you move to the front by the flags, the sooner you can go on your break.

(Thereafter a brief recess was taken after which the proceedings continued)

MR. POINTON: Can everyone take their seats. We would like to reconvene the meeting. Thank you. Next on the agenda we will have a presentation by Mr. David Dale, Director of Programs in the Great Lakes and Ohio River Division on the status of the four inland waterways projects currently under construction in the Division, those projects being the Olmsted Locks and Dam projects on the lower Ohio River, the Lower Monongahela River Locks and Dams 2, 3, and 4, the Kentucky Lock and Dam project, and the Chickamauga Lock and Dam project.

MR. DAVID F. DALE: Good morning General Jackson, Chairman Hettel, other Board members, Corps of Engineers Headquarters staff, other Federal agency representatives and other attendees. For the record my name is David Dale and I am Director of Programs in the Great Lakes and Ohio River Division and as Mark has already said, I will be presenting an update on the status of the four construction projects underway in the Great Lakes and Ohio River Division.

Before I begin I just want to say it is good to be back here at the Users Board meeting and seeing a lot of old friends and have the opportunity to talk about some of the great work we are doing in the Great Lakes and Ohio River Division. I had a great experience and learning opportunity working at USACE Headquarters as the Acting Director of the Office of Contingency Operations and Homeland Security. I learned a lot. My experiences at Headquarters will make me a better Director of Programs at the Division. Thanks again to everyone at Headquarters for making my time there was very worthwhile and beneficial.

Next slide. "Agenda". There you see what I am going to cover today. The four projects underway in the Division: Olmsted, Lower Monongahela, Kentucky Lock and Chickamauga Lock.

Next slide. "Olmsted – Bottom Line Up Front". First up, Olmsted Locks and Dam. Currently we are ahead of schedule and plan for the project to be operational in 2018 and completed in 2022. Current costs – we are currently under budget. The Total Estimated Project cost is currently \$335 million under the estimated project cost contained in the PACR [Post Authorization Change Report] and \$153 million under the Total Project Cost Summary, based on the latest cost estimates prepared by the Corps' Civil Works Cost Engineering Mandatory Center of Expertise located at our Walla Walla District office in Walla Walla, Washington.

A couple of points I would like to make concerning the situation with the project being ahead of schedule and the cost being under budget. First, receiving efficient funding to our capability level has allowed the project development team to effectively plan and execute their annual work plan. Second, advantageous river conditions has allowed the contractor team to work beyond the contractual low water season defined as June 15th to November 30th and thus achieve some stretch construction goals that they might not have been able to accomplish.

Next slide. "Olmsted Project Overview – Status." Here is an overview of the status of some of the key elements at the project site. Everything you see in yellow is currently under contract, and it is all the key features to complete the Olmsted Locks and Dam project from an operational perspective.

In the center of the slide you see a box titled "Tainter Gates." Four of the five tainter gates are already in place and are erected. Our fifth and last tainter gate, Tainter Gate number 5, is scheduled to be delivered to the project site around June 19th, and is scheduled to be erected around August 11th.

The precast work of Service Bridges Number 5 and 6 has been completed and they are scheduled to be set around November 3rd to November 7th, 2017.

The precast work for Training Walls-1A and 1B has been completed and they are scheduled to be set around September 16th to September 20th, 2017.

The precast work for Training Walls-6A and 6B is currently underway and they are scheduled to be set around October 11th to October 14, 2017.

Moving to the next box up and to the left is the box titled "Navigable Pass." All of our paving blocks are set and completed. All of the Navigable Pass Shells, through Navigable Pass Shell Number 10, now are set and complete. The precast work for Navigable Pass 11 has been completed and is scheduled to be set around June 13, 2017. The precast work for Navigable Pass 12A, the last shell on the project, is our identified low water season 2017 stretch goal. The precast work for Right Boat Abutment 2 and Right Boat Abutment 3 is currently underway and is scheduled to be set around July 19 and 20, 2017.

Moving to the left hand side of the slide, there is a box titled "Left Boat Abutment." The thin wall cofferdam is complete and unwatering is scheduled to start June 17, 2017. Cast in place is scheduled to be completed by November 11, 2017.

Moving to the box in the bottom left-hand corner of the slide titled "Wicket Lifter." The Wicket Lifter is the device that actually raises and lowers these Navigable Pass wickets in our Navigable Pass portion of the dam. There are two components. The barge is being fabricated by Conrad Shipyard in Morgan City, Louisiana. The crane part of the wicket lifter is being fabricated by Appleton Marine Incorporated in Appleton, Wisconsin. Appleton Marine is actually fabricating two cranes, a maintenance crane and a wicket lifter crane. Appleton is scheduled to deliver the maintenance crane to Conrad on July 31st. Appleton is scheduled to deliver the wicket lifter crane to Conrad on August 25th. Conrad will then do final assembly of the wicket lifter and will ship the finished wicket lifter to the Olmsted on December 14th.

Moving to the next box to the right titled "River Dikes", there are a series of 13 river dikes that go along with the project. We have a SATOC contract with Luhr Brothers, which is a Single Award Task Order Contract. Dikes numbers 1 through 4, which is immediately upstream of the Left Boat Abutment on the Kentucky side of the river have been constructed. The next series of River Dikes to be constructed, numbers 5 through 7, are on the downstream Kentucky side of the river. Then the last series of River Dikes, numbers 8 through 13, are on the upstream Illinois side of the river.

The final piece on this is slide, on the right-hand side, you will see a yellow box there titled "Operations Facilities." We have two buildings left to support this project, a maintenance building and then a Lockmaster's office. The Notice to Proceed on that contract was issued on February 10th and construction is schedule to be completed no later than May 6, 2018.

Next slide. "2017 High Water Season Images". Photograph 1 show Navigable Pass number 11 in the precast yard. Photograph 2 shows Right Boat Abutment 2 in the precast yard. Photograph 3 shows Training Walls 1A and 1B in the precast yard. Photograph 4 shows Service Bridge 5 in the precast yard. And photograph 5 shows the installation of the hydraulic cylinder at Tainter Gate number 4.

Next slide. "2017 Plan to Complete". This slide shows our plan to complete the remaining items on the project. The items in the very light blue color are the items that we plan to execute this low water construction season. The darker blue item that you see there is one that we currently have scheduled for the 2018 low water construction season. We feel comfortable right now that we will most likely get that stretch goal accomplished during this construction season.

What we are laying out basically is that we will have the dam in place and completed by the end of this low water construction season, probably in the late January/February 2018 time frame.

So you can see the project delivery team is making great progress on the project.

CHAIRMAN HETTEL: Do you know if Mike [Mr. Michael E. Braden, Chief, Olmsted Division, Louisville District, U.S. Army Corps of Engineers, Louisville, KY] and his team have a time scheduled to set Navigable Shell 12A, the last shell that you identified as needing to be placed and that you identified as your stretch goal for this low water construction season?

MR. DALE: The last big Navigable Pass Shell is number 11. Right now we are scheduled to set that in place on June 13th. At the same time we are doing the Cast in Place work over here on in this portion of the dam. Then you jump over to these little sections over here in July [Right Boat Abutments 2 and 3]. Then we go over here and place a couple of these training walls in September and October [Training Walls 1A and 1B and Training Walls 6A and 6B]. Then in November we place these pieces [Service Bridges 5 and 6] up here.

The whole time we are setting pieces in the river, we are doing the pre-cast work over in the pre-cast yard. That pre-cast work should be finished in November 2017. Right now the pre-cast work is scheduled to be completed in November of 2017. That little piece in the pre-cast yard, number 12-A, is this little dark colored piece of the navigable pass on the slide. That is the last shell to be placed. Our intent is place that piece during the end of the low water season. Really beyond the low water season, but we have had great success accomplishing the stretch goals we have set for ourselves. That is our plan right now.

CHAIRMAN HETTEL: Thanks David. Great work by the team.

MR. DALE: Thanks Marty [Chairman Hettel]. We really appreciate it.

Next slide. "Olmsted Project – Time and Cost Scorecard – March 2017". Bottom line is we are under budget and ahead of schedule. In the upper left hand corner you see "Expenditures." You can see the Planned or "Budgeted Cost of Work Scheduled" expenditures, the Earned or "Budgeted Cost of Work Performed" expenditures", and the Actual or "Actual Cost of Work Performed" expenditures.

In the upper right hand corner you can see the project schedule. The dam is scheduled to be operational in October 2018 and the project is scheduled to be completed in March of 2022.

In the lower left hand corner of the slide you can see the Budget through March. As of March, the "TEP" or Total Estimated Price of the project is \$2.762 billion and the authorized cost of the project is \$3.099 billion, so you can see we are well under the budget.

And over in the lower right hand corner you see the Major Activity Schedule, which lays out the schedule and time line for accomplishing each of the thousands of individual activities associated with the project.

Next slide. "12 Month Cost Trends". The upper graph shows the trend of the TPCS or Total Project Cost Summary over the past five years. You can see the trend in the TPCS has been going down over time, from a cost of \$3.1 billion at the time the Post Authorization Change Report was prepared to a TPCS of \$2.95 billion as of Fiscal Year 2017. The lower graph shows the TEP or Total Estimated Price of the project over the last 15 months, from December 2015 through March of 2017. The TEP has gone down from \$2.88 billion in December 2015 to \$2.76 billion in March of 2017.

The Louisville District provides the TPCS estimate to our Cost Engineering Center of Expertise located in Walla Walla to have them certify the cost estimate. The Cost Engineering Center of Expertise performs an independent review of the cost estimate just to be sure the District is not being too optimistic or overly pessimistic. You can see the good news from looking at both graphs is that the cost of the project has been trending down over time.

Next slide. "Olmsted – Finishing Strong". In summary, very honestly I believe were are finishing the Olmsted project in a strong position. Two items I want to talk about on this slide.

The first issue is the disposition of equipment that we have at the project site. Right now we are working on how we are going to dispose of the equipment we have at the project site. We estimate that we have in excess of \$150 million worth of equipment that is the original acquisition value, and over 10,000 discrete items. Certainly the equipment depreciates in value over time, but there is value in the equipment, and as we dispose of that equipment, we are working our way through the process between the Federal Acquisition Regulation and some guidance that came from the GSA [General Services Administration].

We are looking at how you dispose the material and equipment and we are close to wrapping up. Our goal would be to dispose of that equipment in such a way that it allows us to bring the proceeds from the disposition of the equipment back into the project and maximize the return on investment on the disposition of that equipment.

We did one test of the disposal of a piece of equipment through the GSA process. The results of that test case came out substantially lower than what the equipment was appraised at. We then went through a disposition process that I like to use and we got a much higher price for the equipment. What we are trying to do is try to maximize the amount of money we return back to the project. The reason we want to do that is that drives down future cost requirements to complete the project.

The second item I want to briefly touch on is our "out year" marine work packages. We are advancing our J&A [Justification and Approval] documents to advance various marine scopes of work concurrent with dam construction and within our operational footprint. The work packages associated with repairs to miter gates and the flushing of culvert valves were submitted to the PARC [Principal Assistant Responsible for Contracting]. The benefits associated with these marine work packages include advancing project completion, mitigating post operational "navigation lane" impacts and utilizing existing material, skilled labor and equipment.

Subject to your questions, that concludes my update on the Olmsted Locks and Dam project.

CHAIRMAN HETTEL: David, in Mr. Aldridge's report on the status of the Inland Waterways Trust Fund and the status of the various inland waterways construction projects, his report on the Olmsted Locks and Dam project shows a remaining balance of \$743.863 million to complete Olmsted. If you continue down your path of the Total Estimated Price savings of \$335 million under the PACR authorized cost of \$3.099, that \$743 million remaining balance, you basically take that \$335 million off that remaining balance; is that correct?

MR. DALE: Yes sir.

CHAIRMAN HETTEL: So the remaining cost right now would be somewhere in the neighborhood of \$400 million. And that does not include the FY 2017 allocation. Well, it does through April 28. Mr. Aldridge's report says FY 2017 allocation as of 28 April of \$155 million. If you come in at \$250 million, that reduces it by another \$95 million also?

MR. DALE: Yes.

CHAIRMAN HETTEL: This is all good news. At a previous Users Board meeting, I believe it was referenced that some of this equipment that you were able to divest yourself of came around \$500,000 and it was sitting in the Louisville district; is that right?

MR. DALE: It is on the Louisville District's property books. Yes, a dollar value, I think that will be the correct value when we sell it at auction. Am I answering your question?

CHAIRMAN HETTEL: That is what you think that will be the value when you sell it?

MR. DALE: Yes.

CHAIRMAN HETTEL: So you haven't sold that equipment yet?

MR. DALE: No sir.

CHAIRMAN HETTEL: All right, so then that money would reduce the cost.

MR. DALE: Essentially it would become a credit to the contract. And that would be available to Olmsted to offset future cash flow requirements.

CHAIRMAN HETTEL: Okay. Just one question that we discussed last night. With all the problems that the Louisville District has gone through trying to raise the wickets the last couple times they tried at Lock and Dam 52, having what somebody I heard reference the other day as having "Goldilocks water", water that is not too high and water that is not too low, but just right to get in there and replace the wickets, is there an opportunity, do you realize where you are at Olmsted to give them the "Goldilocks water" to be able to come in and finish all those wickets?

MR. DALE: There is an opportunity at Olmsted to operate the wickets. I believe we could operate the wickets and there are enough in place now and we are progressing closer that we could have an impact on river conditions. What I am not prepared to tell you is that I can make "Goldilocks" conditions.

Certainly there is an opportunity to try to operate the dam at Olmsted the way that it would. I have not done the analysis or I have not heard the District has done the analysis to see what we can do to make "Goldilocks" water. The key is we have a tool that is now at the operational stage enough that we could have an impact on the water conditions in that part of the river if need be to try to work any challenge that we have.

CHAIRMAN HETTEL: So a challenge for you, just looking at the river stages this morning, we are probably not going to be in a position, the Corps wouldn't be in a position to raise the wickets at Lock and Dam 52 until probably the middle of June. Is that something you can look at before we get to that point and see if it is feasible?

MR. DALE: We can look at that, sure, be glad to.

CHAIRMAN HETTEL: Thank you.

MR. DALE: Steve [Mr. Stephen Fritz, USACE, Pittsburgh District], would you help me remember my notes, I need to do that. Thank you very much.

CHAIRMAN HETTEL: Thank you.

MR. DALE: Next slide. Moving on the Lower Monongahela River Locks and Dams 2, 3, and 4 project. Bottom Line Up Front. I think everything has been tracking very well at the Lower Monongahela project. A comment on the first bullet, "Current Schedule". The project is on schedule to be operational in 2022 and completed in 2023. I want to clarify under the "Current Schedule", those are the current schedules that are the optimistic schedules, assuming things don't happen that cause something to upset the project schedule. And we all know things do happen.

The next time you see this slide, I am going to adjust it some to show you what we are committed to with an 80 percent confidence level. This is a very optimistic schedule. If things go very well, if we have no funding constraints, these milestones are achievable. We all know those things happen. I want to get in the same mindset we have with the Olmsted Locks and

Dam project and establish a performance baseline, which you can hold us to, and we work towards and figure out how to deliver ahead of that milestone.

Those dates of 2022 for project operations and 2023 for project completion is more appropriate to be about 2029, based on the original cost analysis we did. We will adjust the schedule for clarity.

Next slide.

CHAIRMAN HETTEL: David, you didn't address the current project cost estimate in that previous slide. I just want some clarification if I could on this. The slide say the "TEP \$1.2 Billion. Total Estimated Price – Cost recertified at \$1.33 billion, assuming no FY 2017 funds. Assuming efficient funding, the estimated cost remains at \$1.22 billion."

MR. DALE: That is correct.

CHAIRMAN HETTEL: We have heard at previous Users Board meetings that without exercising the option and moving forward it would be an additional cost of \$164 million to the project. Your TEP cost estimate is coming in at \$1.2 billion. That is a difference of \$110 million.

MR. DALE: Yes sir. There is a logical reason for that. That is because we have a lot of project delivery team members constantly looking at how we can try to minimize the impact of the changes that has occurred. We did report that previously. What they have done is figure out a way to package the work in the future and draw that impact down. That is why you are seeing the TEP cost of \$1.33 billion compared to the \$1.22 billion versus an increase of \$164 million.

CHAIRMAN HETTEL: Still I think it is important to note the \$164 million savings since you should be able to exercise the contract option on the Lower Mon project before September 30th of this year.

MR. DALE: Yes sir. I will explain we are in a position to award that contract option. We are waiting. We do have concerns as we get closer and closer. I know the folks at Headquarters and the ASA's office and elsewhere working it very hard. They appreciate and understand the challenges that we have.

CHAIRMAN HETTEL: I also want to highlight your first bullet under the word "Keys" on your first slide. It says, "In an effort to reduce costs and schedule impacts, associated with no FY 2017 funding, the district has begun discussions with the River Chamber Completion contractor regarding extending the expiration of Option 1 until 30 September 2018."

When you state you are working with the current contractor regarding the possible extension of the contract option expiration date until September 30th, I take it those negotiations would cease and desist should you receive the funding?

MR. DALE: That is correct sir.

CHAIRMAN MARTIN HETTEL: We should have the answer when the FY 2017 work plan comes out. Hopefully that issue has been resolved.

MR. DALE: Next slide. "Lower Mon – Project Overview." One thing I would like to point out on this slide. Under the section titled "Financial". We are currently well underneath the Section 902 cost limit of \$1.76 billion, with a current the current cost estimate to completion of \$1.2 billion. Even if we were to incur a schedule delay and cause a cost increase towards that \$1.76 billion Section 902 cost limit, the delay would push us in that direction, but it does not take us above that limit.

Next slide. "Lower Mon – Project Schedule." One thing that I want to correct about this slide - and I am talking to people in the both the Nashville District and Pittsburgh District - is getting our terminology squared away so we don't give the Users Board different dates, representing different outcomes. I am going to push our people so we are going to adjust these schedules to represent an estimate of a schedule with an 80 percent confidence level. Not an optimistic schedule, but one we feel we can hit. We will still work very hard to achieve the optimistic schedule, but we need to have good firm commitments that we hit on a recurring basis, on a regular basis.

Next slide. "Lower Mon – Charleroi Ongoing/Pending Construction Plan". This slide shows the status of the various contracts underway or remaining to be awarded and their planned award dates. I draw your attention to the column on the far right of the slide, the column titled "Percent Complete." The M22-M27 [monoliths numbered 22 to 27] contract is 48% complete and the RCC Base contract is 69% complete. This is a nice slide if you want to kind of track the overall progress of the project.

Looking at the photo of the project site on the left hand side of the slide, you can see the project site is pretty congested and there is not a lot of room to work there. There are actually have two contractors on site. We have the M22 through M27 contract and then we have the River Chamber Completion base contract, the RCC contract that we are working on. That seems to be working very well.

Next slide. "Charleroi Construction Images". You can see here a couple of photos of work at the project site. The photo on the left shows the contractor preparing for the first mass concrete lift for the M-22 monolith. The photo on the right shows the contractor placing the first mass concrete lift in the M-7 monolith.

Next slide. "Lower Monongahela River Project – Time and Cost Scorecard." In the upper left hand corner of the slide you see the expenditures. In the upper right hand corner of the slide, you can see the project schedule. And in the lower left corner of the slide you can see the budget and in the lower right corner you see the schedule of major activities.

Next slide. "Discussion." In summary, the Lower Monongahela River project is progressing well. The big hurdle is awarding the option so we do not incur additional costs. I would like to take a moment to recognize Steve Fritz, who is joining us today. Steve is the project manager for the large projects in the Pittsburgh district. We have asked Steve to take on that role and to be the person, similar to the role that Mike Braden plays as the lead of the Olmsted project team down in the Louisville District, we see Steve as that person in the Pittsburgh District that runs the mega projects team for us so we can move forward on project and figuring out how we can move this project to the left, so to speak.

Subject to your questions, that completes my update on the Lower Monongahela River project.

Very good. Moving on. Next slide. "Kentucky Lock Addition – Bottom Line Upfront." I want to talk a little bit about Kentucky Lock, because I know at the last Users Board meeting there were some questions that need to be answered and I will try to address those questions during my presentation.

First, bottom line up front. The Downstream Cofferdam Construction contract. First off, the \$27.5 million in options that have an expiration date of 31 May 2017. This is the one that is probably our toughest challenge. You see on the slide that the contract option expires on 31 May. If we don't make that option, the fact is we would execute an option. We are not going to let that contract option expire. What we can do is do some type of unilateral option.

Right now the contractor is telling us his going in price would be somewhere in the \$5 million to \$15 million cost increase associated with executing that option past May 31st. We would obviously negotiate a fair and reasonable price, but the reality is it is going to be a significant cost increase.

MR. LEE: David, does everything line up assuming that you are going to get the money in the work plan to exercise the option by May 31st?

MR. DALE: If we get the money by May 31^{st} –

MR. LEE: Once you know you will be getting the money, can you notify and execute it?

MR. DALE: The subtlety of that is that money has to be in the district. It can't just be released someplace, but I think the project team knows that and is working towards that. Once we get the money in the district, we have options.

MR. LEE: No, I mean, you could execute it knowing it or do you have to have the money in hand?

MR. DALE: We have to have the money in hand.

MR. LEE: That's what I mean. How long is that going to take? Usually how long is that going to take?

MR. DALE: When we are in a hurry, it can be a matter of days. And we will be in a hurry.

CHAIRMAN HETTEL: David, I think to Mr. Lee's point, that time frame is critical, as you are well aware of. If we could have the Fiscal Year 2017 work plan and the Administration does, in fact, support these projects, you have got all of eight days to exercise your option -- get the money in your hands and exercise this option.

MR. DALE: Once we have money in our hand we will execute the option.

CHAIRMAN HETTEL: If there is any help you need in pushing that forward, let us know.

MR. DALE: I have already reached out to our Headquarters team and --

MAJOR GENERAL JACKSON: It is all internal. As soon as we get the go ahead by the Administration with the budget release, there is nothing you can do. That is all Corps and the ASA [Assistant Secretary of the Army] giving us the approval, the Corps will jump through the hoops. That is why I have been pushing so hard to get this money released much sooner, because we are trying to shave the risk off of the days that you are talking about.

I will be having lunch tomorrow with Mr. Doug Lamont [Mr. Lamont serves as the Senior Official Performing the Duties of the Assistant Secretary of the Army for Civil Works] and just reiterate the importance of awarding this option.

CHAIRMAN HETTEL: Awarding this contract option can happen in eight days, is that what you are telling me?

MAJOR GENERAL JACKSON: Yes.

MR. DALE: Roger that. Both teams are pulling in the same direction.

Next slide, please. "Kentucky Lock Project Overview." This is an overview of the project. You can see some of the major features of the project that have been completed or are under construction. You can see the bridge superstructure was completed in July 2014 at a cost of \$104 million and the bridge substructure was completed in March 2006 at a cost of \$44 million. Taken together the cost of those two features is \$148 million. You may notice in a couple of slides, in the slide titled "Cost Estimate Comparison" the line item titled "Highway and Railroad Relocation" has a cost of \$164 million. The reason for the difference in cost between the two items, the bridge superstructure and substructure and the highway and railroad relocation is that this picture does not show the entire scope of the project. There is an East abutment and a West abutment that make up the cost differential between the \$148 million and \$163 million. The \$163 million is the correct cost figure and I will point that out when we get to that slide. This slide shows the key pieces of the project that you can see in this aerial view.

Next slide, please. "Downstream Cofferdam Table Top Exercise Safety Meetings." This slide shows some photos from some table top exercise safety meetings that the project development team held with representatives from the navigation industry, the U.S. Coast Guard,

the contractor and the lock operators in February of 2016 and February and March of 2017. Mr. Don Getty, who is project manager for the project in the Nashville District is working with the navigation industry to try to alleviate some impacts to navigation.

Mr. Getty has facilitated several engagements where he brings together many of the folks from the navigation industry to the table and we talk about the construction approach. We are working on ways to minimize the impacts to the navigation industry. In fact, we are not just talking about reducing the impacts to the navigation industry, but we are actually achieving an elimination of those impacts to the navigation industry.

For example, there were plans to implement restrictions on tows during certain phases of construction. They worked out a way to avoid many of those restrictions and to minimize the impacts to the navigation industry.

That is something we will continue to look at as we progress through the project, and I am very pleased to be able to report to you that not only are they working at it, they are achieving the results.

Next slide. "Kentucky Lock Project Schedule." This slide shows the project schedule. The last three rows of the slide ["Risk Based Total Project Cost Estimate", "Economic Update", and "Post Authorization Change Report for 902 Exceedance"] that you see on this slide are associated with the District doing the Risk Based Total Project Cost Estimate. That is the third line item from the bottom of the slide.

We are actively working on the Economic Update for the project, which will allow us to update the project benefits and costs and estimate a new benefit to cost ratio. The reason that is important is that we have a requirement to do a Section 902 fix, an authorization fix, on the project. We are currently projecting the cost of the project to exceed the Section 902 limit. That will require that the District prepares a Post Authorization Change Report, which is the line item at the bottom of the slide.

That is the schedule we are working towards completing the Post Authorization Change Report. We are looking to complete the report by March of 2018. That is the time period that we think we will have the Post Authorization Change Report out of the Division and up to Headquarters and we will begin to flesh out the schedule working through the rest of the system.

The dates you see on this slide is sort of a "no risk" schedule. What I want to do is develop an 80 percent confidence level schedule in here that we can commit to.

If you go to the fourth and fifth line items from the bottom ["Downstream Lock Construction" and "Approach Walls Construction"], I will give you some dates there.

The "Downstream Lock Construction." Right now the schedule on the slide shows a completion date of March 2024. With the incorporation of risk and inefficient funding, that moves the completion date out to March of 2028.

The "Approach Walls Construction", the schedule on the slide shows a completion date of November 2023. With the incorporation of risk and inefficient funding, that moves the completion date out to November 2027.

Again, Mr. Getty does the same thing that Mr. Fritz is doing, and is working with his project delivery team to try to figure out how to deliver the project more effectively.

With an 80 percent confidence level, those are the numbers we think we will hit, the schedule dates we will hit, and we will work to clean this up and get consistent across the project updates.

Next slide. "Cost Estimate Comparison." There has been a number questions about the cost of the project and why the cost of the project increased and I will try to address those.

I will say that I am not going to be able to balance everything up here at the podium to the penny or even to the -- probably within a hundred million dollars to be quite honest with you. We have not got it all sorted out. We would be more than glad to sit down with you at any time and take you through that level of detail and be as transparent as possible about what led to the increase in costs.

Let me attempt to summarize what led to the increase in costs. First of all, there was not just one factor, but there were several factors and I will try to give some context to the significance of some of them.

First off, there are, to a certain extent, we recognize that we underestimated certain aspects of this work. We underestimated some of the Karst foundation work. Karst foundation is a very weathered limestone that can cause a lot of problems. You start doing foundation work in this type of geologic formation and you see lots of challenges, very similar to our Dam Safety projects that encounter a lot of geotechnical challenges, such as sinkholes, caverns and fractures. That causes some foundation challenges and challenges in cofferdam construction so we have new cost estimates.

We also end up building two additional bridges that we were not expecting during the feasibility phase so that drove up some costs.

The other thing that happened is clearly the project wasn't funded at an efficient funding level. We authorized this project in 1996 [the Kentucky Lock and Dam project was authorized by Section 101(a)(13) of the Water Resources Development Act of 1996, Public Law 104-303, dated October 12, 1996]. We had estimated construction to take a period of nine years. The first construction contract I believe was 1998. Right now we are looking at completing construction in 2028. Do some math and you get about a 30 year delta. There is a good amount of cost associated with a project that you stretch out by "X" number of years.

To give you a feel for that, I went back and talked to the project delivery team about construction overhead, the cost of contractors being on site, the overhead expenses. We think

that is probably about \$183 million worth of costs, additional costs for the contractor being on site for that extended period.

Certainly we, the Corps of Engineers, have a cost for being on site for an extended period. We think that is probably about \$63 million. Highway bridges, we had some changes associated with the Karst foundation work. We think that is in the range of about \$9 million. There are other foundation issues that we estimate cost somewhere around \$6 million. And the lock excavation contract had about \$18 million in additional costs.

I threw a lot of numbers out at you. Totaling all those costs, that is around \$260 million worth of additional costs just on those broad categories.

Then the other piece is, as you look at this slide, there is about \$700 million worth of work remaining to do on the project.

There is a certain percentage -- when this project was authorized in 1996, the cost estimate had about a contingency factor of approximately 24 percent. Currently we are carrying about a 28 percent contingency on the remaining work. That is a 4 percent delta, 4 percent on \$700 million worth of work, and you are talking \$28 million there.

The key is there are a lot of reasons for the cost increase. We don't want to back away or shy away from -- part of it was, we had a low estimate. Some of this was harder than we expected. I don't have a number for you, but the floating guide walls, we had an estimate in the feasibility study and it was low and some of the lessons learned at Olmsted and the result -- what it cost to build the guide walls at Olmsted and they rolled that in.

But that wasn't totally the issue. It is a combination of a low estimate and some challenging foundation issues and inefficient funding. Again, that doesn't balance out the entire cost increase, but we will be glad to sit down with you whenever you want and we will do that at the project level of detail and be transparent as possible.

CHAIRMAN HETTEL: Thank you, David, I do have a couple of questions and a couple comments. When I look at Mr. Aldridge's report on the Kentucky Lock project in his status report that was presented earlier today, he references the \$1.254 billion total project cost estimate is the January 3, 2017 certified cost estimate. I think that is the same total project cost figure that was shown in your earlier slide titled "Kentucky Lock Project Overview", but this slide titled "Cost Estimate Comparison" show a Total Project Cost estimate of \$1.181 billion.

In Mr. Aldridge's report on the Kentucky Lock project in his status report he states that the increase in project cost from the prior Users Board meeting was \$380,263,000. Your slide titled "Cost Estimate Comparison" show a difference in project cost of \$446,553,811. The different cost figures that are being thrown at us raises questions as to what are the correct numbers and that we need to make sure --

MR. DALE: I will get with Mr. Aldridge and we will make sure all of the cost figures are in agreement and get back with you.

CHAIRMAN HETTEL: David, if it is any consolation, I like Mr. Aldridge's low cost figures.

MR. DALE: I understand. I do too.

CHAIRMAN HETTEL: When I look at this slide titled "Cost Estimate Comparison", it looks to me -- and, again, I am not the Corps and I am not familiar with the process that you guys have to do to do a cost recertification, but it looks like you took the whole project and said, "What would it cost to do this piece of the project?"

MR. DALE: That is not true. What we do is we take the sunk costs, so that work has already been done. It is in the ground. What we spent on that. Then we escalate that number up to current year dollars. In this case we used 2017 dollars. We take our sunk costs and we escalate those to current year dollars and then we estimate the remaining work in 2017 dollars. We don't just do a whole total re-estimate. We deal with what we have spent to date and what is left to do in the future.

CHAIRMAN HETTEL: Why do you increase your sunk costs? Why is there an increase in sunk costs? It has already been built, you are not going to rebuild it.

MR. DALE: Well, the sunk costs, we are trying to get the same dollar reference. We don't want to compare 2013 dollars or 1998 dollars to 2017 dollars. We are trying to get to a common cost level so we can get some comparison.

The other piece of it is we take the authorized amount that was authorized and we talk about what we spent. For example, the "Highway and Railroad Relocations." Originally we estimated the authorized cost to be approximately \$60 million in round numbers and that was our authorized amount in 2017 dollars. What we actually spent in 2017 dollars was \$163 million. That is a \$100 million increase, again, in round numbers.

We can talk about that, but the cost hasn't increased. That is the actual cost. That is a sunk cost. We haven't changed anything other than taking those price levels to the same --

MAJOR GENERAL JACKSON: Mr. Dale, I think what Chairman Hettel is saying is it appears as though this project is costing way more than what we thought it would, but in reality it is not. It is to some degree, but what work is remaining to be done is going to be costed at the 2017 price level. But if we have already completed something, we are not saying, "Well, we started at a cost of say, five dollars, but now in today's dollars that five dollars would be twenty-five dollars." We are not doing that and adding that to say, "Now this project that one day cost twenty dollars, now it is going to cost one hundred and twenty dollars."

MR. DALE: Great point sir. When you look at the column titled "Authorized Cost", those cost figures were authorized in 1995. The key is those were much lower numbers. If you are trying to figure out how much did it really grow, these things stretch out over time. If it was a two or three year period, it is really noise. When you start stretching it out over 20-plus years

of extension, it becomes real money. It gets confusing if you don't have a common price level. That is why we take the authorized amount. If we were to estimate, if we want to authorize this project today, what type of cost estimate would you anticipate seeing? Answer is you would see something around \$734 million, which is the cost figure you see at the bottom of the first column.

MAJOR GENERAL JACKSON: David, just to be clear, that is not what we have spent so far on the project.

MR. DALE: That is correct sir.

MAJOR GENERAL JACKSON: I think that is Chairman Hettel's question. The issue is the concern that we are - I am not sure how the numbers are being shared - but we are communicating that this project has experienced extreme cost growth. It has experienced cost growth, but not -- we should not be including what we spent with what it could have cost if we had to do it today in the overall cost description of the project. Does that make sense? I am confused on these numbers based on the way you explained it.

I am sure that the way we are communicating this project and how much it is costing – and what is it going to cost to finish it and by how much it would have cost if we -- stuff we originally estimated – I am lost in this idea that you have to normalize everything that has been spent, what it would cost to build it today, if it has already been completed. Why would you do that?

MR. DALE: If we go back, I think what is confusing is the "Authorized Cost" column. If we strip that out. We just say, here are the sunk costs. Here is what we spent to do these phases of work. Here is the remaining work to be done. Maybe that is a clearer way to present the cost information.

MR. MECKLENBORG: Mr. Dale, how much has been spent to date on the work on the project in the dollars that were actually paid?

MR. DALE: I don't have that information in front of me.

MR. MECKLENBORG: That information would be very helpful in understanding how much has been spent to date on the project and how much you expect to spend on the remaining project features. It would help because you had an estimate of the original authorized cost of the project when the project was authorized. Then you actually went out and did the work, so you spent money in whatever years those happened to be spent. There is the amount of money that has been spent to date. And when you look at the original authorized cost or the current authorized cost bringing it up to 2017 dollars, it would seem that you would take out the work that has already been completed and then you would adjust the cost of the remaining work to be done but not the work that had already been done in order to then combine the cost figures to say here is the total cost of the project. That is the way my thought process would work.

MR. DALE: I will work to see if we can revamp this and make it a little clearer and we can get something back to you and see if that answers your questions. Your question, "How much have we spent?" That is about \$471 million. That is how much has been allocated through September 2016, so it is kind of spent. I know we have \$743 million remaining to be spent.

MR. MECKLENBORG: Right, but here is the way -- because originally the project had an authorized cost of what amount, Mr. Chairman?

CHAIRMAN HETTEL: \$393,200,000.

MR. MECKLENBORG: And so far on the project we have spent \$400+ million and that accomplished some fraction of that work. And now the remaining fraction of work we are now adjusting upward. All I am saying is you should look at the remaining work and adjust it, not the work that already has been completed.

CHAIRMAN HETTEL: And to clarify, Mr. Mecklenborg, in the Users Board's most recent Annual Report to the Congress and the Secretary of the Army, it said the total project cost for the Kentucky Lock and Dam project, at that time, was \$875 million, which reflected the project cost figures reported at the 81st meeting of the Inland Waterways Users Board on December 13, 2016 in Linthicum, Maryland. The Corps says they spent \$471 million, so if you are going to do a re-analysis of the remaining costs, that re-analysis should be somewhere around \$400 million.

David, maybe for our next Users Board meeting, you can show us here is what we spent and here is what we looked at for the FY 2017 cost analysis, to clarify that for us because we would really like to understand where the \$380 million increase that Mr. Aldridge is reporting or the \$446 million increase that this "Cost Estimate Comparison" slide is showing. We have to figure out where the cost increases came from and be confident in the project cost estimate and the remaining costs.

MR. DALE: Sure. Again we will be more than glad to be fully transparent so we will sit down with you and break it out however you want to. Over the time, we wrestled with it over Olmsted however many years ago and it's really difficult because of the time scale.

We really do have to get to a common price level to do a comparison, but we can work that, we can carry it back to the original authorization and scale it back and really feel, if you want to know what percent of the cost increase -- because you should have an estimate, we can do that. Some of that cost increase is because it was stretched out over a longer period of time.

CHAIRMAN HETTEL: David, I hate to belabor this, but according to our most recent Annual Report to Congress and the Secretary of the Army, total allocations to the Kentucky Lock project up to and including Fiscal Year 2016 totaled \$472 million and remaining costs after Fiscal Year 2016 were \$403 million. Your "Cost Estimate Comparison" slide says the project cost estimate increased by \$446 million. That is more than doubled the cost for what was reported in the Annual Report as the remaining to complete the project. In fact, I struggle with that, but we just need some definition to make sure we are comfortable that we are not looking at the original authorized cost of \$734 million up to this year's dollars, because as you know, as we discussed, I don't know -- what is it? A third of this, almost half of this project in dollars was completed prior to this process.

As General Jackson stated, I think we need to make sure where these costs are and what parts of the project have escalated them.

MR. DALE: Can do. Will do.

CHAIRMAN HETTEL: Thank you.

MR. DALE: No problem. Next slide, please. "Kentucky Lock – Summary and Challenges."

You see the first bullet there, "\$27.5 million in Downstream Cofferdam Options expire on 31 may 2017." Executing the Downstream Cofferdam option is an important step for us.

And the third bullet there, "902 Limit is \$819 million versus the current Total Project Cost Estimate of \$1.25 billion – Post Authorization Change Report being developed in concert with Economic Update." The District is working through the 902 fix and we will certainly follow up on the actions that were discussed at today's meeting to bring better clarity to the project cost increase.

Next slide. Moving on the Chickamauga Lock Replacement project.

Next slide, please. "Chickamauga Lock Replacement - Bottom Line Up Front."

You see the first bullet – "Lock Excavation contract is underway, includes unexercised options valued at approximately \$7.25 million. A contract modification to extend the options expiration date from 31 May 2017 to 31 July 2017 at no additional cost is underway."

Executing the option on the Chickamauga Lock Excavation contract is important. The good news is we have already executed -- or are about to execute a contract modification with that contractor for a no cost extension. It is not as critical at Chickamauga Lock. I hate to say that because obviously we want to do this as soon as possible because if we got it after May we should be okay, extend it out through July. That is good news on Chickamauga Lock. The contractor has done that at no cost. No schedule impacts.

Next slide, please. "Chickamauga Lock – Project Overview." Currently we are working on the Lock Excavation contract that you see over on the left side of the slide. That is where the option will be executed and we can move along further with that work.

Next slide. A few photographs of recent activity at the Chickamauga Lock project site. The Chickamauga Lock project has received a lot of visibility along with navigation in general. That first photo is a picture of Mr. Douglas Lamont, the Senior Ranking Official performing the duties of the Assistant Secretary of the Army, visiting the project site this past February. We wanted to get out to the project site and make sure he had a true appreciation for what we were talking about at Chickamauga Lock. The second photo shows the installation of a stability berm to support the downstream wall of the cofferdam during rock excavation. The third photo show the project site and the cofferdam during the recent high water event this past April.

Next slide. "Chickamauga Lock Project Schedule." You can see from this slide the award of the lock excavation contract and the upcoming award of the lock chamber contract and future contract awards.

I am going to revisit the project schedule to make sure we are making true schedule commitments with an 80 percent confidence level. What that means for this particular project is essentially currently we think it will be a four year addition to add all the risks in. There is about two years of additional risk associated with inefficient funding and two years of additional risk associated with normal construction risk to get to that 80 percent confidence level. We will adjust that prior to the next Users Board meeting.

Next slide, please. "Chickamauga Lock Summary and Challenges."

You see that first bullet, "Delayed funding in Fiscal Year 2017 is compressing time available for: 1 – exercising remaining Lock Excavation contract options and 2 – Lock Chamber contract solicitation and award in Fiscal Year 2017" and the second bullet, "Project developing Post Authorization Change Report (PACR) due to current cost estimate exceeding the current authorized 902 limit."

Really, our most pressing challenge is executing the option for the lock excavation contract and then working through the Post Authorization Change Report.

Subject to your questions, that concludes my presentation on the four construction projects underway in the Great Lakes and Ohio River Division.

CHAIRMAN HETTEL: David, just a question on the Post Authorization Change Report. If you have to proceed with that, which it looks like you will, once you reach your limit, then you can't do anything else until the Post Authorization Change Report has been approved?

MR. DALE: Authorized, this is correct sir.

CHAIRMAN HETTEL: Authorized, and you show on the slide titled "Chickamauga Lock Project Schedule" that you are expecting to exceed your 902 limit by Fiscal Year 2020. How long will it take to prepare the Post Authorization Change Report?

MR. DALE: The project team is working their way through that. In this particular case, since we already did an economic update, a lot of that work is already done, so it should not take that long. I don't have a specific duration for you. It is not years. We feel pretty comfortable with doing the 902 update to avoid the 2020 time period is very doable. Next time around I will try to give you a more detailed schedule so you can track that.

CHAIRMAN HETTEL: That would be very helpful so that we can track the progress on that activity. Thank you very much.

MR. INNIS: David, I would like to go back to the Kentucky Lock project for a minute. You said you changed the contingency percentage from 24 percent to 28 percent. Is that what you use now as a contingency factor, do you use a 28 percent contingency factor across all projects?

MR. DALE: No sir. What we do is we have a very deliberate process where we do the cost and schedule risk and we go through a very detailed process with our Cost Estimating Center of Expertise in Walla Walla to look at the risk at that particular project.

In a sense, what is the appropriate level of risk? It is not like a flat 28 percent. It is about sitting down and doing risk registers, working our way through the project, identifying what all the risks are and look at all the opportunities to eliminate those risks. For the risks they don't think they can make go away, they sort out the pricing and scheduling impacts associated with those risks and that rolls down to a total cost. Then they do the math and it gives you the 28 percent, but it is not a flat percentage. It is a very deliberate, well thought out engineering process.

MR. INNIS: Okay, thank you.

MR. DALE: Thank you all very much for your time and attention.

MR. POINTON: Any other questions for David. Hearing none, thanks very much David. Moving on. Next on the agenda, we are now at that Public Comment portion of the meeting. I have two individuals who have indicated that they would like to make a public comment. First up we have Mr. Mike Fewell from the Dow Chemical who is a Board memberelect, and then we will have Mr. John Doyle from the law firm of Jones Walker who would like to make a public comment. Mr. Fewell, I will call on you first. Please proceed to the podium and offer your comments. Thank you.

MR. MIKE FEWELL: Good afternoon General Jackson, Chairman Hettel, other Board members and other attendees. For the record my name is Mr. Mike Fewell and I am Bulk Marine Barge Manager for the Dow Chemical Company.

I will try to make this quick. I have got three different things I want to comment on.

First, concerning the tour of Winfield Lock, I enjoyed the tour yesterday very much. I am a nuts and bolts guy. I really like doing things like that. If we look at that, I don't know if it was rated a D or D minus, I mean, all kinds of red flags went up to me.

Dow Chemical has two facilities here, one in Institute [West Virginia] and one in Charleston. And just as an example, we are always hearing that you should look at your next option for transportation in the event of an emergency.

I will just talk about propylene oxide to start with. We ship anywhere between 90 to 105 barges a year up here from Houston, so we have a very long supply chain. And moving to trucks or rail cars would make it even worse.

Just for an example, using round numbers, we ship 153,000 short tons up here per year. That would be the equivalent of 1,530 rail cars or 6,120 trucks.

Now we are talking about a very volatile, very flammable chemical. I don't think the little towns between Houston and here are going to take it kindly to have that amount of trucks or rail cars running down Main Street.

I mean, that is something we need to look at. Barges discharging today do it every four days. In order to build a rail car fleet to support that, it's not going to happen. I can tell you that right now.

The big problem is our facilities don't have overland unloading capability to start with, so we either ship it by water or we shut everything down.

Okay. I will move onto the Brazos River Floodgates and the Colorado River Locks.

I agree with some of the comments that were already made. I don't see a big problem at the Colorado River Locks. We need to fix Brazos River Floodgates. If you look at what happens today, too many times the Brazos River Floodgates are shut down 12 hours during the day. We may have a six pack [a tow configuration of six barges, two abreast and three in length] ready to leave Freeport. It is sitting in a fleeting area instead of bunching it up at the Brazos River Floodgates.

Now, is that -- are we ready to go through the lock? Does that count as a delay because we are not approaching the lock? I am not sure how on the lock reporting system that is being tracked.

Also we have got a lot of sediment concerns there. Historically we have had to dredge every three years. About five, six years ago that increased to every two years. And we all know what dredging costs. It is very, very expensive.

We try to maintain a depth of 42 feet at our ship docks there, and it has taken about two years for sediment to reduce that draft to about 36 feet now. Something is going on there that we really need to fix.

Concerning the lock performance reports, I think that is going to be a great tool. I do have some questions about all the lockmasters using the same set of rules to track delays. Also, if we are looking at averages, are the outliers included in that average or is there some kind of passing rule – like if the Colorado River or the Brazos River either one is having high water issues, what used to be a 12 hour transit for a locking process is now taking three days, five days, whatever.

I don't know if the averages are skewing the data or if there is a way to track them both.

I will close with that and thank you for opportunity to make some comments and to attend today's meeting. It was great being here and I look forward to serving on the Board.

MR. POINTON: Thank you, Mike. Thank you for your comments and you joining us today and we look forward to you joining the Board. Next up we have Mr. John Doyle from the law firm of Jones Walker. Mr. Doyle has a comment about some of the figures presented during the presentation on the status of the Inland Waterways Trust Fund. When you are ready, Mr. Doyle please come to the microphone. Thank you.

MR. JOHN S. DOYLE, JR.: Thank you, Mark. I want to call attention to this slide that was shown earlier in the meeting on the amount of revenue on the Inland Waterways Trust Fund and a previous slide, because I think the data that is presented here can lead the Users Board to what I believe would be a very wrong conclusion.

Last year, in Fiscal Year 2016, we had \$111 million go into the Trust Fund during the course of that fiscal year. Keep that \$111 million in mind as we look at these numbers.

What we have here is a month by month comparison for the past six years of revenues in the Trust Fund with the numbers being taken from the monthly reports that the U.S. Department of Treasury produces at the end of each month.

Remember that those monthly reports are mostly just estimates. They are not actual collections. It is only periodically that the Department of Treasury goes back and reconciles actual collections with estimated collections.

If you could go to the next slide. What we see here, the two years that are most comparable are fiscal year 2016 and fiscal year 2017, the magenta and the light blue columns, because those are the only two fiscal years that have the entirety of the fiscal year at the \$0.29 per gallon diesel tax level. It would appear from looking at the charts that there is a substantial difference in the collections for January, February and March. If you go back for December, November and October of last year as well, for all six months of fiscal year 2017.

The numbers that are listed here for fiscal year 2016, the light blue, are incorrect numbers. The Treasury Department realized that at about this time last year and in their May 2016 report subtracted \$6.2 million in total from the total amounts that had been collected so far.

If you go and divide that \$6.2 million over the six or seven months that had been covered by it, what you really see is that the numbers that represent revenues this year seem to be very comparable to what they were last year. That would not be at all apparent from these slides.

Now how does that track with what we're seeing in terms of commodity movements overall. If you go to your Tab 3 in your read ahead notebooks, down at the bottom of the page we have got some statistics of total tonnage over the course of the last 12 months. What that

shows is a very slight increase, 0.8 percent increase in commodity tonnage fiscal year 2017 over fiscal year 2016. It looks like overall in that metric we are about where we were, but that is a rolling average.

If you take a look at the six months of fiscal year 2017 and compare them with the six months of fiscal year 2016, we are actually almost six and a half percent better this year than we were last year on the tonnage basis.

All of that suggests to me is that the numbers that we see up here are going to ultimately be corrected as we go forward for the rest of the fiscal year and we are going to end up somewhere close or maybe even a little bit above where we were in fiscal year 2016 for Trust fund revenues, not significantly below as these slides would suggest.

Thank you.

MR. POINTON: Thank you, John. At this point in the meeting I am going to turn the microphone over to Major General Jackson for his closing comments.

MAJOR GENERAL JACKSON: Thank you Mark. I want to begin my remarks where I started and just say thanks again to our hosts from the Huntington District and thanks to all of you, for all the presenters who came and participated in an open dialogue today.

I am hoping that the next meeting, through a side bar with the Chairman, to give you a more – a look at what the Fiscal Year 2017 work plan and the Fiscal Year 2018 budget actually paid for, and to the extent that we can, sort of give you some of our thinking that would go into developing the Fiscal Year 2019 budget development.

I would like to try to, Russ [Mr. Russ Tolle] and Andrea [Ms. Andrea Murdock-McDaniel], try to look at this by waterway so we can kind of get some idea of how we are investing in the navigation system, writ large, and where the Inland Waterways Trust Fund projects come into play. I think that is a helpful perspective.

To Mark Sudol, to you and your team, I really appreciate the progress that you have made on developing these information systems that allow us to see ourselves better. Mr. Chairman, I will work inside our Corps of Engineers team to reconcile the concerns that you raised over the River Information System and make sure that we are not duplicating effort or in our attempt, our wildly and enthusiastic attempt to do better things, not confuse them and make them more difficult. That is not our intent, but Andrea, I will need you to help me with that.

To the departing members of the Board – there are a couple folks who are departing the Board. Mr. Robert McCoy, Mr. Charlie Haun, Mr. Bruce Reed, Mr. Jeff Keifer and Mr. Mike Somales.

I want to say thank you for your service to this Board. I really appreciated getting to hear your perspectives on issues and I hope that, as I told Robert [McCoy] last night, just because you

rotate off the Board, I would hope that you will not disengage yourself from what we do at this Board.

As I participate in a number of activities like this, some of the great value comes from once you understand what we can or can't do on this Board and you step back and if you could continue to help lead and educate the folks who are on the Board from a different perspective in having been a participant.

I really appreciate you and appreciate your companies allowing you to participate because I know that is a cost to them, too, for you guys to be away from your day jobs to participate in these types of activities and I really appreciate that. Thank you for that.

One of the things I would like, and you can send me an e-mail directly, and this is to all the Board members coming and going, if there are things that you would like to see - and, Mr. Chairman, I don't want to subvert chairmanship, but they can go through you - I am interested in making sure that these meetings are providing you the level of information you want and need to help advise us.

We are talking about relevant issues that are helpful to you as Board members. If they are not, I would like to know that so that we can make sure we do something different if we need to. I have asked our team to consider a couple different things. I have spent a lot of time with Mark [Sudol] and his team trying to get this information system up and operational and get you guys more tuned into that so you have that tool. And I think the Chairman has been very, very instrumental in working with Mark [Sudol] to help tidy up some of the data discrepancies, especially in the LPMS arena, and that has been very helpful to us.

If there are other things out there that you think we need to be talking about at these meetings, don't get on the plane and go home and grumble about what we did or didn't do. Take those ideas and run it through the Chairman. Mr. Chairman, I would definitely like to make sure that we are meeting your intentions in having these meetings. I think our next meeting is scheduled to be in Portland; is that correct?

MR. POINTON: Yes sir, that is correct. The next Board meeting is scheduled to take place in Portland, Oregon the week of July 17th. Due to the geographic location of the meeting, there will probably be a travel day on July 17th, so probably the meeting and a site visit will be on July 18th and July 19th.

MAJOR GENERAL JACKSON: Then the following meeting is going to be at ERDC and is scheduled for --

MR. POINTON: Sir, it is going to be in the fall in Vicksburg, Mississippi. We haven't set the actual dates yet.

MAJOR GENERAL JACKSON: Okay. To the extent that I can, I am going to try to set dates a year in advance to the extent that we can because I have a hard time trying to coordinate

my schedule, a couple weeks out and it poses a demand on our District staffs to have to change around their schedules.

Mark [Pointon] that is a task for you in the next couple weeks. I want an annual lay down of meetings, where we want to go, what we want to do, that I can present to Chairman Hettel so we can all adjust our schedules accordingly. And once we lock in the dates of the meetings, come if you can. If you can't, don't, but everybody else will have the benefit of a predictable schedule of when we hold the meetings.

With that, I just thank everyone for traveling here to Huntington to attend this meeting. Thank you for the opportunity to showcase what we do here in this region. With that, Mr. Chairman, I turn the microphone over to you for your final comments. Thank you.

CHAIRMAN HETTEL: Thank you very much, General Jackson, and thank you to the Board members for another engaging and informative and collaborative meeting. Mr. Lee, this being your last Users Board meeting, I would like to reiterate what General Jackson stated earlier. We thank you for your service. Your knowledge will be missed more than you probably think.

MR. LEE: I'm not dying.

CHAIRMAN HETTEL: We certainly wish you success in your future endeavors.

MR. LEE: Thank you very much sir.

CHAIRMAN HETTEL: Seeing how this is the last Users Board meeting for some of our Board members, as Chairman, I would like to personally thank the following outgoing Board members for their engagement, insights, perspectives, and active participation on this Board. Mr. Robert McCoy, representing Amherst Industries; Mr. Charlie Haun, representing Parker Towing; Mr. Michael Somales, representing Murray American River Towing; Mr. Bruce Reed, representing Tidewater Barge Lines; and of course Mr. Jeffery Keifer, representing AEP River Transportation Division.

As Mark [Pointon] stated, our next Users Board meeting will be in July. I had in my notes somewhere between Portland and Walla Walla. It sounds like it has been determined that Portland will be the location of the meeting.

At that Board meeting we will welcome new members to the Board. I know Mr. David Earl, representing Marathon Petroleum is in attendance at today's meeting. Thank you David for joining us today. Mr. Mike Fewell, representing Dow Chemical is also in attendance at today's meeting. Thank you Mike, and thanks for the comments you offered during the public comment period, they were spot on. Mr. Mike Monahan, representing Campbell Transportation, is in attendance at today's meeting. Thanks Mike for joining us. Mr. Matt Rickets, representing Crounse Corporation, could not make it to today's meeting, but we certainly welcome Matt as well to the Board. Parker Towing will keep a position on the Board, and Mr. Timothy Parker, III will be the representative for Parker Towing replacing Mr. Charlie Haun. And Tidewater Barge

Lines will keep a position on the Board. Mr. Bruce Reed is completing his four years of service on the Board and we will welcome Mr. David Konz who will be joining the Board at our next Users Board meeting, so we are looking forward to welcoming all you gentlemen to the Board.

That being said, I am going to end my remarks on a sad note. Mr. David Choate, who was a member of this Board, representing the Bruce Oakley Company lost his battle with his illness on March 19th. While David wasn't able to participate at many of our Board meetings, I remember his time with us as a gentleman that had a sincere interest in our industry.

So please, let us take -- acknowledge a moment of silence in respect of Mr. Choate and his grieving family and friends and what they are going through.

(Thereupon a moment of silence in the memory of Mr. David Choate was observed.)

Thank you much.

Are there any other closing comments from the board members?

MR. MECKLENBORG: I would like to suggest a round of applause for all of our departing Board members.

CHAIRMAN HETTEL: I agree, for them to put up with me for four years is quite an accomplishment. Hearing no other comments, I turn the microphone back over to you Mr. Pointon.

MR. POINTON: I would also like to express my sincere appreciation working with you gentlemen. It has been my privilege working with you for the last four years and I look forward to working with the new Board members and having the same collaboration I had with the current Board members. With that I will ask for a motion to adjourn today's meeting.

MR. SOMALES: So moved.

MR. POINTON: Mr. Somales makes a motion. Do I have a second?

MR. HAUN: Second.

MR. POINTON: Mr. Haun seconds the motion to adjourn the meeting. Can I have a vote on the motion? All in favor say "Aye."

BOARD MEMBERS: Aye (unanimous).

MR. POINTON: Any "Nays". Hearing none, I declare the 83rd meeting of the Inland Waterways Users Board adjourned. I look forward to seeing everyone at our next Board meeting in Portland, Oregon in July. Safe travels, everyone.

(The proceedings ending at 12:33 EST)

STATE OF WEST VIRGINIA, COUNTY OF KANAWHA, to wit;

I, Angela L. Curtis, a Notary Public within and for the County and State aforesaid, duly commissioned and qualified, do hereby certify that the foregoing Board meeting was duly taken by me and before me at the time and place and for the purpose specified in the caption hereof. I further certify that the attached meeting transcript meets the requirements set forth within Article 27, Chapter 47 of the West Virginia Code to the best of my ability.

I do further certify that the said meeting was correctly taken by me in shorthand notes, and that the same were accurately written out in full and reduced to typewriting.

I further certify that I am neither attorney nor counsel for, nor related to or employed by, any of the parties to the action in which this meeting is taken, and further that I am not a relative or employee of any attorney or counsel employed by the parties or financially interested in the action.

My commission expires August 23, 2022. Given under my hand this 22nd day of May, 2017.

Board Meeting No. 83 taken before Angela L. Curtis, a Certified Court Reporter, at Embassy Suites, 300 Court Street, Charleston, West Virginia, on the 17th day of May, 2017.

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